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Introduction

At Seattle Children’s, our commitment to caring for the community is our passion, our duty, and our privilege. We serve as the pediatric and adolescent medical center for the largest landmass of any children’s hospital in the country, which includes Washington, Alaska, Montana and Idaho (the WAMI region). We reach beyond our hospital every day to provide programs and services to make children, teens and families safer and healthier in the communities where they live, based on identified community needs.

The Patient Protection and Affordable Care Act (ACA) requires non-profit hospitals to conduct a Community Health Needs Assessment (CHNA) every three years to understand the most significant needs impeding health in their area and examine ways to address them. At Seattle Children’s we call this process a Community Health Assessment (CHA), and intentionally drop the word “needs” from our report. We do this purposefully because the communities that we serve are so much more than a list of needs; they are intricate places with assets, challenges, and moreover, places that are actively developing and harnessing their own capabilities and strengths. Our CHA aims to provide important and useful information to the hospital, public health, and local organizations interested in improving the health and safety of the community. Included assessments guide community benefit priorities and subsequent implementation and evaluation plans for our hospital.

Seattle Children’s joined Public Health - Seattle and King County and 11 other hospitals and health systems in King County (Washington) on a collaborative project called “Hospitals for a Healthier Community” (HHC), publishing our second comprehensive CHNA in 2015. The current Seattle Children’s CHA is tailored to focus more heavily on the pediatric and adolescent populations, as well as community input, and to include data and information about the WAMI region when available.

This report provides qualitative and quantitative information about:

- **A Description of Our Community:** Seattle Children’s serves the WAMI region, with the majority of our patients located in King County, WA.

- **Life Expectancy and Leading Causes of Death and Hospitalization:** Life expectancy in King County neighborhoods can vary by up to 10 years. Injuries are the leading causes of death among children, teens and young adults in King County and throughout Washington state. The leading causes of hospitalizations for children and teens are asthma and injuries.

- **The following identified health needs:**

  - Children with special healthcare needs and chronic conditions (CSHCN)
  - Access to care
  - Mental and behavioral health
  - Maternal and child health
  - Preventable causes of death
  - Violence and injury prevention

Each profile of health need includes key indicators of relevant health outcomes, which describe the population health status of a county, and the factors that could influence health outcomes, such as access to quality healthcare, health behaviors, social factors, and the physical environment. This assessment embraces a broad concept of health that includes social determinants so that, working collaboratively both within and outside the health system environment, Seattle Children’s can help build on expertise and resources to address critical health needs and address the “triple aim” of health care: enhancing the
patient experience of care, improving the health of populations and reducing the per capita cost of healthcare. Social factors and the physical environment are especially important because they represent the conditions in which people are born, work and play. Neighborhoods with affordable healthy food, safe and accessible housing, and quality employment opportunities facilitate healthy lifestyles. The World Health Organization and others call the living conditions that can affect health and quality of life the "social determinants of health". Our CHA highlights the importance of addressing the social determinants of health by including data about these determinants and then crafting strategies and tactics to address the needs related to the social and physical environment.

Figure 1: General Socioeconomic, Cultural and Environmental Conditions that Impact Health

Social Determinants of Health

Population Health

Physical Environment
Environmental quality
Built environment
Socio-Economic Factors
Education
Employment
Income
Family/social support
Community safety
Health Care
Access to care
Quality of care
Health Behaviors
Tobacco use
Diet & exercise
Alcohol use
Unsafe sex

Source: Authors’ analysis and adaption from the University of Wisconsin Population Health Institute’s County Health Rankings model ©2010, http://www.countyhealthrankings.org/about-project/background

Figure 2: Impact on Population Health

Supplemental data for the indicators of health outcomes are presented in Appendix C. Detailed data are reported, when available, for neighborhoods, cities and regions of King County, and by race/ethnicity, age, income/poverty, gender or other important demographic breakdowns. When possible, comparisons are also made to the Washington state average and national Healthy People 2020 objectives.

Each identified health need has a corresponding section and each section is organized by epidemiological data, followed by community input, as well as an assets and opportunities section. This report is a blend of qualitative and quantitative data. An executive summary of this report is available here or by visiting: http://www.seattlechildrens.org/about/community-benefit/community-health-assessment.
About Seattle Children’s

Founded in 1907, Seattle Children’s is a licensed specialty hospital for children, with more than 700 hospital-based physicians and more than 60 pediatric subspecialties. The 334-bed hospital is ranked the sixth best children’s hospital in the country and the top children’s hospital on the West Coast, according to U.S. News and World Report. Seattle Children’s is also the primary teaching, clinical and research site for the Department of Pediatrics at the University of Washington School of Medicine. Seattle Children’s is the largest, most comprehensive craniofacial center in the United States, with more than 50 healthcare providers from 19 specialty areas. The hospital also offers Washington’s largest children’s cancer center, which has five-year survival rates above the national average for most types of cancer. Seattle Children’s Research Institute is one of the nation’s top five pediatric research centers.

