Pierce County
Accountable Communities of Health (ACH)
Access to Care Data Report

Prepared by:
Office of Assessment, Planning & Improvement
Tacoma-Pierce County Health Department
Pierce County, Washington

December 2016
TABLE OF CONTENTS

TABLE OF CONTENTS .................................................................................................................. 2

I. EXECUTIVE SUMMARY ........................................................................................................... 5
   Background .............................................................................................................................. 5
   Methods ................................................................................................................................. 5
   Results ................................................................................................................................. 6
   Limitations ......................................................................................................................... 7

II. ACKNOWLEDGEMENTS ........................................................................................................ 8

III. INTRODUCTION ................................................................................................................ 8
   Purpose ................................................................................................................................. 8
   Health Equity ...................................................................................................................... 9

IV. METHODS .......................................................................................................................... 11
   Data Collection Methods .................................................................................................... 11
   Selection of Health Indicators ............................................................................................. 11
   Data Sources ....................................................................................................................... 11
   Other Data Considerations ................................................................................................. 12

V. DEMOGRAPHIC PROFILE OF PIERCE COUNTY ................................................................. 13
   Race and Ethnicity ............................................................................................................... 13
   Age ....................................................................................................................................... 14
   Sex ....................................................................................................................................... 15
   Disability ............................................................................................................................. 16

VI. INCOME ............................................................................................................................. 17
   Poverty Status ..................................................................................................................... 17
   Free/Reduced Price Lunch ................................................................................................. 19
   Unemployment .................................................................................................................... 20

VII. SOCIAL SUPPORT ............................................................................................................. 23
   Social Associations ............................................................................................................ 23
Inadequate Social Support ................................................................. 23

VIII. **HOUSING** ................................................................. 24
  High Housing Costs ........................................................................ 24
  Homelessness ................................................................................. 25

IX. **EDUCATION** ................................................................. 26
  High School Graduation ................................................................... 26

X. **LANGUAGE BARRIERS** ....................................................... 27
  Immigrants in Pierce County ................................................................. 27
  Limited English Proficiency ................................................................ 27

XI. **BARRIERS TO HEALTH CARE SERVICES** ...................... 28
  Uninsured Adults ............................................................................. 28
  Uninsured Children .......................................................................... 30
  Adults with a Usual Primary Care Provider .......................................... 32
  Unmet Health Care Needs Due to Cost ................................................. 32
  Bus Service Routes ........................................................................ 33

XII. **ACCESS TO CLINICAL PREVENTIVE SERVICES** .......... 34
  Preventable Hospitalizations ............................................................... 34
  Routine Dental Checkup ................................................................... 35
  Kindergarten Vaccination Rates ......................................................... 36
  Colorectal Cancer Screening .............................................................. 36
  Cervical Cancer Screening ................................................................. 37
  Mammography Screening .................................................................. 37
  Diabetic Monitoring .......................................................................... 37

XIII. **ACCESS TO MCH SERVICES** ........................................... 38
  Early and Adequate Prenatal Care ......................................................... 38

XIV. **PROVIDER AVAILABILITY** ............................................... 39
  Primary Care Provider Rate ............................................................... 39
  Mental Health Provider Rate ............................................................. 39
  Dentist Provider Rate ....................................................................... 40
Health Professional Shortage Areas ................................................................. 40

XV. CONCLUSION AND RECOMMENDATIONS ............................................. 43
  Improving Access to Care Health Indicators and Data Collection ....................... 44
  Limitations ........................................................................................................ 45

XVI. ACRONYMS .................................................................................................. 47

XVII. HEALTH INDICATORS .............................................................................. 48

XVIII. DEFINITIONS ............................................................................................ 49

XIX. DATA SOURCES .......................................................................................... 53
  American Community Survey (ACS) .................................................................. 53
  Behavioral Risk Factor Surveillance System (BRFSS) ........................................ 53
  County Health Rankings and Roadmaps 2016 .................................................. 53
  Community Health Assessment Tool (CHAT) .................................................. 54
  Health Resources and Services Administration (HRSA) ................................. 54
  Public Schools Free and Reduced Lunch Enrollment Report-Office of Superintendent of Public Instruction (OSPI) ........................................................................ 54
  Pierce County Point In Time (PIT) Homelessness Counting System .............. 55
  Washington State Employment Security Department, Labor Market and Performance Analysis ........................................................................................................... 55
I. EXECUTIVE SUMMARY

Access to care represents the coverage, affordability and availability of health care, corresponding with one of the Affordable Care Act’s (ACA)’s primary goals to strengthen health care by extending affordable coverage to the uninsured. Healthy People 2020 identifies access to comprehensive, quality health care services as a key objective, “important for the achievement of health equity and for increasing the quality of a healthy life for everyone.”

BACKGROUND

The Pierce County Accountable Community of Health (ACH) requested the Tacoma-Pierce County Health Department’s (TPCHD) Office of Assessment and Planning & Improvement to complete a quantitative report summarizing needs, barriers and gaps related to Pierce County residents’ access to health care services. The report’s objectives are to identify the most important health services needs of Pierce County residents, barriers that most impede Pierce County residents from receiving health services and gaps in health services within Pierce County. This report helps to inform the ACH’s Regional Health Improvement Plan, as well as provides data for community partners and stakeholders and for general planning purposes.

METHODS

ACH staff selected 35 health indicators for review comparing Pierce County data to the Washington state average in order to identify indicators that are significantly worse (or better) than the state. These indicators represented potential barriers to health care services; Pierce County demographics; social and economic factors that contribute to poor health; and access to clinical preventive and primary care services.

---

**RESULTS**

Data analysis revealed six Pierce County health indicators that were significantly different than Washington state averages:

<table>
<thead>
<tr>
<th>Category</th>
<th>Health Indicator</th>
<th>PC</th>
<th>WA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poverty</td>
<td>Free and reduced priced lunch</td>
<td>45.7%</td>
<td>44.4%</td>
</tr>
<tr>
<td></td>
<td>Unemployment</td>
<td>10.3%</td>
<td>8.8%</td>
</tr>
<tr>
<td>Language Barriers</td>
<td>Number of immigrants</td>
<td>9.8%</td>
<td>13.7%</td>
</tr>
<tr>
<td></td>
<td>Limited English proficiency</td>
<td>5.8%</td>
<td>7.8%</td>
</tr>
<tr>
<td>Social Support</td>
<td>Number of membership associations</td>
<td>7.6</td>
<td>9.1</td>
</tr>
<tr>
<td>Access to Clinical Preventive Services</td>
<td>Rate of preventable hospitalizations</td>
<td>44</td>
<td>36</td>
</tr>
</tbody>
</table>

Additionally, data analysis revealed two health indicators that were not significantly different than Washington state averages, but still important indicators of PC residents’ access to health services:

<table>
<thead>
<tr>
<th>Category</th>
<th>Health Indicator</th>
<th>PC</th>
<th>WA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing</td>
<td>High Housing Costs</td>
<td>39.5%</td>
<td>36.4%</td>
</tr>
<tr>
<td>Provider Availability</td>
<td>Primary Care Provider Ratio</td>
<td>1,438:1</td>
<td>1,190:1</td>
</tr>
</tbody>
</table>

While the analysis in this report did not include a comparison of different communities or populations within Pierce County for many of the variables (e.g., differences by race, gender, age, geographic location, etc.), the data as a whole suggest that significant barriers to access to care in Pierce County may be primarily related to poverty. An analysis of these 35 indicators for people with low incomes would be a good next step to determine which barriers most significantly affect that disparate population.

In addition, Pierce County has a higher rate of preventable hospitalizations compared to the Washington state average. Preventable hospitalizations tend to occur at a greater rate when access to primary care providers is limited or primary care does not meet residents’ health needs.
The demographic profile of Pierce County residents presents similarly to the Washington state demographic profile, with the exception of a slightly higher percentage of African American and Pacific Islander residents, and persons living with a disability. We know from other analyses, these populations tend to have more disparities in both health access and health outcomes. Since these populations exist in large numbers in Pierce County, it’s important we take a closer look at what barriers they might face to achieving improved health outcomes.

We provided data by census tract for four health indicators to examine which geographic communities experience the greatest need. Results revealed the following:

- **Poverty:** There are pockets of high poverty in Parkland, Lakewood’s Tillicum/Woodbrook and Springbrook communities and Tacoma’s Hilltop, Eastside, Lincoln and Southside communities.

- **Unemployment:** The areas where the highest percent of residents are unemployed include downtown Tacoma, Hilltop and Eastside communities, Parkland, North Ft. Lewis and Lakewood’s Tillicum/Woodbrook and Springbrook communities.

- **Unmet Health Care Needs Due to Cost:** Places that had the highest percentage of residents with unmet medical needs include parts of the Key Peninsula and Tacoma’s Hilltop, Eastside, Central and South/Tacoma Mall Area neighborhoods.

- **Uninsured:** Places that have the highest percentages of residents without health insurance include Parkland, parts of North Puyallup, Lakewood’s Tillicum/Woodbrook and Springbrook adjacent communities. In addition, Tacoma’s Hilltop, Eastside, Central, North and South/Tacoma Mall Area neighborhoods all have pockets among highest percentages.

**Limitations**

Accurate data are currently not available (without primary data collection) for two health indicators; physicians accepting Medicaid in Pierce County and number of days (waited) for new patient appointments. We recommend the Pierce County ACH collaborate with other regional ACHs and the Washington State Health Care Authority to collect this primary data directly from health services providers. Additionally, Pierce County ACH should collaborate with state and regional partners to collect more inclusive demographic data to reveal disparities in groups of people that we often overlook or don’t collect data for. For example, transgendered residents

---

2 TPCHD, Fairness Across Places? Your Health in Pierce County, 2015 Health Equity Assessment, February 2016
are not represented when only binary categories are included on surveys such as male and female.

