# **Community Health Needs Assessment** *Douglas County, Oregon*





# **Table of Contents**

List of Figures
List of Tables3
<b>Executive Summary</b> 4
Service Area5
Methods for Identifying Community Health Needs5
Secondary Data5
Primary Data5
Summary of Findings6
Selected Priority Areas6
Conclusion
<b>Introduction</b>
About CHI Mercy Health
CHI Mercy Health [Hospital/Health Department/Collaborative] 7
Community Health Team Structure7
Consultants8
Distribution
<b>Evaluation of Progress Since Prior CHNA</b> 8
Community Feedback on Prior CHNA8
Methodology9
Overview9
Secondary Data Sources & Analysis
Health and Quality of Life Topic Areas
Primary Data Collection & Analysis
Community Survey
Data Considerations
Prioritization
Overview of Douglas County
Demographic Profile
Socioeconomic Profile
SocioNeeds Index
Environmental Profile
Transportation Profile
Crime and Safety
Findings
Secondary Data Scoring Results
Primary Data
Data Synthesis
Topic Areas Examined in This Report
Navigation within Each Topic
Prioritized Health and Quality of Life Topics29
Mental Health & Mental Disorders
Key Issues
Secondary Data29
Primary Data30
Children's Health 30
Key Issues         30
Secondary Data
Primary Data
Access to Health Services
Key Issues
Secondary Data
JCCO114411 Y DALA

Primary Data	
Education	
Key Issues	
Secondary Data	
Primary Data	
Substance Abuse	
Key Issues	
Secondary Data	
Primary Data	33
Non-Prioritized Health and	34
Quality of Life Topics	
Environmental & Occupational Health	
Primary and Secondary Data Summary	
Prevention & Safety	
Primary and Secondary Data Summary	
Economy	
Primary and Secondary Data Summary	34
Social Environment	
Primary and Secondary Data Summary	35
Quality of Life Issues Currently being	
Worked on Through Independent Initiati	ves 35
Respiratory Diseases	
Primary and Secondary Data Summary	
Heart Disease & Stroke	
Primary and Secondary Data Summary	
Diabetes	
Primary and Secondary Data Summary	
Exercise, Nutrition & Weight	
Primary and Secondary Data Summary	
Survey	
Mortality	
Conclusion	
Appendix A. Impact since Prior CHNA	
Appendix B. Secondary Data Scoring	
Overview	
Comparison Score	
Indicator Score	
Topic Score	
Comparison Scores.	
Missing Values	
Indicator Scoring	
Topic Scoring	
Age, Gender and Race/Ethnicity Disparities	
Topic Scoring Table	
Indicator Scoring Table	
Sources	
Appendix C. Primary Data	
Community Survey	
Priof Intorvious Guido	67

### **List of Figures**

Figure 1. Douglas County Map	5
Figure 2. Secondary Data Scoring	9
Figure 3. Ages of Survey Respondents	11
Figure 4. Profession of Survey Respondents	11
Figure 5. Gender of Survey Respondents	12
Figure 6. Ethnicity of Survey Respondents	12
Figure 7. Race of Survey Respondents	12
Figure 8. Educational Attainment of Survey Respondents	12
Figure 9. Household Income Level of Survey Respondents	13
Figure 10. English as Primary Spoken Language	13
Figure 11. Prioritization Community Voting Results (# of votes)	15
Figure 12. Map of Douglas County	16
Figure 13. SocioNeeds Index® (Conduent Healthy Communities Institute, 2018)	19
Figure 14. Community Survey Results: Most Important Health Issues in the Community (%)	26
Figure 15. Community Survey Results: Lifestyle Factors Most Impacting Community Member's Health (%)	26
Figure 16. Community Survey Results: Groups Most Impacted by Poor Health Outcomes (%)	27
Figure 17. Data Synthesis	28
Figure 18. Secondary Data Scoring Overview	43
Figure 19. Score Range	43
List of Tables	
Table 1. Significant Health Needs	6
Table 2. Health and Quality of Life Topic Areas	10
Table 3. Survey Respondents	10
Table 4. Prioritization Criteria	15
Table 5. SocioNeeds Index® (Conduent Healthy Communities Institute, 2018)	20
Table 6. Secondary Data Scoring Results by Topic Area	
Table 7. Criteria for Identifying the Top Needs from each Data Source	
Table 8. Topic Areas Examined In-Depth in this Report	28
Table 9. Data Scoring Results for Mental Health & Mental Disorders 44	29
Table 10. Data Scoring Results for Children's Health	30
Table 11. Data Scoring Results for Access to Health Services	
Table 12. Data Scoring Results for Education	32
Table 13. Data Scoring Results for Substance Abuse	
Table 14. Causes of Mortality in Douglas County Compared to Oregon and U.S	37
Table 15. Topic Scores for Douglas County	44
Table 16. Indicator Scores by Topic Area	45-54
Table 17 Indicator Sources and Corresponding Number Keys	55



### **Executive Summary**

CHI Mercy Health is pleased to present its 2019 Community Health Needs Assessment results. This report offers an overview of the methods and processes used to identify and prioritize significant health needs that Mercy, with the help of her local partners and community members, hopes to address.

This report is a strong example of Mercy's ongoing commitment to better understand the obstacles to health, and promote and support the fitness and wellbeing of our community members. Our tradition of providing charitable aid to the poor and medically underserved is a cherished part of our legacy. Mercy provided more than seven million dollars in uncompensated medical care to vulnerable, uninsured and underinsured members in our community in 2018. This excludes Medicare contributions and bad debt.

The Community Benefit Report outlines our dedication to - and strategy for - optimizing the health of all of our county residents. Our commitment remains to work collaboratively with local community partners to strengthen existing public health programs and advance evidence-based wellness initiatives. Additionally, Mercy will work to reinforce and expand health improvement and disease prevention services currently offered by the hospital. Our long-term goal is to promote greater levels of health, health awareness, and wellness for everyone in our community.

At Mercy, we are committed to managing our resources and advancing our healing ministry in a manner that benefits the common good now and long into the future. Despite today's challenges, we see this as a time of great hope and opportunity for the future of health care.

We want to use this venue to also extend a special note of appreciation to the women and men, who in a spirit of goodwill and collaboration, work alongside us to help address the health priorities of our community by offering an important array of health and wellness programs and services.

In accordance with market policy and IRS 990 Guidelines, the CHI Mercy Health Board Members graciously reviewed and approved this Community Benefit Report at their March 20th, 2019 meeting.



#### **Service Area**

Douglas County, Oregon extends west to east from sea level at the Pacific Ocean to the 9,182 foot Mt. Thielsen in the Cascade Range. Douglas County covers an expansive 5,071 square miles and is comprised of 12 incorporated cities: Roseburg—the county seat, Canyonville, Drain, Elkton, Glendale, Myrtle Creek, Oakland, Reedsport, Riddle, Sutherlin, Winston and Yoncalla. Douglas County, as with many rural areas, faces the challenges of an in migration of seniors as well as an aging baby boomer population, high rates of unemployment and poverty, few educational opportunities, high rates of tobacco and other drug use, and fewer local resources dedicated to addressing these and other known health risk factors. Nearly 70% of residents live outside the county seat of Roseburg, where most health services are provided. Douglas County is a federally designated medically underserved area, as well as a primary care shortage area.



#### **Methods for Identifying Community Health Needs**

#### **Secondary Data**

Secondary data used for this assessment were collected and analyzed from Conduent HCl's community indicator database. The database, maintained by researchers and analysts at Conduent HCl, includes over 100 community indicators from various state and national data sources such as the Centers for Disease Control and Prevention and the American Community Survey. See Appendix B for a full list of data sources used.

Indicator values for CHI Mercy Health were compared to Oregon counties and U.S. counties to identify relative need. Other considerations in weighing relative areas of need included comparisons to Oregon state values, comparisons to national values, trends over time and Healthy People 2020 targets. Based on these six different comparisons, indicators were systematically ranked from high to low need. For a detailed methodology of the analytic methods used to rank secondary data indicators see Appendix B.

#### **Primary Data**

The primary data used in this assessment consisted of a community survey distributed through online and paper submissions. Over 400 Douglas County residents contributed their input on the community's health and health-related needs, barriers, and opportunities, with special focus on the needs of vulnerable and underserved populations. In addition, nine individuals agreed to participate in a brief interview to share their perspective on top health issues in the community.

See Appendix C for all primary data collection tools used in this assessment.

#### **Summary of Findings**

The CHNA findings are drawn from an analysis of an extensive set of secondary data (over 100 indicators from national and state data sources) and in-depth primary data from community leaders, health and non-health professionals who serve the community at large, vulnerable populations, and populations with unmet health needs. Through a synthesis of the primary and secondary data the significant health needs were determined for CHI Mercy Health and are displayed in Table 1.

table 1. significant health needs

Access to Health Services
Children's Health
Diabetes
Economy
Education
Environmental & Occupational Health
Exercise, Nutrition, & Weight
Heart Disease & Stroke
Mental Health & Mental Disorders
Prevention & Safety
Respiratory Diseases
Social Environment
Substance Abuse

#### **Selected Priority Areas**

From the list of significant health needs identified in the data analysis process, five focus areas have been identified: (1) Mental Health & Mental Disorders (2) Children's Health (3) Access to Health Services (4) Education and (5) Substance Abuse; as well as the following secondary sub groups: Violence Prevention, Human Trafficking, Parenting Wisely, HKOP, Youth Diabetes, Opiod, Smoking Cessation and Workforce Violence Prevention.

#### **Conclusion**

This report describes the process and findings of a comprehensive health needs assessment for the residents of Douglas County, Oregon. The prioritization of the identified significant health needs will function to guide community health improvement targets and efforts at CHI Mercy Health. Following this process, CHI Mercy Health will outline how they plan to address the prioritized health needs in their implementation plan.



### Introduction

CHI Mercy Health is pleased to present the 2019 Community Health Needs Assessment, which provides an overview of the significant community health needs identified in Douglas County, Oregon.

The goal of this report is to offer a meaningful understanding of the most pressing health needs across Douglas County, as well as to guide planning efforts to address those needs. Special attention has been given to the needs of vulnerable populations, unmet health needs or gaps in services, and input gathered from the community.

Findings from this report will be used to identify, develop and target initiatives to provide and connect community members with resources to improve the health challenges in their communities.

The 2019 CHI Mercy Health Community Health Needs Assessment was developed through a system of partnerships between CHI Mercy Health, CHI Mercy Foundation, Evergreen Family Medicine, Umpqua Community Health Center, Douglas Public Health Network and Conduent Healthy Communities Institute.

#### **About CHI Mercy Health**

CHI Mercy Health (Mercy) is a private, not-for-profit 174-bed medical center located on a 90-acre campus on the north side of Roseburg, Oregon. Mercy is affiliated with Catholic Health Initiatives, the second largest Catholic health network in the country. Founded in 1909 by the Sisters of Mercy, Mercy Medical Center's core values are reverence, compassion, integrity and excellence. Our mission is to nurture the healing ministry of the Church, supported by education and research. Fidelity to the Gospel urges us to emphasize human dignity and social justice as we create healthier communities.

Mercy's specialized and comprehensive inpatient and outpatient care includes: A 24-hour emergency center, acute medical and surgical services, critical care (ICU and PCU), diagnostic imaging, Shaw Heart and Vascular Center, including catheterization labs, interventional cardiology and peripheral vascular services, outpatient imaging, Family BirthPlace, laboratory services, spiritual care, rehabilitation services, including physical, occupational and speech therapies, day surgery, orthopedic, renal, pulmonology, women's health services, and hospice and home health. Gifts and grants to Mercy are received and administered by the Mercy Foundation, a 501(c) 3, tax-exempt, non-private, charitable foundation. Mercy's inpatient market share is 68%.

#### CHI Mercy Health [Hospital / Health Department / Collaborative]

#### **Partner Organizations**

- Community Cancer Center
- Compass Behavioral Health
- Cow Creek Umpqua Tribe of Indians
- Douglas Educaton Service District
- Evergreen Family Practice Medicine
- Mercy Foundation
- The City Manager
- United Community Action Network
- Umpqua Community Health Center
- Umpqua Health

#### Health Departments and Health Districts

• Douglas Public Health Network

#### Community Health Team Structure

- · Kathleen Nickel, Marketing and Communications CHI Mercy Health
- · David Price, DMin, Mission Leader CHI Mercy Health
- · Sharon Stanphill, Health Operations Officer -
- Cow Creek Umpqua Tribe of Indians
- Dr. Bob Dannenhoffer, Pediatrician DPHN
- Dr. Tim Powell, Family Practice Doctor Evergreen Family Medicin
- · Kim Tyree, COO Evergreen Family Medicine
- · Lisa Platt CEO. Mercy Foundation
- KC Bolton CFO UCHC
- Jay Richards, DO UCHC

#### **Community Benefit Team and CHNA Committee**

- · Travce Curtis. Sr Administrative Assistant CHI Mercy Health
- Nancy Lehrbach Sr Administrative Assistant CHI Mercy Health
- Kathleen Nickel, Marketing and Communications CHI Mercy Health
- David Price, DMin, Mission Leader CHI Mercy Health
- · Sharon Stanphill Health Operations Officer
- Cow Creek Umpaua Tribe of Indians
- · Dr. Bob Dannenhoffer, Pediatrician DPHN
- · Dr. Tim Powell, Family Practice Doctor Evergreen Family Medicine
- Kim Tyree, COO Evergreen Family Medicine
- · Lisa Platt CEO, Mercy Foundation
- KC Bolton, CEO UCHC
- · Jav Richards. DO UCHC



#### **Consultants**

CHI Mercy Health commissioned Conduent Healthy Communities Institute (HCI) to assist with its Community Health Needs Assessment.

Conduent Healthy Communities Institute is a multi-disciplinary team of public health experts, including healthcare information technology veterans, academicians and former senior government officials, all committed to help health-influencing organizations be successful with their projects. Conduent HCI uses collaborative approaches to improve community health and provides web-based information systems to public health, hospital and community development sectors, to help them assess population health.

Conduent HCl works with clients across 38 states to drive improved community health outcomes by assessing needs, developing focused strategies, identifying appropriate intervention programs, establishing progress monitoring systems, and implementing performance evaluation processes. Working with diverse clients nationwide has contributed to Conduent HCl's national knowledge base of population health solutions. In addition, by engaging directly with clients and communities through the primary data collection process and final workshops, Conduent HCl works on behalf of our clients to build trust between and among organizations and their communities.

To learn more about Conduent HCI, please visit https://www.conduent.com/community-population-health/.

Report authors from Conduent HCI: Courtney Kaczmarsky, MPH & Era Chaudry, MPH

#### **Distribution**

An electronic copy of this report is available at www.chimercyhealth.com/assets/community-benefit-report-2019.pdf.

Paper copies can be requested by contacting Nancy Lehrbach either by telephone at 541-677-2467 or via email at nancylehrbach@chiwest.com

# **Evaluation of Progress**Since Prior CHNA

The community health improvement process should be viewed as an iterative cycle. An important piece of that cycle is revisiting the progress made on priority health topics set forth in the preceding community health needs assessment. By reviewing the actions taken to address priority health issues and evaluating the impact those actions have made in the community, it is possible to better target resources and efforts during the next round of the CHNA cycle.

As part of the 2016 Community Health Needs Assessment, healthy weight promotion, violence prevention, parenting education and tobacco reduction were selected as prioritized health needs. A detailed table describing the strategies/action steps and indicators of improvement for each priority area can be found in Appendix A.

#### **Community Feedback on Prior CHNA**

The 2016 CHI Mercy Health Community Health Needs Assessment was made available to the public via www.chimercyhealth.com/assets/community-benefit-report-2016\_finalrev.pdf. Community members were invited to submit feedback via email. No comments had been received on the preceding CHNA at the time this report was written.

### Methodology

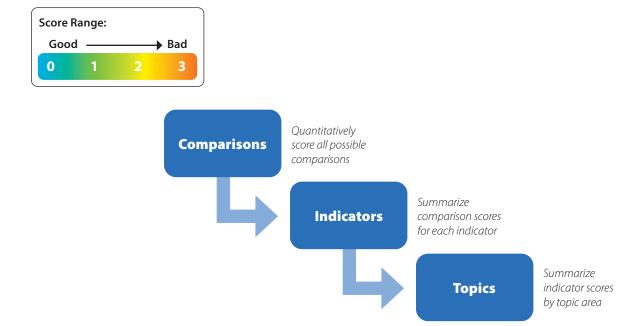
#### **Overview**

Two types of data are analyzed for this Community Health Needs Assessment: secondary data and primary data. Secondary data is data that has been collected from other sources while primary data has been collected directly as a part of this report. Each type of data is analyzed using a unique methodology, and findings are organized by health topic areas. These findings are then synthesized for a comprehensive overview of the health needs in Douglas County.

#### **Secondary Data Sources & Analysis**

The main source of the secondary data used for this assessment is a web-based community health platform developed by Conduent Healthy Communities Institute. The secondary data analysis was conducted using Conduent HCl's data scoring tool, and the results are based on the 137 health and quality of life indicators that were queried on the Health ENC dashboard on October 9, 2018. The data are primarily derived from state and national public data sources. For each indicator on the platform, there exist several comparisons to assess Douglas County's status, including how Douglas County compares to other communities and whether health targets have been met.

Conduent HCl's data scoring tool systematically summarizes multiple comparisons to rank indicators based on highest need (Figure 2).



For each indicator, the CHI Mercy Health value is compared to a distribution of Oregon and U.S. counties, state and national values and Healthy People 2020 targets. Each indicator is then given a score based on the available comparisons. The scores range from 0 to 3, where 0 indicates the best outcome and 3 indicates the worst outcome. Availability of each type of comparison varies by indicator and is dependent upon the data source, comparability with data collected from other communities, and changes in methodology over time. The indicators are grouped into topic areas for a higher-level ranking of community health needs.