We provide inpatient, outpatient, diagnostic, surgical, rehabilitative, behavioral, emergency and outreach services. Moreover, we reach beyond our hospital every day to provide programs and services and partner with communities to make children, teens and families safer and healthier where they live based on identified community needs.

Opportunities for Better Health

In King County — as in communities across the nation — neighborhood conditions, race, income, language and education are highly correlated with disease burden and life expectancy. Community health data consistently show that these determinants of health — shaped by local distributions of money, power and resources — cannot be ignored if we hope to improve individual healthcare and health outcomes.

Our Mission

We provide hope, care and cures to help every child live the healthiest and most fulfilling life possible.

Our Vision

Seattle Children’s will be an innovative leader in pediatric health and wellness through our unsurpassed quality, clinical care, relentless spirit of inquiry, and compassion for children and their families.

Our founding promise to the community is as valid today as it was over a century ago. We will care for all children in our region, regardless of their family’s ability to pay.

We will:

- Practice the safest, most ethical and effective medical care possible.
- Discover new treatments and cures through breakthrough research.
- Promote healthy communities while reducing health disparities.
- Empower our team to reach their highest potential in a respectful work environment.
- Educate and inspire the next generation of faculty, staff and leaders.
- Build on a culture of philanthropy for patient care and research.

Our Values

- Compassion
- Excellence
- Integrity
- Collaboration
- Equity
- Innovation
The relationship between lack of opportunities and poor health is clear: King County neighborhoods with the lowest educational attainment and highest levels of poverty are also the areas with the greatest concentrations of obesity, diabetes and many other adverse health outcomes. Equal access to opportunities, such as education, housing and jobs, is necessary for all people to thrive and achieve their full potential.

Because health services account for only about 20% of overall health, this report highlights community health needs that will require nonclinical as well as clinical approaches by hospitals, health systems, and their partners.4

Working Together Toward Healthier Communities

Across the region, healthcare reform is catalyzing new levels of collaboration among hospitals and health systems, public health, social services, housing, community development and other sectors that address the underlying determinants of health for residents.

There is widespread recognition that achievement of the Triple Aim will require new bridges across systems that have been historically siloed.5

Seattle Children’s is involved in a number of initiatives that help accelerate the goals of local and state health transformation plans. The King County Health and Human Services Transformation Plan calls for a shift from what today is a crisis- and sick-care oriented system, to one focused on prevention, wellness, and the elimination of disparities. Community partnerships that address the upstream, non-medical drivers of health are a key part of ultimately achieving the Triple Aim.

Washington state’s roadmap for health transformation, “Healthier Washington,” also recognizes that health happens at the local level and that communities are at the core of bringing about the changes that will improve the health of their residents. As a foundational piece of health assessment work that can be built upon in the years ahead, this CHA helps lay the groundwork for future community partnerships and well-aligned strategies that will succeed in responding to the identified community needs.

3 U.S. Census Bureau, BRFSS, CHARS, data, map produced by Public Health-Seattle & King County.
Methods

Design

Most of the data referenced in this CHA were collected as part of the comprehensive King County 2015 CHNA referenced above, or more recent data were obtained using the same methods. In crafting their approach to the CHNA, HHC members defined health broadly and used a population-based community health framework to identify health needs and establish criteria for selecting key indicators within each health topic. To identify community concerns and assets, for both the King County CHNA and this Pediatric Community Health Assessment, we interviewed stakeholders, consulted recent community-based reports, and pulled information from previous hospital CHNAs.

The King County and this Pediatric Community Health assessment uses a data collection approach that includes primary data, such as key informant interviews, community listening sessions or focus groups, and a community assets assessment. Secondary data gathering includes epidemiologic data on health outcomes as well as demographic, behavioral and environmental data.

Recognizing that the jointly authored 2015 CHNA and this 2016 Pediatric Community Health Assessment is not intended to provide comprehensive data for each health topic, indicators of relevant health outcomes were selected according to the following criteria:

1. Ability to address health equity, particularly by age, gender, race/ethnicity, geography and socioeconomic status, although not all demographic breakdowns may be available for all indicators.
2. Availability of high-quality data that are population-based (where possible), measurable, accurate, reliable and regularly updated. Data should focus on rates rather than counts.
3. Ability to make valid comparisons to a baseline or benchmark.
4. Prevention orientation with clear sense of direction for action by hospitals for individual, community, system, health service or policy interventions that will lead to community health improvement.
5. Ability to measure progress of a condition or process that can be improved by intervention, policy or system change, and whether a capacity to affect change exists.
6. Alignment with local and national healthcare reform efforts, including the Triple Aim.