II. ACKNOWLEDGEMENTS

A special thanks to Kate Smith, Executive Director of Centro Latino and to Eli Kern, Epidemiologist for Public Health Seattle King County, for providing valuable insight into data limitations for some of our health indicators.

III. INTRODUCTION

PURPOSE

Community needs assessments (CNAs) are an integral part of keeping a pulse on our community’s health and well-being. CNAs serve as the basis for evidence-based decisions for hospitals and health systems, non-profit organizations, state and local health departments and other policy makers and stakeholders. Both CNAs and gap analyses help organizations and collaboratives better understand the health needs, service gaps and assets of the communities, residents and patients they serve in order to deliver relevant, successful and timely services. Comprehensive CNAs have a qualitative community and/or partner engagement component as well as a more in-depth (e.g., stratified) data analysis. This data report is the first step to a more comprehensive Pierce County CNA.

During 2016, the Pierce County Health Innovation Partnership (PCHIP), evolved into the initial stakeholder body of the Accountable Community of Health (ACH), as designated by the Washington State Health Care Authority (HCA). The Pierce County ACH requested the Tacoma Pierce County Health Department’s (TPCHD) Office of Assessment and Planning & Improvement (OAPI) conduct the first step in a community needs assessment—a data report that analyzed multiple indicators related to the health care service needs and gaps among Pierce County residents.
The objectives of this data report are to:

1. Identify the top five most important health services needs of Pierce County residents.
2. Identify top five barriers that most impede Pierce County residents from receiving health services.
3. Identify gaps in health services in Pierce County.
4. Inform the Regional Health Improvement Plan for the ACH.

To meet these objectives, we reviewed, analyzed and summarized thirty five health indicators. (Please see section XVII for the list of health indicators.) Pierce County data have been compared to the Washington state data, when available, in order to identify indicators that are significantly worse (or better) than the state. The data will help inform the ACH’s Regional Health Improvement Plan as well as provide valuable data for general planning purposes. In addition, the report will provide data for other community groups and organizations to work in closer collaboration with the ACH to improve the health of Pierce County residents. Finally, the report identifies additional areas of inquiry about residents’ access to health care services.

**HEALTH EQUITY**

In an effort to achieve health equity, the Pierce County ACH seeks to address underlying conditions that contribute to poor health in order to help all Pierce County residents achieve better health outcomes, no matter where they live, learn, work or play.

The Washington State Health Care Innovation Plan calls for the integration of physical health and the social and economic needs that affect health, such as housing, food, education, and employment. These social, economic, and environmental factors or “social determinants of health” are the conditions in which people live, learn, work and play. These social determinants of health must be addressed to improve population health because more than 50% of our health is determined by them.

Discrimination by social grouping (e.g., race, gender, or class) has contributed to the unfair and avoidable differences in health seen in different communities. Past policies and practices have created and maintained inequitable opportunities for health through the distribution of resources and inequitable access to social determinants of health such as a livable wage, quality housing, education status, access to health services, and more. Redlining policies in the 1930s are a local example. Discriminatory housing policies limited the availability of funds for African

---

American and mixed-race families to build or buy a house, resulting in segregated neighborhoods and limited access to quality housing, education and services. Some Pierce County communities still suffer the effects of those former policies.

In addition to inequitable access to social determinants of health, institutional and systemic racism establish and create independent barriers to access and quality of health care. Racial discrimination can occur in institutions even when the institution (or an individual) does not intend to make distinctions on the basis of race.  

According to the World Health Organization, if health inequities are to be reduced, both social determinants of health and universal health coverage need to be addressed in an integrated and systematic manner. Health equity and social determinants are acknowledged as a critical component of the post-2015 sustainable development global agenda and of the push towards progressive achievement of universal health coverage. While this report does not comprehensively review health inequities experienced by Pierce County residents, it would be valuable for the reader to consider their impact as well as opportunities for systemic change when reviewing the data.

---


IV. METHODS

DATA COLLECTION METHODS

SELECTION OF HEALTH INDICATORS

Health indicators refer to quantitative data from secondary data sources. Data availability was the primary driver to determine which specific measures we included in this report; therefore, some measures may have been omitted because reliable data were not available. Health indicators selected for this report came from a review of multiple population-based health indicator sets available for Washington state counties, including:

- County Health Rankings
- Community Health Status Indicators
- Local Public Health Indicators
- Pierce County Health Indicators
- Pierce County 2013 Community Health Status Assessment
- 2016 Community Health Needs Assessments for MultiCare Health System and CHI Franciscan Health System

Indicators were selected based on relevance to the priorities set for the Pierce County ACH in 2016, with emphasis on access to care and social determinants of health. Indicators and definitions are provided in sections XVII and XVIII.

DATA SOURCES

Much of the data in this report come from the following sources. Details about these data sources can be found in section XIX.

- American Community Survey (ACS)
- Behavioral Risk Factor Surveillance System (BRFSS)
- County Health Rankings and Roadmaps 2016
- Community Health Assessment Tool (CHAT)
- Health Resources and Services Administration (HRSA)
- Public Schools Free and Reduced Lunch Enrollment Report-Office of Superintendent of Public Instruction (OSPI)
- Pierce County Point In Time (PIT) Homelessness Counting System
- Washington State Employment Security Department, Labor Market and Performance Analysis
OTHER DATA CONSIDERATIONS

- For some measures, data have been age-adjusted. Age-adjustment is a statistical method for standardizing different populations with different age distributions. We do this to look for differences in health services needs and barriers between populations (e.g., Pierce County vs. Washington state) that are not caused by having more older or younger residents. Age-adjusted measures are indicated in the figure legends.
- For many of the measures we used, data for Washington state were also available and used to contrast or compare to local Pierce County data.
- Error bars in the figures show 95% confidence intervals. These indicate the margin of error for the value estimated.

Not all data presented are statistically significant, meaning there was not always a large enough cohort or sample size or difference to be confident that the findings were not just by chance. Estimates throughout the document that are statistically significant are shown with an asterisk.
V. DEMOGRAPHIC PROFILE OF PIERCE COUNTY

Second only to King County, Pierce County is the next most populated county in Washington state with 830,120 residents in 2015.

RACE AND ETHNICITY

In 2015, white residents accounted for 75.7% of Pierce County residents (Table 5.1). African-American residents made up 7.3% of the total population in Pierce County (Table 5.1, Figures 5.1 and 5.2). According to the Pierce County Community Health Improvement Plan, Pierce County has become more racially and ethnically diverse primarily due to rapid growth in Asian and Pacific Islander and Hispanic communities. The greatest growth has been among the Native Hawaiian/Pacific Islander population which more than doubled in size from 2000-2010.

Table 5.1 Pierce County (PC) Population by Race, 2015

<table>
<thead>
<tr>
<th>Race</th>
<th>PC</th>
<th>PC %</th>
<th>WA</th>
<th>WA %</th>
</tr>
</thead>
<tbody>
<tr>
<td>White only</td>
<td>628,355</td>
<td>75.7%</td>
<td>5,698,518</td>
<td>80.7%</td>
</tr>
<tr>
<td>Black only</td>
<td>60,594</td>
<td>7.3%</td>
<td>278,360</td>
<td>3.9%</td>
</tr>
<tr>
<td>AI/AN only</td>
<td>13,616</td>
<td>1.6%</td>
<td>130,780</td>
<td>1.9%</td>
</tr>
<tr>
<td>Asian only</td>
<td>54,205</td>
<td>6.5%</td>
<td>562,903</td>
<td>8.0%</td>
</tr>
<tr>
<td>Pacific Islander only</td>
<td>12,767</td>
<td>1.5%</td>
<td>50,698</td>
<td>0.7%</td>
</tr>
<tr>
<td>Multi Race</td>
<td>60,583</td>
<td>7.3%</td>
<td>340,151</td>
<td>4.8%</td>
</tr>
<tr>
<td>Total</td>
<td>830,120</td>
<td>7.3%</td>
<td>7,061,410</td>
<td>4.8%</td>
</tr>
</tbody>
</table>

Note: Race and ethnicity are socially, not biologically, defined categories and are measured by self-report on questionnaires.

6 Tacoma Pierce County Health Department. Just the Facts: Pierce County Population Profile, 2014.
7 Tacoma Pierce County Health Department. Pierce County Health Equity Assessment, 2015.
Hispanic residents are currently the second largest group, representing 10.2% of the population (Table 5.2). Individuals of Hispanic ethnicity, regardless of race, were categorized as Hispanic.

**Table 5.2 Pierce County (PC) Population by Ethnicity, 2015**

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>PC</th>
<th>PC %</th>
<th>WA</th>
<th>WA %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic</td>
<td>84,959</td>
<td>10.2%</td>
<td>879,410</td>
<td>14.2%</td>
</tr>
<tr>
<td>Not Hispanic</td>
<td>745,161</td>
<td>89.8%</td>
<td>6,182,000</td>
<td>87.5%</td>
</tr>
<tr>
<td>Total</td>
<td>830,120</td>
<td></td>
<td>7,061,410</td>
<td></td>
</tr>
</tbody>
</table>


**AGE**

In 2015, children ages 0-14 years represented a slightly larger percentage of the Pierce County population in comparison to Washington state (Table 5.3 and Figure 5.4). The percentage of adults over 65 years living in Pierce County is slightly smaller than the state population percentage.
Table 5.3 Pierce County (PC) Population by Age, 2015

<table>
<thead>
<tr>
<th>Age group</th>
<th>PC</th>
<th>PC %</th>
<th>WA</th>
<th>WA %</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1</td>
<td>11,496</td>
<td>1.4%</td>
<td>87,310</td>
<td>1.2%</td>
</tr>
<tr>
<td>1-14</td>
<td>156,712</td>
<td>18.9%</td>
<td>1,246,682</td>
<td>17.7%</td>
</tr>
<tr>
<td>15-24</td>
<td>108,905</td>
<td>13.1%</td>
<td>929,408</td>
<td>13.2%</td>
</tr>
<tr>
<td>25-44</td>
<td>222,536</td>
<td>26.8%</td>
<td>1,891,305</td>
<td>26.8%</td>
</tr>
<tr>
<td>45-64</td>
<td>221,475</td>
<td>26.7%</td>
<td>1,879,041</td>
<td>26.6%</td>
</tr>
<tr>
<td>65+</td>
<td>108,995</td>
<td>13.1%</td>
<td>1,027,664</td>
<td>14.6%</td>
</tr>
<tr>
<td>Total</td>
<td>830,119</td>
<td></td>
<td>7,061,410</td>
<td></td>
</tr>
</tbody>
</table>


Note: The 0-1 age group represents day of birth until the day up to the 1st birthday.