Please see Appendix B for further details on the secondary data scoring methodology.



#### **Health and Quality of Life Topic Areas**

Table 2 shows the health and quality of life topic areas into which indicators are categorized. These topic areas are broadly based on the Healthy People 2020 framework, with each topic area containing multiple indicators. Four topic areas specific to population subgroups, including Children's Health, Men's Health, Women's Health, and Older Adults & Aging, include indicators spanning a variety of topics. Three additional categories (County Health Rankings, Mortality Data, and Wellness & Lifestyle) are not considered for in-depth exploration, since all three are general categories that include indicators spanning a wide variety of topics. Topic areas with fewer than three indicators are considered to have data gaps and do not receive topic scores. These topics are indicated by an asterisk in Table 2.

**Table 2.** Health and Quality of Life Topic Areas

Access to Health Services	Family Planning*	Prevention & Safety
Cancer	Food Safety*	Public Safety*
Children's Health	Heart Disease & Stroke	Respiratory Diseases
County Health Rankings	Immunizations & Infectious Diseases	Social Environment
Diabetes	Maternal, Fetal & Infant Health	Substance Abuse
Disabilities*	Men's Health	Teen & Adolescent Health*
Economy	Mental Health & Mental Disorders	Transportation
Education	Mortality Data	Vision*
Environment	Older Adults & Aging	Wellness & Lifestyle
Environmental & Occupational Health	Other Chronic Diseases	Women's Health
Exercise, Nutrition, & Weight	Oral Health*	

<sup>\*</sup>Topic area has fewer than 3 indicators and is considered a data gap. No topic score is provided.

#### **Primary Data Collection & Analysis**

To expand upon the information gathered from the secondary data, CHI Mercy Health collected community input. *All community input tools are available in Appendix C.* 

#### **Community Survey**

Community input was collected via a 22-question online and paper survey. Survey Monkey was the tool used to distribute and collect responses for the community survey. Completed paper surveys were entered into the Survey Monkey tool.

#### **Survey Distribution**

The community health perception survey was disseminated through social media channels, our internal email directory, through digital correspondence to key selected stakeholders, and in paper copy form via our hospital-based medical eligibility counseling service group.

Table 3 summarizes the number of survey respondents. A total of 408 responses were collected across Douglas County, with a survey completion rate of 94.4%, resulting in 385 complete responses across the entire survey area.

**Table 3.** Survey Respondents

NUMBER OF RESPONDENTS\*

Service Area Total Responses Total Complete

Douglas County 408 385

Survey participants were asked a range of questions related - but not limited - to: what populations are most negatively affected by poor health outcomes in Douglas County, what their personal health challenges are, and what the most critical health needs are for Douglas County.

The survey instrument is available in Appendix C.

#### **Demographics of Survey Respondents**

The following charts and graphs illustrate CHI Mercy Health demographics of the community survey respondents.

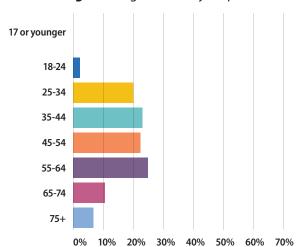


Figure 3. Ages of Survey Respondents

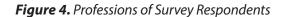




Figure 5. Gender of Survey Respondents

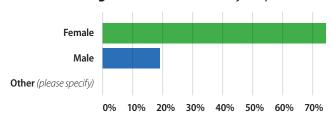
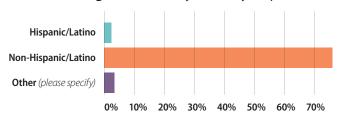


Figure 6. Ethnicity of Survey Respondents



**Figure 7.** Race of Survey Respondents

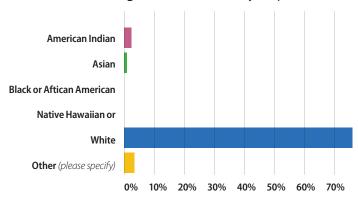


Figure 8. Educational Attainment of Survey Respondents

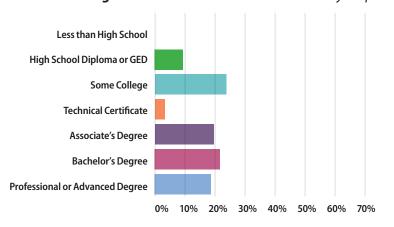


Figure 9. Household Income Level of Survey Respondents

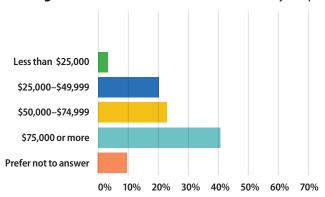
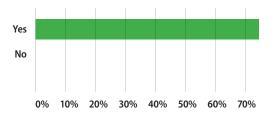


Figure 10. English as Primary Spoken Language



ANSWER CHOICES	RESPONSES	
Yes No	99.75% 0.25%	407 1
TOTAL		408

#### **Brief Community Interviews**

Brief Community Interviews were conducted in late 2018. Nine participants receiving services at CHI Mercy Health agreed to participate in the brief interview process. Participants were asked specific questions about their perspective of top health needs and issues in Douglas County.

The interview guide is available in Appendix C.

#### **Data Considerations**

Several limitations of the data should be considered when reviewing the findings presented in this report. Although the topics by which data are organized cover a wide range of health and health-related areas, within each topic there is a varying scope and depth of data availability. In some topics there is a robust set of secondary data indicators, but in others there may be a limited number of indicators for which data is collected, or limited subpopulations covered by the indicators.

Data scores represent the relative community health need according to the secondary data that is available for each topic and should not be considered to be a comprehensive result on their own. In addition, these scores reflect what was found in the secondary data for the population as a whole, and do not factor in the health or socioeconomic need that is much greater for some subpopulations. In addition, many of the secondary data indicators included in the findings are collected by survey, and though methods are used to best represent the population at large, these measures are subject to instability—especially among smaller populations.

The disparities analysis, used to analyze the secondary data, is also limited by data availability. In some instances, data sources do not provide subpopulation data for some indicators, and for other indicators, values are only available for a select number of race/ethnic groups. Due to these limitations, it is not possible to draw conclusions about subpopulation disparities for all indicators.

The breadth of primary data findings is dependent on other factors. Because the survey was a convenience sample survey, results are vulnerable to selection bias, making findings less generalizable for the population as a whole. In addition, recruitment for the interviews was limited and reflects the personal opinions of participants which may not be generalizable to overall county population.

#### **Prioritization**

In order to better target the vital health needs in Douglas County, fifteen community leaders participated in a group discussion at CHI Mercy Health, facilitated by Conduent HCI, to narrow down the thirteen significant health needs presented. The prioritized health needs will be under consideration for the development of an implementation plan that will address some of the community's most pressing health issues.

#### **Prioritization Session Participants**

Name	Organization
Melanie Taylor Prummer	Battered Persons' Advocacy
Jess Hand	Blue Zones Project
Lance Colley	Blue Zones Project & City of Roseburg
Kathleen Nickel	CHI Mercy Health
David Price	CHI Mercy Health
Angelia Freeman	Community Cancer Center
Adam Jones	Compass Behavioral Health
Sharon Stanphill	Cow Creek Umpqua Tribe of Indians
Christen Rutledge	Douglas Public Health Network
Tim Powell, MD	Evergreen Family Medicine
Kim Tyree	Evergreen Family Medicine
Lisa Platt	Mercy Foundation
Kat Cooper	Umpqua Health Alliance
KC Bolton	Umpqua Community Health Center
Jay Richards	Umpqua Community Health Center

#### **Prioritization Process**

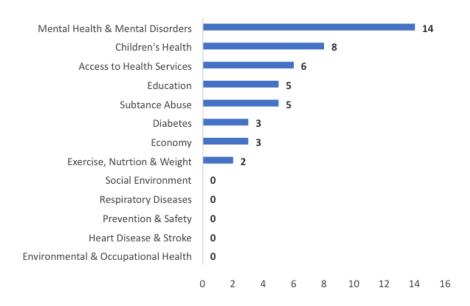
On January 15th, 2019, the participants on the previous page convened to review and discuss the results of Conduent HCl's primary and secondary data analysis leading to the preliminary top significant health needs. Results from the data analysis and details about the prioritization process were sent out in advance to participants to review prior to the meeting. From there, participants were asked to examine how well each of the significant health needs met the criteria set forth by the CHI project team. The criteria for prioritization can be seen below:

**Table 4.** Prioritization Criteria

Prioritization Criteria	Explanation
Evidence Based Approach	Are there evidenced based programs to model a solution to the problem? Is there data available for measurement in the community?
Existing Programs & Resources	Are there programs and resources already allocated in the community to address the problem? Are there ongoing programs that would benefit from additional support? Does the health issue align with strategies and goals already set in the community?
Community Partnership Opportunities	Will the community accept a program to address the problem? Would other community organizations be willing to partner in an effort to effectively address the problem? Would additional partnership across the community improve population health?
Magnitude of the Problem	Are a large number of people affected by the issue? Could a solution for this issue impact multiple problems for the community? Is there value in immediate intervention or a sense of urgency surrounding this issue?

Using the "dotmocracy" voting technique, each participant submitted votes for the health topics that in their professional opinion best met the set criteria. Each participant was given three stickers that they assigned to the health topics that they had selected. Participants were allowed to assign multiple stickers to one topic or assign one sticker to three topics based on their assessment of the importance of the issues. At the end of the voting process, the results were collated to show a ranking of the health topics selected as priorities by the participants. Further discussion amongst the group resulted in the following topics being selected as the top priorities to focus on: Mental Health & Mental Disorders, Children's Health, Access to Health Services, Substance Abuse and Education. The topics selected, as well as those not selected, are explored in the 'Findings' section of this report. The complete results of the voting process are as follows:

**Figure 11.** Prioritization Community Voting Results (# of votes)





### **Overview of Douglas County**

#### **Demographic Profile**

The demographics of a community significantly impact its health profile. Population growth has an influence on the county's current and future needs. Specific population subgroups, including veterans and different age, gender, race and ethnic groups, may have unique needs and require varied approaches to health improvement efforts. The following section explores the demographic profile of CHI Mercy Health in Douglas County, Oregon.



**Figure 12.** Map of Douglas County

Douglas County, Oregon extends west to east from sea level at the Pacific Ocean to the 9,182 foot Mt. Thielsen in the Cascade Range. Douglas County covers an expansive 5,071 square miles and is comprised of 12 incorporated cities Roseburg – the county seat, Canyonville, Drain, Elkton, Glendale, Myrtle Creek, Oakland, Reedsport, Riddle, Sutherlin, Winston, and Yoncalla. Douglas County, as with many rural jurisdictions, faces the challenges of an in migration of seniors as well as an aging baby boomer population, high rates of unemployment and poverty, few educational opportunities, high rates of tobacco and other drug use, and fewer local resources dedicated to addressing these and other known health risk factors. Nearly 70% of residents live outside the county seat of Roseburg, where most health services are provided. Douglas County is a federally designated medically underserved area, as well as a primary care shortage area.

#### **Population**

According to the US Census Bureau's American Community Survey, in 2013-2017, there were 44,828 households in Douglas County, Oregon. The average household size was 2.36 people.

Families made up 65.5 percent of the households in Douglas County, Oregon. The average number of children on free and reduced lunch in 2017 was 61.1%. As of this measurement, it is 60.6% with Oregon's average being 45%. We are ranked 28th overall in the state. This figure includes both married-couple families (49.9 percent) and other families (15.6 percent). Female householder families with no husband present and their own children under 18 years are 5.8 percent of all households. Nonfamily households made up 34.5 percent of all households in Douglas County, Oregon.

In Douglas County, Oregon, 25.3 percent of all households have one or more people under the age of 18; 40.4 percent of all households have one or more people 65 years and over.

Over the last few years, we have experienced an approximately 25% outmigration rate of 20-45 year olds, with more seniors moving to our county because of the seasonal weather conditions.

#### **Economy**

Traditionally, the timber and wood product industries have been the major employers in Douglas County. Even with the downturn, it still remains one of the biggest sources of employment in Douglas County. The largest timber supplier is Roseburg Forest Products. Other large employers include CHI Mercy Health, which is the largest employer in Roseburg proper; Cow Creek Umpqua Tribe of Indians, city, county and federal government including the VA healthcare system, agriculture, the warehouse industry, building trades and education.

#### **Socioeconomic Profile**

Social and economic factors are well known to be strong determinants of health outcomes – those with a low socioeconomic status are more likely to suffer from chronic conditions such as diabetes, obesity and cancer. Community health improvement efforts must determine which subpopulations are most in need in order to effectively focus services and interventions.

#### Household Income in Douglas County, Oregon in 2013-2017

Median earnings for full-time year-round workers was \$40,468. Male full-time year-round workers had median earnings of \$45,400. Female full-time year-round workers had median earnings of \$33,648.

#### Median Earnings for Full-Time Year-Round Workers by Sex in Douglas County, Oregon in 2013-2017

Male	\$ 45,400
Female	\$ 33,648

An estimated 64.8 percent of households received earnings. An estimated 47.8 percent of households received Social Security and an estimated 27.7 percent of households received retirement income other than Social Security. The average income from Social Security was \$18,620. These income sources are not mutually exclusive; that is, some households received income from more than one source.

#### Proportion of Households with Various Income Sources in Douglas County, Oregon in 2013-2017

Earnings	64.8 %
Social Security	47.8 %
Retirement income	27.7 %
Supplemental Security Income (SSI)	6.3 %
Cash public assistance income	3.9 %

#### Household Income in Douglas County, Oregon in 2013-2017

Less than \$10,000	6.4 %
\$10,000 to \$14,999	6.5 %
\$15,000 to \$24,999	14.0 %
\$25,000 to \$34,999	12.8 %
\$35,000 to \$49,999	15.6 %
\$50,000 to \$74,999	19.5 %
\$75,000 to \$99,999	11.8 %
\$100,000 to \$149,999	8.6 %
\$150,000 to \$199,999	2.4 %
\$200,000 or more	2.3 %



#### **Poverty and Participation in Government Programs**

In 2013-2017, 17.0 percent of people were in poverty. An estimated 25.3 percent of children under 18 were below the poverty level, compared with 8.5 percent of people 65 years old and over. An estimated 17.9 percent of people 18 to 64 years were below the poverty level.

#### Poverty Rates in Douglas County, Oregon in 2013-2017

People in poverty	17.0 %
Children under 18 years below poverty	25.3 %
People 65 years old and over below poverty	8.5 %
People 18 to 64 years below poverty	17.9 %

In 2013-2017, 21.7 percent of households received SNAP (the Supplemental Nutrition Assistance Program). An estimated 42.8 percent of households that received SNAP had children under 18, and 37.7 percent of households that received SNAP had one or more people 60 years and over. An estimated 27.9 percent of all households receiving SNAP were families with a female householder and no husband present. An estimated 26.7 percent of households receiving SNAP had two or more workers in the past 12 months.

#### Types of Housing Units in Douglas County, Oregon in 2013-2017

Single-family houses	68.6 %
Apartments in multi-unit structures	11.6 %
Mobile homes	19.2 %
Boat, RV, van, etc.	0.6 %

2.0 percent of the housing inventory was comprised of houses built since 2010, while 7.2 percent of the houses were first built in 1939 or earlier. The median number of rooms in all housing units in Douglas County, Oregon was 5.4 rooms, and of these housing units 61.7 percent had three or more bedrooms.

#### **Occupations**

Occupations for the Civilian Employed Population 16 Years and over in Douglas County, Oregon in 2013-2017

Civilian employed population 16 years and over	Number	Percent
Management, business, sciences, and arts occupations	11,728	28.6 %
Service occupations	7,827	19.1 %
Sales and office occupations	9,746	23.8 %
Natural resources, construction, and maintenance occupations	4,917	12.0 %
Production, transportation, and material moving occupations	6,753	16.5 %

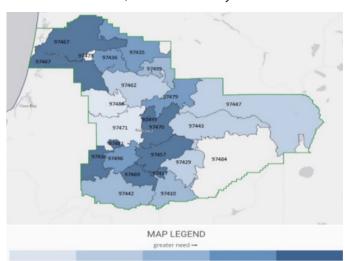
#### Percent by Industry in Douglas County, Oregon in 2013-2017

A with the control California de la control de control	(10)
Agriculture, forestry, fishing and hunting, and mining	6.1 %
Construction	6.2 %
Manufacturing	12.2 %
Wholesale trade	1.5 %
Retail trade	12.5 %
Transportation and warehousing, and utilities	4.5 %
Information	1.4 %
Finance and insurance, and real estate and rental and leasing	4.1 %
Professional, scientific, and management, and administrative and waste management services	7.0 %
Educational services, and health care and social assistance	22.9 %
Finance and insurance, and real estate and rental and leasing	9.9 %
Professional, scientific, and management, and administrative and waste management services	5.5 %
Educational services, and health care and social assistance	6.3 %

#### SocioNeeds Index

Conduent Healthy Communities Institute developed the SocioNeeds Index® to easily compare multiple socioeconomic factors across geographies. This index incorporates estimates for six different social and economic determinants of health – income, poverty, unemployment, occupation, educational attainment, and linguistic barriers – that are associated with poor health outcomes including preventable hospitalizations and premature death.

Zip codes within Douglas County are assigned an index value from 0 (low need) to 100 (high need), based on how those zip codes compare to others in the U.S. Within Douglas County, the zip codes are then ranked from 1 (low need) to 5 (high need) to identify the relative level of need. Zip codes with populations under 300 persons are excluded. Zip code 97457, with an index value of 87.2, has the highest level of socioeconomic need within Douglas County. This is illustrated in Figure 13. Index values and the relative ranking of each zip code within Douglas County are provided in Table 5.