Indicators that satisfied these criteria were statistically analyzed by Public Health — Seattle & King County for both reports.

Data Sources

Data were compiled from local, state and national sources, such as the U.S. Census Bureau, U.S. Centers for Disease Control and Prevention, Washington State Department of Health and Public Health – Seattle and King County. Input was also gathered from people representing the broad interests of the communities we serve through different methods including: interviews with stakeholder coalitions; interviews with community leaders; listening groups with youth, parents and caregivers, and experts in specific topics; an online survey; and a review of recent reports on local health needs.

The following interview questions were used for the in-person interviews and online survey:

1. What are the main concerns you [or your organization] have about the health and well-being of youth in your community/communities?
2. What are the people, places and things that make your community healthy, safe and strong, and 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 that are happening or planned are most relevant to the identified needs?

4. How can Seattle Children’s 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?

Limitations

Key limitations of this report include incomplete or inadequate quantitative data on some topics of interest and our inability to summarize every asset and opportunity in the communities we serve. For example, although we report data on fruit/vegetable consumption, comprehensive population-based data on healthy eating are simply not available. In addition, resource limitations prevent us from mentioning all of the valuable organizations and assets in our communities.

CHNA and CHA data were collected from agencies that use varying data sets. A particular challenge was inconsistent age groupings in epidemiological and outcome data. Data were also inconsistent in defining life-stage categories, such as when a child is considered an adult. Also, inconsistencies in terminology and definitions made it difficult to make side-by-side comparisons. For example, the definition of “Hispanic” varies from one community to another. The definition of “community” also varies. Individuals participating in a CHNA and CHA likely define their community differently; a community can be a geographic area, a racial group, a school or a religious affiliation. This poses problems when analyzing interview and survey results.

We had fewer connections to community leaders in other areas of Washington state, so most of our respondents were from King County. While we gathered a great deal of community input from a wide range of stakeholders, limited resources made it impossible to reach all of our constituents. While we were able to conduct listening groups with multiple communities and interview several community members, these qualitative results should be interpreted as the perspective of the people who participated.

Unfortunately, these limitations may inadvertently reinforce health inequalities. We look forward to continuing to learn more about community strengths and resources. More details about the CHA methodology are included in Appendix A.
Definition of Community

Although Seattle Children’s serves the entire WAMI region, for the purposes of this CHA we defined our community as the children and youth in Washington state with a focus on King County. However, in addition, the report provides a general overview of the status of regional healthcare access issues.

The definition of our community is due, in part, to our patients’ origins in 2015/2016: 19% came from Seattle, 34% from other places in King County, 44% from other locations in Washington, 2% from Alaska, Montana and Idaho, and 1% from outside the WAMI region.
What We Heard From the Community – Key Findings

This section reports on common themes and issues that arose in our conversations with community coalitions, community organizations, families, youth, and subject matter experts. Additional community input can be found in individual chapters of this report.

Basic Needs

Residents voiced the importance of meeting basic needs if they are to fulfill the potential for a healthy life. The basic needs most frequently mentioned included affordable housing, transportation, access to care (behavioral health especially), public safety, living wages, and opportunities to access healthy food and be physically active.

Poverty emerged throughout these conversations, most often as a barrier to improved health. Community members identified access to safe and affordable housing as a major concern. Questions raised include: What is being done to improve and preserve existing affordable housing stock and what is being done to encourage new affordable housing? If affordable housing is not preserved, residents may be uprooted from their communities and risk losing long-standing social and emotional connections, as well as ties to important social and cultural institutions.

Accessible and affordable transportation was identified as an essential component of healthy communities. Ample research supports the notion that reliable transportation to job and education centers can make the difference between poverty and economic stability. King County residents, especially in suburban cities, rely on public transportation to not only get to their jobs but also to access healthy food and participate safely in physical activities.

Community members identified the need for more efficient bus services and improved connections to multiple parts of the county. Respondents asked us to use our influence not only to promote and protect good health and prevent ill health, but also to work collaboratively across all sectors to develop systems to address basic needs and reduce health inequities. While these issues may seem beyond the realm of Seattle Children’s mission, they impact families’ ability to reach their healthiest potential.

Cultural Competency

Multiple service providers, community members and strategic plans called out the importance of providing culturally competent and respectful services to all people regardless of their race, income, language, beliefs or the complexity of their situation. Community members expressed the importance of cultural and linguistic competency and that it must be taken into account when designing new interventions, practices and services. Community members expressed concerns about systemic or institutional racism impacting their families health and well being. Seattle Children’s has many opportunities to partner with organizations that can help us offer culturally specific services.