Figure 5.4 Pierce County (PC) and Washington State (WA) Age Composition, 2015


**SEX**

In 2015, females represented just over half of the Pierce County residents compared to males (Table 5.5). The percentage of females in Pierce County was slightly higher than the percentage of females across Washington state. Because the CHAT web-based query system for data sets and the U.S. Census do not have data that reflect changes in sexual orientation (changes in biology, chromosomes, anatomy) since birth, transgendered as well as non-binary gender...
community is severely underrepresented in the demographic description of Pierce County residents.

Table 5.5 Pierce County (PC) Population by Sex, 2015

<table>
<thead>
<tr>
<th>Sex</th>
<th>PC</th>
<th>PC %</th>
<th>WA</th>
<th>WA %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>410,292</td>
<td>49.4%</td>
<td>3,521,913</td>
<td>49.9%</td>
</tr>
<tr>
<td>Female</td>
<td>419,828</td>
<td>50.6%</td>
<td>3,539,497</td>
<td>50.1%</td>
</tr>
<tr>
<td></td>
<td>830,120</td>
<td></td>
<td>7,061,410</td>
<td></td>
</tr>
</tbody>
</table>


**DISABILITY**

Disability refers to the product of interactions among individuals’ bodies and the physical and social environment in which they live, work, or play. Disability exists where this interaction results in limitations of activities and restrictions to full participation at school, at work, at home, or in the community. Among non-institutionalized civilians, 13.2% of Pierce County residents reported living with disabilities, compared to 12.4% of the same population in Washington State (Table 5.6).

Table 5.6 Disability for Total Civilian Non-institutionalized Population in Pierce County (PC), 2010-2014

<table>
<thead>
<tr>
<th>Total estimate</th>
<th>With a disability</th>
<th>Percent with a disability</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>788,490</td>
<td>103,922</td>
</tr>
<tr>
<td>WA</td>
<td>6,792,627</td>
<td>844,316</td>
</tr>
</tbody>
</table>

Source: American Community Survey (ACS), Table S1810 "Disability Characteristics".
VI. INCOME

Income is a primary social determinant of health; poverty leads to poorer health outcomes through limited access to things like healthy food, quality education and basic primary care or health insurance.\(^8\) Indicators of income or socio-economic status of residents in Pierce County in this report include:

- Poverty status – percentage of Pierce County population living below the federal poverty level.
- Free/reduced price lunch – number of Pierce County children enrolled in free/reduced price lunch programs.
- Unemployment – number of residents 16 years old and over without a job and/or actively looking for work in recent times.

POVERTY STATUS

An individual’s poverty status is determined by comparing the individual’s total family income in the last 12 months with the federal poverty threshold appropriate for that person’s family size and composition. If the total income of that person’s family is less than the threshold appropriate for that family, then the person is considered “below the poverty level,” together with every member of his or her family. Family poverty thresholds vary depending upon three criteria: size of family, number of children, and, for one- and two- person families, age of the householder.

Between 2010-2014, 12.6% of Pierce County residents reported living below the poverty level, compared to 13.5% of residents across Washington state (Table 6.1). During the same time period, 17.1% of Pierce County children were reported (by their parents) as living below the poverty level, compared to 18.1% of children in Washington state. Figure 6.1 provides a comparison of areas (census tracts) where poverty rates may be higher within Pierce County.

---

\(^8\) http://www.rwjf.org/content/dam/farm/reports/reports/2009/rwjf47463
Table 6.1 Poverty Status in the Past 12 Months (all people), 2010-2014

<table>
<thead>
<tr>
<th></th>
<th>Number below poverty level</th>
<th>Percent below poverty level</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>99,743</td>
<td>12.6%</td>
</tr>
<tr>
<td>WA</td>
<td>916,364</td>
<td>13.5%</td>
</tr>
</tbody>
</table>

Source: 2010-2014 American Community Survey 5-Year Estimates, Table S1701 “Poverty status in the past 12 months”
Note*Institutionalized persons, persons in military group quarters, persons in college dormitories, and unrelated individuals under 15 years old may not be adequately represented here.

Table 6.2 Poverty Status among Pierce County (PC) Children (< 18 years) in the Past 12 Months, 2010-2014

<table>
<thead>
<tr>
<th></th>
<th>Below poverty level</th>
<th>Percent below poverty level</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>33,219</td>
<td>17.1%</td>
</tr>
<tr>
<td>WA</td>
<td>283,076</td>
<td>18.1%</td>
</tr>
</tbody>
</table>

Source: 2010-2014 American Community Survey 5-Year Estimates, Table S1701 “Poverty status in the past 12 months”

Poverty is often linked to poor health outcomes and multiple barriers to access to health care services. We provided poverty data by census tract to examine which geographic communities in Pierce County have the highest rates. Figure 6.1 shows pockets of high poverty in Parkland, Lakewood’s Tillicum/Woodbrook and Springbrook communities, and Tacoma’s Hilltop, Eastside, Lincoln and Southside communities.
Figure 6.1 Percent of People in Pierce County Who Live Below the Poverty Line, 2010-2014

FREE/REDUCED PRICE LUNCH

In 2015, 51,671 Pierce County students were enrolled in free/reduced price lunch programs (Table 6.3). The percentage of Pierce County students enrolled in free/reduced price lunch programs was slightly higher than the state average (45.7% and 44.4%, respectively).
Table 6.3 Free/Reduced Price Lunch Among Pierce County (PC) School District Students, 2015

<table>
<thead>
<tr>
<th></th>
<th>Free</th>
<th>Reduced</th>
<th>Total</th>
<th>% of Free/Reduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>51,671</td>
<td>9,420</td>
<td>133,570</td>
<td>*45.7%</td>
</tr>
<tr>
<td>WA</td>
<td>405,843</td>
<td>71,311</td>
<td>1,074,011</td>
<td>*44.4%</td>
</tr>
</tbody>
</table>

Source: Public Schools Free and Reduced Enrollment, Office of Superintendent of Public Instruction, Oct 30, 2015

**UNEMPLOYMENT**

From 2010-2014 the annual average unemployment rate for Pierce County was higher than the average annual unemployment rate for Washington state.

Table 6.4 Proportion of Unemployed Pierce County (PC) Residents 16 Years and Over, 2010-2014

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Percent did not work</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>637,012</td>
<td>*10.3%</td>
</tr>
<tr>
<td>WA</td>
<td>5,488,038</td>
<td>*8.8%</td>
</tr>
</tbody>
</table>

Source: 2010-2014 American Community Survey 5-Year Estimates, Table S2301 “Employment status”

According to the Employment Security Department’s (ESD) Pierce County reports, the size of the Pierce County labor force in 2015 was 390,246, an increase in 1.6% from 2014. The number of residents employed increased by 2.6%, and the number of residents unemployed declined by 10.8%. The 2015 average annual unemployment rate for Pierce County was 6.4%, down from 7.3% in 2014 (Figure 6.2). The ESD has expected the unemployment rate to remain between 6 and 7% during 2016. Preliminary estimates from October 2016 showed an unemployment rate of 6.1%.

---

Prior to the ACA, access to health insurance was closely associated with employment. Unemployed people were far less likely to have health insurance compared to employed people. While the ACA has increased access to health insurance among unemployed people, unemployment is still often a proxy for low income, which is associated with poor health outcomes. Figure 6.3 shows the places in Pierce County where the highest percent of residents age 16 years or older are unemployed. These places include downtown Tacoma, the Hilltop (28%) and Tacoma’s Eastside communities, Parkland, Lakewood’s Tillicum/Woodbrook and Springbrook neighborhoods, and North Ft. Lewis (20.8%).
Figure 6.3: Proportion of Unemployed People (16+ years) By Census Tract, Pierce County, 2010-2014

Source: Geography: Pierce County GIS; Unemployment: Average figures for 2010-2014, American Community Survey, Table S2301.
* Individuals who reported via survey they were unemployed at Fort Lewis (20.8%) were children aged 16-18 and women (likely military wives).
VII. Social Support

Social networks and interpersonal relationships have a substantial impact on physical and psychological health outcomes and mortality risk. Healthy People 2020 identifies “social support and social interactions” as an important social determinant of health.

Social Associations

The rate of associations among Pierce County residents is considerably lower than the Washington state rate (Table 7.1). Social associations include membership groups such as civic organizations, bowling centers, golf clubs, fitness centers, sports organizations, as well as religious, political, business, and professional organizations.

Table 7.1 Pierce County (PC) Membership Associations per 10,000 Population, 2013

<table>
<thead>
<tr>
<th># Associations</th>
<th>Association rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC 624</td>
<td>*7.6</td>
</tr>
<tr>
<td>WA 6,340</td>
<td>*9.1</td>
</tr>
</tbody>
</table>

Source: County Health Rankings and Roadmaps, Social Associations, 2013

Inadequate Social Support

Among Pierce County residents asked “How often do you get the social and emotional support you need?” more than 21% reported receiving insufficient emotional/social support. In comparison, 22% of Washington state residents reported receiving insufficient emotional/social support (Table 7.2).

