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**Bethel Community Services**

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**Catholic Community Services**

**Centro Latino**

**Children’s Home Society - Key Peninsula Family Resource Center**

**CHOICE Coalition**

**City of Tacoma Human Rights Commission**

**City of Tacoma, Human Services Division**

**City of Tacoma, Office of Sustainability**

**City of Tacoma, Community Services Division**

**City of University Place**

**Coalition for Active Transportation**

**Coalition to End Homelessness**

**Community Health Care**

**Community Health Worker Collaborative**

**Comprehensive Life Resources**

**Cross Cultural Collaborative of Pierce County**

**First Creek Middle School**

**First 5 Fundamentals**

**FISH Food Bank**

**Forest Foundation**

**Foundation for Healthy Generations**

**Give an Hour**

**Goodwill Industries, Olympics & Rainier Region**

**Graduate Tacoma**

**Greater Lakes Mental Health Care**

**Hilltop Action Coalition**

**Hilltop Neighborhood Council**

**Hilltop Network**

**Hilltop Urban Gardens**

**Hope Sparks**

**Korean Women’s Association**

**Lakewood Community Collaboration**

**Leaders in Women’s Health**

**Lindquist Dental Clinic for Children**

**Lutheran Community Services Northwest**

**Madison Latina Advisory Board**

**Mercy House**

**Metropolitan Development Council**
Multicultural Child and Family Hope Center
North Pierce County Community Coalition (Fife/Milton/Edgewood)
Northwest Leadership Foundation
Oasis Youth Center
Peace Community Center
Pierce County AIDS Foundation
Pierce County Coordinated Transportation Coalition
Pierce County Family Justice Center
Pierce County Growth Management Coordinating Council
Pierce County Community Connections
Pierce County Community Services
Pierce County Dental Society
Pierce County Housing Authority
Pierce County Human Services Coalition
Pierce County Juvenile Court
Pierce County Library
Pierce County Transit
Pierce County WIC Coalition
Point Defiance AIDS Project
Prairie Ridge Community Coalition
Project Access - Pierce County Medical Society
Puget Sound Regional Council
Rainbow Center
Rally Point/6
Safe Streets
School Nurses Organization of Washington
Sea Mar Community Health Centers
Sequoia Foundation
Shared Housing Services
Slavic Christian Academy
Sound Outreach Services
South Sound Military Partnership
Stand for Children
Tacoma Area Coalition for Individuals with Disabilities
Tacoma City Association of Women of Color
Tacoma Community College
Tacoma Community House
Tacoma Farmers Markets
Tacoma Housing Authority
Tacoma Ministerial Alliance
Tacoma/Pierce County Affordable Housing Consortium
Tacoma-Pierce County Black Collective
Tacoma-Pierce County Health Department, Treatment Services
Tacoma Public Schools
Tacoma Rescue Mission
Tacoma Urban League
Tacoma Whole Child Initiative
University of Washington-Tacoma, Nursing and Healthcare Leadership Program
Washington Women’s Employment & Education
Washington Coalition for Promoting Physical Activity
Washington State Department of Commerce
Washington State Department of Health, Center for Health Statistics
Washington State Department of Social and Health Services, Foster Care Placement

Special thanks to Bill Johnson for page design and to Sandy Bodner, Alexandre Klementiev, Karen Meyer, Stephanie Wood and Seema Untawale from the Tacoma-Pierce County Health Department for data collection and analysis. Thank you to Public Health—Seattle & King County’s Assessment, Policy Development and Evaluation Unit for their technical assistance and foundational work on the community health needs assessment content and format.
The health of a community is complex. The information in this community health needs assessment (CHNA) comes from many sources, including key health indicators from several data sources and information provided by community members, to better understand the needs of the CHI Franciscan Health St. Joseph Medical Center service area community.

The Tacoma-Pierce County Health Department (Health Department) Office of Assessment, Planning & Improvement prepared this CHNA for CHI Franciscan Health St. Joseph Medical Center and was the primary collector and reviewer of the health indicator and demographic data. The Health Department, CHI Franciscan Health as well as MultiCare Health System, all participated in the community engagement and activities, which included nine community workshops, seven key informant interviews and a survey of more than 700 residents and community partners, to further identify and prioritize the hospital service area’s health needs. The Health Department conducted the analysis of the community engagement data.

This CHNA fulfills Section 9007 of the Affordable Care Act, as well as Washington state CHNA requirements.

Community input

Through the community engagement activities described above, community residents, coalitions and organizations shared their health needs, issues, and concerns about their communities, as well as barriers that affect their communities’ ability to thrive. Common overarching themes from these discussions included:

- The need for addressing the conditions, forces and systems that shape residents’ daily lives – the key to making a health community;
- The importance of a large culturally competent health care workforce in addressing health disparities;
- The need for community members to be equal partners in decision-making with health systems;
- The need for health systems to visibly engage and collaborate with communities; and
- The need for health systems to advocate for and participate in making policies, systems and environmental changes that address the social and economic needs of communities they serve.

Other themes related to specific health topics also emerged and can be found throughout this report.
CHI Franciscan Health St. Joseph Medical Center

Here are the main findings of this report, based on the health indicator data and main themes that emerged from the community input.

Description of Community— While White residents account for the majority of the population, the area is becoming more diverse along racial and ethnic lines. One third of residents live at or below 200% of the federal poverty level, a common eligibility criterion for assistance programs.

Leading Causes of Death— Heart disease and cancer are the top two leading causes of death. This is similar to the state and nation.

Chronic Illness— More women than men report having asthma. Breast cancer incidence is higher among women compared to the Washington state average. The leading causes of hospitalizations (after pregnancy/childbirth) are diseases of the circulatory systems and diseases of the digestive system.

Access to Care— Not having a personal doctor is common among non-White residents and males. Lack of health care is higher among non-white residents compared to White residents. One in five adults experience unmet health care needs due to cost.

Maternal/Child Health— Women in the service area were less likely to receive early and adequate prenatal care compared to the state average. The rate of infant deaths is higher than the Washington state average.

Violence and Injury Prevention— Rates of intentional and unintentional injury hospitalizations are higher than the state average. Residents among the ages of 35-44 are more likely than other age groups to be hospitalized for intentional injury/violence. Black residents in the service area have four times the rate of homicides when compared to whites.

Behavioral Health— Frequent mental distress is higher in women compared to men, and women are twice as likely as men to report depression. Cigarette smoking as well as obesity are higher among adults in the service area compared to the Washington state average.
Priority health needs

Based on data from this CHNA, the following priority health needs among residents within the CHI Franciscan Health St. Joseph Medical Center service area emerged. These priorities resulted from applying a prioritization process and criteria to the health indicator data and community engagement themes included in this report. (More detailed information about the criteria and process is in the Supplement sections.)

CHI Franciscan Health St. Joseph Medical Center priority health needs

- Tobacco use among adults and youth, a leading actual cause of death.
- Barriers to access to care.
- Obesity among adults, the second leading actual cause of death.

The priority health needs provide guidance for CHI Franciscan Health planners and decision makers about where best to provide community benefit programs and services to address the most important health needs of the community. Working together, hospitals and health systems, public health, and communities can reduce healthcare costs and improve the health of all people in Pierce County.
The Affordable Care Act (ACA, 2010) requires that once every three years a CHNA is conducted by nonprofit hospitals. This report is a collection of data on more than sixty health indicators that represent the health behaviors, outcomes and status of residents of the CHI Franciscan Health St. Joseph Medical Center service area in Pierce County. In addition, this report includes community input from Pierce County residents gathered at nine community workshops, seven key informant interviews and a survey of more than 700 community residents and partners. CHI Franciscan Health St. Joseph Medical Center is located in Tacoma, Washington. For purposes of this assessment, the CHI Franciscan Health St. Joseph Medical Center service area includes all residents in a geographic area defined by 30 zip codes surrounding the hospital (See Figure 1).

This CHNA will help guide CHI Franciscan Health St. Joseph Medical Center in providing high-quality, affordable health care for the members of the community that it serves. Moving forward with a community benefit implementation strategy based on the results of this report will assist in making long-term, sustainable changes and strengthening relationships with other partners working to improve community health.

**Summary of needs assessment methodology**

This report was completed in accordance with the Affordable Care Act and includes a description of the community served, leading causes of death, levels of chronic illness and other important community health issues and needs. Listed below are eight broad categories of community health needs identified for the CHI Franciscan Health St. Joseph Medical Center service area.

1) Life Expectancy and Leading Causes of Death
2) Chronic Illnesses
3) Actual Causes of Illnesses
4) Access to Care, Uses of Clinical Preventative Services and Oral Health
5) Maternal and Child Health
6) Preventable Causes of Death
7) Violence and Injury Prevention
8) Behavioral Health
The population and environment of a hospital service area may influence the nature of health outcomes. Similarly, relationships between health indicators can affect the degree and/or type of the outcome. For instance, a service area with a high rate of tobacco use among its residents may result in a decrease in life expectancy, due to the risk of developing cancer. A low birth weight may affect an infant’s life expectancy due to the risk of health complications developed later in life. The accessibility and quality of health care for those living in poverty also influences health outcomes, potentially affecting their life expectancy.

This CHNA was completed through a multi-stage process designed to integrate findings from secondary data with the experiences, expertise and opinions made available through primary data collection.

Input was gathered from community residents and community stakeholders representing the broad interests of the communities served by hospitals and health systems. Interviews with community residents, organizations and coalitions, and an online survey were used to glean feedback and recommendations. Survey and interview questions along with methodologies are further described in the Supplement section at the end of this report.

Approximately 60 indicators were chosen that, when looked at together, help illustrate the health of the community. Demographic data and data on key socio-economic drivers of health status—including poverty, housing and educational attainment—are provided first. This is followed by the data and analysis of each health indicator and main themes identified through the community engagement methods. A more detailed description of the methods used to collect and analyze the data is found in the Supplement section.
Some data for a hospital service area are unavailable, making an assessment at this regional level challenging.

Disaggregated data regarding age, race, ethnicity, and gender are not available for all of the data indicators, which limit the ability to look at inequities of health issues in the community.

Data for the CHI Franciscan Health St. Joseph Medical Center service area may be limited by the size of the population, requiring the averaging of several years of data. This limits the ability of the report to represent the most current state of health.

Data are not always collected on an annual basis, resulting in the use of data that are several years old.

The graphs within this report have error bars. These error bars visually give an idea of the margin of error or uncertainty in a reported measurement. If the error bars of two different estimates do not overlap, one can most often conclude that the difference is statistically significant and not due to chance.
This section reports common themes, issues, and opportunities that came up in the community engagement activities (conversations with community residents, key leaders, organizations and coalitions) and qualitative portions of the community survey. Additional community input related to specific health topics are presented in individual chapters of this report.

Nearly half of surveyed residents felt somewhat satisfied with the quality of life in their community. Community residents and other stakeholders agree that the key to a healthy community is to address the basic conditions, forces and systems shaping daily life. In order to create and sustain a healthy community, one cannot address the health needs of a community without addressing the availability of resources to meet daily needs (e.g., safe housing and local food markets); access to quality educational, economic, and job opportunities; and access to affordable, quality health care services.

Basic needs

Community residents, coalitions and organizations shared with us that the ability to meet one’s basic needs most affects their communities’ ability to thrive. Poverty was seen as the primary barrier to a healthy community. The availability of safe and affordable housing; affordable nutritious foods; transportation; and safe and walkable neighborhoods are keys to ensuring that individuals, families and communities experience good health and well-being.

Community members identified access to safe and affordable housing as a major concern. Residents said housing cost increases, coupled with limited employment opportunities, causes more working poor and low income residents to be uprooted from their communities. Many school districts are alarmed at the rising number of children identifying as not living in a place that they can call their own home. Community leaders were concerned that cuts in social service funding also limit transitional, treatment or special care facilities for those with chemical dependency, mental health and developmental support needs. Transitory community members can lack long-standing social and emotional connections to neighborhood residents, which limits neighborhood cohesion, an important aspect of a healthy community.
Community residents identified issues related to **access to nutritious food** for many of their neighbors and themselves, recognizing that if individuals are not eating healthy and nutritious food, their overall health and well-being are affected. Reports of increased numbers of individuals and families regularly accessing food banks and other emergency feeding programs is coupled with higher numbers of children receiving free and reduced-price lunch at school. Quality grocery stores are less prevalent in depressed neighborhoods, while other neighborhoods prosper with multiple stores. Residents consider some areas within this hospital service area as “food deserts” with little to no accessibility to healthy food for those without transportation.

Low-income women describe the difficulty of purchasing healthy food with limited food assistance and/or limited income. In addition, low-income families often depend on public transportation when purchasing food, which can make grocery shopping a lengthy and difficult endeavor.

**Accessible and affordable transportation** was identified as an important factor that makes a healthy community due to its impact on accessing employment, nutritious food and health care services. Limited transportation also decreases access to physical activities if one’s own community is unsafe or unwalkable. Lack of transportation particularly impacts rural areas relying on public transportation. Community members identified the need for more efficient bus services and improved connections to multiple parts of the county, especially to rural areas that have little to no bus access. Community members see the need for shuttle options for older and/or disabled adults and low-income families. When transportation cannot be directly altered, then safer walking and biking areas options should be explored.