A shortage of bilingual and bicultural behavioral health service providers in King County and Washington state emerged as a significant workforce capacity issue. This issue has been acknowledged by policy-makers at various levels. The Governor’s Interagency Council on Health Disparities in Washington state has called for increased attention to cultural competency and diversity in the healthcare
workforce. A new guide released by the Equity of Care initiative called “Becoming a Culturally Competent Health Care Organization,” outlines steps and educational techniques. Additional guidance on providing culturally and linguistically appropriate services is available from the federal Office of Minority Health.

### Community Input and Inclusiveness

Stakeholders wanted assurance that traditionally unrepresented and under-represented communities will be at the table during community health assessments and improvement processes. Community engagement and empowerment is considered essential to improving the health and wellness of the communities we serve.

Community representatives view hospitals as “major forces in the community” and would like them to welcome community members as full partners in making decisions to improve community conditions. Many expressed a desire for an ongoing, two-way conversation with hospitals instead of one-time meetings. Many believe that ongoing communication between hospitals and community groups will yield more relevant information about community needs than fixed-interval, formal assessments. Several different approaches to dialogue were suggested, for example having hospital staff attend community-based coalition meetings on a regular basis. Another suggestion was for hospitals to partner with existing community organizations to offer programs jointly. An important take-home message was, “Don’t recreate what already exists, but collaborate.”

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in Washington state (15% in King County) live in poverty, meaning a family of four earns $24,000 or less a year in net income, while 7% in Washington (5% in King County) live in extreme poverty, which is less than $12,000 in net income for a family of four.

Almost half of all Washington residents on Medicaid are children or teens.

King County is the 13th most populated county in the United States. With an estimated population of 2.1 million people in 2015, King County is home to one-third of Washington state’s population and is growing. Children and teens represent 21% of the King County population.

In King County, 15% of children live in poverty and 5% in extreme poverty. King County includes Seattle and 38 other cities, plus unincorporated and rural areas. The county is also home to 19 school districts and 12 hospitals and health systems. The South Region has an estimated 704,000 residents, which is larger than Seattle’s 617,000 residents. The East

Community Social and Economic Context

Child and teen health are influenced by a variety of environmental and social factors. Social risk factors, such as poverty, a lack of health insurance coverage and racial/ethnic minority status, are associated with poorer health outcomes for children. In this section we present quantitative data on a variety of demographic characteristics than are considered social determinants of health. (See Figures 1 and 2 on page 5)

Overview of Washington State and King County

Of the more than 7 million residents of Washington state, nearly 27% are under 20 years old. Washington state data also shows 13% of the population as foreign-born, with 18% speaking a language other than English at home. Of the 1.6 million children under 18 years old in Washington state, 21% of them are of Hispanic or Latino origin. Also, 18% of children in Washington state (15% in King County) live in poverty, meaning a family of four earns $24,000 or less a year in net income, while 7% in Washington (5% in King County) live in extreme poverty, which is less than $12,000 in net income for a family of four. Almost half of all Washington residents on Medicaid are children or teens.

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9 Ibid.
10 Ibid.

• Partnerships, coalitions and collaborations: Across the board, whether the focus was mental health, violence and injury prevention, healthy eating and active living, or infant mortality, existing partnerships and coalitions were identified as key assets that are essential for success in improving the health and well being of King County communities. At the same time, many respondents believed coordination among community-based organizations could be improved. They stressed the need for increased collaboration between community-based organizations, governmental agencies, advocacy organizations, hospitals and health systems, and the private sector.

• Faith-based institutions and committees, like the Eastside Interfaith Social Concerns Council, were recognized for their tireless efforts to address homelessness, food insecurity, and other basic needs.

• Community health centers, particularly clinics that specialize in providing culturally sensitive and appropriate care, were respected for their outreach to and care for hard-to-reach, underserved, and marginalized communities.

• Food banks and other food-related programs, such as Fresh Bucks, were recognized as valued resources for families struggling with food insecurity, which is a key health concern.
Region has a population of about 514,000, and the North Region is home to about 122,000 people. More detailed demographic information about King County and the four regions is located in Appendix C.

Approximately 170 languages are spoken in King County, and one out of every four King County residents speaks a language other than English at home — more than twice the rate 20 years ago. Students at area school districts speak dozens of different languages. The Tukwila School District, for example, has been dubbed “the most diverse school district in the nation.” In King County, Spanish is the most frequently spoken language other than English. Vietnamese, Russian, Chinese, Korean, Tagalog and African languages (primarily Somali) are also common.