*Figure 13.* SocioNeeds Index® (Conduent Healthy Communities Institute, 2018)

**Table 5.** SocioNeeds Index® (Conduent Healthy Communities Institute, 2018)

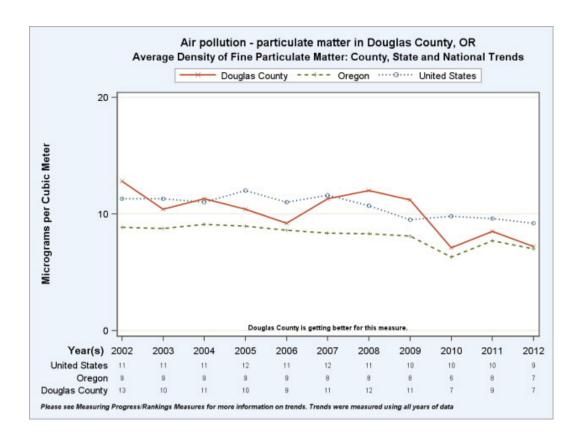
TOWNS	ZIP CODE	INDEX	RANK
Myrtle Creek	97457	87.2	5
Riddle	97469	84.2	5
Reedsport	97467	81.4	5
Tenmile	97481	81.1	5
Camas Valley	97416	80.4	5
Canyonville	97417	80	5
Roseburg	97470	78	5
Winston	97496	74.4	4
Sutherlin	97479	72.2	4
Drain	97435	71.5	4
Elkton	97436 71.2		4
Glendale	97442	66	3
Yoncalla	97499	64.8	3
Azalea	97410	63	3
Winchester	97495	61.2	3
Days Creek	97429	57.5	2
Idleyld Park	97447	56.4	2
Oakland	97462	55.1	2
Glide	97443	50.9	2
Roseburg	97471	45.8	1
Umpqua	97486	38.8	1

Understanding where there are communities with high socioeconomic need is critical to forming prevention and outreach activities.

#### **Environmental Profile**

#### **Physical Environment**

	COUNTY	OREGON
Air pollution - particulate matter	7.9	8.9
Drinking water violations	0%	11%
Severe housing problems	16%	19%
Driving alone to work	74%	72%
Long commute - driving alone	19%	26%



#### **Transportation Profile**

Public transportation offers mobility, particularly to people without cars. Transit can help bridge the spatial divide between people and jobs, services, and training opportunities. Public transportation also reduces fuel consumption, minimizes air pollution, and relieves traffic congestion. Walking to work helps protect the environment, while also providing the benefit of daily exercise.

#### Percent of Workers 16 and over Commuting by Mode

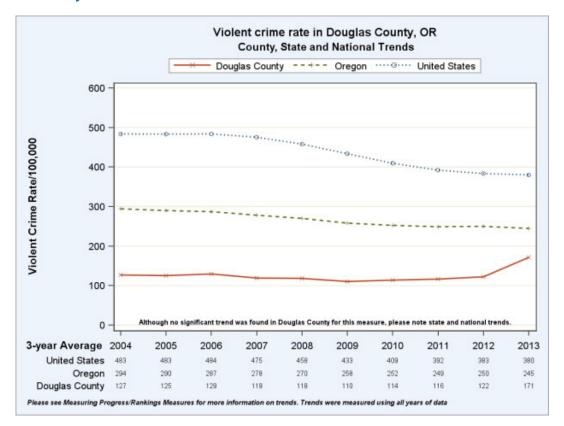
	PERCENT
Car, truck, van drove alone	80.2
Car, truck, van carpooled	9.7
Public transportation (excluding taxicab)	0.3
Walked	2.6
Other means	1.9
Worked at home	5.2

#### ADDITIONAL DATA FOR CONSIDERATION

· *Transportation system* – Highways, state-maintained roads, unpaved state/county roads; rail system, air, bus, local transportation https://www.ncdot.gov/doh/



#### **Crime and Safety**



#### **Access to Healthcare, Insurance and Health Resources Information**

Medical costs in the United States are very high. People without health insurance may not be able to afford medical treatment or prescription drugs. They are also less likely to get routine checkups and screenings, so if they do become ill they may not seek treatment until the condition is more advanced, and therefore more difficult and costly to treat. The following table provides an organized and comprehensive statistical breakdown of the insured, underinsured and uninsured residents of Douglas County, Oregon.

Douglas County, Oregon											
SUBJECT	тот	AL	INSU	INSURED		PERCENT INSURED		SURED	PERCENT UNINSURED		
	Estimate	Margin of Error	Estimate	Margin of Error							
Civilian population (noninstitutionalized)	106,896	+/-157	98,453	+/-948	92.1%	+/-0.9	8,443	+/-936	7.9%	+/-0.9	
Under 6 years	6,542	+/-253	6,241	+/-291	95.4%	+/-2.1	301	+/-136	4.6%	+/-2.1	
6 to 18 years	15,351	+/-322	14,451	+/-422	94.1%	+/-2.3	900	+/-363	5.9%	+/-2.3	
19 to 25 years	7,848	+/-305	6,650	+/-351	84.7%	+/-3.5	1,198	+/-280	15.3%	+/-3.5	
26 to 34 years	10,234	+/-307	8,821	+/-394	86.2%	+/-3.2	1,413	+/-337	13.8%	+/-3.2	
35 to 44 years	10,815	+/-126	9,221	+/-362	85.3%	+/-3.3	1,594	+/-357	14.7%	+/-3.3	
45 to 54 years	13,372	+/-149	11,592	+/-364	86.7%	+/-2.6	1,780	+/-350	13.3%	+/-2.6	
55 to 64 years	17,154	+/-92	15,977	+/-251	93.1%	+/-1.3	1,177	+/-231	6.9%	+/-1.3	
65 to 74 years	14,665	+/-151	14,612	+/-142	99.6%	+/-0.3	53	+/-51	0.4%	+/-0.3	
75 years+	10.915	+/-154	10.888	+/-152	99.8%	+/-0.2	27	+/-27	0.2%	+/-0.2	

SUBJECT	TOTAL INSI		RED PERCENT INSURED			UNINSURED PERCE			NT UNINSURED	
	Estimate	Margin of Error	Estimate	Margin	Estimate	Margin	Estimate	Margin	Estimate	Margin
	Estimate	of Error	Estimate	of Error	Estimate	of Error	Estimate	of Error	Estimate	of Error
Under 19 years	21,893	+/-144	20,692	+/-420	94.5%	+/-1.8	1,201	+/-398	5.5%	+/-1.8
19 to 64 years	59,423	+/-228	52,261	+/-709	87.9%	+/-1.2	7,162	+/-707	12.1%	+/-1.2
65 years and older	25,580	+/-160	25,500	+/-160	99.7%	+/-0.2	80	+/-56	0.3%	+/-0.2
SEX										
Male	52,640	+/-217	48,252	+/-654	91.7%	+/-1.1	4,388	+/-578	8.3%	+/-1.1
Female	54,256	+/-170	50,201	+/-522	92.5%	+/-0.9	4,055	+/-510	7.5%	+/-0.9
			,				· ·			
RACE AND HISPANIC C			01.604	1/050	02.60/	1/00	7220	. / 012	7.40/	1/00
White alone	98,943	+/-359	91,604	+/-950	92.6%	+/-0.9	7,339	+/-913	7.4%	+/-0.9
Black or African American alone	435	+/-101	376	+/-102	86.4%	+/-10.6	59	+/-46	13.6%	+/-10.6
American Indian & Alaska Native alone	1,288	+/-280	1,003	+/-229	77.9%	+/-6.4	285	+/-106	22.1%	+/-6.4
Asian alone	1,001	+/-204	877	+/-217	87.6%	+/-9.9	124	+/-98	12.4%	+/-9.9
Native Hawaiian & other Pacific Islander alone	90	+/-73	84	+/-73	93.3%	+/-12.5	6	+/-10	6.7%	+/-12.5
Some other race alone	760	+/-241	658	+/-201	86.6%	+/-13.5	102	+/-114	13.4%	+/-13.5
Two or more races	4,379	+/-349	3,851	+/-324	87.9%	+/-3.9	528	+/-183	12.1%	+/-3.9
Hispanic or Latino (of any race)	5,851	+/-25	5,005	+/-289	85.5%	+/-4.9	846	+/-286	14.5%	+/-4.9
White alone, not Hispanic or Latino	94,520	+/-156	87,760	+/-836	92.8%	+/-0.9	6,760	+/-837	7.2%	+/-0.9
LIVING ARRANGEMEN	TS									
In family households	85,798	+/-1,205	79,124	+/-1,351	92.2%	+/-1.0	6,674	+/-879	7.8%	+/-1.0
In married couple families	64,176	+/-2,075	60,105	+/-2,030	93.7%	+/-1.2	4,071	+/-772	6.3%	+/-1.2
In other families	21,622	+/-1,854	19,019	+/-1,649	88.0%	+/-1.8	2,603	+/-452	12.0%	+/-1.8
Male householder, no wife present	5,555	+/-1,111	4,799	+/-946	86.4%	+/-4.0	756	+/-289	13.6%	+/-4.0
Female householder, no husband present	16,067	+/-1,815	14,220	+/-1,635	88.5%	+/-2.1	1,847	+/-397	11.5%	+/-2.1
In non-family households and other living arrangements	21,098	+/-1,175	19,329	+/-1,077	91.6%	+/-1.5	1,769	+/-339	8.4%	+/-1.5
NATIVITY AND U.S. CIT	TIZENSHI	P STATUS								
Native born	104,072	+/-388	96,071	+/-940	92.3%	+/-0.8	8,001	+/-863	7.7%	+/-0.8
Foreign born	2,824	+/-364	2,382	+/-331	84.3%	+/-8.9	442	+/-273	15.7%	+/-8.9
Naturalized	1,445	+/-261	1,409	+/-257	97.5%	+/-2.0	36	+/-29	2.5%	+/-2.0
Not a citizen	1,379	+/-348	973	+/-237	70.6%	+/-15.4	406	+/-270	29.4%	+/-15.4
DISABILITY STATUS										
With a disability	22,467	+/-881	21,665	+/-898	96.4%	+/-0.9	802	+/-205	3.6%	+/-0.9
No disability	84,429	+/-878	76,788	+/-1,164	90.9%	+/-1.1	7,641	+/-907	9.1%	+/-1.1



SUBJECT	TOTAL		INSURED F		PERCENT	PERCENT INSURED		UNINSURED		PERCENT UNINSURED	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	
EDUCATIONAL ATTAIN	MENT			1		1		1			
Civilian noninstitutionalized population 26 years and over	77,155	+/-340	71,111	+/-692	92.2%	+/-0.9	6,044	+/-672	7.8%	+/-0.9	
Less than high school graduate	8,046	+/-601	7,266	+/-468	90.3%	+/-3.1	780	+/-281	9.7%	+/-3.1	
High school graduate (includes equivalency)	24,873	+/-1,002	22,336	+/-906	89.8%	+/-1.4	2,537	+/-386	10.2%	+/-1.4	
Some college or Associate's degree	31,055	+/-889	28,929	+/-883	93.2%	+/-1.2	2,126	+/-373	6.8%	+/-1.2	
Bachelor's degree or higher	13,181	+/-799	12,580	+/-812	95.4%	+/-1.5	601	+/-191	4.6%	+/-1.5	
FAADI OVAAFNIT STATUS											
EMPLOYMENT STATUS				1	Γ	1	1	1	1	1	
Civilian noninstitutionalized population 19 to 64 years	59,423	+/-228	52,261	+/-709	87.9%	+/-1.2	7,162	+/-707	12.1%	+/-1.2	
In labor force	41,503	+/-867	36,604	+/-1,011	88.2%	+/-1.4	4,899	+/-581	11.8%	+/-1.4	
Employed	37,742	+/-839	33,945	+/-976	89.9%	+/-1.4	3,797	+/-511	10.1%	+/-1.4	
Unemployed	3,761	+/-518	2,659	+/-443	70.7%	+/-5.4	1,102	+/-235	29.3%	+/-5.4	
Not in labor force	17,920	+/-884	15,657	+/-781	87.4%	+/-2.0	2,263	+/-389	12.6%	+/-2.0	
WORK EXPERIENCE											
Civilian noninstitutionalized population 19 to 64 years	59,423	+/-228	52,261	+/-709	87.9%	+/-1.2	7,162	+/-707	12.1%	+/-1.2	
Worked full-time, year round in past 12 mos	25,561	+/-837	23,674	+/-889	92.6%	+/-1.3	1,887	+/-340	7.4%	+/-1.3	
Worked less than full-time, year round in past 12 mos	17,416	+/-718	14,257	+/-692	81.9%	+/-2.5	3,159	+/-465	18.1%	+/-2.5	
Did not work	16,446	+/-832	14,330	+/-725	87.1%	+/-2.1	2,116	+/-384	12.9%	+/-2.1	
HOUSEHOLD INCOME (I	N 2017 IN	IFI ATION	-ADIUST	ED DOLL	ΔRS)						
Total household population	105,731	+/-291	97,446	+/-990	92.2%	+/-0.9	8,285	+/-935	7.8%	+/-0.9	
Under \$25,000	20,996	+/-1,462	18,904	+/-1,388	90.0%	+/-1.8	2,092	+/-409	10.0%	+/-1.8	
\$25,000 to \$49,999	29,756	+/-1,975	27,025	+/-1,854	90.8%	+/-1.5	2,731	+/-491	9.2%	+/-1.5	
\$50,000 to \$74,999	21,737	+/-1,461	19,958	+/-1,314	91.8%	+/-2.0	1,779	+/-473	8.2%	+/-2.0	
\$75,000 to \$99,999	14,930	+/-1,759	14,143	+/-1,598	94.7%	+/-2.8	787	+/-460	5.3%	+/-2.8	
\$100,000 and over	18,312	+/-1,557	17,416	+/-1,515	95.1%	+/-1.6	896	+/-302	4.9%	+/-1.6	
RATIO OF INCOME TO P	OVERTY	FVFI IN	THE PAST	12 MON	гнс					- 1	
Civilian noninstitutionalized population for whom poverty status is determined	106,082	+/-280	97,660	+/-959	92.1%	+/-0.9	8,422	+/-938	7.9%	+/-0.9	
Below 138 percent of the poverty threshold	26,526	+/-1,938	23,323	+/-1,754	87.9%	+/-1.7	3,203	+/-516	12.1%	+/-1.7	
138 to 399 percent of the poverty threshold	51,686	+/-1,808	47,510	+/-1,807	91.9%	+/-1.5	4,176	+/-793	8.1%	+/-1.5	
At or above 400 percent of the poverty threshold	27,870	+/-1,563	26,827	+/-1,530	96.3%	+/-1.0	1,043	+/-297	3.7%	+/-1.0	
Below 100 percent of the poverty threshold	18,075	+/-1,511	15,599	+/-1,416	86.3%	+/-2.4	2,476	+/-463	13.7%	+/-2.4	

### **Findings**

#### **Secondary Data Scoring Results**

*Table 6* shows the data scoring results for Douglas County by topic area. Topics with higher scores indicate greater need. Environmental & Occupational Health is the poorest performing health topic for CHI Mercy Health, followed by Prevention & Safety, Respiratory Diseases, Education, Diabetes, Economy and Children's Health.

Table 6. Secondary Data Scoring Results by Topic Area

Health & Quality of Life Topics	Indicators	Topic Score
Environmental & Occupational Health	3	2.01
Prevention & Safety	4	1.93
Respiratory Diseases	10	1.89
Education	7	1.87
Diabetes	3	1.80
Economy	18	1.75
Children's Health	5	1.75
Mortality Data	20	1.67
Wellness & Lifestyle	6	1.67
Exercise, Nutrition, & Weight	21	1.66
Social Environment	13	1.63
Transportation	7	1.60
Men's Health	4	1.60
Access to Health Services	7	1.56
County Health Rankings	6	1.56
Maternal, Fetal & Infant Health	5	1.54
Environment	18	1.46
Mental Health & Mental Disorders	6	1.45
Other Chronic Diseases	4	1.43
Immunizations & Infectious Diseases	7	1.42
Heart Disease & Stroke	10	1.42
Public Safety	3	1.38
Older Adults & Aging	21	1.37
Substance Abuse	9	1.35
Cancer	15	1.33
Women's Health	6	1.20

<sup>\*</sup>See Appendix B for additional details on the indicators within each topic area



Figure 14. Community Survey Results: Most Important Health Issues in the Community (%)

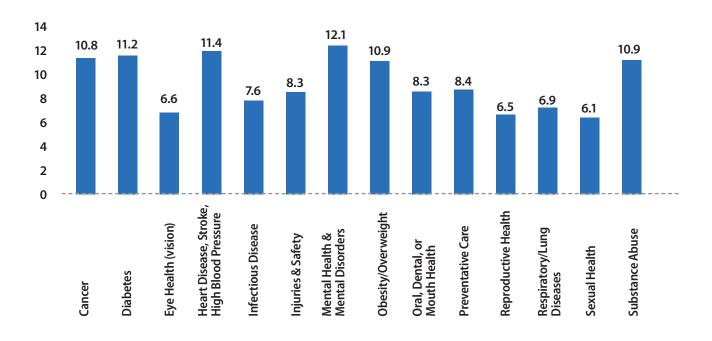


Figure 15. Community Survey Results: Lifestyle Factors Most Impacting Community Member's Health (%)

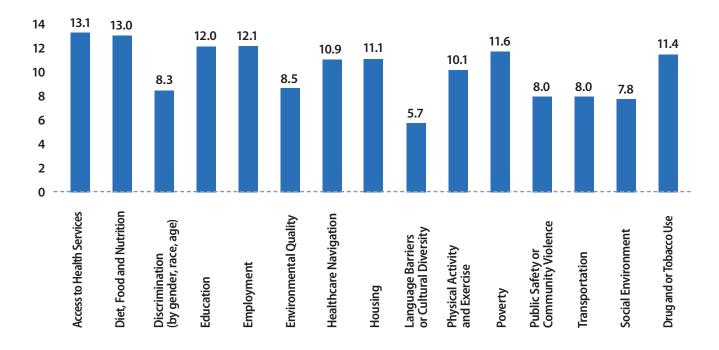
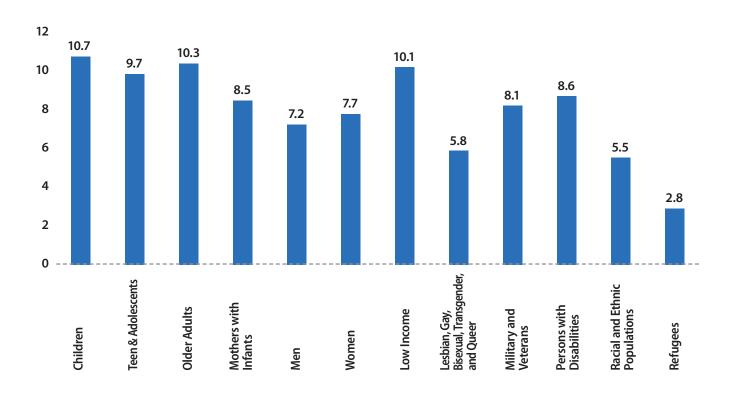


Figure 16. Community Survey Results: Groups Most Impacted by Poor Health Outcomes (%)



#### **Data Synthesis**

All forms of data have strengths and limitations. In order to gain a comprehensive understanding of the significant health needs for CHI Mercy Health, findings from the secondary data and community survey were compared and analyzed for areas of overlap. The top needs from each data source were identified using the criteria displayed in *Table 7*.