Living in a **safe and walkable neighborhood** is a key factor in defining a healthy community. Surveyed community members felt that crime and violence is one of the biggest problems to their community’s overall health. While crime rates have gone down in many areas over the last two decades, residents still report that fear of violence and crime make them less likely to walk or bicycle to places beyond their homes. Community members feel that an important solution to creating a safe neighborhood is building on community connection.
Residents are concerned about what they see as poorly designed communities where sidewalks are rare and crosswalks are unsafe. Recognizing the positive impact that walkable pedestrian- and bike-friendly communities have, not only on neighborhood safety and transportation needs but also on engaging residents in active exercise, community members requested bike paths, connecting sidewalks, crosswalks, traffic signals and more speed zone enforcement around schools. Community members would like to see hospitals and health systems “speak up” about how the design of communities and land use policies directly affect the public’s health.

Community stakeholders asked hospitals to not only prevent poor health and promote good health, but also to work with communities to address and reduce health inequities using a holistic approach. Community members would like hospitals to work collaboratively across all sectors to develop systems to provide holistic, integrated care (physical and behavioral health care services alongside social services) and to address basic needs such as housing, employment and transportation.

Community members view hospitals as having major influence in the community and expressed the importance of being proactively involved in policy, systems and environmental change strategies that could best improve the conditions, forces and systems shaping community life.

**Community connection**

Community members felt an important solution to creating a safe and healthy neighborhood was to increase community connections. About a quarter of survey respondents said they felt connected with their communities. Community stakeholders suggested opportunities to continue building a sense of community, i.e., building more community centers and increasing community events.

**Cultural competency**

Community members expressed the importance of service providers and organizations being respectful of and working effectively with the linguistic and cultural differences within their consumers and communities. Community members see an opportunity for improving culturally competent and respectful services to all people regardless of age, race, ethnicity, gender, income, language, beliefs, or the complexity of their situation. Community members also wanted
to remind providers that historical trauma continues to create barriers for community members to access health care.

Community members support hospitals’ current efforts to partner with organizations that have strong ties to diverse population groups. Active engagement with communities in strategic planning activities and being present at community events provide opportunities to continue improving cultural competency.

**Community engagement**

Community residents and leaders value hospital visibility within the community, both as part of health promotion and prevention activities, as well as during meaningful engagement with health system planning efforts. Other opportunities for community engagement included:

- Hospital staff continuing to participate in community outreach events (e.g., health fairs and hospital-sponsored park events).
- Hospitals hosting events where residents can meet providers and learn about services.
- Health systems partnering with community organizations to offer programs jointly.

Community leaders encouraged health systems to engage un- and under-represented residents in this work. Community members appreciate the health system's engagement around health needs assessments and would like to engage more around program planning and evaluation. Ideas for community engagement included:

- Continue partnering with community members so everyone can say “we did that together.”
- Create an environment of safety, respect and inclusion whenever engaging with community members, recognizing that mistrust exists in communities of color from historical trauma that may have occurred in other parts of the country or in seemingly unrelated situations.
- Continue operating hospital advisory councils that are comprised of people who represent racial and economic diversity in the hospital service area.
2015 Community survey

The following are the results of the community health needs assessment survey. More than 700 community members throughout Pierce County responded.

- More than one third of respondents (35%) answered “yes” when asked if anything keeps them from getting the health care they need. The top barrier listed (42%) was the cost, including the affordability of health care and limits of health insurance coverage.

- Two out of five respondents (41%) had heard of “Ready, Set, Go! 5210” which is a Pierce County community initiative to promote active, healthy lifestyles among children and families.

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>What do you think are the three most important things that make a healthy community?</td>
<td>1. Low crime and violence/ safe neighborhoods</td>
<td>52.2%</td>
</tr>
<tr>
<td></td>
<td>2. Good jobs and healthy economy</td>
<td>40.3%</td>
</tr>
<tr>
<td></td>
<td>3. Good place to raise children</td>
<td>30.2%</td>
</tr>
<tr>
<td>What three things cause the biggest problems to your community’s overall health?</td>
<td>1. Mental health needs</td>
<td>39.4%</td>
</tr>
<tr>
<td></td>
<td>2. Poverty</td>
<td>38.7%</td>
</tr>
<tr>
<td></td>
<td>3. Crime and violence</td>
<td>38.5%</td>
</tr>
<tr>
<td>What three things cause the biggest problems to children and youth in your community?*</td>
<td>1. Drug and alcohol abuse (including tobacco)</td>
<td>49.3%</td>
</tr>
<tr>
<td></td>
<td>2. Lack of opportunity for physical activity</td>
<td>33.9%</td>
</tr>
<tr>
<td></td>
<td>3. School violence (including bullying)</td>
<td>32.1%</td>
</tr>
</tbody>
</table>

* This question was asked only of respondents who said they have children living with them. Only 274 people responded to this question.
### Health status of the community

<table>
<thead>
<tr>
<th>Question</th>
<th>Responses</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>How satisfied are you with the quality of life in your community?</td>
<td>Very or Somewhat Satisfied</td>
<td>76.7%</td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>9.8%</td>
</tr>
<tr>
<td></td>
<td>Very or Somewhat Unsatisfied</td>
<td>13.4%</td>
</tr>
<tr>
<td>How satisfied are you with healthcare in your community?</td>
<td>Very or Somewhat Satisfied</td>
<td>64.5%</td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>19.1%</td>
</tr>
<tr>
<td></td>
<td>Very or Somewhat Unsatisfied</td>
<td>16.4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>How socially connected do you feel in your community?</td>
<td>Very or Somewhat Connected</td>
</tr>
<tr>
<td></td>
<td>Very or Somewhat Unconnected</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>How would you rate your community's health overall?</td>
<td>Very Healthy or Healthy</td>
</tr>
<tr>
<td></td>
<td>Somewhat Healthy</td>
</tr>
<tr>
<td></td>
<td>Very or Somewhat Unhealthy</td>
</tr>
</tbody>
</table>

While efforts were made to distribute the survey to people of all genders, races/ethnicities and ages, survey participants were disproportionately female and middle-age (45-59 years). The three most common zip codes of survey participants were 98405, 98406 and 98407, each representing 7.0% of all respondents.
DEMOGRAPHIC CHARACTERISTICS

Understanding who lives in a community is the first step toward understanding that community’s health needs. The demographic characteristics of a community are strong predictors of health outcomes and health service needs. For example, communities with large older populations may have different health needs than a younger population. Factors such as lower income and education levels are also strongly linked to worse health outcomes.

Population - Approximately 779,107 people live in the CHI Franciscan Health St. Joseph Medical Center primary service area: an increase of 239,494 residents or a 44.4% growth since 1990.

Age - Children, teens, and youth represent 33.1% of the population, while 13.0% of the population is 65 or older. Respectively, these numbers are 32.2% and 14.0% statewide, not significantly different.

Race and Ethnicity – Two-thirds of residents are White non-Hispanic (66.3%).

Hispanic residents were the second largest group representing 10.7% of the service area’s total population; statewide they account for 12.2%.

Demographics
CHI Franciscan Health St. Joseph Medical Center service area, 2014

<table>
<thead>
<tr>
<th>Age</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1</td>
<td>10,580</td>
<td>1.4%</td>
</tr>
<tr>
<td>1-4</td>
<td>42,091</td>
<td>5.4%</td>
</tr>
<tr>
<td>5-14</td>
<td>104,681</td>
<td>13.4%</td>
</tr>
<tr>
<td>15-24</td>
<td>100,173</td>
<td>12.9%</td>
</tr>
<tr>
<td>25-34</td>
<td>107,372</td>
<td>13.8%</td>
</tr>
<tr>
<td>35-44</td>
<td>101,305</td>
<td>13.0%</td>
</tr>
<tr>
<td>45-54</td>
<td>110,844</td>
<td>14.2%</td>
</tr>
<tr>
<td>55-64</td>
<td>100,679</td>
<td>12.9%</td>
</tr>
<tr>
<td>65-74</td>
<td>60,874</td>
<td>7.8%</td>
</tr>
<tr>
<td>75-84</td>
<td>28,025</td>
<td>3.6%</td>
</tr>
<tr>
<td>85+</td>
<td>12,484</td>
<td>1.6%</td>
</tr>
</tbody>
</table>

Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>382,248</td>
<td>49.1%</td>
</tr>
<tr>
<td>Female</td>
<td>396,859</td>
<td>50.9%</td>
</tr>
</tbody>
</table>

Race

<table>
<thead>
<tr>
<th>Race</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic or Latino</td>
<td>83,251</td>
<td>10.7%</td>
</tr>
<tr>
<td>White Only - NH</td>
<td>516,735</td>
<td>66.3%</td>
</tr>
<tr>
<td>Black Only - NH</td>
<td>53,666</td>
<td>6.9%</td>
</tr>
<tr>
<td>Asian Only - NH</td>
<td>57,086</td>
<td>7.3%</td>
</tr>
<tr>
<td>American Indian/Alaska</td>
<td>8,435</td>
<td>1.1%</td>
</tr>
<tr>
<td>Native Only - NH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pacific Islander Only</td>
<td>12,434</td>
<td>1.6%</td>
</tr>
<tr>
<td>Multi-Race Only - NH</td>
<td>47,501</td>
<td>6.1%</td>
</tr>
</tbody>
</table>

Source: Washington State Office of Financial Management, Forecasting Division
SOCIOECONOMIC CHARACTERISTICS

Poverty

- Thirteen percent of residents had incomes below the federal poverty level.
- One of every four Hispanic residents lives below the Federal Poverty Level. One of every five American Indian/Alaska Native residents and Black residents lives below the Federal Poverty Level.
- Thirty percent of residents live in or below 200% of the federal poverty level, a common eligibility criterion for assistance programs.
- The rate of poverty varied in the CHI Franciscan Health St. Joseph Medical Center service area from between 5.5% and 30.6% (Figure 3).

Housing Affordability

- A little over half of renters (53.3%) and 41.0% of owners with a mortgage in the service area are paying more than 30% of their household income on housing. Spending more than 30% of household income on housing is financially burdensome.

<table>
<thead>
<tr>
<th>Description</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>People in poverty</td>
<td>103,554</td>
<td>13.2%</td>
</tr>
<tr>
<td>White - NH</td>
<td>65,346</td>
<td>11.4%</td>
</tr>
<tr>
<td>Black - NH</td>
<td>10,798</td>
<td>19.6%</td>
</tr>
<tr>
<td>AIAN - NH</td>
<td>2,050</td>
<td>22.7%</td>
</tr>
<tr>
<td>Asian - NH</td>
<td>7,143</td>
<td>12.9%</td>
</tr>
<tr>
<td>NHOPI - NH</td>
<td>1,624</td>
<td>14.3%</td>
</tr>
<tr>
<td>Some other race - NH</td>
<td>6,630</td>
<td>29.0%</td>
</tr>
<tr>
<td>Two or more races - NH</td>
<td>9,963</td>
<td>18.3%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>21,956</td>
<td>26.8%</td>
</tr>
<tr>
<td>People below 200% of the poverty level</td>
<td>238,113</td>
<td>30.4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Population with burdensome housing cost</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Renters</td>
<td>58,270</td>
<td>53.3%</td>
</tr>
<tr>
<td>Owners with mortgage</td>
<td>56,434</td>
<td>41.0%</td>
</tr>
<tr>
<td>Owners without mortgage</td>
<td>6,592</td>
<td>14.6%</td>
</tr>
</tbody>
</table>

Source: American Community Survey, 2009-2013
Immigration
- Twelve percent of the service area population is foreign born.

Non-English Speaking Persons
- A majority of the service area residents speak only English at home.
- Among people who do not exclusively speak English at home, seven percent speak English “less than very well”.

Immigration and languages
2009-2013 average

<table>
<thead>
<tr>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immigrants</td>
<td>93,824</td>
</tr>
<tr>
<td>Speak a language other than English at home</td>
<td>125,652</td>
</tr>
<tr>
<td>Population 5 years and older who spoke English less than very well</td>
<td>51,567</td>
</tr>
</tbody>
</table>

Source: American Community Survey, 2009-2013

Top 10 countries of origin for immigrants
2009-2013 average

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country of Origin</th>
<th>Number of Immigrants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mexico</td>
<td>20,402</td>
</tr>
<tr>
<td>2</td>
<td>Korea</td>
<td>12,165</td>
</tr>
<tr>
<td>3</td>
<td>Philippines</td>
<td>8,194</td>
</tr>
<tr>
<td>4</td>
<td>Vietnam</td>
<td>5,897</td>
</tr>
<tr>
<td>5</td>
<td>Ukraine</td>
<td>4,554</td>
</tr>
<tr>
<td>6</td>
<td>Germany</td>
<td>3,885</td>
</tr>
<tr>
<td>7</td>
<td>Canada</td>
<td>3,414</td>
</tr>
<tr>
<td>8</td>
<td>Cambodia</td>
<td>3,227</td>
</tr>
<tr>
<td>9</td>
<td>Moldova</td>
<td>2,278</td>
</tr>
<tr>
<td>10</td>
<td>China</td>
<td>2,223</td>
</tr>
</tbody>
</table>

Source: American Community Survey, 2009-2013

Top languages spoken
2009-2013 average

<table>
<thead>
<tr>
<th>Rank</th>
<th>Foreign Language</th>
<th>Number of People</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Spanish</td>
<td>49,535</td>
</tr>
<tr>
<td>2</td>
<td>Korean</td>
<td>13,628</td>
</tr>
<tr>
<td>3</td>
<td>Tagalog</td>
<td>7,317</td>
</tr>
<tr>
<td>4</td>
<td>Russian</td>
<td>7,225</td>
</tr>
<tr>
<td>5</td>
<td>Vietnamese</td>
<td>6,831</td>
</tr>
</tbody>
</table>

Source: American Community Survey, 2009-2013
High school graduation rate

Graduation rates are important indicators of the health status of students in kindergarten through 12th grade. The four-year graduation rate for students in the CHI Franciscan Health St. Joseph Medical Center service area for the 2013-14 school year was 79.5%. This is higher than Washington state's rate of 77.2%.