King County Demographics

As the population of King County grows, there have been demographic shifts, including an increase in diversity. Successive waves of immigrants and refugees from Asia, the Horn of Africa (Somalia, Djibouti, Eritrea and Ethiopia), Mexico, Central America and the former Soviet Union now make King County and Washington state their home. Many refugees arrive with complex needs. As they integrate into society, these new residents can face enormous challenges, including language barriers, isolation, past trauma, poverty, and disability. They also come with many strengths, including resilience and adaptability.

In King County, more than one out of every three residents — and almost half of children — is a person of color, and the diversification trend is expected to continue. The county’s fast-growing southern suburbs include several cities and school districts where people of color make up more than half the population. South King County has some of the largest health inequities of anywhere in the United States.

Poverty Improves

There have been recent improvements in poverty levels in Washington state. The number of children living in poverty had increased


16 King County (s.f.) Retrieved from http://www.kingcounty.gov/~/media/operations/policies/documents/inf142aeo_appxc.ashx?id=em.

17 US Census Bureau, Census 1980; WA Office of Financial Management 2015. Percentages may not add up to 100% due to rounding.
steadily since 2008 from 14.3% to 18.6% in 2013. In 2014, we saw our first drop in the number of children living in poverty to 17.5%.

The 2016 Federal Poverty Level (FPL) threshold for a family of four is $24,300 (100% FPL). Nearly one out of every five residents in King County — more than 500,000 adults and children — now live in or near poverty, which is defined as below 200% of the federal poverty level. In King County, the percentage of children under age 18 who live in poverty grew from 14.5% in 2011 to 15.7% in 2013, and dropped to 13.6% in 2014.

Although the trend is improving, many families still live in economic hardship, which has negative effects on children. Children who experience economic instability at home have a harder time concentrating at school. This can undermine children’s progress in the earliest stages of education.


19 Seattle Children’s with 2013 5-year ACS data. (2015). Children Living in Poverty: Washington. This graph was created by Dr. John Mosser in r-studio using 2013 5-year ACS data, and represents the location of children living in poverty in Washington (absolute numbers). Each point represents a zip code, and the # of children living in poverty is concordant with the size of the circle.

stages of their education by impeding their cognitive, social, and emotional development.\textsuperscript{21} Additionally, stressful events experienced in childhood, known as adverse childhood experiences (ACES), including sustained economic hardship, are linked to poor health later in life, such as obesity, alcoholism, and depression.\textsuperscript{22}

Stress experienced by parents living in poverty can also negatively impact engagement and bonding with their children, which affects children’s healthy growth and development. Therefore, creating environments for kids to thrive requires policies that improve the economic well-being of parents and children.\textsuperscript{23}

As poverty shifts from inner-city Seattle to the margins of Seattle and the suburban areas in the south, the prevalence of chronic diseases and associated risk factors are also seen increasing in those areas, mirroring what is happening across the nation.\textsuperscript{24} For poverty in particular, looking at King County as a whole masks huge disparities. One indicator of poverty is the eligibility for the free or reduced-price meal program in schools. The eligibility rates of the program varied widely during the 2014 to 2015 school year, from 4\% of students in Mercer Island to 78\% in Tukwila. All districts with 50\% or more students in the free or reduced-price meal programs were located in South King County.\textsuperscript{25}

### Housing Affordability

As housing rental and purchase prices increase, families have less to spend on other necessities. In analyzing housing affordability, experts rely on the rule of thumb that renters should spend no more than 30\% of their before-tax income on rent and utilities.\textsuperscript{26} In Washington state, the median gross rent as a percentage of household income is 30.6\%.\textsuperscript{27} In King County, almost half of renters and 40\% of owners with a mortgage are paying more than the affordability threshold of 30\% of their household income on housing.\textsuperscript{28}

Since 2008, the number of homeless children is up by nearly 15,000 and is particularly high for children of color.\textsuperscript{29} During the 2014 to 2015 school year, there were 35,511 homeless students in Washington state.\textsuperscript{30} In King County in 2016, 824 youth between the ages of 12 to 25 were homeless or unstably housed. Of these, 13\% were under the age of 18, and 38\% were enrolled in school.\textsuperscript{31} Also in King County, 778 families with children slept in emergency shelters and 2,148 lived in temporary transitional housing in 2016.\textsuperscript{32}

![Figure 9: Housing Status of Homeless Youth in King County, 2015](image)

\textsuperscript{21} Ibid.  
\textsuperscript{23} Ibid.  

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\textsuperscript{26} Rolf, P. (2012, March 5). Rental affordability: Multiple measures for a complex concept.  
\textsuperscript{30} Ibid.  
\textsuperscript{32} Seattle/King County Coalition on Homelessness. One Night Count. (2016).  
Stark Disparities by Place, Race and Income

Healthy People 2020 defines “health disparity” as “a particular type of health difference that is closely linked with social, economic and/or environmental disadvantage. Health disparities adversely affect groups of people who have systematically experienced greater obstacles to health based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion.”