---

Table 7.2 Percent of Pierce County (PC) Adults Reporting Inadequate Social Support, 2012

<table>
<thead>
<tr>
<th></th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>21.6%</td>
</tr>
<tr>
<td>WA</td>
<td>22.7%</td>
</tr>
</tbody>
</table>

Source: Behavioral Risk Factor Surveillance System (BRFSS)

VIII. HOUSING

Housing is an important social determinant of physical and mental health. Access to affordable housing enables families to spend more on healthy food and health care, which can improve health outcomes.¹¹

HIGH HOUSING COSTS

High cost of housing refers to the percent of people that live in renter-occupied housing units or owner-occupied housing units with a mortgage and pay 30% or more of their household income on housing costs. Between 2010 and 2014, 39.5% of Pierce County residents had high housing costs, compared to 36.4% of Washington state residents (Table 8.1).

Table 8.1 High Housing Costs, 2010-2014

<table>
<thead>
<tr>
<th></th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>39.5%</td>
</tr>
<tr>
<td>WA</td>
<td>36.4%</td>
</tr>
</tbody>
</table>

Source: ACS, Table B25106 “Tenure by Housing costs as a Percentage of Household Income in the Past 12 Months”

HOMELESSNESS

The 2016 Pierce County Point in Time (PIT) count identified 1,268 individuals as sheltered meaning they spent the night prior to the count in emergency shelter or transitional housing (Figure 8.1). Another 494 individuals were identified as unsheltered meaning they spent the night prior to the count on the streets, in an abandoned building, in a car, or other place not meant for human habitation. According to the Pierce County Community Connections 2016 annual PIT report, there was a 37% increase over the last year in the total number of people experiencing homelessness in Pierce County with a 46% increase in the number of people sleeping outside or in places not meant for human habitation.

Figure 8.1 Homelessness by Population in Pierce County, 2010-2016

Washington state data for 2016 have not yet been made available; however it is worth noting that the total number of homeless Pierce County residents in 2015 (1,283) represented nearly 8% of Washington’s total reported homeless (19,419).

It is important to note that people who are marginally housed, meaning couch-surfing, doubled up with other families, in institutional settings such as jail, or children living in foster care, are not represented in these estimates. Unsheltered homeless families are underrepresented in
these data because they do not tend to sleep in encampments or easily identified outside areas.

Unaccompanied youth/young adults are under particularly underrepresented in these data because they tend to double up or couch surf, and neither tend to sleep in encampments nor easily identified outside areas. It is also important to note that 27% of the 2016 PIT’s counted homeless youth and young adults identified as gay, lesbian, bisexual or other (non-heterosexual) sexual orientation.

IX. EDUCATION

Education is one of the strongest predictors of health. The more education a person has, the more money they earn to be able to afford better housing, healthy food, medical care and health insurance. Education also helps people strengthen social networks, and mitigate social stressors.\(^\text{12}\)

On-time graduation refers to the percent of students entering 9th grade who graduate in four years. The percent of Pierce County 2015 graduates who graduated in four years or less with a regular high school diploma was slightly higher than the Washington state average (Table 9.1).

**High School Graduation**

Table 9.1: Four-Year Adjusted Cohort Graduation Rate for Pierce County (PC), Class of 2015

<table>
<thead>
<tr>
<th></th>
<th>Adjusted 4-Year Cohort Grad. Rate %</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>79.6%</td>
</tr>
<tr>
<td>WA</td>
<td>78.1%</td>
</tr>
</tbody>
</table>

Source: Graduation and Dropout Statistics Annual Report, March 2016

X. **Language Barriers**

Language barriers impact access to health insurance coverage and affect patient health care experience. In 2014, adults speaking Spanish or Ukrainian at home were roughly four times more likely to be uninsured than adults speaking English at home.\(^{13}\)

**Immigrants in Pierce County**

Immigrants, or foreign-born individuals, are residents who report not being a U.S. citizen or a U.S. national at birth. This includes naturalized U.S. citizens, lawful permanent residents (i.e., immigrants), temporary migrants (e.g., foreign students), humanitarian migrants (e.g., refugees), and possibly unauthorized migrants (i.e., people illegally present in the United States). According to the U.S. Census, foreign-born individuals in Pierce County averaged close to 10% of total county residents over a five-year span of 2010-2014 (Table 10.1). This average was significantly lower than the Washington state average over the same five-year period.

**Table 10.1 Foreign-born Individuals in Pierce County (PC), 2010-2014**

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>83,106</td>
<td>*9.8%</td>
</tr>
<tr>
<td>WA</td>
<td>980,158</td>
<td>*13.7%</td>
</tr>
</tbody>
</table>

Source: 2010-2014 American Community Survey 5-Year Estimates, Table DP02 “Selected social characteristics in the United States”

Note: Since they are less likely to report their presence, unauthorized immigrants are largely invisible to us as a population from a data standpoint. Please see recommendation section for further discussion.

**Limited English Proficiency**

Limited English proficiency refers to ACS participants who reported they and/or their household members five years or older speak English ‘less than very well.’ Nearly 6% of Pierce County residents have limited English proficiency, though this is lower than the Washington state average (Table 10.2).

---

\(^{13}\) Public Health Seattle King County, Quality Assurance and Eval of the ACA In King County, WA, 2014.
Table 10.2 Reported English Proficiency Level, Pierce County (PC), 2010-2014

<table>
<thead>
<tr>
<th></th>
<th>Population (aged 5+ years)</th>
<th>Speak English less than &quot;very well&quot;</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>756,251</td>
<td>43,585</td>
<td>*5.8%</td>
</tr>
<tr>
<td>WA</td>
<td>6,455,316</td>
<td>505,263</td>
<td>*7.8%</td>
</tr>
</tbody>
</table>

Source: 2010-2014 American Community Survey 5-Year Estimates, Table DP02 "Selected social characteristics in the United States"

XI. BARRIERS TO HEALTH CARE SERVICES

Healthy People 2020 reports barriers to health care services include high cost, lack of insurance coverage, and lack of availability of services. These barriers limit access to health care which impacts people's ability to reach their full potential and negatively affects their quality of life.14

UNINSURED ADULTS

A person is considered insured if they are currently covered by any of the following types of health insurance or health coverage plans:15

- Insurance through a current or former employer or union (of this person or another family member).
- Insurance purchased directly from an insurance company (by this person or another family member).
- Medicare, for people 65 and older, or people with certain disabilities (Note: SAHIE does not report insurance rates for people over 65 since over 98% of people over the age of 65 are insured).
- Medicaid, Medical Assistance, or any kind of government-assistance plan for those with low incomes or a disability.
- TRICARE or other military health care.
- Indian Health Services.*
- VA (including those who have ever used or enrolled for VA health care).
- Any other type of health insurance or health coverage plan (user specified).

*People whose only health coverage is Indian Health Service are uninsured as IHS is not considered comprehensive coverage.

Between 2010-2014, 20% of Pierce County adults were uninsured and 6% of Pierce County children (Tables 11.1a and 11.2). Less than 1% of adults aged 65+ were uninsured, a much lower number likely due to the availability of Medicare and other services (Table 11.1b). Although these numbers are consistent to Washington state averages, the fact that there are still nearly 89,000 adults and over 11,000 children uninsured in Pierce County is a concern.

Table 11.1a Percent of Uninsured Pierce County (PC) Adults 18-64 Years Old, 2010-2014

<table>
<thead>
<tr>
<th>Number uninsured</th>
<th>Percent uninsured</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC 88,741</td>
<td>17.9%</td>
</tr>
<tr>
<td>WA 782,241</td>
<td>18.1%</td>
</tr>
</tbody>
</table>

Source: 2010-2014 American Community Survey 5-Year Estimates, Table S2701 “Health insurance”

Table 11.1b Percent of Uninsured Pierce County (PC) Adults 65+ Years Old, 2010-2014

<table>
<thead>
<tr>
<th>Number uninsured</th>
<th>Percent uninsured</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC 657</td>
<td>0.7%</td>
</tr>
<tr>
<td>WA 7,098</td>
<td>0.8%</td>
</tr>
</tbody>
</table>

Source: 2010-2014 American Community Survey 5-Year Estimates, Table S2701 “Health insurance”
The data shows a decrease in uninsured after 2013 due to the implementation of the ACA. Between 2011 and 2015, nearly half of uninsured residents in Pierce became insured. While the data are not currently available yet for 2016, a downward trend in the percent of uninsured individuals is expected to continue with the implementation of the ACA (Figure 11.1).

**Figure 11.1: Proportion of Uninsured Adults 18-64 Years Old, 2011-2015**

![Graph showing proportion of uninsured adults 18-64 years old, 2011-2015.](Image)

Source: *BRFSS years 2011-2015 (WA, PC)*

### Uninsured Children

**Table 11.2 Percent of Uninsured Children Under 18 Years Old, 2010-2014**

<table>
<thead>
<tr>
<th></th>
<th>Number uninsured</th>
<th>Percent uninsured</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>11,415</td>
<td>5.8%</td>
</tr>
<tr>
<td>WA</td>
<td>88,903</td>
<td>5.6%</td>
</tr>
</tbody>
</table>

Source: 2010-2014 American Community Survey 5-Year Estimates, Table S2701 “Health insurance”

Note: Only civilian non-institutionalized population are accounted for in estimates presented in Table 17 and Table 18

Geographic locations of uninsured residents in Pierce County are displayed on the map below (Figure 11.2). The percent of Pierce County residents without health insurance varies widely among communities and locations. This indicator ranges from 0% to almost a third of residents.
Places that have the highest percentages of residents without health insurance include Parkland, Lakewood’s Springbrook and Tillicum/Woodbrook neighborhoods. In addition, Tacoma’s Hilltop, Eastside, Central, North and South/Tacoma Mall Area neighborhoods all have pockets among highest percentages.