Free/reduced price meals

A free and reduced-price meal program is a federal program for students whose families meet the definition of being low-income. Students are eligible for free meals if their family’s income is at or below 130% of the federal poverty guidelines. Eligibility for reduced-price meals is between 130% and 185% of federal poverty guidelines. This program assists in ensuring that children get nutritious meals that promote overall health and learning in school.

Almost half (48.2%) of CHI Franciscan Health St. Joseph Medical Center service area students in public kindergarten through 12th grade schools during the 2013-14 school year received free or reduced-price meals. This is significantly higher than the Washington state average of 46.0%.
Homeless

Homelessness is an increasing problem due in part to poverty and inequities in housing. Depending on the size of the service area, the percent of total homeless persons served can vary widely. The Homelessness Housing and Assistance Act requires each county in the state to conduct an annual Point in Time count of sheltered and unsheltered homeless persons.

- The most recent Point in Time counts took place on January 29, 2015. The Pierce County count totaled 2,048 homeless, while the Washington state total was 6,893.

- Of the homeless counted in the CHI Franciscan Health St. Joseph Medical Center service area, the percent ranged from a high of 17.5% in zip code 98405 to a low of 0.5% in zip code 98422.

Foster care

- The percent of Pierce County children ages 17 years and younger who received foster care placement services in 2014 (0.55%) was similar to the state's (0.58%).

- Almost two-thirds (62.4%) of Pierce County children under the age of 18 received some type of aid or service through the Washington State Department of Social and Health Services in 2014. This was similar to the state average of 62.1%.

Disability

Disabilities can include any one or more of five functions: hearing, vision, cognition, ambulatory, self-care and independence. Disabilities can prevent a person from living a full, normal life and limit the opportunity to hold a steady job.

- From 2009 to 2013, 11.6% of residents in the CHI Franciscan Health St. Joseph Medical Center service area had at least one disability, compared with 10.3% of all Washington state residents.
Life expectancy and death rates provide important information about the health status of the community. Analyses of causes of death and disparities among segments of the population can help members of the community identify health needs, prioritize health concerns and develop intervention programs.

**LIFE EXPECTANCY**

Life expectancy is a widely used measure of the overall health of a population. The definition is the average number of years a person at birth can expect to live, given current death rates. Life expectancy can be improved by reducing specific causes of diseases and eliminating health inequities.

- For the CHI Franciscan Health St. Joseph Medical Center service area, the average life expectancy of a resident for those born in years 2010 to 2014 is 79 years, one year lower than the state average of 80 years.
- Statewide, residents are living longer. The average life expectancy for those born in years 2010 to 2014 is about five years longer than for those born in 1980.\textsuperscript{vii}
- Patterns in life expectancy data by race in the service area indicate that American Indian/Alaska Native and Native Hawaiian/Other Pacific Islanders had the shortest life expectancies: 74 and 71 years, respectively. Hispanics and Asians had the longest life expectancies, both at 85 years.
- Life expectancy in the CHI Franciscan Health St. Joseph Medical Center service area varied by geography, ranging from 74.9 to 83.5 years of age (Figure 4). The lowest life expectancies are along the I-5 corridor and Parkland/Spanaway areas.

**Life expectancy**

<table>
<thead>
<tr>
<th>2010-2014 average</th>
<th>St. Joseph</th>
<th>WA State</th>
<th>White-NH</th>
<th>Black-NH</th>
<th>AI/AN-NH</th>
<th>Asian-NH</th>
<th>NHPI-NH</th>
<th>Multi-Race-NH</th>
<th>Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>79</td>
<td>80</td>
<td>79</td>
<td>78</td>
<td>74</td>
<td>85</td>
<td>71</td>
<td>86</td>
<td>86</td>
</tr>
</tbody>
</table>

LEADING CAUSES OF DEATH

Over the last five years, the main causes of death in the US have remained fairly consistent, with the top three of these (heart disease, cancer and chronic lower respiratory diseases) accounting for over 50% of all deaths.\textsuperscript{viii}

- The top three leading causes of death in the CHI Franciscan Health St. Joseph Medical Center service area during 2010 to 2014 were heart disease, cancers of all types and lung cancer.*
- The top ten leading causes of death were the same for the residents of the hospital service area as they were for all Washington state residents.

**Leading causes of death**
**2010-2014 average**

<table>
<thead>
<tr>
<th>Causes</th>
<th>St Joseph Ranking</th>
<th>WA Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart disease</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Cancer</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Alzheimer’s disease</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Lung cancer</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Chronic lower respiratory diseases</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Stroke</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Accidents</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Diabetes</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Intentional self-harm (suicide)</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Colorectal cancer</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Avg. # per yr.</td>
<td>5,044</td>
<td>44,193</td>
</tr>
</tbody>
</table>

Source: Death Certificate Data, Washington State Department of Health, Center for Health Statistics.

*Ranked by the number of deaths over the 5-year period from 2010 to 2014.
LEADING CAUSES OF HOSPITALIZATION

Another aspect of the health of a community is the rate of hospitalizations. When compared to other states, Washington state’s rate of hospitalizations for conditions that can be prevented by early intervention or good outpatient care was lower than the average in 2011.

- From 2010 to 2014, hospitalizations for childbirth accounted for the majority of the hospitalizations in the CHI Franciscan Health St. Joseph Medical Center service area, followed by circulatory and digestive disorders.

- The leading causes of hospitalization and their ranking were identical for the hospital service area and the state.

Leading causes of hospitalization
By main category of diagnosis, 2010-2014 average

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>St Joseph</th>
<th>WA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complications of pregnancy; childbirth; and the puerperium</td>
<td>55,360</td>
<td>417,235</td>
</tr>
<tr>
<td>Certain conditions originating in the perinatal period</td>
<td>47,713</td>
<td>402,625</td>
</tr>
<tr>
<td>Diseases of the circulatory system</td>
<td>45,420</td>
<td>400,913</td>
</tr>
<tr>
<td>Diseases of the digestive system</td>
<td>36,521</td>
<td>284,118</td>
</tr>
<tr>
<td>Injury and poisoning</td>
<td>30,747</td>
<td>251,011</td>
</tr>
<tr>
<td>Diseases of the musculoskeletal system and connective tissue</td>
<td>30,586</td>
<td>225,922</td>
</tr>
<tr>
<td>Diseases of the respiratory system</td>
<td>24,766</td>
<td>224,027</td>
</tr>
<tr>
<td>Infectious and parasitic diseases</td>
<td>17,706</td>
<td>154,245</td>
</tr>
<tr>
<td>Mental illness</td>
<td>17,057</td>
<td>137,040</td>
</tr>
<tr>
<td>Cancer</td>
<td>16,311</td>
<td>135,223</td>
</tr>
<tr>
<td>Diseases of the genitourinary system</td>
<td>15,369</td>
<td>130,697</td>
</tr>
<tr>
<td>Endocrine; nutritional; and metabolic diseases and immunity disorders</td>
<td>12,752</td>
<td>89,148</td>
</tr>
<tr>
<td>Symptoms; signs; and ill-defined conditions and factors influencing health status</td>
<td>9,678</td>
<td>72,808</td>
</tr>
</tbody>
</table>

Half of all American adults have at least one chronic disease or condition. Almost one in three adults have multiple chronic conditions.*

Just as chronic diseases share many of the same causes, many of the same strategies and interventions can prevent them or lessen their severity. Many chronic diseases are linked to health behaviors, environmental conditions and social and economic factors.

**DIABETES (YOUTH)**

The prevalence of diabetes in youth is self-reported. Public school students are asked if they have ever been told by a doctor or other health professional that they have diabetes. As obesity rates in children continue to increase, type 2 diabetes is becoming more common in youth.

- In the CHI Franciscan Health St. Joseph Medical Center service area, 3.6% of 10th graders in 2014 reported having diabetes.
- There are no significant differences between White and non-White youth in the service area.

### Diabetes (youth)

#### 2014

<table>
<thead>
<tr>
<th></th>
<th>St. Joseph</th>
<th>WA</th>
<th>White</th>
<th>Non-White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td>3.6%</td>
<td>3.2%</td>
<td>3.9%</td>
<td>4.3%</td>
</tr>
</tbody>
</table>

Source: Healthy Youth Survey, 2014
**DIABETES (ADULTS)**

Uncontrolled diabetes can cause kidney disease, blindness, damaged nerves, comas, other serious medical conditions and death. Reducing known risk factors (such as tobacco use, weight gain, high blood pressure and physical inactivity) can prevent type 2 diabetes or delay its onset.

The prevalence of diabetes among adults is self-reported data.

- From 2011 to 2013, 9.7% of residents living in the CHI Franciscan Health St. Joseph Medical Center service area reported having diabetes.

- There were no significant differences by gender or race in the service area.
Colorectal cancer (occurring in both colon and rectum) affects men and women of all racial and ethnic groups and is most often found in people 50 years or older. In Washington state and throughout the nation, colon cancer is the second leading cause of cancer deaths for both men and women.

- From 2008 to 2012, the incidence rate of colorectal cancer in the CHI Franciscan Health St. Joseph Medical Center service area was 36.8 cases per 100,000.

- There were no significant differences in colorectal cancer rates by race.

**Invasive colorectal cancer incidence 2008-2012 average**

![Graph showing incidence rates by racial groups]


^Rate: cases per 100,000 population
CERVICAL CANCER INCIDENCE

Due to the availability of screening, few women in Washington state get cervical cancer. However, many women are still not getting screened.

- From 2008 to 2012, the rate of developing cervical cancer for women in the CHI Franciscan Health St. Joseph Medical Center service area was 4.3 cases per 100,000 women.

Invasive cervical cancer incidence
2008-2012 average

<table>
<thead>
<tr>
<th></th>
<th>St. Joseph</th>
<th>WA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008-2012 average</td>
<td>4.3</td>
<td>3.5</td>
</tr>
</tbody>
</table>


BREAST CANCER INCIDENCE

Breast cancer is the most common cancer that affects women. Screening for breast cancer allows the cancer to be detected earlier, which improves the chances for successful treatment.

- From 2008 to 2012, the breast cancer incidence rate among residents of the CHI Franciscan Health St. Joseph Medical Center service area was 181.5 cases per 100,000.

- Asian women had one of the lowest rates (130.5 cases per 100,000), significantly lower than White and Black women.

Invasive breast cancer incidence
2008-2012 average

<table>
<thead>
<tr>
<th></th>
<th>St. Joseph</th>
<th>WA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008-2012 average</td>
<td>181.5</td>
<td>172.3</td>
</tr>
</tbody>
</table>


^Rate: cases per 100,000 women, age-adjusted to the 2000 US population
ASTHMA (ADULTS)

Asthma is a chronic lung disease that inflames and narrows the airways. It has recurring symptoms including wheezing, breathlessness, chest tightening and coughing. Although there is no cure for asthma, it can be managed with medical care, and attacks prevented by avoiding triggers.

- From 2011 to 2013, the percent of adults who reported being diagnosed with asthma in the CHI Franciscan Health St. Joseph Medical Center service area was 9.7%.
- More women reported having asthma (13.1%) than did men (6.5%).

ASTHMA (YOUTH)

Asthma is linked to depression, decreased academic achievement and reduced quality of life in children ages 17 years and younger.

- From 2011 to 2013, 9.1% of children in the CHI Franciscan Health St. Joseph Medical Center service area had asthma.
- There were no significant differences by race or gender.

Asthma (youth)
2011-2013 average
HIV PREVALENCE

The Human Immunodeficiency Virus (HIV) attacks the immune system, causing deficiency or damage to the immune system. HIV damages the body’s ability to fight diseases and infections and can lead to Acquired Immunodeficiency Syndrome (AIDS).

Men having sex with men (MSM) are disproportionately at risk for HIV. Statewide HIV infection rates among MSM are more than 150 times higher compared to heterosexual men and women. Additionally, people 40 to 59 years of age have the highest number and rates of HIV cases. Diagnosis rates are also significantly higher among (non-Hispanic) Black people compared to other racial/ethnic groups.