**Table 7.** Criteria for Identifying the Top Needs from each Data Source

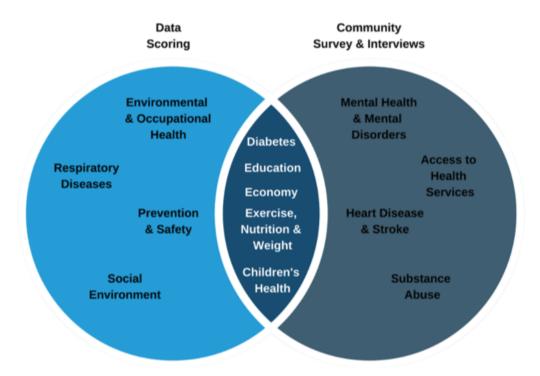
Data Source	Criteria for Top Need
Secondary Data	Top 8 topic areas receiving highest data score
Community Survey	Community issues ranked by survey respondents as the most important health issues (Q14), the most impactful lifestyle factors (Q15) and the group(s) most affected by poor health outcomes (Q16)
Brief Community Interviews	Most mentioned community health issues and lifestyle factors

The top needs from each data source were incorporated into a Venn Diagram. Community issues ranked by survey respondents were categorized to align with the health and quality of life topic areas displayed in *Table 2*.

Figure 3 displays the top needs from each data source in the Venn diagram.



**Figure 17.** Data Synthesis



Across all data sources, there is strong evidence of need for Education, Diabetes, Economy and Exercise, Nutrition & Weight. Children's Health came up across the data sources indicating children as a subgroup needing more attention and focus. As seen in Figure 4, the survey results and focus group discussion analysis cultivated additional topics not ranked as top priorities in the secondary data findings. A mixed-methods approach is a strength when assessing a community as a whole. This process ensures robust findings through statistical analysis of health indicators and examination of constituent's perceptions of community health issues.

#### **Topic Areas Examined in This Report**

The topic areas with the highest secondary data scores and identified in the community survey are explored in-depth in this report.

**Table 8.** Topic Areas Examined In-Depth in this Report

Access to Health Services
Children's Health
Diabetes
Economy
Education
Environmental & Occupational Health
Exercise, Nutrition, & Weight
Heart Disease & Stroke
Mental Health & Mental Disorders
Prevention & Safety
Respiratory Diseases
Social Environment
Substance Abuse

#### **Navigation within Each Topic**

Findings are organized by topic area and whether they were prioritized or not prioritized by the selection committee. Within each topic, key issues are summarized followed by a review of secondary and primary data findings. Each topic includes a table with key indicators from the secondary data scoring results. Indicators that received a score of 1.50 or above are considered high scoring and are included for the prioritized topics.

The full list of indicators for each topic area can be found in Appendix B.

### Prioritized Health and Quality of Life Topics

Upon completion of the group prioritization session, five areas of need were identified for subsequent implementation planning by CHI Mercy. These five health needs are: Mental Health & Mental Disorders, Children's Health, Access to Health Services, Education and Substance Abuse.

#### **Mental Health & Mental Disorders**

#### Key Issues

- Higher number of reported poor mental health days in Douglas County than the U.S.
- Age-adjusted death rate due to suicide is higher in Douglas County than in Oregon and the U.S.
- Community leaders identified suicide as a top health issue in the community

#### **Secondary Data**

Mental Health & Mental Disorders received an overall topic score of 1.45 and was the eighteenth highest scoring topic in Douglas County. The highest scoring indicators for this topic area were Poor Mental Health: Average Number of Days and Age-Adjusted Death Rate due to Suicide. The average number of reported poor mental health days in Douglas County is in line with the Oregon value (4.5 days) but higher than the U.S. value (3.8). The age-adjusted death rate due to suicide is 24.7 deaths per 100,000 population in Douglas County which is higher than in Oregon (18.1 deaths/100,000 population) and the U.S (13.2 deaths/100,000 population).

**Table 9.** Data Scoring Results for Mental Health & Mental Disorders

SCORE	MENTAL HEALTH & MENTAL DISORDERS	UNITS	DOUGLAS COUNTY	HP 2020	OREGON	U.S.	MEASUREMENT PERIOD	SOURCE
2.17	Poor Mental Health: Average Number of Days	Days	4.5		4.5	3.8	2016	5
2.06	Age-Adjusted Death Rate due to Suicide	Deaths/ 100,000 population	24.7	10.2	18.1	13.2	2014-2016	13

 $<sup>\</sup>hbox{``See Appendix B for full list of indicators included in each topic area}\\$ 



#### **Primary Data**

Community Survey respondents selected Mental Health as the most important health issue in the community with 12.1% of participants selecting this issue.

Mental Health & Mental Disorders received the highest number of votes during the prioritization session with fourteen votes. Participants selected this topic area because of concerns about depression and suicide rates in the community. One participant identified gaps in youth mental health services and another felt that there is a need to tackle silos amongst community resources. Recommendations included focusing on increasing access to treatment, developing prevention services and involving the whole community in improvement efforts.

#### **Children's Health**

#### Key Issues

- · Child food insecurity is a top area of need in Douglas County
- · Substantiated child abuse rate is higher in Douglas County than in Oregon
- · Percentage of children with health insurance is lower in Douglas County than in Oregon and the U.S.

#### **Secondary Data**

Children's Health received an overall topic score of 1.75 and was the seventh highest scoring topic in Douglas County. The highest scoring indicators for this topic area were Child Food Insecurity Rate and Substantiated Child Abuse Rate. 25.3% of children are consider food insecure in Douglas County which is higher than in Oregon (20%) and the U.S. (17.9%). In addition, the Substantiated Child Abuse Rate is 28.1 cases per 1,000 children in Douglas County which is substantially higher than in Oregon (12.8 cases/1,000 children). 94.7% of children have health insurance in Douglas County which is slightly lower than the state overall (97.2%) and the U.S. (95.9%). Another indicator of concern is children with low access to a grocery store which is 5.4% of the population.

**Table 10.** Data Scoring Results for Children's Health

SCORE	CHILDREN'S HEALTH	UNITS	DOUGLAS COUNTY	HP 2020	OREGON	U.S.	MEASUREMENT PERIOD	SOURCE
2.17	Child Food Insecurity Rate	percent	25.3		20	17.9	2016	6
2.11	Substantiated Child Abuse Rate	cases/1,000 children	28.1		12.8		2017	12
1.69	Children with Health Insurance	percent	94.7	100	97.2	95.9	2017	1
1.67	Children with Low Access to a Grocery Store	percent	5.4				2015	18

#### **Primary Data**

10.7% of Community Survey respondents selected Children as the group in the community that is the most effected by poor health outcomes.

Children's Health received the second highest number of votes during the prioritization session with eight votes. Participants selected this topic area because of concerns for children living below poverty level and child food insecurity. Community leaders felt that a sub-group at particular risk are children in the foster care system or living

in unstable homes. One participant felt that the need to address children's health is great however there is a lack of an integrated community strategy with many organizations working on the issue, but some efforts may be duplicated or are too diffuse to make an impact. Another participant suggested that focusing on children's health is the best opportunity for the community to address long-term change for health issues such as obesity and healthy life styles in the community.

#### **Access to Health Services**

#### Key Issues

- · Fewer adults have health insurance and a usual source of health care in Douglas County than in the state and U.S.
- · There is a need for primary care providers in Douglas County

#### **Secondary Data**

Access to Health Services received an overall topic score of 1.56 and was the fourteenth highest scoring topic in Douglas County. The highest scoring indicators for this topic area were Adults with a Usual Source of Health Care, Adults with Health Insurance and Primary Care Provider Rate. 72% of adults in Douglas County have a usual source of health care compared to 75.5% of adults in Oregon. In addition, 83.9% of adults have health insurance in Douglas County which is lower than in Oregon (87.5%) and the U.S. (84.3%). The primary care provider rate is an area of need for Douglas County with 64.1 providers per 100,000 population which is lower than in Oregon (93.5 provider/100,000 population) and in the U.S. (75.5 providers/100,000 population).

**Table 11.** Data Scoring Results for Access to Health Services

SCORE	ACCESS TO HEALTH SERVICES	UNITS	DOUGLAS COUNTY	HP 2020	OREGON	U.S.	MEASUREMENT PERIOD	SOURCE
2.11	Adults with a Usual Source of Health Care	percent	72	89.4	75.5		2010-2013	10
1.92	Adults with Health Insurance	percent	93.9	100	87.5	84.3	2017	1
1.89	Primary Care Provider Rate	providers/ 100,000 population	64.1		93.5	75.5	2015	5
1.69	Children with Health Insurance	percent	94.7	100	97.2	95.9	2017	1

<sup>\*</sup>See Appendix B for full list of indicators included in each topic area

#### **Primary Data**

Community Survey respondents were asked what lifestyle factors have the most impact on health and Access to Health Services received the highest response with 13.1% of participants selecting the topic.

Access to Health Services received the third highest number of votes during the prioritization session with six votes. Participants selected this topic area because of a need in the community for continuous 24/7 availability of services and additional primary care providers. One participant raised the issue of turnover rates for primary care providers in the community and how that may impact a patients' ability to re-establish care with a new provider.



#### **Education**

#### **Key Issues**

- · Bachelor's degree attainment is much lower in Douglas County than in Oregon and the U.S.
- · The percent of students dropping out of high school is more than twice as high in Douglas County than in Oregon
- · Community leaders perceive improving education as a preventative intervention opportunity to impact health and quality of life

#### **Secondary Data**

Education received an overall topic score of 1.87 and was the fourth highest scoring topic in Douglas County. The highest scoring indicator for this topic area was People 25+ with a Bachelor's Degree or Higher. 16.3% of people in Douglas County hold a bachelor's degree which is much lower than in Oregon (31.4%) and the U.S. (30.3%). The high school dropout rate in Douglas County is another area of concern with 8% of high schoolers dropping out compared to 3.9% in Oregon overall. In addition, 8th and 3rd grade reading and math proficiency is lower in Douglas County than in the state.

**Table 12.** Data Scoring Results for Education

SCORE	EDUCATION	UNITS	DOUGLAS COUNTY	HP 2020	OREGON	U.S.	MEASUREMENT PERIOD	SOURCE
2.33	People 25+ with a Bachelor's Degree or Higher	percent	16.3		31.4	30.3	2012-2016	1
2.11	High School Drop Outs	percent	8		3.9		2016-2017	11
2.00	8th Grade Students Proficient in Reading	percent	42.8		57.2		2015-2016	2
1.83	3rd Grade Students Proficient in Math	percent	37.9		47.5		2015-2016	2
1.83	3rd Grade Students Proficient in Reading	percent	40.9		47.4		2015-2016	2
1.83	8th Grade Students Proficient in Math	percent	32.4		42.4		2015-2016	2

<sup>\*</sup>See Appendix B for full list of indicators included in each topic area

#### **Primary Data**

Community Survey respondents were asked what lifestyle factors have the most impact on health and Education received one of the highest responses with 12% of participants selecting the topic.

Education received the fourth highest number of votes (tied with Substance Abuse) during the prioritization session with five votes. Participants selected this topic area because of a need in the community to address the percent of students dropping out of high school and lack of higher educational attainment in the community. Participants felt that improving and increasing education in the community is a preventative approach and will impact other health and quality of life issues in the community.

#### **Substance Abuse**

#### **Key Issues**

- · High percentage of women report smoking during pregnancy in Douglas County
- · The age-adjusted death rate due to alcohol consumption is higher in Douglas County than in Oregon overall
- · Community members and leaders identified substance use a primary contributor to poor health outcomes in Douglas County

#### **Secondary Data**

Substance Abuse received an overall topic score of 1.35 and was the twenty-fourth highest scoring topic in Douglas County. The highest scoring indicators for this topic area were Mothers who Smoked During Pregnancy and Age-Adjusted Death Rate due to Alcohol Consumption. 20.5% of pregnant women reported smoking during pregnancy which is much higher than in Oregon (9.6%) and the U.S. (7.2%). In addition, the age adjusted death rate in Douglas County is 25.8 deaths per 100,000 population which is higher than in Oregon over all (17.3 deaths/100,000 population). 25.6% of adults report smoking in Douglas County compared to 19% in the overall population of Oregon. Finally, the death rate due to drug poisoning in Douglas County (13.9 dates/100,000 population) is higher than in Oregon but lower than in the U.S. overall.

**Table 13.** Data Scoring Results for Substance Abuse

SCORE	SUBSTANCE ABUSE	UNITS	DOUGLAS COUNTY	HP 2020	OREGON	U.S.	MEASUREMENT PERIOD	SOURCE
2.31	Mothers who Smoked During Pregnancy	percent	20.5	1.4	9.6	7.2	2016	13
2.08	Age-Adjusted Death Rate due to Alcohol Consumption	deaths/ 100,000 population	25.8		17.3		2014-2016	13
1.83	Adults who Smoke	percent	25.6	12	19		2010-2013	10
1.67	Death Rate due to Drug Poisoning	deaths/ 100,000 population	13.9		12.7	16.9	2014-2016	5
?	Eighth Graders using e-cigarettes (Vaping)	percent	9					
?	Eleventh Graders using e-cigarettes (Vaping)	percent	12					

#### \*See Appendix B for full list of indicators included in each topic area

#### **Primary Data**

Community Survey respondents were asked what lifestyle factors have the most impact on health and Drug or Tobacco Use received one of the highest responses with 11.6% of participants selecting the topic. During the Brief Interviews with individuals receiving health care services at CHI Mercy, Substance Abuse was the top issue identified.

Substance Abuse received the fourth highest number of votes (tied with Education) during the prioritization session with five votes. Participants selected this topic area because of the overlap with other issues such as mental health, education, homelessness and health overall. One participant identified the opportunity to build partnerships and collaboration with the many community agencies already working on the substance abuse issue.

### Non-Prioritized Health and Quality of Life Topics

The following health and quality of life topics were identified through stakeholder and community feedback, however were not identified as highest needs during the prioritization process. Due to limited resources, CHI Mercy Health has elected to focus efforts on the areas with greatest opportunity during this community benefit cycle.

#### **Environmental & Occupational Health**

### **Primary and Secondary Data Summary**SURVEY

Environmental & Occupational Health received an overall topic score of 2.01 and was the highest ranked topic score for Douglas County. The topic score was determined based on three indicator scores that each had a score above 1.50. The top indicator of concern was Asthma amongst the Medicare Population (8.1%) in Douglas County which was higher than the Oregon state value (6.6%) but lower than the U.S. value (8.2%). Additional indicators of concern were Adults with Current Asthma (15.1%) and the Physical Environment Ranking. See Appendix B for full list of indicators included in this topic area.

Environmental & Occupational Health did not receive any votes during the prioritization session.

#### **Prevention & Safety**

### **Primary and Secondary Data Summary** SURVEY

Prevention & Safety received an overall topic score of 1.93 and was the second highest ranked topic score for Douglas County. Four indicators within this topic area received a score above 1.50. The highest scoring indicator was Age-Adjusted Death Rate due to Unintentional Injuries (56.2 deaths per 100,000 population) which was higher in Douglas County than in Oregon (18.1 deaths/100,000 population) and in the U.S. (43.2 deaths/100,000 population). Other indicators of concern were Age-Adjusted Death Rate due to Motor Vehicle Collisions (20.1 deaths/100,000 population), Death Rate due to Drug Poisoning (13.9 deaths/100,000 population) and Severe Housing Problems (18%). See Appendix B for full list of indicators included in this topic area

Prevention & Safety did not receive any votes during the prioritization session.