**Figure 11.2: Proportion of People (all ages) Without Health Insurance, 2010-2014**

*Individuals of all ages from total civilian noninstitutionalized population who do not have health insurance: by census tract, Pierce County, 2010-2014.*

*Source:* Geography: Pierce County GIS; Health insurance: Average figures for 2010-2014, American Community Survey, Table S2701.

*Note:* This aggregate time frame 2010-2014 may mask differences among communities before vs. after the ACA was implemented.
ADULTS WITH A USUAL PRIMARY CARE PROVIDER

In 2015, 72.8% of Pierce County residents reported having a personal health care provider. Similarly, 73% of Washington state residents reported having a health care provider (Table 11.3).

Table 11.3 Percent of Pierce County (PC) Adults With a Personal Doctor or Health Care Provider, 2015

<table>
<thead>
<tr>
<th></th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>72.8%</td>
</tr>
<tr>
<td>WA</td>
<td>73.0%</td>
</tr>
</tbody>
</table>

Source: BRFSS 2015

UNMET HEALTH CARE NEEDS DUE TO COST

Unmet health care needs due to cost refers to individuals who self-reported a time in the past 12 months when they needed to see a doctor but could not due to cost. 12% of Pierce County residents reported having unmet health care needs due to cost, compared to 11% of Washington state residents (Table 11.4). Figure 11.2 provides a comparison of percentages of adults with unmet medical needs by zip code across Pierce county.

Table 11.4 Pierce County (PC) Adults with Unmet Health Care Needs Due to Cost, 2015

<table>
<thead>
<tr>
<th></th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>12.1%</td>
</tr>
<tr>
<td>WA</td>
<td>11.1%</td>
</tr>
</tbody>
</table>

Source: BRFSS 2015
The percent of Pierce County adults with unmet medical needs varies from only 1% in some communities to almost a third of residents in other communities. Places that had the highest percentage of residents with unmet medical needs include parts of the Key Peninsula and Tacoma’s Hilltop, Eastside, Central and South/Tacoma Mall Area neighborhoods.

**Figure 11.2: Percent of Adults with Unmet Medical Needs by Zip codes, 2011-2015**

Transportation barriers are often cited as barriers to health care access. Transportation barriers lead to rescheduled or missed appointments, delayed care, and missed or delayed medication use. These consequences may lead to poorer management of chronic illness and thus poorer health outcomes. In 2012 only 59% of Pierce County residents reported living within a half mile of a bus stop - a 10.3% decrease from 2007 (Figure 11.3).
XII. **ACCESS TO CLINICAL PREVENTIVE SERVICES**

Routine disease screening and scheduled immunizations are examples of clinical preventive services that are key to reducing death, disability and disease. Although these services are covered by Medicare, Medicaid, and many private insurance plans, millions of people go without these important services.¹⁶

**PREVENTABLE HOSPITALIZATIONS**

The preventable hospitalizations rate describes the number of hospital stays for ambulatory-care sensitive conditions per 1,000 Medicare enrollees. In 2016, there were 44 reported hospital stays for every 1,000 Medicare enrollees in Pierce County, compared to 36 reported in Washington state.

In 2016, the rate of preventable hospitalizations in Pierce County was higher than the Washington state rate (Table 12.1). Preventable hospitalizations tend to occur at a greater rate when access to primary care providers is limited or primary care does not meet residents’ health needs.

---

Table 12.1 Preventable Hospitalizations in Pierce County (PC) per 1,000 Medicaid Enrollees, 2016

<table>
<thead>
<tr>
<th></th>
<th>Preventable hospitalizations rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>*44</td>
</tr>
<tr>
<td>WA</td>
<td>*36</td>
</tr>
</tbody>
</table>

Source: County Health Ranking & Roadmaps
http://www.countyhealthrankings.org/app/washington/2016/rankings/pierce/county/outcomes/overall/snapshot

**Routine Dental Checkup**

Routine dental checkup refers to the percentage of Pierce County adults that have reported visited a dentist, dental hygienist or dental clinic within the past year. In 2015, 66.8% of adults in Pierce County had a routine dental checkup, compared to 67% of adults in Washington state (Table 12.2a).

**Table 12.2a Routine Dental Checkup Among Pierce County (PC) Adults, 2015**

<table>
<thead>
<tr>
<th>Percent</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>66.8%</td>
</tr>
<tr>
<td>WA</td>
<td>67.0%</td>
</tr>
</tbody>
</table>

Source: BRFSS 2015

Table 12.2b shows the percentages of children who reported having seen a dentist for a check-up, exam, teeth cleaning, or other dental work in the last 12 months. The percentage of youth receiving dental checkups in Pierce County is lower than percentages reported for Washington state.
Table 12.2b Dental Checkup Among Pierce County (PC) Youth, 2015

<table>
<thead>
<tr>
<th></th>
<th>Grade 8</th>
<th>Grade 10</th>
<th>Grade 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>73.0%</td>
<td>74.8%</td>
<td>73.9%</td>
</tr>
<tr>
<td>WA</td>
<td>79.8%</td>
<td>79.0%</td>
<td>75.5%</td>
</tr>
</tbody>
</table>

Source: HYS 2014

**Kindergarten Vaccination Rates**

The percentage of completed required immunizations among enrolled kindergarten students in Pierce County was slightly higher than Washington state average (Table 12.3).

Table 12.3 Pierce County (PC) Kindergarten Vaccination Rates for School Year, 2015-2016

<table>
<thead>
<tr>
<th>Reported enrollment</th>
<th>% complete for all immunizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>10,468</td>
</tr>
<tr>
<td>WA</td>
<td>84,239</td>
</tr>
</tbody>
</table>


**Colorectal Cancer Screening**

71% of adults (50 years and older) in Pierce County have ever undergone a colorectal cancer screening at least one time in their lifetime, compared to 72% of adults (50 years and older) in Washington state (Table 12.4).

Table 12.4 Percent of Pierce County (PC) Adults 50+ Years That Have Ever had a Sigmoidoscopy or Colonoscopy, 2015

<table>
<thead>
<tr>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
</tr>
<tr>
<td>WA</td>
</tr>
</tbody>
</table>

Source: BRFSS 2015
**Cervical Cancer Screening**

The percentage of Pierce County women (over 18 years old) who have had a pap test in the past three years was slightly higher than the Washington state average (Table 12.5).

Table 12.5 Percent of Pierce County (PC) Women 18+ Years Who Have Had a Pap Test in the Past Three Years, 2015

<table>
<thead>
<tr>
<th></th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>76.6%</td>
</tr>
<tr>
<td>WA</td>
<td>74.1%</td>
</tr>
</tbody>
</table>

Source: BRFSS 2015

**Mammography Screening**

The percentage of Pierce County women (ages 50-74) who reported having a screening mammogram within the past two years was nearly the same as the Washington state average (Table 12.6).

Table 12.6 Percent of Pierce County (PC) Women 50-74 Years Who Report Having Ever Had a Screening Mammogram, 2015

<table>
<thead>
<tr>
<th></th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>77.2%</td>
</tr>
<tr>
<td>WA</td>
<td>77.7%</td>
</tr>
</tbody>
</table>

Source: BRFSS 2015

**Diabetic Monitoring**

In 2015, 9.0% of adults in Pierce County were monitored for and/or diagnosed with diabetes, compared to 8.4% of adults in Washington state (Table 12.7).
Table 12.7 Percent of Pierce County (PC) Adults Who Were Told They Had Diabetes, 2015

<table>
<thead>
<tr>
<th></th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>9.0%</td>
</tr>
<tr>
<td>WA</td>
<td>8.4%</td>
</tr>
</tbody>
</table>

Source: BRFSS 2015
*Note: Cases of female diabetes during pregnancy (gestational diabetes) are NOT considered as diabetic cases.

XIII. ACCESS TO MCH SERVICES

The risk of maternal and infant mortality and pregnancy-related complications can be reduced by accessing quality prenatal care. Women can identify existing health risks during early prenatal visits to prevent future health problems for themselves and their children, including hypertension, heart disease, diabetes and genetic conditions.17

EARLY AND ADEQUATE PRENATAL CARE

Early and adequate prenatal care refers to the percent of live births where 80% or more of the recommended number of prenatal care visits occurred. The American College of Obstetricians and Gynecologists considers a ratio of 80% or greater an adequate percentage of visits, but not an indication of the quality of care. The recommended number of prenatal care visits occurred in 68.8% of Pierce County live births, compared to 70.8% of Washington state births (Table 13.1).

Table 13.1 Percent of Pierce County (PC) Live Births With Recommended Prenatal Care Visits, 2015

<table>
<thead>
<tr>
<th></th>
<th>Count</th>
<th>Population</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>7,133</td>
<td>10,368</td>
<td>68.8%</td>
</tr>
<tr>
<td>WA</td>
<td>58,003</td>
<td>81,899</td>
<td>70.8%</td>
</tr>
</tbody>
</table>


---

XIV. Provider Availability

According to HealthyPeople.gov, access to health services requires distinct steps which include accessing a health care location where needed services are provided, and finding a health care provider with whom the patient can communicate and trust. The availability of providers in a particular geographic region is key to area residents accessing the care they need.

**Primary Care Provider Rate**

For every 1,438 residents in Pierce County there is one primary care provider available, compared to a ratio of 1,190 residents for every one primary care provider in Washington state (Table 14.1).

<table>
<thead>
<tr>
<th></th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>1,438:1</td>
</tr>
<tr>
<td>WA</td>
<td>1,190:1</td>
</tr>
</tbody>
</table>

Source: County Health Rankings and Roadmaps 2016

**Mental Health Provider Rate**

For every 380 residents in Pierce County there is one mental health provider available, compared to a ratio of 279 residents for every one mental health provider in Washington state (Table 14.2).