- In 2015, more than a thousand people living in the CHI Franciscan Health St. Joseph Medical Center service area were diagnosed with HIV. This equals 8.7% of all people with HIV in the state and 79.2% of all those in Pierce County.
- In 2015, the rate of HIV incidence was 182.3 cases per 100,000 residents in Washington state and 169.4 cases per 100,000 residents in Pierce County.

Source: All HIV/AIDS surveillance data reported to the Washington State Department of Health as of May 31, 2015
Eating nutritious foods, becoming more physically active and avoiding tobacco are healthy behaviors that can help prevent many of the diseases and conditions mentioned in the previous section. Even if a person already has a chronic condition such as diabetes or cancer, healthy behaviors can help better manage the illness, avoid complications and prolong life.

Community Input: Community stakeholders identified limited physical activity, access to affordable nutritious food and environmental concerns (clean air and clean groundwater) as contributing factors to chronic illness prevention and management.

**OBESITY AND OVERWEIGHT (ADULTS)**

Overweight adults are those who have a body mass index (BMI) greater than or equal to 25.0 and less than 30.0.

- From 2011 to 2013, 33.0% of adults in the CHI Franciscan Health St. Joseph Medical Center service area were overweight.

- There were no significant differences by race or gender.

**Overweight, adults**

2011-2013 average

Source: Behavioral Risk Factor Surveillance System, 2011-2013
Obese adults are those who have a BMI equal to or greater than 30.0. Obesity-related conditions include heart disease, stroke, type 2 diabetes and certain types of cancer.

- From 2011 to 2013, 30.6% of adults in the CHI Franciscan Health St. Joseph Medical Center service area were obese. This is significantly more than the state average.
- There were no significant differences by race or gender.

**Obese, adults**

**2011-2013 average**

![Graph showing obesity rates by race and gender for 2011-2013.](image)

- St. Joseph: 30.6%
- WA: 26.9%
- White: 31.3%
- Non-White: 28.3%
- Male: 31.5%
- Female: 29.7%

*Source: Behavioral Risk Factor Surveillance System, 2011-2013*

**OBESITY AND OVERWEIGHT (YOUTH)**

Obesity contributes to a number of chronic diseases and causes a greater likelihood of premature death. Children and adolescents with BMI values at or above the 95th percentile of the sex-specific BMI growth charts are categorized as obese. Those at or above the 85th percentile, but below the 95th, are considered to be overweight. Poor diet and physical inactivity are risk factors for obesity and overweight among youth.

- In 2014, 13.1% of 10th graders in the CHI Franciscan Health St. Joseph Medical Center service area were obese, while 14.0% were overweight.
- Non-White 10th graders had a higher percent of obesity and overweight combined (31.6%) than White 10th graders (24.1%).

**Obesity and overweight (youth)**

**2014**

![Graph showing obesity and overweight rates by race and gender for 2014.](image)

- St. Joseph: 13.1% Obese, 14.0% Overweight
- WA: 11.5% Obese, 14.0% Overweight
- White: 11.5% Obese, 12.8% Overweight
- Non-White: 15.5% Obese, 14.1% Overweight

*Source: Healthy Youth Survey, 2014*
**PHYSICAL ACTIVITY (ADULTS)**

Adult physical activity is based on the percent of adults 18 years and over who met both the aerobic and muscle strengthening recommendations for physical activity. The recommended level of aerobic physical activity may be either regular moderate physical activity or regular vigorous physical activity. The recommendation for muscle strengthening is that people engage in muscle strengthening activity at least twice a week.

- In 2011 and 2013, 22.0% percent of adults in the CHI Franciscan Health St. Joseph Medical Center service area met both the aerobic and muscle strengthening recommendations for physical activity.
- There were no significant differences by race or gender.

*Source: Behavioral Risk Factor Surveillance System, 2011-2013*
PHYSICAL ACTIVITY (YOUTH)

Youth physical activity is based on the percent of 10th graders who were physically active for five days per week for at least 60 minutes per day. The Dietary Guidelines for America and the National Association for Sports and Physical Education recommend that children and adolescents participate in at least 60 minutes of physical activity most days of the week, preferably daily.

- In the CHI Franciscan Health St. Joseph Medical Center service area, 79.0% of 10th graders reported that they had not met the physical activity recommendations for 60 minutes of physical activity daily.

Source: Healthy Youth Survey, 2014
SUGAR-SWEETENED BEVERAGE CONSUMPTION (YOUTH)

Sugar-sweetened beverages include regular soda, sports drinks or other flavored sweetened drinks. Sugary beverage consumption leads to excess caloric intake and weight gain, increased obesity rates among children and adolescents, and can contribute to increased tooth decay.

- In the CHI Franciscan Health St. Joseph Medical Center service area, 86.3% of 10th grade students reported not drinking a sugar-sweetened beverage in the past seven days.*

Sugar-sweetened beverage consumption (youth)

**2014**

<table>
<thead>
<tr>
<th>Category</th>
<th>86.3%</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Joseph</td>
<td></td>
</tr>
<tr>
<td>Pierce County</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>87.3%</td>
</tr>
<tr>
<td>Non-White</td>
<td>84.8%</td>
</tr>
</tbody>
</table>

Source: Healthy Youth Survey, 2014

*data not available for Washington state

FRUIT AND VEGETABLE CONSUMPTION

Eating more fruits and vegetables adds nutrients to diets, reduces the risk for heart disease, stroke, and some cancers, and helps manage body weight when consumed in place of more energy-dense foods.

DAILY FRUIT CONSUMPTION (ADULTS)

- From 2011 to 2013, 39.4% of adults in the CHI Franciscan Health St. Joseph Medical Center service area ate fruit each day.

Daily fruit consumption (adults)

2011-2013

<table>
<thead>
<tr>
<th>Category</th>
<th>St. Joseph</th>
<th>WA</th>
<th>White</th>
<th>Non-White</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Joseph</td>
<td>39.4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WA</td>
<td>36.6%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>38.5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-White</td>
<td>42.3%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>47.2%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>32.1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Behavioral Risk Factor Surveillance System, 2011-2013
Actual Causes of Illness

Continued

DAILY VEGETABLE CONSUMPTION (ADULTS)

From 2011 to 2013, 20.0% of adults in the CHI Franciscan Health St. Joseph Medical Center service area ate vegetables each day.

Daily vegetable consumption (adults) 2011-2013

<table>
<thead>
<tr>
<th>Category</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Joseph</td>
<td>16.9%</td>
<td>23.3%</td>
<td>25.2%</td>
</tr>
<tr>
<td>WA</td>
<td>18.2%</td>
<td>18.2%</td>
<td>18.2%</td>
</tr>
<tr>
<td>White</td>
<td>20.0%</td>
<td>20.0%</td>
<td>20.0%</td>
</tr>
<tr>
<td>Non-White</td>
<td>22.3%</td>
<td>22.3%</td>
<td>22.3%</td>
</tr>
<tr>
<td>Male</td>
<td>16.9%</td>
<td>18.8%</td>
<td>18.8%</td>
</tr>
<tr>
<td>Female</td>
<td>17.0%</td>
<td>17.0%</td>
<td>17.0%</td>
</tr>
</tbody>
</table>

Source: Behavioral Risk Factor Surveillance System, 2011-2013

Community Input:

Community leaders identified access to affordable nutritious food as a contributing factor to chronic illness prevention and management.

Community members identified opportunities to improve cooking skills and referred back to the “days before” when previous generations were more experienced with cooking. Providing free or low-cost culturally and linguistically appropriate cooking programs in community settings is very appealing to many community members. Community members also wanted more educational materials on obesity, exercise and nutrition that are easy to read (i.e., lower reading level) and translated into more languages.

Recent community surveys of low-income women within the CHI Franciscan Health St. Joseph Medical Center service area conducted for the Supplemental Nutrition Assistance Program (SNAP) reported the difficulty of purchasing healthy food with limited food assistance and/or limited income. Low-income individuals and families often depend on public transportation, making grocery shopping challenging. Food banks and other emergency feeding programs are working to provide healthier options to residents most in need. Low income community members using basic food assistance (SNAP/WIC) appreciate the Fresh Bucks program that enables participants to double their SNAP/WIC dollars at farmers markets.
**CIGARETTE SMOKING (ADULTS)**

Cigarette smoking is the leading cause of preventable disease and death in the United States. The Centers for Disease Control and Prevention estimate that cigarette smoking kills about 8,300 adults each year in Washington state.

- From 2011 to 2013, the CHI Franciscan Health St. Joseph Medical Center service area had a higher percent (20.3%) of current smokers than did Washington state (16.8%).

- Cigarette smoking rates ranged from 1.8% to 44.0% for specific zip codes in the St. Joseph Medical Center service area (Figure 5).

**Cigarette smoking (adults) 2011-2013**

![Figure 5. Tobacco use CHI Franciscan Health St. Joseph Medical Center service area, 2011-2013]

Source: Behavioral Risk Factor Surveillance System, 2011-2013
CIGARETTE SMOKING (YOUTH)

Most adult smokers begin smoking as teenagers. In Washington state about 40 youth start smoking cigarettes each day, and one in three of these youth smokers will die prematurely from a smoking-caused disease. Additionally, smoking is associated with the increased risk of drug use and low academic performance.

■ In 2014, 8.7% of 10th graders in the CHI Franciscan Health St. Joseph Medical Center service area smoked.

Cigarette smoking (youth)
2014

![Cigarette smoking (youth) 2014 chart]

Source: Healthy Youth Survey, 2014

E-CIGARETTE USE (YOUTH)

Most electronic-cigarettes (e-cigarettes or e-cigs) contain nicotine, which is a highly addictive and harmful drug. Nicotine use by teens or children may increase their likelihood of tobacco addiction as adults.

Findings from the 2014 National Youth Tobacco Survey, as well as the statewide Healthy Youth Survey, show that e-cigarette use among high school students has increased three-fold just in the two previous years.

■ In the CHI Franciscan Health St. Joseph Medical Center service area, the percent of 10th graders who used an e-cigarette in the past 30 days was 20.2%.*

E-cigarette use (youth)
2014

![E-cigarette use (youth) 2014 chart]

Source: Healthy Youth Survey, 2014

*Washington state data not available
Assets and Resources

- CHI Franciscan Health Outpatient Nutrition Education Center
- CHI Franciscan Health Diabetes Support Groups-St. Joseph Medical Center and St. Anthony Hospital
- CHI Institute for Research & Innovation
- CHI Franciscan Health Talks
- Local parks and community centers offer public places for physical activities; some offer programs such as single-gender swim times and scholarships for children.
- Supplemental and Nutrition Assistance Program (SNAP-Ed) The goal of SNAP-Ed is to improve the likelihood that persons eligible for SNAP will make healthy choices within a limited budget and choose active lifestyles consistent with the current Dietary Guidelines for Americans and MyPlate.
- Farmers markets
- The Women Infant and Children Supplemental Nutrition Program helps pregnant women, new mothers, and young children eat well, learn about nutrition, and stay healthy.
- Food banks and other feeding programs, sponsored by faith-based organizations, are working to provide healthier options to their customers.
- Ready Set Go! 5210 is a community-based initiative in Pierce County to promote healthy lifestyle choices for children, youth and families.
- YMCA Programs: Diabetes Prevention Program; Silver Sneakers; ACT Program

Opportunities include:

- Providing information about free or low-cost cooking and exercise programs in languages read by immigrants and refugees.
- Provide healthy ethnic cooking classes for minority communities.
- Improving access to places for physical activity, supported by ongoing efforts of employers, coalitions, agencies, and communities. These groups are attempting to change the local environment (e.g., by creating walking trails), build new exercise facilities, provide access to existing nearby facilities, and reduce the cost of opportunities for physical activity. Improved access is typically achieved in a particular community through a multi-component strategy that includes training or education for participants. http://www.countyhealthrankings.org/policies/access-places-physical-activity.

■ Helping residents increase their earning capacity (and their ability to buy healthy food) by supporting job training programs, community economic development, and living wages.

**Tobacco prevention & control assets and resources include:**

■ Tobacco Alliance of Pierce County.

■ CHI Franciscan Health Freedom From Tobacco Support Groups.

■ Multiple partners committed to reducing the prevalence of Tobacco, Marijuana, and Other Drugs (TMOD).

■ The Washington State Quitline.

■ Cessation medication and counseling in combination – the most effective cessation method.

■ Behavioral health providers who are increasingly addressing tobacco cessation with patients who have some of the highest smoking rates.

**Opportunities include:**

■ Hospital and health department partnerships to communicate with the public about the ongoing need for tobacco prevention and cessation, including vaping and e-cigarette use. Many hospitals already have robust tobacco-free policies. These policies could be combined with strong messaging to patients about the impacts of tobacco use.

■ Brief tobacco screening and interventions in emergency departments, primary care, dental, and other healthcare settings can improve quit rates. This is an evidence-based practice.

■ Tobacco-cessation coverage varies by health plan. No mandated coverage standard exists in Washington state.
Access to comprehensive, quality health care services is an important factor to achieving a healthy life for everyone. Limited access to health care impacts people’s ability to reach their full health and well-being potential. Barriers to achieving optimal health care include: lack of insurance coverage, high cost of that coverage and health services, and lack of availability of services. These barriers can lead to unmet health needs, delays in receiving appropriate care, inability to get preventive services and hospitalizations that could have been prevented.