Healthy People 2020 defines “health equity” as the “attainment of the highest level of health for all people. Achieving health equity requires valuing everyone equally and will require focused and ongoing efforts to address avoidable inequalities, and historical and contemporary injustices to end health and healthcare disparities.” Equity does not mean equal treatment: some populations may need more or different services to achieve health equity.

Health disparities are evident in Washington state based on data from adult populations. Though Washington state has some of the lowest death rates due to pneumonia, heart disease, colorectal cancer and influenza compared to other U.S. states, these low rates are not consistent across all of the state’s communities. Among all ages, Washington state has some of the lowest smoking and physical inactivity rates compared to other states, but smoking rates are higher among the American Indian/Alaska Native population and rates of physical inactivity are much higher for people who are Black or of African heritage, American Indian/Alaska Native, and Hispanic populations. In terms of health insurance coverage and dental visits, Washington state ranks in the middle range of states, but in the low range of states related to routine check-ups and cholesterol screenings.
Overall, King County has a strong economy and ranks among the top counties in the nation on indicators of health and well-being. As with poverty, however, these averages mask stark differences by place, race and income. People of color, people living in poverty and those living in communities with few opportunities also experience the health-related impacts of inequity. Any efforts to improve the health of the community and to successfully achieve the Triple Aim of better health, better care and lower healthcare costs will require strategies that acknowledge and tackle these disparities.

Partly due to high levels of immigration, King County is home to some of the most diverse communities in the United States. The unique cultural strengths and assets of these communities benefit the entire region. We also benefit from strong institutional assets, including faith communities, governments, hospitals and health systems, universities, philanthropic organizations, and non-profits. In addition, many small programs help our communities thrive, and individuals come together to create support networks for friends, family and neighbors.

### Figure 12: King County Health Disparities Profile, All Ages, 2014

<table>
<thead>
<tr>
<th>Population (2014) (all ages)</th>
<th>Non-Hispanic White</th>
<th>Non-Hispanic Black</th>
<th>Hispanic</th>
<th>American Indian/Alaskan Native</th>
<th>Asian/Pacific Islander</th>
<th>State Total</th>
<th>Healthy People 2020 National Target</th>
<th>State Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>73.5</td>
<td>4.4</td>
<td>11.7</td>
<td>2.2</td>
<td>9.2</td>
<td>7,061,530</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Major causes of death (rate per 100,000)**

<table>
<thead>
<tr>
<th>Cause</th>
<th>Rate per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>All cause</td>
<td>703.2</td>
</tr>
<tr>
<td>Heart disease</td>
<td>144.1</td>
</tr>
<tr>
<td>Coronary heart disease</td>
<td>90.9</td>
</tr>
<tr>
<td>Total cancer</td>
<td>166.1</td>
</tr>
<tr>
<td>Colorectal cancer</td>
<td>13.7</td>
</tr>
<tr>
<td>Lung cancer</td>
<td>44.1</td>
</tr>
<tr>
<td>Stroke</td>
<td>34.4</td>
</tr>
<tr>
<td>Chronic obstructive pulmonary disease</td>
<td>121.6</td>
</tr>
<tr>
<td>Diabetes-related</td>
<td>74.8</td>
</tr>
<tr>
<td>Influenza and pneumonia</td>
<td>9.7</td>
</tr>
<tr>
<td>Unintentional injuries</td>
<td>40.7</td>
</tr>
<tr>
<td>Suicide</td>
<td>16.5</td>
</tr>
</tbody>
</table>

**Health risk factors (percent)**

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnosed high blood pressure</td>
<td>29.9</td>
</tr>
<tr>
<td>Obesity (age 20 &amp; over)</td>
<td>27.9</td>
</tr>
<tr>
<td>No leisure-time physical activity</td>
<td>15.9</td>
</tr>
<tr>
<td>Smoking currently</td>
<td>24.7</td>
</tr>
<tr>
<td>Eats 5+ fruits and vegetables a day</td>
<td>29.9</td>
</tr>
</tbody>
</table>

**Preventive care (percent)**

<table>
<thead>
<tr>
<th>Preventive Care</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cholesterol screening in past 5 yrs. (2013)</td>
<td>73.6</td>
</tr>
<tr>
<td>Routine check-up in past 2 yrs. (2014)</td>
<td>78.7</td>
</tr>
<tr>
<td>Dental visit within the past year (2014)</td>
<td>69.7</td>
</tr>
</tbody>
</table>