#### **Economy**

### **Primary and Secondary Data Summary**SURVEY

Economy received an overall topic score of 1.75 and was the sixth highest ranked topic score for Douglas County. Fourteen indicators within this topic area received a score of 1.50 or above. The highest scoring indicators for Douglas County were Children Living Below Poverty Level (28.6%), Families Living Below Poverty Level (13.3%) and Unemployed Workers in Civilian Labor Force (5.1%). Children Living Below Poverty Level is higher in Douglas County than in Oregon (20.4%) and the U.S. (21.2%). Families Living Below Poverty Level is higher in Douglas than in Oregon (10.5%) and the U.S. (11%). Unemployed Workers in Civilian Labor Force is also slightly higher in Douglas County than in Oregon (4%) and the U.S. (4.2%). Other indicators of concern in Douglas County are Child Food Insecurity Rate (25.3%), People Living 200% Above Poverty Level (58.1%), People Living Below Poverty Level (18.6%), Food Insecurity Rate (15.4%), Low-Income and Low Access to a Grocery Store (11.1%), Median Household Income (\$42,052), Per Capita Income (\$23,608), Households with Cash Public Assistance Income (3.8%), Severe Housing Problems (18%), Social and Economic Factors Ranking (Ranked 28th) and Renters Spending 30% or More of Household Income on Rent (47.7%). See Appendix B for full list of indicators included in this topic area.

Economy received three votes during the prioritization session.

#### **Social Environment**

### **Primary and Secondary Data Summary**SURVEY

Social Environment received an overall topic score of 1.63 and was the eleventh highest ranked topic score for Douglas County. Nine indicators within this topic area received a score of 1.50 or above. The highest scoring indicator for Douglas County was People 25+ with a Bachelor's Degree or Higher (16.3%) which is lower than in Oregon (31.4%) and in the U.S. (30.3%). Other indicators of concern in Douglas County are Single-Parent Households (35.4%), Children Living Below Poverty Level (28.6%), Substantiated Child Abuse Rate (28.1 cases/1,000 children), People Living Below Poverty Level (18.6%), Median Household Income (\$42,052), Per Capita Income (\$23,608), Voter Turnout: Presidential Election (77.1%) and Social and Economic Factors Ranking (Ranked 28th). See Appendix B for full list of indicators included in this topic area.

Social Environment did not receive any votes during the prioritization session.

# Quality of Life Issues Currently Being Worked on Through Independent Initiatives and Active Collaborations

#### **Respiratory Diseases**

### **Primary and Secondary Data Summary**SURVEY

Respiratory Diseases: Through CHI Mercy Health internal and ambulatory COPD and CHF readmission prevention work team, our clinicians focus on educating patients to intervention and prevention techniques that enhance their quality of life and help them avoid unnecessary hospitalizations and medical setbacks.

Respiratory and Heart diseases received an overall topic score of 1.89 and was the third highest ranked topic score for Douglas County. Eight indicators within this topic area received a score of 1.50 or above. The highest scoring indicator was COPD amongst the Medicare Population (12.3%) which is higher than in Oregon (8.7%) and the U.S. (11.2%). Other indicators of concern include Asthma amongst the Medicare Population (8.1%), Age-Adjusted Death Rate due to Lung Cancer (55.6 deaths/100,000 population), Adults with Current Asthma (15.1%), Age-Adjusted Death Rate due to Chronic Lower Respiratory Diseases (52.5 deaths/100,000 population), Age-Adjusted Death Rate due to Influenza and Pneumonia (11.6 deaths/100,000 population), Adults 65+ with Influenza Vaccination (53.7%) and Lung and Bronchus Cancer Incidence Rate (62.1 cases/100,000 population). See Appendix B for full list of indicators included in this topic area.

Respiratory Diseases did not receive any votes during the prioritization session.





#### **Heart Disease & Stroke**

### **Primary and Secondary Data Summary** SURVEY

Heart Diseases: Through CHI Mercy Health internal and ambulatory COPD and CHF readmission prevention work team, our clinicians focus on educating patients to intervention and prevention techniques that enhance their quality of life and help them avoid unnecessary hospitalizations and medical setbacks.

Heart Disease & Stroke received an overall topic score of 1.42 and was the twenty-first highest ranked topic score for Douglas County. Two indicators within this topic area received a score of 1.50 or above. The highest scoring indicator for Douglas County was High Blood Pressure Prevalence (34.4%) which is higher in Douglas County than in Oregon (27.7%) and does not meet the Healthy People 2020 goal of 26.9%. High Cholesterol Prevalence is also an indicator of concern for Douglas County (41.3%) which is higher than the prevalence in Oregon (31.8%) and does not meet the Healthy People 2020 goal of 13.5%. Other indicators of concern are Atrial Fibrillation: Medicare Population (7.4%) and Hypertension: Medicare Population (49.2%). See Appendix B for full list of indicators included in this topic area.

Heart Disease & Stroke did not receive any votes during the prioritization session.

#### **Diabetes**

### **Primary and Secondary Data Summary**SURVEY

Youth Diabetes: A Steering committee was formed and our first Youth Diabetes Open House included 30 families. Currently we are working with 47+ youth with Type 1 diabetes. Workshops which include Parent and Youth Support Groups, Nutrition Education, Equipment Updates, and Round Table of Issues, are held monthly.

Diabetes received an overall topic score of 1.80 and was the fifth highest ranked topic score for Douglas County. Two indicators within this topic area received a score of 1.50 or above. The highest scoring indicators for Douglas County were Adults with Diabetes (10.5%) and Age-Adjusted Death Rate due to Diabetes (31.9 deaths/100,000 population). Adults with Diabetes is higher in Douglas County than in Oregon (8.2%). The Age-Adjusted Death Rate due to Diabetes is higher in Douglas County than in Oregon (23 deaths/100,000 population) and in the U.S. (21.1 deaths/100,000 population). See Appendix B for full list of indicators included in this topic area.

Diabetes received three votes during the prioritization session.

#### **Exercise, Nutrition & Weight**

### **Primary and Secondary Data Summary**SURVEY

Exercise, Nutrition & Weight: In partnership with the Blue Zones Umpqua Team, CHI Mercy Health is working on numerous interventions designed to promote natural movement, healthy eating and healthy weight.

Exercise, Nutrition & Weight received an overall topic score of 1.66 and was the tenth highest ranked topic score for Douglas County. Fourteen indicators within this topic area received a score of 1.50 or above. The highest scoring indicator for Douglas County was Adults who are Obese (34.4%) which is higher than in Oregon (25.9%) and does not meet the Healthy People 2020 goal of 30.5%. Other indicators of concern in Douglas County are Food Environment Index (6.8), Child Food Insecurity Rate (25.3%), Access to Exercise Opportunities (66.9%), Food Insecurity Rate (15.4%), Workers who Walk to Work (2.8%), Low-Income and Low Access to a Grocery Store (11.1%), People 65+with Low Access to a Grocery Store (4.6%), Children with Low Access to a Grocery Store (5.4%), Households with No Car and Low Access to a Grocery Store (2.6%), Grocery Store Density (0.2 stores/1,000 population), Adults 20+ who are Sedentary (19.6%), Adults who are Overweight (36.1%) and Recreation and Fitness Facilities (0.1 facilities/1,000 population). See Appendix B for full list of indicators included in this topic area.

Exercise, Nutrition & Weight received two votes during the prioritization session.

# Mortality

Knowledge about the causes of death in a population is critical to understanding how to target interventions to maximize population health. Table 14 shows the causes of mortality in Douglas County, Oregon, where the rate is age-adjusted to the U.S. standard population and is given as an age-adjusted death rate per 100,000 population with the exception of Infant Mortality Rate (1,000 live births) and Alcohol-Impaired Driving Deaths (percent).

**Table 14.** Causes of Mortality in Douglas County Compared to Oregon and U.S.

MORTALITY DATA	DOUGLAS COUNTY	OREGON	U.S.	UNITS	MEASUREMENT PERIOD	SOURCE
Age-Adjusted Death Rate due to Cancer	189.9	164.8	163.5	deaths/ 100,000 population	2011-2015	8
Age-Adjusted Death Rate due to Unintentional Injuries	56.2	18.1	43.2	deaths/ 100,000 population	2014-2016	13
Age-Adjusted Death Rate due to Lung Cancer	55.6	42.3	43.4	deaths/ 100,000 population	2011-2015	8
Infant Mortality Rate	8.2	5.1	5.9	deaths/ 1,000 live births	2015	13
Age-Adjusted Death Rate due to Chronic Lower Respiratory Diseases	52.5	40.5	40.9	deaths/ 100,000 population	2014-2016	13
Age-Adjusted Death Rate due to Diabetes	31.9	23	21.1	deaths/ 100,000 population	2014-2016	13
Age-Adjusted Death Rate due to Alcohol Consumption	25.8	17.3		deaths/ 100,000 population	2014-2016	13
Age-Adjusted Death Rate due to Suicide	24.7	18.1	13.2	deaths/ 100,000 population	2014-2016	13
Age-Adjusted Death Rate due to Motor Vehicle Collisions	20.1	11		deaths/ 100,000 population	2014-2016	13
Age-Adjusted Death Rate due to Influenza and Pneumonia	11.6	9	14.6	deaths/ 100,000 population	2014-2016	13
Death Rate due to Drug Poisoning	13.9	12.7	16.9	deaths/ 100,000 population	2014-2016	5
Age-Adjusted Death Rate due to Prostate Cancer	20.8	21.1	19.5	deaths/ 100,000 males	2011-2015	8
Age-Adjusted Death Rate due to Kidney Disease	11.4	7.9	13.3	deaths/ 100,000 population	2014-2016	3
Age-Adjusted Death Rate due to Cerebrovascular Disease (Stroke)	37.2	37.2	37.2	deaths/ 100,000 population	2014-2016	13
Age-Adjusted Death Rate due to Colorectal Cancer	14.4	13.9	14.5	deaths/ 100,000 population	2011-2015	8
Age-Adjusted Death Rate due to Alzheimer's Disease	26.9	31.8	28.4	deaths/ 100,000 population	2014-2016	13
Age-Adjusted Death Rate due to Breast Cancer	19	20.2	20.9	deaths/ 100,000 females	2011-2015	8
Age-Adjusted Death Rate due to Heart Disease	136.3	133.6	167	deaths/ 100,000 population	2014-2016	13
Alcohol-Impaired Driving Deaths	20.8	31.8	29.3	percent	2012-2016	5

# Conclusion

The Community Health Needs Assessment utilized a comprehensive set of secondary data indicators measuring the health and quality of life needs for CHI Mercy Health. The assessment was further informed with input from Douglas County residents through a community survey and brief interviews that included participants from broad interests of the community. The data synthesis process identified twelve significant health needs: Access to Health Services, Children's Health, Diabetes, Economy, Education, Environmental & Occupational Health, Exercise, Nutrition, & Weight, Heart Disease & Stroke, Mental Health & Mental Disorders, Prevention & Safety, Respiratory Diseases, Social Environment and Substance Abuse. From this list, the prioritization process identified five focus areas: (1) Mental Health & Mental Disorders (2) Children's Health (3) Access to Health Services (4) Education and (5) Substance Abuse. Following this process, CHI Mercy Health will outline how it plans to address these health needs in its implementation plan.

We hope to incorporate any feedback on this report into the next CHNA process. Please send your feedback and comments to *nancylehrbach@chiwest.com* 



# Appendix A. Impact since Prior CHNA

Significant Health Need Identified in Preceding CHNA	Planned Activities to Address Health Needs Identified in Preceding Implementation Strategy	Was Activity Implemented (Yes/No)	Results, Impact & Data Sources
	Increase public knowledge of healthy eating and nutrition	Yes	Pilot started in 2016-17 school year in 2 middle schools. Kids in the Kitchen, a program implemented by the Healthy Kids Outreach Program (HKOP), expanded to serve 5 school sites this last year bringing the total of participants to 75 with plans of expanding to 7 sites during the 2018-2019 school year. Almost 3,000 students received 10 week classroom nutrition education this last year. 2721 (2017-18), 2690 (2016-17), 2215 (2015-16) Engaged schools further in applying the nutrition education and empowering the students to make healthy choices by providing 49 cafeteria tastings resulting in 11,347 contacts, 54 displays promoting healthy eating, and monthly newsletters went home to 20918 parents/guardians. Evaluations indicated an increase in knowledge of identifying health foods across all age groups and increase in activity. Kindergarteners saw an increase in some food identification by 50%, almost 30% in washing hands, and 15% increase in physical activity. Comparative data from the previous year is as follows: 2017-18: Kindergarten 210% increase in matching grain foods, 168% increase in matching protein, 27% increase in hand washing prior to eating. 1st and 2nd grade Increase in correctly identifying foods, 6% decrease in frequency of watching TV or playing video games per day. 4th and 5th grade 11% increase reported eating more than one type fruit and vegetable most days of the week, 7% increase in fruits, 5% increase in asking for fruits and vegetables from their parents, and 5% increase engaging in physical activity that "makes them breathe hard."
Healthy Weight Promotion	Partner with Blue Zones and school systems to increase engagement with BEPA, and improve nutritional options in school cafeterias	Yes	HKOP (Health Kids Outreach Program) had originally implemented BEPA (Balanced Energy Physical Activity) trainings and toolkits in 5 schools prior to BZ involvement. We were able to increase the number of schools trained, engaging and accessing BEPA toolkits for 3 additional schools and refreshing 3 other schools training and supplies. HKOP provided Food waste study to 3 volunteer schools to help formulate improvement plans within their cafeterias. Since BZ, 2 other schools selected cafeteria score cards to improve their delivery and selection of healthful foods that included trying Foodhero recipes, position of foods, signage, and selecting a food of the month. 2 schools have been Blue Zone approved and other Roseburg schools are currently working on their plans and approval. Green Elementary, Eastwood, and Hucrest kicked off new/refreshed walk and bike to school days. Currently BZ is working on 2 school sites for the Walking School Bus but nothing has been accomplished for safe routes to school. Green Elementary has continued theirs once a week. Douglas County was awarded \$2 million to increase safety for Green Elementary students. The proposed improvements will include constructing continuous sidewalks and bike lanes, increasing visibility at crossings and posting school warning signs and street markings to alert motorists, made possible by funding from the Safe Routes to School program. Safe Routes to School is a national program to increase physical activity, improve health and reduce traffic congestion around schools by making it safer and easier for students to walk and bicycle to school.
	Increase access to healthy food options for underserved and geographically marginalized populations	Yes	<ul> <li>Veggie RX-kicked off with an 8 week pilot program with collaboration from Evergreen, MMC, Mercy Foundation, Farmer's Market, OSU Ext SNAP Ed, and Blue Zones</li> <li>Mobile Food Pantry-a grant was written and received for our community, and the program was launched in the Spring of 2019 with a coordinator and a mobile food pantry. The soft opening was in Camas Valley</li> </ul>
	Healthy Weight and Exercise	Yes	Blue Zones Umpqua demonstration pilot started in December of 2017, with a full-year implementation in 2018. Blue Zones Project – Umpqua focuses on the changing policies that assist citizens in making the healthy choice the easy choice and the Power 9, a number of principles that have been documented to have a positive impact on longevity. Included in this work is a focus on diet (plant slant), exercise (naturally moving throughout the day and forming MOAls, small groups that support healthy activities) and volunteerism. As of January 2019, 3472 people have participated in a Blue Zones related activity. Of these, 344 residents participated in Purpose workshops through community venues, schools, churches and worksites. 351 residents completed a 10-week Moai, including walking and healthy eating and plant-based potlucks. Monthly newsletters are sent that include new plant-based recipes as well as opportunities for community members to participate in healthy and active activities, including walking MOAls, trail hikes and community clean up events.

	Raise awareness, increase reporting and prevent incidence of violence	Yes	<ul> <li>Partnership with community members to host a Resilience Summit focused on the effects of Adverse Childhood experiences (ACE's) attended by over 300 community members and professionals</li> <li>Hosted QPR (Question, Persuade, Refer) Suicide Prevention Training attended by over 50 local professionals</li> <li>Growth Mindset Training which recognizes and encourages positive behavior changes by shifting self-perception to effect learning achievement, skill acquisition and personal relationships for youth and adults attended by 25 local professionals</li> <li>Continue to coordinate monthly Up2UsNow Child Abuse Prevention coalition meetings with 30+ agencies</li> <li>Continue to participate on the Multi-Disciplinary Team to review cases of child abuse.</li> <li>Participate on the resource staffing at the Juvenile Detention Center</li> <li>Developed and continues to participate on the Family Violence Task force as a result of the Up2UsNow coalition</li> <li>Coordinates the Challenge of the Heroes annual event to promote awareness of Human Trafficking, Domestic Violence and Child Abuse</li> <li>Coordinates the Annual Community Denim day to bring more awareness to Sexual Assault Prevention</li> </ul>
	Rural Teams is a project to strengthen families/ communities in rural areas to increase the health, safety and well- being of children.		<ul> <li>Received a grant from The Ford Family Foundation to continue projects across our 5100 square mile county</li> <li>1 Rural Team is self-sustaining and has implemented youth projects within their community</li> <li>1 is currently in development and 8 others will be designed throughout the next 2 years</li> <li>Hired an independent coordinator to implement project programs within our rural areas</li> </ul>
Violence Prevention	Youth Media Project is a peer to peer awareness project to address the issues impacting our counties youth.	Yes	<ul> <li>2 project PSA's completed over the past year and aired on local television, social media and available on You Tube. Topics included social acceptance and sexual assault. Past topics have included substance abuse, bullying, neglect, physical and verbal abuse and teen problem gambling.</li> <li>Project was highlighted through a CHI/Dignity Health promotional film as a premiere prevention project. Filming took place in December 2018. This has been an on-going project for the past 8 years and duplicated in many other violence prevention initiatives. New project to begin April 2019.</li> <li>Continue to teach Violence Prevention curriculum in DC schools that focuses on antibullying, Healthy Relationships, and Life skills training through the Healthy Kids Outreach Program.</li> </ul>
Viole	Opioid Task Force Efforts	Yes	Naloxone Training and Distribution—all law enforcement agencies trained and received Naloxone kits. Data reports use of Naloxone by all trained agencies. HOPE Summit—to bring education and awareness to issues of the local opioid crisis throughout our community which will include a prevention and treatment focus on opioids and other drugs. Data Collection on the increased presence of Fentanyl within our county. Jail pre-release program to connect inmates to local services prior to release
	Human Trafficking Awareness, Education and Outreach	Yes	The task force became a recognized certified entity by the Oregon Dept. of Justice in 2018.  • Partnerships with over 14 local agencies and community members  • Created and instituted protocols, screening tools for medical providers & self-sufficiency  • Developed a directory of services and distributed to partnering agencies where none had previously existed  • Developed and facilitated 38 trainings and awareness events educating over 875 community members  • Outreach – hotel/motel and truck stop outreach projects across county and distribution of newsletters into medical clinics providing indicators of trafficking as well as local resources  • 2- Victims of Crime Act (VOCA) grants for strengthening the task force to hire an Anti-Trafficking advocate for Battered Persons Advocacy-(BPA).  • Our training program with our local truck driving school utilizing the Truckers against Trafficking curriculum was highlighted as a premiere prevention and awareness initiative through the CHI/Dignity Health promotional film project in December 2018  • Designing initiatives to bring prevention education curricula into our local middle and high schools
			From 2017-18, 579 students received 2-3 lesson series on healthy relationships/anti-bullying/assertiveness. This school year 6 schools have requested VP estimating approximately 500 students participating in the VP education.