Community input:
Community members identified access to affordable healthcare as one of the most defining factors of what makes a healthy community. Opportunities include assistance for people without health insurance or who struggle to afford insurance premiums (particularly seniors); and increased Medicaid reimbursement.
HEALTH INSURANCE COVERAGE (ADULTS)

- From 2011 to 2013, 80.9% of adults in the CHI Franciscan Health St. Joseph Medical Center service area had health coverage.
- Whites (84.9%) were more likely to have health coverage than non-Whites (69.8%).

Adults with health coverage 2011-2013 average

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
<th>Non-White</th>
<th>White</th>
<th>WA</th>
<th>St. Joseph</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-2013 average</td>
<td>83.6%</td>
<td>78.3%</td>
<td>69.8%</td>
<td>84.9%</td>
<td>82.5%</td>
<td>80.9%</td>
</tr>
</tbody>
</table>

Source: Behavioral Risk Factor Surveillance System, 2011-2013

UNMET HEALTH CARE NEEDS (ADULTS)

Unmet health care needs may occur for several reasons including treatment costs, long waiting times, not being able to take time off of work or needing to look after children, and transportation barriers.

- From 2011 to 2013, 20.2% of residents in the CHI Franciscan Health St. Joseph Medical Center service area had unmet health care needs due to cost. This was higher than the state rate at 15.9%.

Unmet health care needs (adults) 2011-2013 average

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
<th>Non-White</th>
<th>White</th>
<th>WA</th>
<th>St. Joseph</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-2013 average</td>
<td>22.5%</td>
<td>18.0%</td>
<td>24.7%</td>
<td>18.6%</td>
<td>15.9%</td>
<td>20.2%</td>
</tr>
</tbody>
</table>

Source: Behavioral Risk Factor Surveillance System, 2011-2013
NO PRIMARY CARE PROVIDER (ADULTS)

Primary care providers work to prevent disease, maintain health, manage chronic disease, diagnose medical problems, refer patients to specialists and coordinate medical care for a patient population. A strong primary care system provides accessible, cost-effective and high-quality care.

People with regular primary care receive more preventive services, are better at complying with their treatment, and have lower rates of illness and premature death than those without such care. They also use emergency rooms and are hospitalized less often than those without primary care.

- From 2011 to 2013, 27.6% of residents in the CHI Franciscan Health St. Joseph Medical Center service area did not have a personal doctor.
- Compared to White residents (23.0%), a higher percent of non-Whites (40.5%) were without a primary care doctor.
- The percent of men (33.4%) with no primary care provider was higher than that of women (21.8%).

No primary care provider (adults) 2011-2013 average

HEALTH PROFESSIONAL SHORTAGE AREAS

Health Professional Shortage Areas (HPSAs) are designated as having a shortage of primary medical, dental or mental health providers. They may be urban or rural areas, population groups, or medical or other public facilities.

- Within the CHI Franciscan Health St. Joseph Medical Center service area, there is one primary care shortage area and no mental or oral health shortage areas.
DENTAL CHECKUP (ADULTS)

Most adults should see a dentist twice a year for a routine dental checkup, which typically includes teeth cleaning, an evaluation of gums and sometimes X-rays. This process provides a dentist with information regarding tooth decay and other health conditions.

- Between 2011 and 2012, an average of 66.9% of adults in the CHI Franciscan Health St. Joseph Medical Center service area had a routine dental checkup in the last year.

### Dental checkup (adults)

**2011, 2012**

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Joseph</td>
<td>66.9%</td>
<td></td>
</tr>
<tr>
<td>WA</td>
<td>67.1%</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>67.5%</td>
<td></td>
</tr>
<tr>
<td>Non-White</td>
<td>66.4%</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>63.7%</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>70.3%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Behavioral Risk Factor Surveillance System, 2011-2013

DENTAL CHECKUP (YOUTH)

Dental checkups are important to start as early as toddler age. Tooth decay is a chronic condition that can start with baby teeth and typically lasts into adulthood with greater costs and risk of diseases such as stroke, diabetes, and heart disease.

- In 2014, 75.2% of students in 10th grade in the CHI Franciscan Health St. Joseph Medical Center service area reported having a dental checkup in the last year.

- White students (77.9%) were more likely than non-White students (71.3%) to have a dental checkup in the last year.

### Dental checkup (youth)

**2014**

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>St. Joseph</td>
<td>75.2%</td>
</tr>
<tr>
<td>WA</td>
<td>78.0%</td>
</tr>
<tr>
<td>White</td>
<td>77.9%</td>
</tr>
<tr>
<td>Non-White</td>
<td>71.3%</td>
</tr>
</tbody>
</table>

Source: Healthy Youth Survey, 2014
CHILDHOOD CAVITIES

Tooth decay is a preventable disease; however, it still remains one of the most common chronic diseases of childhood. For school aged children, pain caused by untreated dental decay can lead to absence from, and inability to concentrate, in school and the development of poor eating habits. Racial inequities in the development of childhood cavities also persist for teens.

- The 2010 Pierce County Smile Survey showed that by third grade, 51.3% of Pierce County children had experienced decay in at least one tooth.
- Among third graders, 19.0% had untreated dental decay.
- Untreated dental decay is more likely among children receiving free or reduced-price meals. One in four (25.9%) third grade children on free or reduced price meals had untreated decay.
- In Pierce County, 38.7% of third graders had protective dental sealants. This was lower than the Washington state average of 51.2%.

IMMUNIZATIONS

Immunizations are one of the best ways parents can protect infants, children and teens from many potentially harmful diseases. These diseases can be very serious, may require hospitalization, or can even be deadly. Efforts to increase vaccination coverage can focus on increasing access to preventive care, changing parental attitudes, and improving knowledge about the safety and effectiveness of vaccines.

- As of June 2015, 49.0% of children age 19-35 months residing in the CHI Franciscan Health St. Joseph Medical Center service area had not completed the recommended series of childhood immunizations.*

### Children with incomplete vaccination series 2015

<table>
<thead>
<tr>
<th>2015</th>
<th>St. Joseph**</th>
<th>WA*</th>
</tr>
</thead>
<tbody>
<tr>
<td>49.5%</td>
<td></td>
<td>43.3%</td>
</tr>
</tbody>
</table>

*4313314 vaccination series
Vaccination rates 19-35 months (recommended doses DTaP, polio, MMR, Hib, hepatitis B, varicella, and pneumococcal conjugate vaccine (PCV)).

**Zip codes of small areas may provide small, unreliable numbers.
COLORECTAL SCREENING GUIDELINES MET

Adults 50 to 75 years who are at average risk for developing colorectal cancer should be screened by using one or more of the following methods: fecal occult blood testing every year, sigmoidoscopy every five years or colonoscopy every ten years. \(^{xvi,vii}\)

The data below show the percent of adults who reported ever having a sigmoidoscopy or colonoscopy screening exam.

- From 2011 to 2013, 70.3% of adults over 50 years old in the CHI Franciscan Health St. Joseph Medical Center service area reported ever having a sigmoidoscopy or colonoscopy.

**Colorectal screening guidelines met**

**2011-2013 average**

<table>
<thead>
<tr>
<th></th>
<th>St. Joseph</th>
<th>WA</th>
<th>White</th>
<th>Non-White</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>70.3%</td>
<td></td>
<td>73.2%</td>
<td>61.7%</td>
<td>67.2%</td>
<td>73.3%</td>
</tr>
</tbody>
</table>

**Source:** Behavioral Risk Factor Surveillance System, 2011-2013

PREVENTABLE HOSPITAL STAYS

A preventable hospital stay is one that might have been avoided with better medical care outside of the hospital. The Prevention Quality Indicators (PQIs) are a set of measures taken from hospital discharge data to identify quality of care for “ambulatory care sensitive conditions”. Early intervention and good outpatient care can potentially prevent the need for hospitalization, or prevent complications or more severe disease for these conditions.

These indicators provide insight into the community health care system or services outside of the hospital setting and can be used to help flag potential health care quality problems that need further investigation.

- Breathing problems (asthma or other lung conditions), congestive heart failure, and bacterial pneumonia were the PQIs with the highest rates in Pierce County in 2012. These same PQIs showed the highest rates in Washington state in 2012.

- For all PQIs, except lower extremity amputations for diabetics, Pierce County had higher rates of preventable hospital stays compared to the state average.
### Preventable hospital stays

#### WA State, 2012

<table>
<thead>
<tr>
<th>Condition</th>
<th>Counts</th>
<th>Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>PQI Composite - All*</td>
<td>49,285</td>
<td>928.4</td>
</tr>
<tr>
<td>PQI Composite - Acute**</td>
<td>18,747</td>
<td>353.1</td>
</tr>
<tr>
<td>Dehydration</td>
<td>3,630</td>
<td>69.9</td>
</tr>
<tr>
<td>Bacterial Pneumonia</td>
<td>9,328</td>
<td>175.8</td>
</tr>
<tr>
<td>Urinary Tract Infection</td>
<td>5,689</td>
<td>108.2</td>
</tr>
<tr>
<td>PQI Composite - Chronic***</td>
<td>30,539</td>
<td>575.3</td>
</tr>
<tr>
<td>Diabetes - Short Term Complications</td>
<td>3,075</td>
<td>59.8</td>
</tr>
<tr>
<td>Diabetes - Long Term Complications</td>
<td>3,402</td>
<td>65.3</td>
</tr>
<tr>
<td>High Blood Sugar Complications</td>
<td>194</td>
<td>4.8</td>
</tr>
<tr>
<td>Lower Extremity Amputation - (Diabetics)</td>
<td>485</td>
<td>11.0</td>
</tr>
<tr>
<td>Adult Asthma (Ages 19-39)</td>
<td>581</td>
<td>31.9</td>
</tr>
<tr>
<td>Breathing Problems (Asthma or Other Lung Conditions)</td>
<td>8,803</td>
<td>273.1</td>
</tr>
<tr>
<td>Hypertension</td>
<td>1,507</td>
<td>31.6</td>
</tr>
<tr>
<td>Congestive Heart Failure</td>
<td>11,889</td>
<td>224.9</td>
</tr>
<tr>
<td>Angina</td>
<td>361</td>
<td>8.4</td>
</tr>
</tbody>
</table>


†Observable rate (5,308,080 residents 18 years and older as denominator: ACS)

*Combines the acute and chronic PQIs into a single measure for an overall rate

**Overall rate of acute conditions

***Overall rate of chronic conditions

PQIs: Prevention Quality Indicators

### Preventable hospital stays

#### Pierce County, 2012

<table>
<thead>
<tr>
<th>Condition</th>
<th>Counts</th>
<th>Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>PQI Composite - All*</td>
<td>8,090</td>
<td>1,420.3</td>
</tr>
<tr>
<td>PQI Composite - Acute**</td>
<td>2,911</td>
<td>518.4</td>
</tr>
<tr>
<td>Dehydration</td>
<td>625</td>
<td>109.8</td>
</tr>
<tr>
<td>Bacterial Pneumonia</td>
<td>1,277</td>
<td>227.0</td>
</tr>
<tr>
<td>Urinary Tract Infection</td>
<td>1,009</td>
<td>181.8</td>
</tr>
<tr>
<td>PQI Composite - Chronic***</td>
<td>5,179</td>
<td>901.0</td>
</tr>
<tr>
<td>Diabetes - Short Term Complications</td>
<td>525</td>
<td>83.4</td>
</tr>
<tr>
<td>Diabetes - Long Term Complications</td>
<td>541</td>
<td>91.0</td>
</tr>
<tr>
<td>High Blood Sugar Complications</td>
<td>43</td>
<td>7.1</td>
</tr>
<tr>
<td>Lower Extremity Amputation - (Diabetics)</td>
<td>52</td>
<td>8.8</td>
</tr>
<tr>
<td>Adult Asthma (Ages 19-39)</td>
<td>119</td>
<td>48.0</td>
</tr>
<tr>
<td>Breathing Problems (Asthma or Other Lung Conditions)</td>
<td>1,646</td>
<td>471.0</td>
</tr>
<tr>
<td>Hypertension</td>
<td>394</td>
<td>67.0</td>
</tr>
<tr>
<td>Congestive Heart Failure</td>
<td>1,817</td>
<td>329.3</td>
</tr>
<tr>
<td>Angina</td>
<td>74</td>
<td>12.5</td>
</tr>
</tbody>
</table>
Community input:

Community members identified access to affordable health care as one of the most defining factors of what makes a healthy community.

Community leaders identified access to health care services as a contributing factor to chronic illness prevention and management. Community members highlighted affordability, provider workforce capacity and barriers to access as the most significant barriers.

Community stakeholders expressed concern for care service affordability. While the Affordable Care Act has provided coverage to an increasing number of residents, some may choose not to enroll, are not eligible for subsidies or Medicaid, or struggle to afford premiums. High deductibles and co-pays, unaffordable wrap-around benefits and higher premiums leave many community members with limited access to specialty care and prevention-based services. Residents make decisions to forgo these services in order to meet basic needs such as food or housing. Seniors and those with specialty care needs are particularly impacted by limited coverage for specialty care, adult dental care and behavioral health services.