---

https://www.healthypeople.gov/2020/topics-objectives/topic/Access-to-Health-Services
Table 14.2 Ratio of Population to Mental Health Providers in Pierce County (PC), 2016

<table>
<thead>
<tr>
<th></th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>380:1</td>
</tr>
<tr>
<td>WA</td>
<td>279:1</td>
</tr>
</tbody>
</table>

Source: County Health Rankings and Roadmaps 2016
Note: There are limitations to the accuracy of mental health provider rates, please see limitations section

DENTIST PROVIDER RATE

For everyone 1,318 residents in Pierce County there is one dentist, compared to a ratio of 1,290 residents for every one dentist in Washington state.

Table 14.3 Ratio of Pierce County (PC) Population to Dentists, 2015

<table>
<thead>
<tr>
<th></th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>1,318:1</td>
</tr>
<tr>
<td>WA</td>
<td>1,290:1</td>
</tr>
</tbody>
</table>

Source: County Health Rankings and Roadmaps 2016
http://www.countyhealthrankings.org/app/washington/2016/measure/factors/88/data

HEALTH PROFESSIONAL SHORTAGE AREAS

Health Professional Shortage Areas (HPSAs) are designated by HRSA as having shortages of primary medical care, dental or mental health providers and may be geographic (a county or service area), demographic (low income population) or institutional (comprehensive health center, federally qualified health center or other public facility). Medically Underserved Areas/Populations are areas or populations designated by HRSA as having: too few primary care providers, high infant mortality, high poverty and/or high elderly population.

HPSA Scores describe the severity of a health professional shortage, scores range from 1 to 25 for primary care and mental health, and 1 to 26 for dental health. The higher the score, the greater the need for additional medical services, which increases an area’s priority for placement of new practitioners (eligibility for acquiring NHSC recruits is typically a score of 14 or higher). Several factors go into determining a score, such as providers-to-population ratios, poverty levels and the incidences of infant mortality or low-birth weights.
Table 14.4 show the number of health professional shortage areas by discipline in Pierce County. Tables 14.5a and 14.5b list the HPSA area and facility name with associated score.

**Table 14.4 Health Professional Shortage Areas in Pierce County (PC) by Discipline, 2015**

<table>
<thead>
<tr>
<th></th>
<th>Primary care</th>
<th>Mental health</th>
<th>Dental health</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>7</td>
<td>4</td>
<td>7</td>
</tr>
</tbody>
</table>

*Source: HRSA Data Warehouse, HRSA in Your State, 2016
Source: HRSA Data Warehouse, HRSA in Your County, 2016*
Table 14.5a Health Professional Shortage Area (HPSA) in Pierce County: Primary Care

<table>
<thead>
<tr>
<th>HPSA Type</th>
<th>HPSA Name</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPSA Geographic</td>
<td>Eatonville/Roy</td>
<td>10</td>
</tr>
<tr>
<td>HPSA Geographic</td>
<td>Buckley/Enumclaw Service Area</td>
<td>10</td>
</tr>
<tr>
<td>HPSA Geographic</td>
<td>Longbranch</td>
<td>12</td>
</tr>
<tr>
<td>Comprehensive Health Center</td>
<td>Community Health Care Delivery</td>
<td>15</td>
</tr>
<tr>
<td>Comprehensive Health Center</td>
<td>Metropolitan Development Council</td>
<td>5</td>
</tr>
<tr>
<td>Correctional Facility</td>
<td>Immigration/Customs Enforcement-Tacoma</td>
<td>12</td>
</tr>
<tr>
<td>Native American Tribal Population</td>
<td>Puyallup Tribal Health Authority</td>
<td>16</td>
</tr>
</tbody>
</table>

Source: https://datawarehouse.hrsa.gov/

Table 14.5b Health Professional Shortage Area (HPSA) in Pierce County: Dental Health

<table>
<thead>
<tr>
<th>HPSA Type</th>
<th>HPSA Name</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensive Health Center</td>
<td>Community Health Care Delivery</td>
<td>17</td>
</tr>
<tr>
<td>Comprehensive Health Center</td>
<td>Metropolitan Development Council</td>
<td>10</td>
</tr>
<tr>
<td>Native American Tribal Population</td>
<td>Puyallup Tribal Health Authority</td>
<td>13</td>
</tr>
<tr>
<td>Correctional Facility</td>
<td>Immigration and Customs Enforcement - Tacoma</td>
<td>12</td>
</tr>
</tbody>
</table>

Source: https://datawarehouse.hrsa.gov/

Table 14.5c Health Professional Shortage Area (HPSA) in Pierce County: Mental Health

<table>
<thead>
<tr>
<th>HPSA Type</th>
<th>HPSA Name</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Mental Hospital</td>
<td>Special Commitment Center</td>
<td>16</td>
</tr>
<tr>
<td>Comprehensive Health Center</td>
<td>Community Health Care Delivery</td>
<td>16</td>
</tr>
<tr>
<td>Health Center</td>
<td>Metropolitan Development Council</td>
<td>10</td>
</tr>
<tr>
<td>Correctional Facility</td>
<td>Immigration/Customs Enforcement - Tacoma</td>
<td>6</td>
</tr>
<tr>
<td>Correctional Facility</td>
<td>Washington Corrections Center for Women</td>
<td>3</td>
</tr>
<tr>
<td>Native American Tribal Population</td>
<td>Puyallup Tribal Health Authority</td>
<td>13</td>
</tr>
<tr>
<td>State Mental Hospital</td>
<td>Western State Hospital</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: https://datawarehouse.hrsa.gov/

Note: HPSA Scores are developed for use by the National Health Services Corps (NHSC) and Health Resources and Services Administration (HRSA) to prioritize the need of designations. Based on the severity of a health professional shortage, scores range from 1 to 25 for primary care and mental health, and 1 to 26 for dental health. The higher the score, the greater the need for additional medical services, which increases an area’s priority for placement of new practitioners (eligibility for acquiring NHSC recruits is typically a score of 14 or higher). Several factors go into determining a score, such as providers-to-population ratios, poverty levels, and the incidences of infant mortality or low-birth weights.  

Our analysis shows a diverse demographic profile in Pierce County, with a higher percentage of African American and Hispanic residents than the Washington state average. By stratifying the health indicator data in this report by age, race and gender, we would see a more complete picture of what populations are experiencing the most barriers to accessing care.

When comparing Pierce County health indicator data to Washington state, six indicators revealed a statistically significant difference compared to state averages:

**Indicators of Poverty in Pierce County:**
- **Free and reduced priced lunch** – the percent of children in Pierce County enrolled in free/reduced price lunch programs is higher than the state average.
- **Unemployment** – Between 2010 and 2015 the average annual employment rate for Pierce County has remained higher than the state average.

**Indicators of Language Barriers in Pierce County:**
- **Number of Immigrants** – The percentage of foreign-born individuals who reported immigration status in Pierce County, is lower than Washington state average
- **Limited English Proficiency** – The percentage of individuals aged 5+ years reporting ‘limited English proficiency’ in Pierce County is lower than the percentage reported in Washington state.

**Indicator of Social Support in Pierce County:**
- **Number of Membership Associations** – The rate of associations among Pierce county residents is considerably lower than the Washington state rate.

**Indicator of access to primary care in Pierce County:**
- **Preventable Hospitalizations** – The rate of preventable hospitalizations in Pierce County was higher (by 18%) than the Washington state rate.

This data as a whole suggest that significant barriers to access to care in Pierce County may be primarily related to poverty, lack of social supports, and limited access to clinical preventive services. The data shows English as a second language to be less of a barrier for Pierce County residents in accessing care, although our undocumented immigrant populations are not
represented in these data which presents a need for additional data collection. Data analysis revealed that high housing costs and insufficient primary care provider-to-patient ratios as health indicators were not significantly different than Washington state averages (from a statistical perspective - meaning not statistically significant). However, these two indicators are important when considering access to health services for Pierce County residents. For example, 4 out of 10 Pierce County residents are paying more than 30% of their income on housing—which may impact their ability to afford health insurance.

While these data reveal significant barriers to access to care, they also reveal important health services needs of Pierce County residents. Low primary care provider rates and high rates of preventable hospitalizations reveal the need for improved access to primary care providers and preventive care. We also observed the potential for strengthening social support networks for residents.

Further statistical analysis of this data, including stratification by age, race, and gender would further inform the Pierce County ACH of populations most experiencing barriers accessing health care, especially due to poverty indicators which are higher than the state average. We also recommend engaging with communities to conduct qualitative data collection (e.g., interviews, focus groups, etc.) to better understand the specific service needs and barriers to care that Pierce County residents are experiencing especially within those populations which we are lacking data for, such as unauthorized immigrants, homeless youth, marginally housed families, and members of LGBTQ communities.

**IMPROVING ACCESS TO CARE HEALTH INDICATORS AND DATA COLLECTION**

**Physicians Accepting Medicaid:** Washington state’s five Managed Care Organizations (MCOs) have lists of Medicaid-contracted providers, and those providers who accept Medicaid patients. Public Health Seattle King County (PHSKC), through collaboration with the University of Washington, assessed the accuracy of the MCO provider lists. Findings from their report are included in the 2014 report, Quality Assurance and Evaluation of the Affordable Care Act. Results from “mystery shopper surveys” led the team to conclude the MCO provider lists are largely inaccurate:

*In December, only 37% of primary care providers had an accurate phone number listed on an MCO website directory. By April, the accuracy rate had fallen significantly to 31%. The*
The assessment findings from King County justify the need to gather data directly from providers. Medicaid transformation waiver, Initiative 1 will build incentives for providers who are committed to changing how we deliver care, and presents an opportunity for the Health Care Authority to work directly with health systems to update lists of providers accepting Medicaid patients. Unfortunately this data does not exist today without this primary data collection. We recommend the Pierce County ACH collaborate with other regions to work directly with health systems provider to collect this data.