Parenting Education	Increase awareness and visibility of parental and family support services in Douglas County	Yes	CHI Mercy Health sponsored a multi-month parenting education collaborative where local community stakeholders assembled to discuss barriers to service, engage in strategic networking and brainstorm solutions and opportunities for improved partnering. As a result of these conversations it was identified that the implementation of a consolidated, digital platform that hosted and organized County level services into precise tabulated categories, would be of great benefit not only in the promotion of parenting education but in the advancement of all public and private health provisions. This led to a stakeholder partnership which collectively invested in Trilogy's Network of Care; a convenient, web-based, directory of available community services, health information, model practices, and a landing site for Community Benefit Reports and CHIP's.
Parenting	Improve access to parenting education resources	Yes	CHI Mercy Health, in a joint effort with the Douglas Education Services District, distributed 65 digital parenting education resources to assist families in healthy skill building for effectively parenting teens and adolescents. We also held three Baby 101 classes with a total of 33 attendees.  We provided fuel vouchers for three of the Take Root education classes for parents. Funding was distributed to the Tree of Hope Committee of Mercy Foundation for UCC's Early
			Childhood Care program, the SMART Reading program and Altrusa for the Douglas County Battle of the Books program.
	Promote / Implement Evidence Based Tobacco Cessation Programs	Yes	Forged partnership with Truth Initiatives to offer a no-cost digital, web-based tobacco reduction and cessation support service to hospital employees, and Douglas County residents. Since the inception of the program we've had 68 community members enroll, 75% establish a quit date and 15 clients report discontinuing a tobacco product.
			Mercy Foundation Healthy Kids Outreach Program offered age appropriate education on the effects tobacco use has on teeth, mouth, throat and appearance in the county school systems.
			Worked with Education Specialists and Community partners to increase the visibility of tobacco cessation support group opportunities and encourage client enrollment.
			Provided education on the Oregon Tobacco Quit Line through our Respiratory Service group, the general nursing intake assessment engine, and the internal distribution of information leaflets and matriculation cards with the result of 186 community members enrolling in services.
			In collaboration with the Blue Zones Tobacco Sector Committee, distributed 75 updated Indoor Clean Air Act stickers to local cigarette retail vendors in Roseburg Oregon.
duction			CHI Mercy Health, in partnership with the Blue Zones Tobacco Sector Committee sponsored the strategic placement and installation of 20 fireproof cigarette butt receptacles as a tobacco use and waste reduction measure in downtown Roseburg Oregon. We also collaborated with the city to expand the number of smoke free public sites in our municipal by two additional locations.
Tobacco Redu			Mercy Foundation Dental Learning Lab touches on basic care, impacts of nutrition, tobacco resistance, oral health safety, local resources, impacts of drugs and alcohol, and health careers within the dental field. In 2017-18 9069 students were reached; 2016-17, 7530 students and in, 2015-16, 6959 students.
Toba	Increase awareness of substance abuse impact and programs		Substance abuse often overlaps with other issues such as mental health, education, human trafficking, homelessness and health overall. One participant identified the opportunity to build partnerships and collaboration with the many community agencies already working on the substance abuse issue.
			Mercy Foundation Healthy Kids Outreach Program will provide age appropriate education on the effects tobacco use has on teeth, mouth, throat and appearance in the county school systems.
			Mercy and Mercy Foundation are actively collaborating with the Blue Zones Tobacco Sector Committee and Roseburg Downtown Association to create a smoke-free, butt-free area. In addition, Mercy and Mercy Foundation are working closely with Blue Zones and the Douglas County Public Health Network to partner with the Truth Initiative to bring "This is Quitting," a free mobile app developed to help 13 to 19 year olds to successfully quit e-cigarettes, or vaping The efforts for vaping will be built on the current digital platform Becoming an EX
			Mercy offered free Nicotine Replacement Therapy (NRT) and promoted the option for Douglas County resident to get a kick start on quitting via social media
			Mercy Foundation staff have assisted with training first responders in the use of Naloxone and provide them with the kits to reduce the incidents of overdose deaths; staff also provide education about substance abuse and smoking cessation at Rural Team events; and assist with training law enforcement and first responders about the connection between human trafficking in the "sex for drugs" trade.

Type 1 Diabetes Support	Improve Parent and Youth Support, and nutrition education for type 1 Diabetes.	Yes	Youth Diabetes Program – Steering committee was formed and our first Youth Diabetes Open House included 30 families. Currently we are working with 47+ youth with Type 1 diabetes. Workshops which include Parent and Youth Support Groups, Nutrition Education, Equipment Updates, and Round Table of Issues, are held monthly.
Health Lifestyles	Improve healthy lifestyles and services for youth in the community.	Yes	<ul> <li>Provide Backpacks filled with school supplies since 1998 to help improve self-esteem in our K-5 grade children The Learning Child Committee of Mercy Foundation (TLC)</li> <li>Provided socks, underwear, and shoes–giving children an equal playing field no matter what their socio-economic status is</li> <li>Provided hygiene products for our Douglas county students K-12 that include: deodorant, soap, shampoo, and dental supplies</li> <li>Provide Lice shampoo for all 13 school districts and education on how to use it not only on the family but in their homes on furniture, clothing, etc.</li> <li>Printed 400 (Balanced Energy Physical Activity) BEPA workbooks for several school districts (HKOP-Tree of HOPE) – these books help non-PE teachers get children moving while teaching a variety of subjects - Math, Science, etc.</li> <li>Placed washers and dryers in 36 schools in Douglas County so youth could learn to wash clothes and not be embarrassed by wearing dirty clothing (Tree of HOPE)</li> <li>Purchased 2 blender/art bikes to reinforce physical activity and learn more about nutritional foods while riding a bike and making smoothies, grains, hummus, etc.</li> <li>Sponsored the Special Olympics Partner camp at the YMCA through the Taylor Hatfield fund of Mercy Foundation. Through this same partner fund, it was able to fund for the Douglas ESD Motor Activities Training Program for special needs children</li> <li>We assisted COBB Street in purchasing and developing a science lab through another Partner Fund-Molly McGinnis</li> <li>Provided funding for all 13 school districts Grad Night Alcohol Free parties</li> <li>Scholarships from the Lance Michael Emmons Athletic Partner fund went to the Umpqua Valley Soccer Association; Myrtle Creek Soccer Program and scholarships for the Cal Ripken baseball program</li> <li>In addition many of our Partner Funds through the Mercy Foundation provided funding for the Riddle Behavioral Health Support Program, scholarships for Children with Cancer to learn how to manage their symp</li></ul>



# Appendix B. Secondary Data Scoring

#### **Overview**

Data scoring consists of three stages, which are summarized in Figure 4:

#### **Comparison Score**

For each indicator, CHI Mercy Health is assigned up to 5 comparison scores based on its comparison to other communities and whether health targets have been met. Comparison scores range from 0-3, where 0 indicates the best outcome and 3 indicates the worst outcome.

#### **Indicator Score**

Indicator scores are calculated as a weighted average of comparison scores. Indicator scores range from 0-3, where 0 indicates the best outcome and 3 indicates the worst outcome.

#### **Topic Score**

Figure 18. Secondary Data Scoring Overview Indicators are then categorized into topic areas. Topic scores are calculated by averaging all relevant indicator scores, with indicators equally weighted. Topic scores range from 0-3, where 0 indicates the best outcome and 3 indicates the worst outcome. Indicators may be categorized into more than one topic area.

Figure 18. Secondary Data Scoring

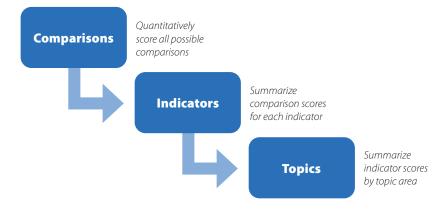
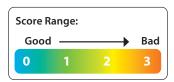


Figure 19. Score Range



### **Comparison Scores**

Up to 5 comparison scores were used to assess the status of Douglas County. The possible comparisons include a comparison of Douglas County to Oregon counties, all U.S. counties, the Oregon state value, the U.S. value and Healthy People 2020 targets. Availability of each type of comparison varies by indicator and is dependent upon the data source, comparability with data collected for other communities, and changes in methodology over time. The determination of comparison scores for each type of comparison is discussed in more detail below.

#### **Missing Values**

Indicator scores are calculated using the comparison scores, availability of which depends on the data source. If an indicator does not have data for a specific comparison type that is included for indicator score calculations, the missing comparison is substituted with a neutral score. When information is unknown due to lack of comparable data, the neutral value assumes that the missing comparison score is neither good nor bad and does not impact the indicator's weighted average.

#### **Indicator Scoring**

Indicator scores are calculated as a weighted average of all included comparison scores. If none of the included comparison types are possible for an indicator, no score is calculated, and the indicator is excluded from the data scoring results.

### **Topic Scoring**

Indicator scores are averaged by topic area to calculate topic scores. Each indicator may be included in up to three topic areas if appropriate. Resulting scores range from 0-3, where a higher score indicates a greater level of need as evidenced by the data. A topic score is only calculated if it includes at least three indicators.

### **Age, Gender and Race/Ethnicity Disparities**

When a given indicator has data available for population subgroups – such as age, gender and race/ethnicity – and values for these subgroups include confidence intervals, we are able to determine if there is a significant difference between the subgroup's value and the overall value. A significant difference is defined as two values with non-overlapping confidence intervals. Confidence intervals are not available for all indicators. In these cases, disparities cannot be determined because there is not enough data to conclude whether two values are significantly different from each other.

### **Topic Scoring Table**

Table 15 shows the Topic Scores for Douglas County, with higher scores indicating a higher need.

**Table 15.** Topic Scores for Douglas County

Health & Quality of Life Topics	Indicators	Topic Score
Environmental & Occupational Health	3	2.01
Prevention & Safety	4	1.93
Respiratory Diseases	10	1.89
Education	7	1.87
Diabetes	3	1.80
Economy	18	1.75
Children's Health	5	1.75
Mortality Data	20	1.67
Wellness & Lifestyle	6	1.67
Exercise, Nutrition, & Weight	21	1.66
Social Environment	13	1.63
Transportation	7	1.60
Men's Health	4	1.60
Access to Health Services	7	1.56
County Health Rankings	6	1.56
Maternal, Fetal & Infant Health	5	1.54
Environment	18	1.46
Mental Health & Mental Disorders	6	1.45
Other Chronic Diseases	4	1.43
Immunizations & Infectious Diseases	7	1.42
Heart Disease & Stroke	10	1.42
Public Safety	3	1.38
Older Adults & Aging	21	1.37
Substance Abuse	9	1.35
Cancer	15	1.33
Women's Health	6	1.20

## **Indicator Scoring Table**

Table 16 (spanning multiple pages) presents the indicator data used in the quantitative data analysis. Indicators are grouped into topic areas and sorted by indicator score, with higher scores indicating a higher need. Douglas County values are displayed alongside various comparison values and the period of measurement.

**Table 16.** Indicator Scores by Topic Area

SCORE	ACCESS TO HEALTH SERVICES	UNITS	DOUGLAS COUNTY	HP2020	OREGON	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	SOURCE
2.11	Adults with a Usual Source of Health Care	percent	72	89.4	75.5		2010-2013		10
1.92	Adults with Health Insurance	percent	83.9	100	87.5	84.3	2017		1
1.89	Primary Care Provider Rate	providers/ 100,000 population	64.1		93.5	75.5	2015		5
1.69	Children with Health Insurance	percent	94.7	100	97.2	95.9	2017		1
1.42	Clinical Care Ranking	ranking	10				2018		5
1.22	Dentist Rate	dentists/ 100,000 population	69.2		78.6	67.4	2016		5
0.67	Non-Physician Primary Care Provider Rate	providers/ 100,000 population	82.1		74.6	81.2	2017		5

SCORE	CANCER	UNITS	DOUGLAS COUNTY	HP2020	OREGON	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	SOURCE
2.61	Age-Adjusted Death Rate due to Cancer	deaths/ 100,000 population	189.9	161.4	164.8	163.5	2011-2015		8
2.17	Age-Adjusted Death Rate due to Lung Cancer	deaths/ 100,000 population	55.6	45.5	42.3	43.4	2011-2015		8
2.00	Mammogram in Past 2 Years: 50-74	percent	70.6	81.1	75.3		2010-2013		10
1.89	Prostate Cancer Incidence Rate	cases/ 100,000 males	106.7		95.4	109	2011-2015		8
1.61	Cancer: Medicare Population	percent	6.9		6.6	7.8	2015		4
1.50	Lung and Bronchus Cancer Incidence Rate	cases/ 100,000 population	62.1		56.2	60.2	2011-2015		8
1.44	Age-Adjusted Death Rate due to Prostate Cancer	deaths/ 100,000 males	20.8	21.8	21.1	19.5	2011-2015		8
1.25	Cervical Cancer Incidence Rate	cases/ 100,000 females	7.2	7.3	6.8	7.5	2011-2015		8
1.17	Age-Adjusted Death Rate due to Colorectal Cancer	deaths/ 100,000 population	14.4	14.5	13.9	14.5	2011-2015		8
1.06	Age-Adjusted Death Rate due to Breast Cancer	deaths/ 100,000 females	19	20.7	20.2	20.9	2011-2015		8
1.06	Colon Cancer Screening	percent	67.3	70.5	61.1		2010-2013		10
1.06	Oral Cavity and Pharynx Cancer Incidence Rate	cases/ 100,000 population	11.4		11.8	11.6	2011-2015		8
0.89	All Cancer Incidence Rate	cases/ 100,000 population	399.8		428.4	441.2	2011-2015		8
0.17	Breast Cancer Incidence Rate	cases/ 100,000 females	81.6		124.9	124.7	2011-2015		8
0.00	Colorectal Cancer Incidence Rate	cases/ 100,000 population	27.6	39.9	34.8	39.2	2011-2015		8



SCORE	CHILDREN'S HEALTH	UNITS	DOUGLAS COUNTY	HP2020	OREGON	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	SOURCE
2.17	Child Food Insecurity Rate	percent	25.3		20	17.9	2016		6
2.11	Substantiated Child Abuse Rate	cases/ 1,000 children	28.1		12.8		2017		12
1.69	Children with Health Insurance	percent	94.7	100	97.2	95.9	2017		1
1.67	Children with Low Access to a Grocery Store	percent	5.4				2015		18
1.11	Low-Income Preschool Obesity	percent	11.5				2009-2011		18

SCORE	COUNTY HEALTH RANKINGS	UNITS	DOUGLAS COUNTY	HP2020	OREGON	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	SOURCE
1.75	Mortality Ranking	ranking	35				2018		5
1.58	Morbidity Ranking	ranking	25				2018		5
1.58	Physical Environment Ranking	ranking	22				2018		5
1.58	Social and Economic Factors Ranking	ranking	28				2018		5
1.42	Clinical Care Ranking	ranking	10				2018		5
1.42	Health Behaviors Ranking	ranking	17				2018		5

SCORE	DIABETES	UNITS	DOUGLAS COUNTY	HP2020	OREGON	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	SOURCE
2.11	Adults with Diabetes	percent	10.5		8.2		2010-2013		10
2.11	Age-Adjusted Death Rate due to Diabetes	deaths/ 100,000 population	31.9		23	21.1	2014-2016		13
1.17	Diabetes: Medicare Population	percent	22.1		20.6	26.5	2015		4

SCORE	ECONOMY	UNITS	DOUGLAS COUNTY	HP2020	OREGON	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	SOURCE
2.22	Children Living Below Poverty Level	percent	28.6		20.4	21.2	2012-2016		1
2.22	Families Living Below Poverty Level	percent	13.3		10.5	11	2012-2016		1
2.22	Unemployed Workers in Civilian Labor Force	percent	5.1		4	4.2	June 2018		16
2.17	Child Food Insecurity Rate	percent	25.3		20	17.9	2016		6
2.06	People Living 200% Above Poverty Level	percent	58.1		64.8	66.4	2012-2016		1
2.06	People Living Below Poverty Level	percent	18.6		15.7	15.1	2012-2016		1
2.00	Food Insecurity Rate	percent	15.4		12.9	12.9	2016		6
1.83	Low-Income and Low Access to a Grocery Store	percent	11.1				2015		18
1.83	Median Household Income	dollars	42052		53270	55322	2012-2016		1
1.83	Per Capita Income	dollars	23608		28822	29829	2012-2016		1
1.72	Households with Cash Public Assistance Income	percent	3.8		4	2.7	2012-2016		1
1.67	Severe Housing Problems	percent	18		20.5	18.8	2010-2014		5