**Health insurance coverage (percent)**

<table>
<thead>
<tr>
<th>Health insurance coverage (ages 18–64)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health insurance coverage (2014)</td>
<td>90.9</td>
</tr>
</tbody>
</table>

**Health status and well-being indicators**

- **Smoking**: 15.9%
- **Obesity**: 27.9%
- **Physical activity**: 15.9%
- **Cholesterol screening**: 73.6%
- **Dental visit**: 69.7%
- **Health insurance coverage**: 90.9%

---

However, not all people in the county experience the same benefits of our strong and healthy county. Across the region, communities differ in their assets and their opportunities for improvement. Displaying data by census tract helps identify neighborhoods with the greatest opportunities for improving health. The map shows that areas in the southern part of the county and South Seattle, along with pockets in the East and North regions, generally fare worse than other areas.

For example, the average life expectancy for King County residents is 82 years, three years longer than the national average of 79 years. However, life expectancy within King County varies by almost 10 years — from 77 years in South Auburn to 86 years in West Bellevue. Many other health and social indicators — such as housing quality, alcohol-related deaths, obesity, lack of health insurance and smoking — show similar patterns of inequity.

**Figure 13: King County Population Measures**

Employment and Income

In 2015, 5.7% of Washingtonians were unemployed. The average unemployment rate for King County was 4.4% in 2015. Across the state, 67,000 children live in homes with no working adults. The median income for Washington families with children was $69,300 in 2014. While the median income is slightly higher in King County, there are disparities by place and race, with those in South King County and of Hispanic/Latino ethnicity earning the least.

**Figure 14: Percent of Washington State Children Living in Low-Income Households without a Working Adult, 2010-2014**

**Figure 15: Median Income by Race/Ethnicity in King County, 2009-2013**

43 Ibid.
44 Ibid.
High school graduation (or equivalency) is a necessary step in the transition to college. Washington ranks 36th in the nation in public school graduation rates and 46th in the number of high school graduates attending college directly from high school. The on-time high school graduation rate in the 2015-16 school year was 73% for all students in Washington state and 80% in King County. Out of 100 high school graduates (from either public or private high schools) in Washington state, 48 enroll in college directly from high school.\textsuperscript{50}

<table>
<thead>
<tr>
<th>Region</th>
<th>Median Income in Dollars</th>
<th>90% Margin of Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>King County</td>
<td>$73,035</td>
<td>+/-697</td>
</tr>
<tr>
<td>Seattle</td>
<td>$67,365</td>
<td>+/-1,101</td>
</tr>
<tr>
<td>Auburn</td>
<td>$57,635</td>
<td>+/-2,066</td>
</tr>
<tr>
<td>Burien</td>
<td>$52,140</td>
<td>+/-2,586</td>
</tr>
<tr>
<td>Des Moines</td>
<td>$58,308</td>
<td>+/-3,420</td>
</tr>
<tr>
<td>Federal Way</td>
<td>$54,186</td>
<td>+/-2,378</td>
</tr>
<tr>
<td>Kent</td>
<td>$57,490</td>
<td>+/-2,551</td>
</tr>
<tr>
<td>Renton</td>
<td>$62,949</td>
<td>+/-2,763</td>
</tr>
<tr>
<td>SeaTac</td>
<td>$46,595</td>
<td>+/-4,153</td>
</tr>
</tbody>
</table>

Table 1. Median Household Income in King County Region, 2010-2014

Education and Early Childhood Development

Childhood health is influenced by social factors, including the education level attained by parents and the quality of educational experiences children have themselves.

In Washington state, the federally-funded Head Start program is available to meet the early childhood education needs of low-income children, 12,423 of whom were enrolled in 2014.\textsuperscript{47} In King County in 2014, 25% children were eligible for Head Start or the Early Childhood Education and Assistance Program (ECEAP). The rate varied by school district from 48% in Vashon Island and 38% in Seattle to 15% in Federal Way, 12% in Renton, 11% in Tahoma, and 7% in Issaquah.\textsuperscript{48} However, thousands of children who are eligible for the program do not get in due to limited availability.\textsuperscript{49}

Graduation rates are lower for students with limited English proficiency (53.8%), students with disabilities (55.8%), and low-income students (66.8%) in Washington state.\textsuperscript{51} Since 2005, graduation rates have increased across


\textsuperscript{49} Ibid.


all ethnicities in Washington state and King County, yet American Indian/Alaska Native, black and Hispanic youth still have lower graduation rates than their Asian and white counterparts. During the 2015 school year, on-time graduation rates varied by school district, with lowest rates in Tukwila (70%, up from 57.3% in the 2012-2013 school year) and Highline (70.3%), which are both in South King County, and the highest rates in Mercer Island (93.9%) and Vashon Island (93.2%).