**Number of days for new patient appointment:** This metric is not available on a population level using existing data. Assessment findings from PHSKC on this metric also justify the need for data sharing between the public health and health care delivery systems. We recommend the Pierce County ACH collaborate with other regions to work directly with health systems provider to collect this data.

**Limitations**

**Gender:** Because the state and national major data sets do not allow for self-reported gender, nontraditional sexes and genders are severely underrepresented in data sets used in data reports. Because there is a great deal of evidence that individuals self identifying or presenting as an unexpected or unfamiliar gender experience higher rates of disparities than traditional sex and gender expressing individuals. We recommend the ACH collaborate with other regions to include non-binary gender categories on state and regional data collection surveys, to improve our visibility of transgendered populations and their health care needs.

**Living Near Highways:** The number of residents living near highways was not readily available for Washington state, without raw data collection and analysis.

**Mental Health Provider Rate:** This data comes from the National Provider Identification data file. Providers who transmit electronic health records are required to obtain an identification number, but very small providers may not obtain a number. Providers also have the option of deactivating their identification number if they are no longer practicing; many do not do this. This may result in an overestimate of active mental health professionals in some

---

20 Public Health Seattle & King County, Quality Assurance and Eval of the Affordable Care Act in King County, WA, 2014.
communities.\textsuperscript{21} In previous reports, OAPI found a lot of mental health providers were no longer practicing. CHR staff recommended that for benchmarking or comparison/trend purposes, counties should develop a methodology that more thoroughly analyzes the mental health providers particular to their community.

**Sexuality:** When looking at access to care and care disparities, there is a great deal of evidence that non-heterosexual individuals experience higher rates of health disparities than heterosexual individuals. Sexuality is self-reported and such data are added when most relevant to describing Pierce County health disparities. We recommend the ACH add ‘Sexuality’ as a health indicator to future data assessments to include LGBTQ populations in the Pierce County demographic profile.

**Undocumented populations:** Unauthorized immigrants are less likely to report their presence on surveys for data collection, making it difficult to capture population data. Due to their undocumented status, this population experience significant barriers to health care access and greater health disparities. We recommend the Pierce County ACH collaborate with regional ACHs to determine how to capture population data on this vulnerable community. Qualitative research would also be valuable to determine health services needs of these Pierce County residents (in collaboration with local organizations, such as Centro Latino).

\textsuperscript{21} County Health Rankings & Roadmaps, Mental Health Providers, 2016. http://www.countyhealthrankings.org/measure/mental-health-providers
XVI. ACRONYMS

ACH: Accountable Communities of Health
ACS: U.S. Census Bureau’s American Community Survey
BLS: Bureau of Labor Statistics
BRFSS: Behavioral Risk Factor Surveillance System
CHAT: Community Health Assessment Tool
CHIP: Community Health Improvement Plan
CHR: County Health Rankings
CNA: Community Needs Assessment
DOH: Washington State Department of Health
HCA: Washington State Health Care Authority
HPSAs: Health Professional Shortage Areas
HRSA: Department of Health and Human Services’ Health Resources and Services Administration
HUD: U.S. Department of Housing and Urban Development
MCH: Maternal Child Health Services
OAPI: Tacoma Pierce County Health Department, Office of Assessment, Planning & Improvement
OSPI: Washington State Office of Superintendent of Public Instruction
PC: Pierce County
PCHIP: Pierce County Health Innovation Partnership
PIT: Point in Time Homeless Counting System
TPCHD: Tacoma Pierce County Health Department
WA: Washington State
## XVII. Health Indicators

**Figure 17.1 Pierce County ACH Access to Care Data Report Health Indicators**

<table>
<thead>
<tr>
<th>Health Indicator</th>
<th>Objectives</th>
<th>Category</th>
<th>Health Indicator</th>
<th>Objectives</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Race/ethnicity</td>
<td>4-5</td>
<td>Demographics</td>
<td>19 Adults with a usual</td>
<td>2-5</td>
<td>Barriers to Health Care Services</td>
</tr>
<tr>
<td>2 Age</td>
<td>4-5</td>
<td></td>
<td>20 Unmet health care needs due to</td>
<td>1-5</td>
<td>cont.</td>
</tr>
<tr>
<td>3 Disability</td>
<td>4-5</td>
<td></td>
<td>21 Number of days for</td>
<td>1-5</td>
<td></td>
</tr>
<tr>
<td>4 Sex</td>
<td>4-5</td>
<td></td>
<td>new patient appt.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Poverty (total population)</td>
<td>4-5</td>
<td>Income</td>
<td>22 Bus service routes</td>
<td>2,4,5</td>
<td></td>
</tr>
<tr>
<td>6 Children in poverty</td>
<td>4-5</td>
<td></td>
<td>23 Routine dental checkup</td>
<td>1,3-5</td>
<td>Access to Clinical Preventive</td>
</tr>
<tr>
<td>7 Free/reduced price lunch</td>
<td>4-5</td>
<td></td>
<td>24 Vaccination rates</td>
<td>1,3-5</td>
<td>Services</td>
</tr>
<tr>
<td>8 Unemployment</td>
<td>4-5</td>
<td></td>
<td>25 Colorectal cancer screening</td>
<td>1,3-5</td>
<td></td>
</tr>
<tr>
<td>9 Social associations</td>
<td>4-5</td>
<td>Social Support</td>
<td>26 Cervical cancer screening</td>
<td>1,3-5</td>
<td></td>
</tr>
<tr>
<td>10 Inadequate social support</td>
<td>4-5</td>
<td></td>
<td>27 Mammography screening</td>
<td>1,3-5</td>
<td></td>
</tr>
<tr>
<td>11 High housing costs</td>
<td>4-5</td>
<td>Housing</td>
<td>28 Diabetic monitoring</td>
<td>1,3-5</td>
<td></td>
</tr>
<tr>
<td>12 Living near highways</td>
<td>4-5</td>
<td></td>
<td>29 Early and adequate prenatal</td>
<td>1,3-5</td>
<td>Access to MCH Services</td>
</tr>
<tr>
<td>13 Homelessness</td>
<td>4-5</td>
<td></td>
<td>30 Primary care provider rate</td>
<td>1-5</td>
<td>Provider Availability</td>
</tr>
<tr>
<td>14 High school graduation</td>
<td>4-5</td>
<td>Education</td>
<td>31 Mental health provider rate</td>
<td>1-5</td>
<td></td>
</tr>
<tr>
<td>15 Immigrant</td>
<td>2,4,5</td>
<td>Language Barriers</td>
<td>32 Dentist provider rate</td>
<td>1-5</td>
<td></td>
</tr>
<tr>
<td>16 Limited English proficiency</td>
<td>2,4,5</td>
<td></td>
<td>33 Physicians accepting Medicaid</td>
<td>1-5</td>
<td></td>
</tr>
<tr>
<td>17 Uninsured adults</td>
<td>1-5</td>
<td>Barriers to Health</td>
<td>34 Health professional shortage</td>
<td>1-5</td>
<td></td>
</tr>
<tr>
<td>18 Uninsured children</td>
<td>1-5</td>
<td>Care Services</td>
<td>35 Preventable hospitalizations</td>
<td>1-5</td>
<td>Access to Primary Care</td>
</tr>
</tbody>
</table>
XVIII. Definitions

Disability Status: Under the conceptual framework of disability described by the Institute of Medicine (IOM) and the International Classification of Functioning, Disability, and Health (ICF), the American Community Survey (ACS) defines disability as the product of interactions among individuals’ bodies; their physical, emotional, and mental health; and the physical and social environment in which they live, work, or play. Disability exists where this interaction results in limitations of activities and restrictions to full participation at school, at work, at home, or in the community.

In an attempt to capture a variety of characteristics that encompass the definition of disability, the ACS identifies serious difficulty with four basic areas of functioning – hearing, vision, cognition, and ambulation. These functional limitations are supplemented by questions about difficulties with selected activities from the Katz Activities of Daily Living (ADL) and Lawton Instrumental Activities of Daily Living (IADL) scales, namely difficulty bathing and dressing, and difficulty performing errands such as shopping.

_Hearing difficulty_ asked respondents if they were “deaf or ... [had] serious difficulty hearing.” _Vision difficulty_ asked respondents if they were “blind or ... [had] serious difficulty seeing even when wearing glasses.” _Cognitive difficulty_ asked respondents if due to physical, mental, or emotional condition, they had “serious difficulty concentrating, remembering, or making decisions.” _Ambulatory difficulty_ asked respondents if they had “serious difficulty walking or climbing stairs.”

Immigrant/Foreign born individuals: The American Community Survey (ACS) defines foreign born individuals as anyone who was not a U.S. citizen or a U.S. national at birth. This includes surveyed individuals who indicated they were a U.S. citizen by naturalization or not a U.S. citizen. The ACS questionnaires do not ask about immigration status. The foreign-born population includes naturalized U.S. citizens, lawful permanent residents (i.e. immigrants), temporary migrants (e.g., foreign students), humanitarian migrants (e.g., refugees), and to some proportion unauthorized migrants (i.e. people illegally present in the United States).

Gender: Gender is most often seen as a social construct whereby a society or culture assigns certain tendencies or behaviors the labels of masculine or feminine. Gender is usually self-reported by individuals on a survey or similar data collection method (post-birth) while sex is most often reported at birth from vital statistic records (or by asking an individual of the sex noted on their birth certificate).
**Health professional shortage:** Health Professional Shortage Areas (HPSAs) are designated by HRSA as having shortages of primary medical care, dental or mental health providers and may be geographic (a county or service area), demographic (low income population) or institutional (comprehensive health center, federally qualified health center or other public facility). Medically Underserved Areas/Populations are areas or populations designated by HRSA as having: too few primary care providers, high infant mortality, high poverty and/or high elderly population. The primary factor is the number of health professionals relative to the population with consideration of high need. Federal regulations stipulate that, in order to be considered as having a shortage of providers, an area must have a population-to-provider ratio of a certain threshold.