1.58	Social and Economic Factors Ranking	ranking	28			2018	5
1.56	Renters Spending 30% or More of Household Income on Rent	percent	47.7	52.9	47.3	2012-2016	1
1.22	People 65+ Living Below Poverty Level	percent	8.3	8.1	9.3	2012-2016	1
1.11	Homeownership	percent	60.5	55.6	55.9	2012-2016	1
1.11	Low-Income Preschool Obesity	percent	11.5			2009-2011	18
1.11	SNAP Certified Stores	stores/ 1,000 population	1.2			2016	18

SCORE	EDUCATION	UNITS	DOUGLAS COUNTY	HP2020	OREGON	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	SOURCE
2.33	People 25+ with a Bachelor's Degree or Higher	percent	16.3		31.4	30.3	2012-2016		1
2.11	High School Drop Outs	percent	8		3.9		2016-2017		11
2.00	8th Grade Students Proficient in Reading	percent	42.8		57.2		2015-2016		2
1.83	3rd Grade Students Proficient in Math	percent	37.9		47.5		2015-2016		2
1.83	3rd Grade Students Proficient in Reading	percent	40.9		47.4		2015-2016		2
1.83	8th Grade Students Proficient in Math	percent	32.4		42.4		2015-2016		2
1.17	Student-to-Teacher Ratio	students/ teacher	18.8		21.1	17.7	2015-2016		9

SCORE	ENVIRONMENT	UNITS	DOUGLAS COUNTY	HP2020	OREGON	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	SOURCE
2.22	Food Environment Index		6.8		7.6	7.7	2018		5
2.00	Access to Exercise Opportunities	percent	66.9		77.5	83.1	2018		5
1.83	Low-Income and Low Access to a Grocery Store	percent	11.1				2015		18
1.83	People 65+ with Low Access to a Grocery Store	percent	4.6				2015		18
1.67	Children with Low Access to a Grocery Store	percent	5.4				2015		18
1.67	Households with No Car and Low Access to a Grocery Store	percent	2.6				2015		18
1.67	Severe Housing Problems	percent	18		20.5	18.8	2010-2014		5
1.61	Grocery Store Density	stores/ 1,000 population	0.2				2014		18
1.58	Physical Environment Ranking		22				2018		5
1.50	Recreation and Fitness Facilities	facilities/ 1,000 population	0.1				2014		18
1.39	Fast Food Restaurant Density	restaurants/ 1,000 population	0.6				2014		18
1.39	PBT Released	pounds	2024.4				2017		19
1.39	Recognized Carcinogens Released into Air	pounds	133683.5				2017		19

1.22	Farmers Market Density	markets/ 1,000 population	0.1			2016	18
1.11	SNAP Certified Stores	stores/ 1,000 population	1.2			2016	18
0.92	Drinking Water Violations	percent	0.3	18.9		FY 2013-14	5
0.72	Houses Built Prior to 1950	percent	14.1	17.1	18.2	2012-2016	1
0.56	Liquor Store Density	stores/ 100,000 population	5.6	6.3	10.5	2015	17

SCORE	ADDITIONAL INDICATORS	UNITS	DOUGLAS COUNTY	HP2020	OREGON	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	SOURCE
2.33	Asthma: Medicare Population	percent	8.1		6.6	8.2	2015		4
2.11	Adults with Current Asthma	percent	15.1		10.4		2010-2013		10
1.58	Physical Environment Ranking	ranking	22				2018		5

SCORE	EXERCISE, NUTRITION AND WEIGHT	UNITS	DOUGLAS COUNTY	HP2020	OREGON	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	SOURCE
2.50	Adults who are Obese	percent	34.4	30.5	25.9		2010-2013		10
2.22	Food Environment Index		6.8		7.6	7.7	2018		5
2.17	Child Food Insecurity Rate	percent	25.3		20	17.9	2016		6
2.00	Access to Exercise Opportunities	percent	66.9		77.5	83.1	2018		5
2.00	Food Insecurity Rate	percent	15.4		12.9	12.9	2016		6
1.89	Workers who Walk to Work	percent	2.8	3.1	3.9	2.8	2012-2016		1
1.83	Low-Income and Low Access to a Grocery Store	percent	11.1				2015		18
1.83	People 65+ with Low Access to a Grocery Store	percent	4.6				2015		18
1.67	Children with Low Access to a Grocery Store	percent	5.4				2015		18
1.67	Households with No Car and Low Access to a Grocery Store	percent	2.6				2015		18
1.61	Grocery Store Density	stores/ 1,000 population	0.2				2014		18
1.58	Adults 20+ who are Sedentary	percent	19.6	32.6	15.3		2013		3
1.50	Adults who are Overweight	percent	36.1		35.5		2008-2011		10
1.50	Recreation and Fitness Facilities	facilities/ 1,000 population	0.1				2014		18
1.42	Health Behaviors Ranking		17				2018		5
1.39	Fast Food Restaurant Density	restaurants/ 1,000 population	0.6				2014		18
1.33	Adult Fruit and Vegetable Consumption	percent	22.7		21.9		2010-2013		10
1.25	Adults Engaging in Regular Physical Activity	percent	59.7				2006-2009		10
1.22	Farmers Market Density	markets/ 1,000 population	0.1				2016		18
1.11	Low-Income Preschool Obesity	percent	11.5				2009-2011		18
1.11	SNAP Certified Stores	stores/ 1,000 population	1.2				2016		18

SCORE	HEART DISEASE & STROKE	UNITS	DOUGLAS COUNTY	HP2020	OREGON	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	SOURCE
2.50	High Blood Pressure Prevalence	percent	34.4	26.9	27.7		2010-2013		10
2.28	High Cholesterol Prevalence	percent	41.3	13.5	31.8		2010-2013		10
1.61	Atrial Fibrillation: Medicare Population	percent	7.4		7.3	8.1	2015		4
1.56	Hypertension: Medicare Population	percent	49.2		42.1	55	2015		4
1.33	Hyperlipidemia: Medicare Population	percent	36.3		32.2	44.6	2015		4
1.28	Age-Adjusted Death Rate due to Cerebrovascular Disease (Stroke)	deaths/ 100,000 population	37.2	34.8	37.2	37.2	2014-2016		13
1.06	Ischemic Heart Disease: Medicare Population	percent	19.2		18.4	26.5	2015		4
1.00	Age-Adjusted Death Rate due to Heart Disease	deaths/ 100,000 population	136.3		133.6	167	2014-2016		13
0.83	Heart Failure: Medicare Population	percent	11.1		10.8	13.5	2015		4
0.72	Stroke: Medicare Population	percent	2.7		2.8	4	2015		4

SCORE	ADDITIONAL INDICATORS	UNITS	DOUGLAS COUNTY	HP2020	OREGON	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	SOURCE
1.83	Age-Adjusted Death Rate due to Influenza and Pneumonia	deaths/ 100,000 population	11.6		9	14.6	2014-2016		13
1.78	Adults 65+ with Influenza Vaccination	percent	53.7		56.2		2010-2013		10
1.39	Tuberculosis Cases	cases	0				2017		14
1.36	Gonorrhea Incidence Rate	cases/ 100,000 population	50.5		58.4	110.7	2014		14
1.25	Chlamydia Incidence Rate	cases/ 100,000 population	298.3		390.9	456.1	2014		14
1.17	Adults 65+ with Pneumonia Vaccination	percent	74.6	90	74.5		2010-2013		10
1.17	HIV Diagnosed Cases	cases	1				2017		14

SCORE	MATERNAL, FETAL & INFANT HEALTH	UNITS	DOUGLAS COUNTY	HP2020	OREGON	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	SOURCE
2.31	Mothers who Smoked During Pregnancy	percent	20.5	1.4	9.6	7.2	2016		13
2.14	Infant Mortality Rate	deaths/ 1,000 live births	8.2	6	5.1	5.9	2015		13
1.50	Teen Pregnancy Rate	pregnancies/ 1,000 females aged 15-17	10.6		10.1		2016		13
1.19	Mothers who Received Early Prenatal Care	percent	81.3	77.9	79.7	77.1	2016		13
0.58	Babies with Low Birth Weight	percent	5.5	7.8	6.5	8.2	2016		13

SCORE	MEN'S HEALTH	UNITS	DOUGLAS COUNTY	HP2020	OREGON	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	SOURCE
2.11	Life Expectancy for Males	years	75.1		77.4	76.7	2014		7
1.89	Prostate Cancer Incidence Rate	cases/ 100,000 males	106.7		95.4	109	2011-2015		8
1.44	Age-Adjusted Death Rate due to Prostate Cancer	deaths/ 100,000 males	20.8	21.8	21.1	19.5	2011-2015		8
0.94	Adults who Binge Drink: Males	percent	16.6	24.2	22.4		2010-2013		10

SCORE	MENTAL HEALTH & MENTAL DISORDERS	UNITS	DOUGLAS COUNTY	HP2020	OREGON	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	SOURCE
2.17	Poor Mental Health: Average Number of Days	days	4.5		4.5	3.8	2016		5
2.06	Age-Adjusted Death Rate due to Suicide	deaths/ 100,000 population	24.7	10.2	18.1	13.2	2014-2016		13
1.33	Frequent Mental Distress	percent	13.2		13.7	15	2016		5
1.11	Depression: Medicare Population	percent	14.3		15.7	16.7	2015		4
1.06	Age-Adjusted Death Rate due to Alzheimer's Disease	deaths/ 100,000 population	26.9		31.8	28.4	2014-2016		13
0.94	Alzheimer's Disease or Dementia: Medicare Population	percent	7		7.5	9.9	2015		4

SCORE	MORTALITY DATA	UNITS	DOUGLAS COUNTY	HP2020	OREGON	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	SOURCE
2.61	Age-Adjusted Death Rate due to Cancer	deaths/ 100,000 population	189.9	161.4	164.8	163.5	2011-2015		8
2.50	Age-Adjusted Death Rate due to Unintentional Injuries	deaths/ 100,000 population	56.2	36.4	18.1	43.2	2014-2016		13
2.17	Age-Adjusted Death Rate due to Lung Cancer	deaths/ 100,000 population	55.6	45.5	42.3	43.4	2011-2015		8
2.14	Infant Mortality Rate	deaths/ 1,000 live births	8.2	6	5.1	5.9	2015		13
2.11	Age-Adjusted Death Rate due to Chronic Lower Respiratory Diseases	deaths/ 100,000 population	52.5		40.5	40.9	2014-2016		13
2.11	Age-Adjusted Death Rate due to Diabetes	deaths/ 100,000 population	31.9		23	21.1	2014-2016		13
2.08	Age-Adjusted Death Rate due to Alcohol Consumption	deaths/ 100,000 population	25.8		17.3		2014-2016		13
2.06	Age-Adjusted Death Rate due to Suicide	deaths/ 100,000 population	24.7	10.2	18.1	13.2	2014-2016		13
1.86	Age-Adjusted Death Rate due to Motor Vehicle Collisions	deaths/ 100,000 population	20.1		11		2014-2016		13
1.83	Age-Adjusted Death Rate due to Influenza and Pneumonia	deaths/ 100,000 population	11.6		9	14.6	2014-2016		13
1.75	Mortality Ranking		35				2018		5
1.67	Death Rate due to Drug Poisoning	deaths/ 100,000 population	13.9		12.7	16.9	2014-2016		5

1.44	Age-Adjusted Death Rate due to Prostate Cancer	deaths/ 100,000 males	20.8	21.8	21.1	19.5	2011-2015	8
1.36	Age-Adjusted Death Rate due to Kidney Disease	deaths/ 100,000 population	11.4		7.9	13.3	2014-2016	3
1.28	Age-Adjusted Death Rate due to Cerebrovascular Disease (Stroke)	deaths/ 100,000 population	37.2	34.8	37.2	37.2	2014-2016	13
1.17	Age-Adjusted Death Rate due to Colorectal Cancer	deaths/ 100,000 population	14.4	14.5	13.9	14.5	2011-2015	8
1.06	Age-Adjusted Death Rate due to Alzheimer's Disease	deaths/ 100,000 population	26.9		31.8	28.4	2014-2016	13
1.06	Age-Adjusted Death Rate due to Breast Cancer	deaths/ 100,000 females	19	20.7	20.2	20.9	2011-2015	8
1.00	Age-Adjusted Death Rate due to Heart Disease	deaths/ 100,000 population	136.3		133.6	167	2014-2016	13
0.17	Alcohol-Impaired Driving Deaths	percent	20.8		31.8	29.3	2012-2016	5

SCORE	OLDER ADULTS & AGING	UNITS	DOUGLAS COUNTY	HP2020	OREGON	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	SOURCE
2.50	COPD: Medicare Population	percent	12.3		8.7	11.2	2015		4
2.33	Asthma: Medicare Population	percent	8.1		6.6	8.2	2015		4
2.17	Chronic Kidney Disease: Medicare Population	percent	16.9		14.9	18.1	2015		4
1.83	People 65+ with Low Access to a Grocery Store	percent	4.6				2015		18
1.78	Adults 65+ with Influenza Vaccination	percent	53.7		56.2		2010-2013		10
1.61	Atrial Fibrillation: Medicare Population	percent	7.4		7.3	8.1	2015		4
1.61	Cancer: Medicare Population	percent	6.9		6.6	7.8	2015		4
1.56	Hypertension: Medicare Population	percent	49.2		42.1	55	2015		4
1.33	Hyperlipidemia: Medicare Population	percent	36.3		32.2	44.6	2015		4
1.28	Rheumatoid Arthritis or Osteoarthritis: Medicare Population	percent	25.6		24.6	30	2015		4
1.22	People 65+ Living Below Poverty Level	percent	8.3		8.1	9.3	2012-2016		1
1.17	Adults 65+ with Pneumonia Vaccination	percent	74.6	90	74.5		2010-2013		10
1.17	Diabetes: Medicare Population	percent	22.1		20.6	26.5	2015		4
1.11	Depression: Medicare Population	percent	14.3		15.7	16.7	2015		4
1.06	Age-Adjusted Death Rate due to Alzheimer's Disease	deaths/ 100,000 population	26.9		31.8	28.4	2014-2016		13
1.06	Ischemic Heart Disease: Medicare Population	percent	19.2		18.4	26.5	2015		4
0.94	Alzheimer's Disease or Dementia: Medicare Population	percent	7		7.5	9.9	2015		4



0.89	Osteoporosis: Medicare Population	percent	4.3	4.6	6	2015	4
0.83	Heart Failure: Medicare Population	percent	11.1	10.8	13.5	2015	4
0.72	Stroke: Medicare Population	percent	2.7	2.8	4	2015	4
0.56	People 65+ Living Alone	percent	24.2	27	26.4	2012-2016	1

SCORE	OTHER CHRONIC DISEASES	UNITS	DOUGLAS COUNTY	HP2020	OREGON	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	SOURCE
2.17	Chronic Kidney Disease: Medicare Population	percent	16.9		14.9	18.1	2015		4
1.36	Age-Adjusted Death Rate due to Kidney Disease	deaths/ 100,000 population	11.4		7.9	13.3	2014-2016		3
1.28	Rheumatoid Arthritis or Osteoarthritis: Medicare Population	percent	25.6		24.6	30	2015		4
0.89	Osteoporosis: Medicare Population	percent	4.3		4.6	6	2015		4

SCORE	PREVENTION & SAFETY	UNITS	DOUGLAS COUNTY	HP2020	OREGON	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	SOURCE
2.50	Age-Adjusted Death Rate due to Unintentional Injuries	deaths/ 100,000 population	56.2	36.4	18.1	43.2	2014-2016		13
1.86	Age-Adjusted Death Rate due to Motor Vehicle Collisions	deaths/ 100,000 population	20.1		11		2014-2016		13
1.67	Death Rate due to Drug Poisoning	deaths/ 100,000 population	13.9		12.7	16.9	2014-2016		5
1.67	Severe Housing Problems	percent	18		20.5	18.8	2010-2014		5

SCORE	PUBLIC SAFETY	UNITS	DOUGLAS COUNTY	HP2020	OREGON	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	SOURCE
2.11	Substantiated Child Abuse Rate	cases/ 1,000 children	28.1		12.8		2017		12
1.86	Age-Adjusted Death Rate due to Motor Vehicle Collisions	deaths/ 100,000 population	20.1		11		2014-2016		13
0.17	Alcohol-Impaired Driving Deaths	percent	20.8		31.8	29.3	2012-2016		5

SCORE	RESPIRATORY DISEASES	UNITS	DOUGLAS COUNTY	HP2020	OREGON	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	SOURCE
2.50	COPD: Medicare Population	percent	12.3		8.7	11.2	2015		4
2.33	Asthma: Medicare Population	percent	8.1		6.6	8.2	2015		4
2.17	Age-Adjusted Death Rate due to Lung Cancer	deaths/ 100,000 population	55.6	45.5	42.3	43.4	2011-2015		8
2.11	Adults with Current Asthma	percent	15.1		10.4		2010-2013		10
2.11	Age-Adjusted Death Rate due to Chronic Lower Respiratory Diseases	deaths/ 100,000 population	52.5		40.5	40.9	2014-2016		13
1.83	Age-Adjusted Death Rate due to Influenza and Pneumonia	deaths/ 100,000 population	11.6		9	14.6	2014-2016		13

1.7	8	Adults 65+ with Influenza Vaccination	percent	53.7		56.2		2010-2013	10
1.5	0	Lung and Bronchus Cancer Incidence Rate	cases/ 100,000 population	62.1		56.2	60.2	2011-2015	8
1.3	9	Tuberculosis Cases	cases	0				2017	14
1.13	7	Adults 65+ with Pneumonia Vaccination	percent	74.6	90	74.5		2010-2013	10