While the Affordable Care Act improves access for many consumers, insurance companies still charge large sums for office visits and/or have large deductible costs that still make health care out of reach for many, including middle income earners. Community members value free or subsidized-cost services on a consistent basis for any resident (e.g., free clinics, discounts for cash payments, sliding scale payment, etc.). The second most common request is that actual service costs be lowered (e.g., lower cost of visits).

Understanding eligibility for specific services and benefits remains a challenge, particularly for those changing coverage, for non-native English speakers and for military families changing active duty status. Community health workers, hospital navigators, and in-person assisters are seen as very helpful in explaining the care system and medical terminology.

Community members expressed concerns of severe shortages of health care provider workforce capacity affecting various services including primary care.

Community members value health care providers’ knowledge about addressing root causes of poor health, time listening to patients’ needs and compassionate approaches that reflect community diversity including racial, ethnic, cultural, linguistic, sexual identity and gender diversity. They appreciate providers who spend more time with patients with complex needs, allowing for more discussion.
Community members asked for more community health workers and medical translators, more providers serving the LGBTQ community, and continuing to partner with agencies that understand the community’s diverse cultures and languages. Successfully addressing barriers to care means improving transportation to service sites, increasing services in rural areas (especially with little to no bus access) and improving coordinated care, according to community members. Community members suggested alternative transportation options, such as providing bus tokens to get to appointments and shuttle services for older and/or disabled adults and low-income families.

Participants asked health systems to increase rural service sites, increase mobile services, work to coordinate services through a central hub, co-locate physical care services with behavioral health and social services, and get involved with legislation, advocating for rural areas in need of services.

Inadequate Medicaid reimbursement is likely to restrict access to child and adult dental care, especially for those in need of dentures. Community stakeholders expressed the need for increased access to dental services, citing many of the same barriers to overall access to health care.

**Assets and resources include:**

- **Project Access** helps low-income patients connect with primary health care and specialty providers to improve health outcomes and reduce inappropriate emergency room use. Project Access also provides premium assistance for individuals on the health exchange.

- **Lindquist Dental Clinic for Children’s (LDCC)** provides accessible, compassionate and effective dental care to Puget Sound children in need.

- **Medical Teams International’s Mobile Dental Program** provides free or low-cost urgent dental care services to patients who lack dental insurance or any realistic way to pay for dental treatment.

**Opportunities include:**

- Ensure that Project Access and premium assistance is promoted and understood by community members.

- Explore additional opportunities to assist people without health insurance or who struggle to afford insurance premiums (particularly seniors).

- Advocate to increase Medicaid reimbursement.
INFANT MORTALITY

The infant mortality rate is the number of babies who die before their first birthday per 1,000 live births in a given year. In Washington state two-thirds of infant deaths are associated with labor and delivery-related conditions, birth defects and prematurity. Because many of these deaths are preventable, infant mortality is a measure of the overall health of a population.

From 2010 to 2014, the infant mortality rate in the CHI Franciscan Health St. Joseph Medical Center service area was 5.8 deaths per 1,000 and is higher than the Washington state rate.

Infant mortality
2010-2014 average

Source: Washington State Department of Health, Center for Health Statistics, Death Certificate Data, 1990-2014,
^Rate = Infant deaths per 1,000 live births
SUDDEN INFANT DEATH SYNDROME

Sudden Infant Death Syndrome (SIDS) is the sudden, unexpected death of an apparently healthy baby under one year of age that remains unexplained after a complete postmortem investigation, including an autopsy, examination of the death scene and a review of the medical history. While SIDS occurs in all demographic groups, Black and American Indian/Alaska Native babies are two to three times more likely to die of SIDS than White babies.\[viii\]

From 2010 through 2014, 34 sleep-related infant deaths occurred among residents of the CHI Franciscan Health St. Joseph Medical Center service area.

EARLY AND ADEQUATE PRENATAL CARE

Starting prenatal care early in pregnancy and having regular visits improves the chances of a healthy pregnancy. This indicator measures births for which 1) prenatal care started before the end of the 4th month, and 2) 80% or more of the recommended number of visits occurred.

From 2010 to 2014, approximately six out of ten expectant mothers in the CHI Franciscan Health St. Joseph Medical Center service area (62.7%) received early and adequate prenatal care. These women were less likely to receive early and adequate prenatal care compared to the state average at 69.9%.

Early and adequate prenatal care 2010-2014 average

Source: Birth Certificate Data, Washington State DOH, Center for Health Statistics.
BREASTFEEDING INITIATION

Breastfeeding initiation refers to mothers who start breastfeeding before leaving the hospital. A high percent of breastfeeding initiation is a positive indicator of effective preventive health service. Sustaining breastfeeding beyond initiation may be challenging for some women. The proportion of births being breastfed beyond initiation decreases over time.

- From 2010-2014, 91.1% of mothers residing in the CHI Franciscan Health St. Joseph Medical Center service area initially breastfed their infants. This was lower than the state average.
- Native Hawaiian/Pacific Islanders, American Indian/Alaskan Native and Black mothers were less likely to initiate breastfeeding when compared to White and Hispanic women.

Breastfeeding initiation
2010-2014 average

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Joseph</td>
<td>91.1%</td>
</tr>
<tr>
<td>WA</td>
<td>92.1%</td>
</tr>
<tr>
<td>White-NH</td>
<td>92.2%</td>
</tr>
<tr>
<td>Black-NH</td>
<td>86.9%</td>
</tr>
<tr>
<td>AIAN-NH</td>
<td>88.5%</td>
</tr>
<tr>
<td>Asian-NH</td>
<td>92.1%</td>
</tr>
<tr>
<td>NHPI-NH</td>
<td>85.5%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>92.1%</td>
</tr>
</tbody>
</table>

Source: Birth Certificate Data, Washington State DOH, Center for Health Statistics.
LOW BIRTH WEIGHT

An infant born weighing less than 2500 grams (about 5.5 pounds) is considered low birth weight. Low birth weight infants are at higher risk of infant mortality, respiratory disorders and neuro-developmental disabilities. Low birth weight can add to the length of hospital stays and health care costs.

- From 2010 to 2014, 6.6% of infants born to residents of the CHI Franciscan Health St. Joseph Medical Center service area were low birth weight.

- The rate of low birth weight varied from 4.8% to 8.0% in the CHI Franciscan Health St. Joseph Medical Center service area (Figure 6).

Low birth weight
2010-2014 average

Source: Birth Certificate Data, Washington State DOH, Center for Health Statistics.
Community input:

Community members cite the impact of poverty and inadequate social support as primary barriers to healthy development of their infants, especially for first time mothers. Local community groups and strong partnering health care systems are appreciated for their collaborative work to provide culturally competent care and support to pregnant and parenting women. Home visiting programs and innovative faith-based health ministry support and referral programs are considered some of the region’s best assets. Building family support networks by holding community events provides opportunities for maternal/child-related health education, as well as building relationships between parents.

Assets and resources include:

- The Equal Start Community Coalition which brings together leaders of nearly 30 organizations to promote healthy mothers, families, and communities and seeks to reduce infant mortality.
- The Native American Women’s Dialogue on Infant Mortality (NAWDIM), a Native-led collective whose members are concerned about high rates of infant mortality in their communities.
- Governor Inslee’s statewide Results Washington framework which calls for reducing birth outcome disparities.
- An objective of the Public Health Improvement Partnership, convened by the Washington State Department of Health, to prevent or reduce the impact of adverse childhood experiences, such as abuse and neglect.
- The Nurse Family Partnership and other home visiting and prenatal support programs, including the MOMs Plus program for high risk pregnant and parenting women, are great resources. Providers remain concerned that there is not sufficient capacity within these programs.
Maternal/Child Health

Continued

- The Period of PURPLE Crying curriculum helps parents understand this time in their baby’s life and is a promising strategy for reducing the risk of child abuse.

- Women, Infants and Children (WIC) provides support for pregnant women, nursing moms, and children under five to improve access to healthy foods, receive health education and screening services, increase breast feeding and access other health and social services.

- Black Infant Health helps to increase healthy births with the support of 28 local African American churches and other organizations by educating pregnant women about prenatal care and child development and linking them to services.

Opportunities include:

- Adverse Childhood Experiences (ACEs) education and prevention Foundation for Healthy Generations provides a variety of training for agencies, organizations and groups interested in understanding how to prevent ACEs.

- Prenatal care can offer an opportunity to address lifelong health issues with women.

- Many strong community-based organizations provide home visiting and other supports to pregnant and parenting women and are strong partners to health care systems.
Injuries and violence cross all boundaries and can affect anyone, regardless of age, sex, race or socioeconomic background. Injuries and violence are the leading cause of death and disability for people one to 44 years old in both the state and nationwide. While injuries and violence can have a dramatic impact on a person’s ability to lead an active, fulfilling life, they are largely preventable. Those who survive unintentional and violence-related injuries may face life-long mental and physical problems. Recognizing the social and economic burden of injury and violence is critical to determine the appropriate level of intervention and investment into prevention activities.

**HOMICIDE**

Homicide is the number of deaths resulting from the intentional use of force or power, threatened or actual, against another person. Homicide is related to community well-being and wider social conditions such as poverty and low education, racial composition and the disruption of family structure.

- From 2010 to 2014, the homicide rate in the CHI Franciscan Health St. Joseph Medical Center service area was 3.2 per 100,000 population.
- Blacks had a higher homicide rate than Whites.

### Homicide 2010-2014 average

<table>
<thead>
<tr>
<th>Group</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Joseph</td>
<td>3.2</td>
</tr>
<tr>
<td>WA</td>
<td>3.0</td>
</tr>
<tr>
<td>White-NH</td>
<td>2.5</td>
</tr>
<tr>
<td>Black-NH</td>
<td>12.4</td>
</tr>
<tr>
<td>AI/AN-NH</td>
<td>4.3</td>
</tr>
<tr>
<td>Hispanic</td>
<td>11.3</td>
</tr>
<tr>
<td>*Asian-NH</td>
<td></td>
</tr>
<tr>
<td>*NHPI-NH</td>
<td></td>
</tr>
<tr>
<td>Multi-Race-NH</td>
<td></td>
</tr>
</tbody>
</table>


*too few cases to protect confidentiality and/or report reliable rates

^Rate: cases per 100,000 population, age-adjusted to the 2000 US population
SUICIDES

Suicide is a serious public health problem with lasting harmful effects for individuals, families and communities. While its causes are complex, the goal of suicide prevention is simple: reduce factors that increase suicide risk and increase protective factors that promote resilience. Effective prevention strategies are needed to promote awareness of suicide and encourage a commitment to social change.

- The 2010-2014 suicide rate in the CHI Franciscan Health St. Joseph Medical Center service area was 16.0 per 100,000 population.
- Whites had a higher rate of suicide deaths than Blacks, Asians and Hispanics.

Suicide deaths
2010-2014 average

<table>
<thead>
<tr>
<th>Group</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Joseph</td>
<td>16.0</td>
</tr>
<tr>
<td>WA</td>
<td>14.4</td>
</tr>
<tr>
<td>White-NH</td>
<td>19.1</td>
</tr>
<tr>
<td>Black-NH</td>
<td>9.5</td>
</tr>
<tr>
<td>AI/AN-NH</td>
<td>22.1</td>
</tr>
<tr>
<td>Asian-NH</td>
<td>8.3</td>
</tr>
<tr>
<td>NHPI-NH</td>
<td>5.0</td>
</tr>
<tr>
<td>Multi-Race-NH</td>
<td>10.0</td>
</tr>
<tr>
<td>Hispanic</td>
<td>3.8</td>
</tr>
</tbody>
</table>

†Rate: cases per 100,000 residents, age-adjusted to the 2000 US population.
*too few cases to protect confidentiality and/or report reliable rates.
INTENTIONAL INJURY HOSPITALIZATIONS

Intentional injuries can be physical and/or emotional and result from purposeful human action, whether directed at oneself or others. Examples include injuries resulting from attempted suicides or assaults.

- From 2010 to 2014, the average rate of intentional injury hospitalizations for the CHI Franciscan Health St. Joseph Medical Center service area was 73.2 cases per 100,000 population. This is 1.4 times that of the state average.
- Adults ages 35-44 years were the most likely to be hospitalized for intentional injuries.


^ Rate = cases per 100,000 population, age-adjusted to the 2000 US population

* too few cases to protect confidentiality and/or report reliable rates
**UNINTENTIONAL INJURY DEATHS**

Unintentional injury deaths are deaths due to unintended causes. In 2014, the top three causes were poisonings, motor vehicle crashes and falls.

- From 2010 to 2014, the incidence rate of unintentional injury deaths in the CHI Franciscan Health St. Joseph Medical Center service area was 36.7 cases per 100,000 population.

- American Indian/Alaskan Native residents are more likely to die from unintentional injuries compared to White, Black, Asian and Multi-Race residents.