**High Cost Housing:** The measure describes the percent of people that live in renter-occupied housing units or owner-occupied housing units with a mortgage and pay 30% or more of their household income on housing costs.

**High School Graduation:** The four-year graduation rate is calculated by dividing the number of students who graduate in four years or less with a regular high school diploma by the number of students who form the adjusted cohort for that graduating class.

**Homelessness:** There is more than one “official” definition of homelessness. Different agencies use different definitions of homelessness, which affect how various programs determine eligibility for individuals and families at the state and local level. A full definition of Homelessness as defined by the US Department of Housing and urban Development (HUD) can be located at [https://www.nhchc.org/faq/official-definition-homelessness](https://www.nhchc.org/faq/official-definition-homelessness).

In addition, the U.S. Department of Housing and Urban Development (HUD) has recently updated their definition of homelessness incorporating comments submitted over the years by a wide variety of stakeholders, including the Homelessness Alliance. They have since changed the definition of chronically homeless, among other definitions that may impact reporting. Please see Appendix B for more information.

People who are marginally housed as in couch-surfing, doubling up with other families or institutional settings such as jail, or children living in foster care are not represented in the PIT count. Unsheltered homeless families are underrepresented in these data because they do not tend to sleep in encampments or easily identified outside areas.

**Insured:** Small Area Health Insurance Estimates (SAHIE) and the American Community Survey (ACS) recognizes an individual as insured if they are currently covered by any of the following types of health insurance or health coverage plans:
- Insurance through a current or former employer or union (of this person or another family member).
- Insurance purchased directly from an insurance company (by this person or another family member).
- Medicare, for people 65 and older, or people with certain disabilities (Note: SAHIE does not report insurance rates for people over 65 since over 98% of people over the age of 65 are insured).
- Medicaid, Medical Assistance, or any kind of government-assistance plan for those with low incomes or a disability.
- TRICARE or other military health care.
- Indian Health Services.*
- VA (including those who have ever used or enrolled for VA health care).

Any other type of health insurance or health coverage plan (user specified)*People whose only health coverage is Indian Health Service are uninsured as IHS is not considered comprehensive coverage

**Inadequate social support definition and calculation:** Calculation of the percentages in was based on the responses to the BRFSS question "How often do you get the social and emotional support you need?" with these options for the answer:
- Always
- Usually
- Sometimes
- Rarely
- Never

Persons were considered to be receiving insufficient emotional/social support if they reported getting social/emotional support Sometimes, Rarely, Never.

**Living near highways:** Percent of population living within 150 meters of a highway.

**Mental Health - Health Professional Shortage Area (HPSA) in Pierce County:** For mental health, the population to provider ratio must be at least 30,000 to 1 (20,000 to 1 if there are unusually high needs in the community). The number of mental health care HPSA designations includes HPSAs that are proposed for withdrawal and HPSAs that have no data. By statute, designations are not withdrawn until a Federal Register Notice is published, generally once a year on or around July 1. The percent of need met is computed by dividing the number of psychiatrists available to serve the population of the area, group, or facility by the number of psychiatrists that would be necessary to eliminate the mental health HPSA (based on a ratio of
30,000 to 1 (20,000 to 1 where high needs are indicated)). The number of additional psychiatrists needed to achieve a population-to-psychiatrist ratio of 30,000 to 1 (20,000 to 1 where high needs are indicated) in all designated mental health HPSAs, resulting in their removal from designation

**Poverty:** Poverty statistics in American Community Survey (ACS) uses the Census Bureau’s set of dollar value thresholds. An individual’s poverty status is determined by comparing the individual’s total family income in the last 12 months with the poverty threshold appropriate for that person's family size and composition. If the total income of that person's family is less than the threshold appropriate for that family, then the person is considered “below the poverty level,” together with every member of his or her family.

Poverty status was determined for all people except institutionalized people, people in military group quarters, people in college dormitories, and unrelated individuals under 15 years old. Since poverty is defined at the family level and not the household level, the poverty status of the household is determined by the poverty status of the householder. Households are classified as poor when the total income of the householder's family in the last 12 months is below the appropriate poverty threshold. The poverty thresholds vary depending upon three criteria: size of family, number of children, and, for one- and two- person families, age of the householder.

**Preventable hospitalizations rate:** Number of hospital stays for ambulatory-care sensitive conditions per 1,000 Medicare enrollees.

**Sex:** Sex is identified in all major data systems (including U.S. Census) as “sex” based on the biological attributes of men and women (chromosomes, anatomy, hormones), specifically intending to capture a person’s biological sex and not gender. Sex is most often reported at birth from vital statistic records (or by asking an individual of the sex noted on their birth certificate,) while gender is more likely self-reported by individuals on a survey or similar data collection method post-birth

**Social Associations:** include membership organizations such as civic organizations, bowling centers, golf clubs, fitness centers, sports organizations, religious organizations, political organizations, labor organizations, business organizations, and professional organizations.

**Social association rate:** The number of associations per 10,000 population.
**Unemployment:** The American Community Survey (ACS) defines unemployment as all civilians 16 years old and over if they (1) were neither “at work” nor “with a job but not at work” during the reference week, and (2) were actively looking for work during the last 4 weeks, and (3) were available to start a job. Also included as unemployed are civilians who did not work at all during the reference week, were waiting to be called back to a job from which they had been laid off, and were available for work except for temporary illness.

**XIX. Data Sources**

Much of the data in this report come from a few key sources. These sources and their limitations are briefly described below.

**American Community Survey (ACS)**

The American Community Survey 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 10-year intervals. Contrary to the U.S. Census, the ACS does not collect data from all residents but rather a sample of the population.

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

The Behavioral Risk Factor Surveillance System is an ongoing national telephone survey conducted yearly by the DOH in collaboration with the Centers for Disease Control and Prevention. Adults (people aged 18 years or older) living in non-institutional settings who live in households having a telephone are randomly selected for an interview. To meet challenges for increasing non-coverage and decreasing response rates in U.S. landline-based telephone samples due to cell phone only households, BRFSS has expanded its traditional landline-based survey to a dual frame survey of landline and cell phone numbers. The survey provides state- and county-level data for each calendar year on a wide variety of topics including disease prevalence, health care access and use, health behaviors and demographics.

**County Health Rankings and Roadmaps 2016**

In these reports, the County Health Rankings & Roadmaps program explores how wide gaps are throughout each state and what is driving those differences. The health rankings include data on health indicators that are most likely to affect health outcomes and health status. This information can help state and local leaders as they identify ways for everyone to have a fair
chance to lead the healthiest life possible. Specifically, these reports can help leaders understand:

1. What health gaps are and why they matter,
2. The size and nature of the health gaps among counties,
3. What factors are influencing the health of residents, and
4. What state and local communities can do to address health gaps.

**COMMUNITY HEALTH ASSESSMENT TOOL (CHAT)**

The Community Health Assessment Tool (CHAT) provides a secure web-based query system for data sets maintained by the Washington State Department of Health. Data set examples include death certificates, birth certificates and hospital discharge abstracts. CHAT is primarily available to local and state government agencies. It allows data analysts in local health jurisdictions, the department, and other state agencies to conduct analyses that improve their understanding of these data. In addition to population and census data, CHAT contains detailed information on life expectancy as well as many occurrences of health-related events in Washington state such as but not limited to births, deaths, fatal injuries, cancers, hospitalizations, and communicable diseases.

**HEALTH RESOURCES AND SERVICES ADMINISTRATION (HRSA)**

The Health Resources and Services Administration (HRSA) is the primary federal agency for improving access to health care services for people who are uninsured, isolated or medically vulnerable. The Health Resources and Services Administration Database of Health Professional Shortage Areas outline the health professional shortage areas (HPSAs) which have shortages of primary medical care, dental or mental health providers.

**PUBLIC SCHOOLS FREE AND REDUCED LUNCH ENROLLMENT REPORT—OFFICE OF SUPERINTENDENT OF PUBLIC INSTRUCTION (OSPI)**

The Office of Superintendent of Public Instruction (OSPI) is the primary agency charged with overseeing K–12 education in Washington state. OSPI provides reports on child nutrition programming that assists school districts and other institutions to promote life-long healthful living while providing nutritious meals each day that prepare children for learning. The OSPI provided the number of Pierce County students that are enrolled in free/reduced price lunch programs.
PIERCE COUNTY POINT IN TIME (PIT) HOMELESSNESS COUNTING SYSTEM

On Friday, January 29, 2016, over 200 volunteers in Pierce County conducted a Point in Time (PIT) count of people experiencing homelessness across the county. The PIT count identifies the number of people who slept in emergency shelters, transitional housing, outside or in other places not meant for human habitation.

The PIT does not include people who are marginally housed (couch-surfing and doubling up with other families); institutional settings such as jail; or children living in foster care. Unsheltered homeless families, unaccompanied youth, and young adults are underrepresented in these data because they do not tend to sleep in encampments or easily identified outside areas.

WASHINGTON STATE EMPLOYMENT SECURITY DEPARTMENT, LABOR MARKET AND PERFORMANCE ANALYSIS

Local Area Unemployment Statistics are monthly estimates of the labor force, including employment, unemployment and unemployment rates statewide, by county and by metropolitan area. Every month, the federal Bureau of Labor Statistics (BLS) surveys households to learn whether residents are employed or unemployed and looking for work. The survey does not count people who have stopped looking for work. These survey data are used to create local unemployment estimates. Employment and unemployment data are published each month, based on a federal BLS schedule.