SCORE	SOCIAL ENVIRONMENT	UNITS	DOUGLAS COUNTY	HP2020	OREGON	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	SOURCE
2.33	People 25+ with a Bachelor's Degree or Higher	percent	16.3		31.4	30.3	2012-2016		1
2.28	Single-Parent Households	percent	35.4		30.8	33.6	2012-2016		1
2.22	Children Living Below Poverty Level	percent	28.6		20.4	21.2	2012-2016		1
2.11	Substantiated Child Abuse Rate	cases/ 1,000 children	28.1		12.8		2017		12
2.06	People Living Below Poverty Level	percent	18.6		15.7	15.1	2012-2016		1
1.83	Median Household Income	dollars	42052		53270	55322	2012-2016		1
1.83	Per Capita Income	dollars	23608		28822	29829	2012-2016		1
1.83	Voter Turnout: Presidential Election	percent	77.1		80.3		2016		15
1.58	Social and Economic Factors Ranking	ranking	28				2018		5
1.11	Homeownership	percent	60.5		55.6	55.9	2012-2016		1
0.89	Mean Travel Time to Work	minutes	20		23.2	26.1	2012-2016		1
0.56	Linguistic Isolation	percent	0.5		2.7	4.5	2012-2016		1
0.56	People 65+ Living Alone	percent	24.2		27	26.4	2012-2016		1

SCORE	SUBSTANCE ABUSE	UNITS	DOUGLAS COUNTY	HP2020	OREGON	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	SOURCE
2.31	Mothers who Smoked During Pregnancy	percent	20.5	1.4	9.6	7.2	2016		13
2.08	Age-Adjusted Death Rate due to Alcohol Consumption	deaths/ 100,000 population	25.8		17.3		2014-2016		13
1.83	Adults who Smoke	percent	25.6	12	19		2010-2013		10
1.67	Death Rate due to Drug Poisoning	deaths/ 100,000 population	13.9		12.7	16.9	2014-2016		5
1.42	Health Behaviors Ranking	ranking	17				2018		5
1.17	Adults who Binge Drink: Females	percent	10.2	24.2	13.2		2010-2013		10
0.94	Adults who Binge Drink: Males	percent	16.6	24.2	22.4		2010-2013		10
0.56	Liquor Store Density	stores/ 100,000 population	5.6		6.3	10.5	2015		17
0.17	Alcohol-Impaired Driving Deaths	percent	20.8		31.8	29.3	2012-2016		5

SCORE	TRANSPORTATION	UNITS	DOUGLAS COUNTY	HP2020	OREGON	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	SOURCE
2.44	Workers Commuting by Public Transportation	percent	0.2	5.5	4.4	5.1	2012-2016		1
2.33	Workers who Drive Alone to Work	percent	78.9		71.4	76.4	2012-2016		1
1.89	Workers who Walk to Work	percent	2.8	3.1	3.9	2.8	2012-2016		1
1.67	Households with No Car and Low Access to a Grocery Store	percent	2.6				2015		18
1.67	Households without a Vehicle	percent	7.2		7.9	9	2012-2016		1
0.89	Mean Travel Time to Work	minutes	20		23.2	26.1	2012-2016		1
0.33	Solo Drivers with a Long Commute	percent	18.6		27.6	34.7	2012-2016		5

SCORE	WELLNESS & LIFESTYLE	UNITS	DOUGLAS COUNTY	HP2020	OREGON	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	SOURCE
2.11	Life Expectancy for Males	years	75.1		77.4	76.7	2014		7
1.94	Self-Reported General Health Assessment: Good or Better	percent	75.7		83.2		2010-2013		10
1.58	Morbidity Ranking	ranking	25				2018		5
1.56	Life Expectancy for Females	years	80.5		81.5	81.5	2014		7
1.50	Insufficient Sleep	percent	31.9		30.8	38	2016		5
1.33	Frequent Physical Distress	percent	11.6		11.3	15	2016		5

SCORE	WOMEN'S HEALTH	UNITS	DOUGLAS COUNTY	HP2020	OREGON	U.S.	MEASUREMENT PERIOD	HIGH RACE DISPARITY*	SOURCE
2.00	Mammogram in Past 2 Years: 50-74	percent	70.6	81.1	75.3		2010-2013		10
1.56	Life Expectancy for Females	years	80.5		81.5	81.5	2014		7
1.25	Cervical Cancer Incidence Rate	cases/ 100,000 females	7.2	7.3	6.8	7.5	2011-2015		8
1.17	Adults who Binge Drink: Females	percent	10.2	24.2	13.2		2010-2013		10
1.06	Age-Adjusted Death Rate due to Breast Cancer	deaths/ 100,000 females	19	20.7	20.2	20.9	2011-2015		8
0.17	Breast Cancer Incidence Rate	cases/ 100,000 females	81.6		124.9	124.7	2011-2015		8

### **Sources**

Table 17 displays the list of sources used in secondary data scoring. Number keys are referenced alongside each indicator in the Indicator Scoring Table.

**Table 17.** Indicator Sources and Corresponding Number Keys

Number Key	Source
1	American Community Survey
2	Annie E. Casey Foundation
3	Centers for Disease Control and Prevention
4	Centers for Medicare & Medicaid Services
5	County Health Rankings
6	Feeding America
7	Institute for Health Metrics and Evaluation
8	National Cancer Institute
9	National Center for Education Statistics
10	Oregon Behavioral Risk Factor Surveillance System
11	Oregon Department of Education
12	Oregon Department of Human Services
13	Oregon Health Authority, Center for Health Statistics
14	Oregon Health Authority, HIV-STD-TB Program
15	Oregon Secretary of State
16	U.S. Bureau of Labor Statistics
17	U.S. Census - County Business Patterns
18	U.S. Department of Agriculture - Food Environment Atlas
19	U.S. Environmental Protection Agency

# Appendix C. Primary Data

Primary data used in this assessment was collected through a community survey. The survey instrument and interview guide is provided in this Appendix.

### **Community Survey**

#### Welcome to the Douglas County Community Survey

CHI Mercy Health in partnership with Evergreen Family Medicine, UCHC and Douglas County Public Health Network wants to better understand the health needs of Douglas County.

In this survey, you can tell us what issues are important. Your thoughts will help to tell us how organizations in Douglas County can better serve the community.

This survey will take about 15 minutes to complete.

Thank you for your thoughts and your time! If you have questions about this survey, please contact us at *davidprice@chiwest.com* 

# **l.** First, tell us a little bit about yourself...

1.	What is your zip code?
	ZIP/Postal Code
	Zii/i Ostai Code
2.	What is your profession?
	Current U.S. service member
	Currently unemployed
	Currently retired
	Agriculture, forestry, fishing & hunting, and mining
	Arts, entertainment, & recreation, and accommodation & food services
	Construction
	Educational services, and social assistance
	Finance & insurance, and real estate, rental & leasing
	Healthcare
	Homemaker
	Information
	Manufacturing
	Professional, scientific & management, and administrative & waste management services
	Public administration
	Other services, except public administration
	Retail trade
	Transportation & warehousing, and utilities
	Wholesale trade
	Other (please specify):
	Social Service or Not for Profit?
	Law Enforcement
3.	What is your age?
	17 or younger
	18-24
	25-34
	35-44
	45-54
	55-64
	65-74



4.		What is your gender identity?
		Female
	_	Male
		Other (please specify):
		Other (piease specify).
5.		What is your ethnicity? (Select one)
J.		what is your ethnicity: (Select one)
		Hispanic/Latino(a)
		Non-Hispanic/Latino(a)
		Other (please specify):
6.		What is your race? (Select all that apply)
		American Indian or Alaska Native
		Asian
		Black or African American
		Native Hawaiian or Other Pacific Islander
		White
		Other (please specify):
7.		Select the highest level of education you have achieved.
		Less than High School
	_	High School Diploma or GED
		Some College
		Technical Certificate
		Associate's Degree
		Bachelor's Degree
		Professional or Advanced Degree
8.		Write the number of individuals in your household (including yourself).

9.	Are there any children (persons younger than age 18) in your nousehold?
	No
	Yes (if yes, please specify the number of children in your household):
10.	Select your total household income level.
	Less than \$25,000
	\$25,000-\$49,999
	\$50,000-\$74,999
	\$75,000 or more
	Prefer not to answer
11.	Is English the primary language spoken in your home?
	Yes
	No (please specify the primary language spoken in your home):
	1.

12.	How would you rate the overall health of the community? (Select one)
	Very good
	Good
	OK
	Poor
	Very poor
	Don't know/not sure
13.	When was the last time you or someone in your household experienced anxiety over the lack
	of resources to meet basic food needs?
	Within the last couple of week
	Within the last couple of months
	Within the last couple of days
	More than once this Year
	Not Recently
	-Please Continue to Next Page-
	case commute to . text age

Next, we'd like to hear your thoughts and opinions about the community health of Douglas County's residents.

II.

## 14. What do you think are the most important health issues in the community? (Select up to 5)

SELECT FIVE [X]	HEALTH ISSUE	RANK THE SELECTED FIVE (1 Being the most important)
	Cancer	
	Diabetes	
	Eye Health (vision)	
	Heart Disease, Stroke, High Blood Pressure, and Heart Failure	
	Infectious Diseases (tuberculosis, measles, mumps, rubella, flu, pneumonia, Lyme disease, etc.)	
	<b>Injuries and Safety</b> (falls, motor vehicle safety, pedestrian safety, domestic violence, assault, etc.)	
	Mental Health and Mental Disorders (depression, anxiety, trauma, crisis, etc.)	
	Obesity/Overweight	
	Oral, Dental, or Mouth Health (tooth decay, gum disease, etc.)	
	<b>Preventive Care</b> (wellness visits, mammograms, Pap smears, flu shots, colonoscopy, etc.)	
	Reproductive Health (contraceptives, planned or unintended pregnancy, family planning/counseling, prenatal care, etc.)	
	Respiratory/Lung Diseases (asthma, COPD, etc.)	
	Sexual Health (sexual health education, safe sexual experiences, HIV, gonorrhea, syphilis, chlamydia, HPV, etc.)	
	Substance Abuse (alcohol, tobacco, e-cigarettes, drugs, opioids, prescription drugs, etc.)	
	Other (please specify):	

# 15. What conditions of daily life have the most impact on community member's health? (Select up to 5)

SELECT FIVE [X]	CONDITIONS OF DAILY LIFE	RANK THOSE FIVE (1 having greatest impact on the community)
	Access to Health Services (getting health insurance, paying for healthcare, etc.)	
	Diet, Food, and Nutrition (lack of affordable healthy foods, fast food, knowledge of healthy diet, etc.) somewhere you should mention food disparities	
	Discrimination (by gender, race, age, etc.)	
	Education	
	Employment (jobs, etc.)	
	Environmental Quality (poor air quality, lead exposure, exposure to secondhand smoke, etc.)	
	Healthcare Navigation (understanding health issues or health insurance, finding doctors, etc.)	
	Housing	
	Language Barriers or Cultural Diversity	
	Physical Activity and Exercise (time to exercise, safe parks and spaces to exercise, etc.)	
	Poverty(including generational and situational poverty)	
	Public Safety or Community Violence (crime, public violence, child abuse or neglect etc.)	
	Transportation (public buses, access to car, ability to move freely in your community)	
	Social Environment (social ties, community resources, family relations, faith community, etc.)	
	Drug and or Tobacco Use	
	Other (please specify):	

16. Who do you think in Douglas County is most affected by poor health outcomes? (Select up to 5)

SELECT FIVE [X]	POPULATION	RANK THOSE FIVE (1 is most negatively affected)
	Children	
	Teen and Adolescents	
	Older Adults	
	Mothers with infants	
	Men	
	Women	
	Low Income	
	Lesbian, Gay, Bisexual, Transgender, and Queer	
	Military and Veterans	
	Persons with Disabilities	
	Racial or Ethnic Populations	
	Refugees	
	Other (please specify):	

17. Which racial or ethnic groups do you think are most affected by poor health outcomes in Douglas County? (Select one)

White
Black or African American
American Indian or Alaska Native
Asian
Native Hawaiian and Other Pacific Islande
Hispanic or Latino
Multi-racial
Other (please specify):

# 18. Please tell us whether you: "Strongly Agree", "Agree", "Feel Neutral", "Disagree", or "Strongly Disagree" with the following statements about your community.

STATEMENT	STRONGLY AGREE	AGREE	FEEL NEUTRAL	DISAGREE	STRONGLY DISAGREE
Public transportation and other transit opportunities make accessing health services manageable.					
I, or someone I know, have delayed seeking health care due to cost in the last 12 months.					
My community is knowledgeable of the health resources available to them.					
I, or someone I know, have delayed seeking health care due to wait times or limited appointment opportunities.					
My community supports a healthy lifestyle.					
I, or someone I know, have had difficulty understanding a health professional because of a language barrier in the last 12 months.					
There is a lack of resources related to health improvement in this community.					
I and members of my community feel we have a voice in our community.					
I consider my community to be safe.					

19.	What health information do you think the community needs more information or education about? (select all that apply):
Г	Alcohol and substance abuse (alcohol, tobacco, e-cigarettes, drugs, opioids, prescription drugs, etc.)
	Alternative medicine (acupuncture, cupping, etc.)
	Chronic disease management (diabetes, high blood pressure management, etc.)
Ī	Emotional wellness and/or mindfulness
	Family planning
	Fitness and physical activity
	Mental health (depression, anxiety, trauma, crisis, etc.)
	Nutrition and healthy diet
	Pain management
	Pregnancy and new baby
	Preventive care (wellness visits, mammograms, Pap smears, flu shots, colonoscopy, etc.)
	Quitting smoking
	Senior health
	Stress reduction
	Transportation
	Other (please specify):
20.	Where do you get most of your health related resource information? (select all that apply):
20.	
20.	211 lines
<b>20.</b>	211 lines  Books/Magazines
20.	211 lines Books/Magazines Doctor
<b>20.</b>	211 lines  Books/Magazines  Doctor  Faith/Community
<b>20.</b>	211 lines Books/Magazines Doctor Faith/Community Friends and Family
	211 lines Books/Magazines Doctor Faith/Community Friends and Family Grocery Stores
	211 lines Books/Magazines Doctor Faith/Community Friends and Family Grocery Stores Health and Fitness Facilities
	211 lines Books/Magazines Doctor Faith/Community Friends and Family Grocery Stores
	211 lines Books/Magazines Doctor Faith/Community Friends and Family Grocery Stores Health and Fitness Facilities Health Department
	211 lines Books/Magazines Doctor Faith/Community Friends and Family Grocery Stores Health and Fitness Facilities Health Department Hospital
	211 lines Books/Magazines Doctor Faith/Community Friends and Family Grocery Stores Health and Fitness Facilities Health Department Hospital Internet
	211 lines Books/Magazines Doctor Faith/Community Friends and Family Grocery Stores Health and Fitness Facilities Health Department Hospital Internet Pharmacist
	211 lines Books/Magazines Doctor Faith/Community Friends and Family Grocery Stores Health and Fitness Facilities Health Department Hospital Internet Pharmacist School
	211 lines  Books/Magazines  Doctor  Faith/Community  Friends and Family  Grocery Stores  Health and Fitness Facilities  Health Department  Hospital  Internet  Pharmacist  School  Social Media (Facebook, Twitter, etc.)
	211 lines Books/Magazines Doctor Faith/Community Friends and Family Grocery Stores Health and Fitness Facilities Health Department Hospital Internet Pharmacist School Social Media (Facebook, Twitter, etc.) Television
21.	211 lines Books/Magazines Doctor Faith/Community Friends and Family Grocery Stores Health and Fitness Facilities Health Department Hospital Internet Pharmacist School Social Media (Facebook, Twitter, etc.) Television
	211 lines Books/Magazines Doctor Faith/Community Friends and Family Grocery Stores Health and Fitness Facilities Health Department Hospital Internet Pharmacist School Social Media (Facebook, Twitter, etc.) Television Other (please specify):



(Optional) Is the	re anything else you	would like us t	o know about y	our community
(Optional) Is then (Please feel free to to	re anything else you ell us below)	would like us t	o know about y	our communit
(Optional) Is then (Please feel free to to	<b>re anything else you</b> ell us below)	would like us t	o know about y	our communit
(Optional) Is then (Please feel free to to	re anything else you ell us below)	would like us t	o know about y	our communit
(Optional) Is then (Please feel free to to	<b>re anything else you</b> ell us below)	would like us t	o know about y	our community
(Optional) Is then (Please feel free to to	re anything else you ell us below)	would like us t	o know about y	our communit
(Optional) Is thei (Please feel free to to	re anything else you ell us below)	would like us t	o know about y	our community
(Optional) Is then (Please feel free to to	re anything else you ell us below)	would like us t	o know about y	our communit
( <b>Optional</b> ) Is then (Please feel free to to	re anything else you ell us below)	would like us t	o know about y	our community

Thank you for your participation!

The final Community Health Needs Assessment report will be completed in 2019.

#### **Brief Interview Guide**

#### Record answers below (one participant per form)

Introduction: We are collecting information anonymously and voluntarily from patients/community members about health concerns in the community to better understand the needs and challenges people face to achieving better health. Would you be willing to answer a few questions to help us with this effort?

#### [If response is Yes- Record the following, if possible: Age, Gender, Race/Ethnicity]

- 1. In your opinion, what are the most serious health related problems in your community?
- 2. What are some challenges that you or others in your community face that keep you from being healthy?
- 3. What could be done to make your community healthier? Are there any additional services or changes to existing services that would be helpful for you or family members and friends?

**Conclusion:** This information is being collected anonymously, however we are holding a session in January 2019 where we will meet with community stakeholders, health care leaders and community members to prioritize community health initiatives over the next few years. Would you be interested in participating in an event like this and providing your feedback during the session?

If you are interested, please provide the best way to contact you and we will provide additional details about the event in the next few weeks.

Thank you for your time.

[If Response is Yes- Record best method of contacting participant]