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**Unintentional injury deaths 2010-2014**

<table>
<thead>
<tr>
<th>Group</th>
<th>Rate^</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Joseph</td>
<td>36.7</td>
</tr>
<tr>
<td>WA</td>
<td>38.4</td>
</tr>
<tr>
<td>White-NH</td>
<td>39.3</td>
</tr>
<tr>
<td>Black-NH</td>
<td>39.7</td>
</tr>
<tr>
<td>AI/AN-NH</td>
<td>62.2</td>
</tr>
<tr>
<td>Asian-NH</td>
<td>19.7</td>
</tr>
<tr>
<td>NHPI-NH</td>
<td>56.0</td>
</tr>
<tr>
<td>Multi-Race-NH</td>
<td>23.7</td>
</tr>
<tr>
<td>Hispanic</td>
<td>34.7</td>
</tr>
</tbody>
</table>


^Rate: cases per 100,000 population age-adjusted to the 2000 US population.
UNINTENTIONAL INJURY HOSPITALIZATIONS

Unintentional injury hospitalizations are non-fatal hospitalizations due to unintentional injuries. In 2014, the top three causes of unintentional injuries resulting in hospitalization in the state and Pierce County were falls, motor vehicle crashes and poisonings.

- From 2010 to 2014, the unintentional injury hospitalization rate in the CHI Franciscan Health St. Joseph Medical Center service area was 648.2 hospitalizations per 100,000 population. This is significantly higher than the state average rate.

- After age five, the unintentional injury hospitalization rate increases with age, peaking at 6,752.1 among residents age 85 and older.

Unintentional injury hospitalizations 2010-2014 average

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Rate</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1</td>
<td>354.9</td>
<td>354.9</td>
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<tr>
<td>1-4</td>
<td>188.1</td>
<td>188.1</td>
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<tr>
<td>5-14</td>
<td>115.7</td>
<td>115.7</td>
</tr>
<tr>
<td>15-24</td>
<td>290.8</td>
<td>290.8</td>
</tr>
<tr>
<td>25-34</td>
<td>323.9</td>
<td>323.9</td>
</tr>
<tr>
<td>35-44</td>
<td>398.2</td>
<td>398.2</td>
</tr>
<tr>
<td>45-54</td>
<td>576.4</td>
<td>576.4</td>
</tr>
<tr>
<td>55-64</td>
<td>772.1</td>
<td>772.1</td>
</tr>
<tr>
<td>65-74</td>
<td>1,276.6</td>
<td>1,276.6</td>
</tr>
<tr>
<td>75-84</td>
<td>3,065.7</td>
<td>3,065.7</td>
</tr>
<tr>
<td>85+</td>
<td>6,752.1</td>
<td>6,752.1</td>
</tr>
</tbody>
</table>

Community input:

Injury prevention

Community members remain concerned about safety in their neighborhoods, citing safety as the second most important feature in defining a healthy community. Violence among youth and young adults is of particular concern. Lack of gainful employment, poverty-related stress, mental health needs, chemical dependency, and limited healthy socialization are seen as the root causes of most criminal and violent behavior. Community leaders support working with law enforcement to coordinate and communicate around violence prevention.

Most profoundly, community members feel that the most valuable assets of their community are the community members themselves, citing neighborhood cohesion as the most important aspect of a healthy community. There is a need to create safe spaces to meet, live and be active in order to make a community where people want to live. Residents recommend building community social capital by holding more frequent community events where residents can come together to build relationships.

Suicide prevention

Community stakeholders share a great concern for people with mental health and chemical dependency illnesses and recognize them as risk factors for suicide. The community strongly supports holistic, integrated wrap-around care and suicide risk screening as part of suicide prevention. Community members also recommended addressing other contributing factors to suicide risk, such as basic needs (e.g., employment and housing) and the need for social support experienced by struggling parents and families.

Opportunities identified by community stakeholders included patient and family education, support groups and classes; hospital discharge planning; wrap-around services, referrals and associated follow up; and education and support groups for parents and families struggling with poverty-related stressors.
**Assets and resources include:**

**Drug and alcohol related injuries and deaths**
- Law Enforcement: High-visibility patrols by law enforcement; internal coordination; use of skilled drug-recognition experts; use of the Mobile Impaired Driving Unit (MIDU), a self-contained mobile DUI processing center and incident command post.
- Education campaigns.
- Employer-based policies for cell-phone use by drivers.
- The Target Zero Task Force, which focuses on reducing traffic crashes and traffic-related injuries to zero by the year 2030.

**Suicide prevention**
- Forefront, a research organization based at the University of Washington, is training health professionals to develop and sharpen their skills in the assessment, management, and treatment of suicide risk.
- WA House Bill 2315 and other bills passed over the past several years require school staff, behavioral healthcare providers, and other healthcare providers to participate in suicide prevention training as part of their licensure.
- The Youth Suicide Prevention Program provides training for students and educators.
- Children’s Crisis Outreach Response System (CCORS) provides mobile crisis outreach and crisis stabilization services for children and youth up to age 18.
- The Crisis Solutions Center offers a therapeutic option when police and medics are called to intervene in a behavioral healthcare crisis. The program minimizes inappropriate use of jails and hospitals and provides rapid stabilization, treatment, and referrals for up to 46 individuals.
Falls prevention
- Stay Active & Independent for Life (SAIL) classes
- ThinkFirst National Injury Prevention Foundation
- One Step Ahead is a fall-prevention program.
- Community and senior centers offer physical-activity programs such as Silver Sneakers.

Opportunities include:

Drug and alcohol related injuries and deaths
- Primary-care intake assessments that include questions about cell-phone use while driving, seat-belt use, and driving while impaired.

Suicide prevention
- Patient and family education, support groups, and classes for friends and families of people who are suicidal or have a mental illness or substance abuse disorder can help reduce stigma and make it easier for those in need to access care.
- Improvements in hospital discharge planning and “warm hand-off” referrals (in which primary care providers directly introduce clients to their behavioral healthcare providers at the time of their medical visits) can help transfer trust and rapport to the new relationship.
- Low-barrier mental health and substance-abuse screenings at health fairs can help identify more people at risk for suicide.

Falls prevention
- Environmental modifications in seniors’ homes can reduce the risk of readmissions for repeat falls.
- Potential partnerships with community organizations that address falls prevention and promote health among seniors.
Mental health is essential to a person’s well-being and ability to live a full and productive life. People of all ages, including children and adolescents, with untreated mental health disorders are at high risk for many unhealthy and unsafe behaviors, and co-occurring disorders, including alcohol or drug abuse. Information and resources that better integrate behavioral health services into the overall health care system can lower the risk of poor health outcomes.

**FREQUENT MENTAL DISTRESS (ADULTS)**

Frequent mental distress is defined as adults reporting poor mental health (includes stress, depression, and problems with emotion) on 14 or more days in the past 30 days.

- From 2011 to 2013, 13.7% of adults in the CHI Franciscan Health St. Joseph Medical Center service area experienced frequent mental distress.
- Women (17.0%) were more likely to experience frequent mental distress than men (10.4%).

**Frequent mental distress (adults)
2011-2013 average**

- St. Joseph: 13.7%
- WA: 11.6%
- White: 12.8%
- Non-White: 15.3%
- Male: 10.4%
- Female: 17.0%

Source: Behavioral Risk Factor Surveillance System, 2011-2013
DEPRESSION PREVALENCE (ADULTS)

Adult depression includes depression, major depression and dysthymia (minor depression) in adults ages 18 years or older. Continued sadness that includes loss of interest or enjoyment in doing things, as well as feeling down, could be a sign of depression.

- From 2011-2013, 22.9% of adults in the CHI Franciscan Health St. Joseph Medical Center service area reported having depression.
- Women were twice as likely to be depressed as men.

**Depression (adults)**

**2011-2013 average**

<table>
<thead>
<tr>
<th></th>
<th>Non-White</th>
<th>White</th>
<th>WA</th>
<th>St. Joseph</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-2013</td>
<td>24.2%</td>
<td>19.2%</td>
<td>21.9%</td>
<td>22.9%</td>
</tr>
<tr>
<td>2014-2013</td>
<td>24.2%</td>
<td>19.2%</td>
<td>21.9%</td>
<td>22.9%</td>
</tr>
<tr>
<td>2015-2013</td>
<td>24.2%</td>
<td>19.2%</td>
<td>21.9%</td>
<td>22.9%</td>
</tr>
<tr>
<td>2016-2017</td>
<td>24.2%</td>
<td>19.2%</td>
<td>21.9%</td>
<td>22.9%</td>
</tr>
<tr>
<td>2017-2018</td>
<td>24.2%</td>
<td>19.2%</td>
<td>21.9%</td>
<td>22.9%</td>
</tr>
</tbody>
</table>

**Source:** Behavioral Risk Factor Surveillance System, 2011-2013

DEPRESSION (YOUTH)

Youth depression is based on the percent of youth in 10th grade who reported that during the past 12 months, they had felt so sad or hopeless almost every day for two weeks or more in a row, they had stopped doing some usual activities.

- In 2014, 37.1% of 10th graders in the CHI Franciscan Health St. Joseph Medical Center service area felt so sad or hopeless for two weeks or more that they stopped doing their usual activities.

**Depression (youth)**

**2014**

<table>
<thead>
<tr>
<th></th>
<th>Non-White</th>
<th>White</th>
<th>WA</th>
<th>St. Joseph</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014-2015</td>
<td>37.6%</td>
<td>36.9%</td>
<td>35.0%</td>
<td>37.1%</td>
</tr>
<tr>
<td>2015-2016</td>
<td>37.6%</td>
<td>36.9%</td>
<td>35.0%</td>
<td>37.1%</td>
</tr>
<tr>
<td>2016-2017</td>
<td>37.6%</td>
<td>36.9%</td>
<td>35.0%</td>
<td>37.1%</td>
</tr>
<tr>
<td>2017-2018</td>
<td>37.6%</td>
<td>36.9%</td>
<td>35.0%</td>
<td>37.1%</td>
</tr>
<tr>
<td>2018-2019</td>
<td>37.6%</td>
<td>36.9%</td>
<td>35.0%</td>
<td>37.1%</td>
</tr>
</tbody>
</table>

**Source:** Healthy Youth Survey, 2014
BINGE DRINKING (YOUTH)

Binge drinking is defined as the percent of students in 10th grade who have had five or more drinks in a row in the last two weeks. The effects of binge drinking among youth may include school or social problems, abuse of other drugs and an increased risk of unintentional and intentional injury. Additionally, negative health effects of alcohol such as liver disease, some cancers, and trauma are associated with greater quantities and longer duration of use.

In 2014, 11.4% of 10th grade students in the CHI Franciscan Health St. Joseph Medical Center service area reported binge drinking in the past 30 days.

Community input:

While there is an increased need for crisis-related behavioral health services, there is also a growing recognition of the need to invest resources into screening and support services for non-crisis individuals with behavioral health needs. Insurance premiums and regulatory barriers can limit the pursuit and/or use of services, particularly for residents not in crisis. There is strong community support for behavioral health-related screening and services incorporated into primary care and social service sites and for more access to behavioral health services in rural areas and for low-income residents.

Community members and leaders strongly supported hospitals’ efforts to integrate behavioral health, social services and physical health care services in order to address complex needs or dual diagnosis patients. Integrated health care also provides a better opportunity to address more subtle yet chronic mental health needs, such as depression associated with chronic illnesses like diabetes or challenges to meet basic needs like housing. Many physical and behavioral health care organizations are increasing their capacity for integrated care, such as incorporating behavioral health specialists into primary care settings and using physical-behavioral health and social services “side-by-side” care models.
In addition, community stakeholders valued the following approaches to behavioral health:

- Cross-training staff to provide holistic, wrap-around care such as screening, referrals and discharge planning.

- Addressing contributing factors for suicide, such as basic needs (employment, housing) and social support for parents.

- Additional psychiatric and chemical dependency detoxification treatment beds.

The need for support for families in poverty and families and children with special health care needs was the second largest concern related to children and youth. Community members cited poverty coupled with inadequate support, that lead to increased stress associated with attempting to meet basic needs, chemical dependency, unmanaged mental health needs such as depression, social isolation, child abuse and domestic violence. Parents are unable to be home and supervise their children when both parents work for most of the day. Families in crisis are unable to focus on healthy behaviors such as healthy eating, stress reduction and physical activity.

**Assets and resources include:**

- The Tacoma-Pierce County Health Department Family Support Centers in Pierce County assist families in finding resources and applying for DSHS benefits, including SNAP (food stamps), as well as medical and dental benefits. In addition, the Family Support Centers connect families to low-cost and/or free resources in the community related to pregnancy, parenting, infant case management, services for children with special needs and services for behavioral health care needs.

- Comprehensive Life Resources (formerly Comprehensive Mental Health) provides behavioral health services, including outpatient and community support services to adults, children and families, services to homeless individuals, housing services, foster care and residential/inpatient services for children and adults.

- Tacoma Area Coalition for Individuals with Disabilities (TACID) works with individuals to assess needs, including behavioral health needs. TACID supports and connects individuals with community resources, including behavioral health services.
Catholic Community Services has 12 family centers across Western Washington providing an array of services, including counseling, case management, information and referral, chemical dependency services, mental health services and family support services to children, adults and families in need. In Pierce County, the Tahoma Family Center is housed in the renovated St. Leo High School Building in the heart of Tacoma’s Hilltop neighborhood.

Suicide prevention resources are listed in the Violence and Injury Prevention section of this report.

Opportunities include:

- Increased resources for free or low-cost family support programs, such as “family nights” where parents can socialize.
- Use of coordination of discharge planning across care services.
- Increased systemic capacity for integrated physical and behavioral health care services.
- Increased family support services and increased inpatient options for behavioral health-related crisis intervention.
1 Office of Superintendent of Public Instruction (OSPI), Washington State Report Card (2013-2014). All students, 4-year graduate and dropout results, class of 2014, school year 2013-14 results.


3 The Homelessness Housing and Assistance Act, ESHB 2163-2005, RCW43.185C.030.

4 Community Connections (Pierce County, WA) as part of Government HUD requirement.

5 Department of Social and Health Services (DSHS): Foster Care Placement Services (6/4/2015).

6 American Community Survey, 2009-2013


9 http://www.cdc.gov/chronicdisease/about/prevention.htm

10 Centers for Disease Control and Prevention, CDC Growth Charts, U.S.

11 Health Resources and Services Administration: HRSA Data Warehouse/Map Tool.


19 http://www.doh.wa.gov/YouandYourFamily/InjuryandViolencePrevention
This report includes both primary and secondary data sources. Primary data consists of new information gathered directly from the community through surveys, interviews, or community workshops. Secondary data is information that has already been collected by someone else.

**QUANTITATIVE DATA SOURCES AND METHODS**

Much of the data in this report comes from several key sources. These sources, the methods used to analyze the data, and the data limitations are briefly described below.

**Behavioral Risk Factor Surveillance System (BRFSS)**

This is the largest, continuously conducted telephone health survey in the world. The survey collects information on a vast array of health conditions, health-related behaviors, and risk and protective factors about individual adult (18 years and older) health. It enables the Centers for Disease Control and Prevention (CDC), state and local health departments, and other health agencies to monitor modifiable risk factors for chronic diseases and other leading causes of death. Data are reported annually. [http://www.cdc.gov/brfss/index.html](http://www.cdc.gov/brfss/index.html)

Beginning in 2011, new methods were used in order to make the BRFSS results more representative of the population. First, the sample includes respondents who have cell phones but no landline; this group was not included in previous surveys. Second, the data were weighted by various demographic characteristics to compensate for underrepresentation of certain demographic subgroups. Both these changes should improve the accuracy of the BRFSS results. However, because of these methodological changes, the BRFSS data values starting in 2011 are not comparable to prior years.

**Healthy Youth Survey (HYS)**

This school-based survey is administered in even numbered years throughout Washington state. The survey includes grades 6, 8, 10 and 12. For this report, we used data from 10th grade students. We included data from schools that were physically located in the hospital service area, recognizing that this may include responses of students residing outside the service area and exclude information about students living in the service area but attending school elsewhere.
HYS topics include health risk behaviors, family, community risk and protective factors and current health conditions. Like other survey data, it is subject to social desirability bias and recall error. Unaggregated data of ten or fewer counts was not used in order to protect anonymity of the participants. http://www.tpchd.org/resources/public-health-data/behavioral-health-risks/

Death certificate data

For death certificates, funeral directors collect information about the deceased person, including race and ethnicity, from an informant who is usually a family member or close personal friend of the deceased person. A certifying physician, medical examiner or coroner generally provides cause-of-death information. Cause-of-death data come from underlying causes of death and not immediate causes. For example, if a person dies of a complication or metastasis of breast cancer, breast cancer would be the underlying cause of death. Data are compiled by the Washington State Department of Health, Center for Health Statistics. http://www.doh.wa.gov/DataandStatisticalReports/VitalStatisticsData.aspx

Birth certificate data

The birth certificate system contains records on all births occurring in the state and nearly all births to residents of the state. Information is gathered about the mother, the father, the pregnancy and the child. The information is collected at hospitals and birth centers from worksheets completed by parents or medical staff, through the review of medical charts or by a combination of these sources. Midwives and family members who deliver a baby complete the birth certificate and collect the information from a parent or from their records. Data are compiled by the Washington State Department of Health, Center for Health Statistics. http://www.doh.wa.gov/DataandStatisticalReports/VitalStatisticsData.aspx

American Community Survey (ACS)

The ACS is a mailed survey conducted every year by the U.S. Census Bureau to estimate a wide variety of social and economic data for the U.S. population. The ACS replaces the long form of the census for collecting detailed population data and has the advantage of being released annually rather than at ten-year intervals. The ACS location of residence is based on census tracts, which don’t align with zip code boundaries. To better align with the hospital service area, which is
defined by zip code, we used ZCTAs (Zip Code Tabulation Areas) developed by the ACS to simulate zip codes. http://www.census.gov/acs/www/

The Office of the Superintendent of Public Instruction

The Washington State Report Card (2013-2014) provides data on graduation and free/reduced price meal data through the Comprehensive Education Data and Research System (CEDARS), an online system that captures information regarding student graduation, transfers and drop-outs. The adjusted cohort method follows a single cohort of students for four years based on when they first entered 9th grade. The cohort is “adjusted” by adding in students who transfer into the school and by subtracting students who transfer out of the school. http://www.k12.wa.us/

Washington State Department of Health (DOH), School Immunization

Per state law, all schools are required to send DOH their annual School Immunization Status Report by November 1st for that school year. Immunization status is parent-reported and may not be health care provider verified. Numbers may be under- or over-estimates as parents might not recall or know the exact immunization status for their child. Immunization status is reported as “complete”, “out-of-compliance” or “exempt”. We reported the percent of “complete” status, which means a student met all the school entry requirements for their age and grade (that is, they are in compliance). http://www.doh.wa.gov/DataandStatisticalReports/Immunization/SchoolReports.aspx

Washington State DOH, Enhanced HIV/AIDS Reporting System (eHARS)

This is a browser-based application provided by the Centers for Disease Control and Prevention (CDC). The Washington State DOH uses eHARS to collect, manage and report HIV/AIDS case surveillance data to CDC. http://www.doh.wa.gov/DataandStatisticalReports/DiseasesandChronicConditions/HIVAIDSData/SurveillanceReports.aspx

Washington State DOH, Washington State Cancer Registry (WSCR)

The Washington State Cancer Registry monitors the incidence of cancer in the state to better understand, control and reduce the occurrence of cancer. In 1995, WSCR received funding through the Centers for Disease Control and Prevention’s National Program of Central Cancer Registries. This program is designed to standardize data collection and provide information for cancer prevention and control programs. https://fortress.wa.gov/doh/wscr/
**Additional Data Sources**

**Health Professional Shortage Areas**
Health Resources and Services Administration (HRSA):
HRSA Data Warehouse/Map Tool
http://datawarehouse.hrsa.gov/tools/analyzers/HrsaFindResults.aspx

**Foster Care**
Department of Social and Human Services (DSHS):
Foster Care Placement Services (6/4/2015)
https://www.dshs.wa.gov/ca/foster-parenting

**Homelessness**
The Homeless Housing and Assistance Act (ESSHB 2163-2005) requires each county to conduct an annual point in time count of sheltered and unsheltered homeless persons (RCW 43.185C.030) in accordance with the requirement of the U.S. Department of Housing and Urban Development (HUD).
Pierce County Point in Time (Census data) 1/22/2015.
Hospital Service Area data: HMIS (Homeless Management Information System) – Community Connections (1/1/2014 – 12/31/2014).

**Prevention Quality Indicators**
Agency for Health Care Research and Quality (AHRQ):
Prevention Quality Indicators (PQIs).
http://www.wamonahrq.net
Washington State data: WA MONAHRQ2012.
Pierce County rates are based on hospital discharge data collected from hospitals. County populations are from U.S. Census Bureau data.
http://www.wamonahrq.net/MONAHRQ_5p0_WA_2012/index.html#/utilization/avoidabl stays?reportType=county&county=2981&topics=1,2,3,4,5,6,7/

**Calculating and Interpreting Rates**
Rates: Most health data are reported as percentages (%). In other cases, we use rates to compare risk between groups. A rate converts a count of events (e.g., number of births per year) in a target population to a ratio that represents the number of same events in a standard population. This removes the variability associated with the size of the sample. Each rate has its own standard denominator that is specified (e.g., 1,000 women, 100,000 residents, etc.) for that rate. Rates present the actual magnitude of an indicator.
**Age-Adjustment:** All age-adjusted mortality and disease rates in this report are adjusted to the 2000 U.S. population. The risk of death and disease is affected primarily by age. As a population ages, its collective risk of death and disease increases. As a result, a population with a higher proportion of older residents will have higher crude death and disease rates. To control for differences in the age compositions of the communities being compared, death and certain specific disease rates are age-adjusted. This aids in making comparisons across populations.

**Averages:** Multiple year average estimates were used in order to increase sample sizes and to minimize widely fluctuating frequencies from year to year.

**Confidence Intervals:** Hospital service area comparisons to Washington state and comparisons among subpopulations were calculated using 95% confidence intervals. Confidence intervals (error bars on the graphs) indicate the margin of error for the value estimated by describing an upper and lower limit of an estimate. Using confidence intervals is a conservative approach to determine if differences among groups are statistically significant. If the confidence interval of two different estimates do not overlap, we can most often conclude that the difference is statistically significant and not due to chance.


**Stratification:** Where possible (i.e., the population size or counts were adequate to determine significance and protect anonymity), we analyzed the indicators by race/ethnicity or gender. We used the following terms to describe race/ethnicity:

- NH: Non-Hispanic
- White – NH: Non-Hispanic White
- Black – NH: Non-Hispanic Black
- Hispanic: Hispanic as a race
- Asian – NH: Non-Hispanic Asian
- AIAN-NH: Non-Hispanic American Indian/Alaskan Native
- NHPI - NH: Non-Hispanic Native Hawaiian/Pacific Islander
- Multi-Race: Multiple or more than one race

In cases where there were too few numbers to separate race into the above categories, we combined the population groups into Whites and non-Whites, regardless of Hispanic ethnicity.
QUALITATIVE METHODS

Community survey – In addition to paper surveys made available at community events, an online survey was available for 18 weeks from May to September 2015 in the following languages: English, Spanish, Russian, Korean and Vietnamese. The survey received 712 responses from community members.

The questions included:

1. How satisfied are you with the quality of life in your community?
2. How socially connected do you feel to your community? Connected means being socially involved with others in your community.
3. What do you think are the three most important things that make a healthy community?
4. What three things cause the biggest problems to your community’s overall health?
5. Do you have a child in the household under the age of 18?
6. What three things cause the biggest problems to children and youth in your community?
7. How would you rate your community’s health overall?
8. What do you think is the most important way to work on health problems in your community?
9. What can health care providers, hospitals or clinics do to help make communities healthier?
10. How satisfied are you with health care in your community?
11. Does anything keep you from getting the health care you need?
12. Please tell us what has kept you from getting health care you need.

Community workshops – Eight community workshops were conducted throughout Pierce County. Workshop participants were asked up to four questions:

1. How do you define a healthy community (or neighborhood)?
2. What do you think are the strengths and assets of your community?
3. What do you think makes it challenging to be healthy here? Or, what are the barriers to being healthy?
4. What do you need to be healthy?
To answer these questions, a variety of interactive methods were used. For example at some workshops with small number of participants, participants answered question 1 individually on a piece of paper and then were asked to display their answers in a group photo.

For questions 2, 3 and 4, participants were asked to answer the questions using the “1, 2, 4-All” method. For this method, participants were asked a question and given one minute to think about and answer the question individually. Participants wrote their responses on an index card. Then participants paired with another, shared their answer, and then repeated this in small groups of four. Each small group shared the consensus of their group with the whole group.

**Key informant interviews** - Seven key informant interviews were conducted with people who serve in leadership roles or who are subject matter experts in various aspects of community health. Each interview was conducted individually. The questions asked included:

1. What are the main concerns you or your organization has about the health of residents right now? How are you [is your organization] involved in addressing these concerns?

2. What are the people, places, and things that make your community healthy, safe, and strong? Please tell us why these people, places, and things are important. [These could include organizations, leaders, coalitions, initiatives, policies, or physical/environmental attributes.]

3. What programs or projects are happening or planned that are most relevant to the identified needs?

4. How can hospitals and health systems be involved in addressing the issues you have identified?

5. What are the most significant gaps in resources, coordination, etc. in this area?

6. Is there anything else you would like to add?

Responses were recorded with permission of the participants and then transcribed verbatim.
SELECTION OF PRIORITY HEALTH NEEDS

The selection of priority health needs followed a process of reviewing both the qualitative and quantitative data elements in the report. Three criteria were used to determine priorities:

- Was a health concern or indicator significantly worse in the hospital service area than in the state?
- Were relatively large numbers of people impacted by a health concern or indicator?
- Was a health concern repeatedly voiced during the community engagement portion of the assessment (e.g., survey, workshops or interviews)?

The health concerns or indicators that met the most criteria became the priority health needs for the hospital service area.

Although it is objective, this approach has many limitations. Different selection criteria might have resulted in a different list of priority areas. The decision about whether large numbers of people were impacted was a relative judgment based on reviewers’ experience and knowledge, not on a numeric threshold. Finally, the rubric identifies problem areas, but not solutions. For some problem areas, solutions may be unknown or impractical. For these reasons, the list of priority needs can be viewed as a starting point for discussion, not a definitive short list requiring action.