Foster Care

Foster placement services are provided when children need short-term or temporary protection because they are abused, neglected or involved in family conflict. Of the approximately 1.6 million children who lived in Washington in 2014, 8,942 were in foster care in 2013 (1,275 from King County), 1,359 were adopted from foster care, and about 41,000 were being raised by their grandparents. The greatest number of foster children in Washington live in King, Spokane, Pierce and Clark counties. More than half of children in foster care (51.4%) turn 18 years old without a permanent home.

LGBTQ Youth

It is difficult to accurately estimate the number of lesbian, gay, bisexual, transgender or questioning (LGBTQ) youth because most national, state and local surveys do not collect information on sexual orientation. Adding to the complexity of gathering such data is the lack of standardized measures to assess sexual orientation, societal stigmatization, and the fact that many adolescents are unsure of their sexual orientation.

Adolescents face many challenges during their transition into adulthood. LGBTQ youth face additional challenges due to social stigma, which causes varying degrees of psychosocial stress. LGBTQ youth are:

- Two to three times more likely to attempt suicide.
  - In one statewide representative survey of high school students, more than 30% of LGBTQ youth had attempted suicide within the past year, and 50% had considered suicide.
  - LGBTQ youth who are bullied or rejected by their families after coming out are at even greater risk.
  - Protective factors for LGBTQ youth include family connectedness, caring adults, and school safety.
- Significantly more likely to be homeless (20% to 40% of homeless youth identify as LGBTQ).
- More likely to skip school, drop out of school and get poor grades.
- Have increased rates of sexual intercourse, and use of alcohol, tobacco and illicit drugs.
- Report higher rates of verbal, physical and sexual harassment and violence.

Rural Washington

People living in rural areas experience distinct benefits and challenges to health from those living in urban areas. Across the U.S., many living in rural areas share similar advantages such as dense social networks, shared life 21
experiences, high quality of life and reciprocity among community members. On the other hand, less availability of sidewalks, streetlights and access to facilities contribute to the higher proportion of sedentary time experienced by rural residents. These residents often have less access to healthy foods and exercise opportunities than their urban counterparts. Even for rural residents living closer to farming areas, some live in food deserts, which is defined as an area where the population is mostly low-income and lives 10 miles or more from a large supermarket. In rural areas, there may not be enough residents to support a grocery store that carries healthy food options at affordable costs. Additionally, across the U.S., food insecurity is higher in rural areas than in urban areas.

Such conditions contribute to the health disparities experienced by rural families. Children living in rural areas are at an increased risk of poverty, more likely to be overweight or obese, and have lower access to healthcare. The scarcity of primary care physicians in rural areas coupled with the long distances needed to travel to receive healthcare pose additional challenges for rural families. There is often a lack of adequate transportation, which limits the accessibility of obstetric, mental health, dental health, and substance abuse services.

Approximately 10% of Washington state’s 7 million residents live in rural areas. Across numerous social determinants of health, residents in rural Washington face greater disparities than their urban counterparts. In 2015, the unemployment rate in rural Washington was 7.1% compared to 5.5% in urban Washington. Based on 2010-2014 American Community Survey data, of those 25 and older, 12.2% of rural Washington residents did not complete high school compared to 9.5% in urban Washington. In the same period, only 23% of rural residents completed college compared to 33.4% of urban residents. The 2010-2014 poverty rate was also higher in rural Washington (17.8%) than in urban Washington (13.1%).

Figure 17: Urbanicity of Washington State According to the U.S. Census

Source: University of Washington Rural Health Research Center

Ibid.

Ibid.

Ibid.

Ibid.

Ibid.

Ibid.

Ibid.
Seattle Children’s Patient Demographics

In 2015-2016, Seattle Children’s recorded 405,817 patient visits. This included 332,286 outpatient visits, 42,414 Emergency Department visits, and 15,947 hospital admissions. The hospital reported a total of 87,750 inpatient days, with an average length of stay of 5.08 days per patient. The top reason for inpatient admissions in 2015 was asthma at 715 visits, and the top outpatient service by volume was psychiatry with 45,019 visits.

The ethnic/racial diversity of our patients reflects the diversity of our region. At Seattle Children’s, 52% of the children we serve are non-white or Latino. One in eight of our families prefer to communicate about their healthcare in a language other than English, and 13% of patient-families at Children’s have limited English proficiency.

Life Expectancy and Leading Causes of Death and Hospitalization

Life expectancy and leading causes of death and hospitalization are broad foundational health measures often used by local, state and federal public health agencies to monitor progress in promoting well-being, preventing disease and disability, and reducing health disparities.

Life expectancy is defined as the number of years a newborn can expect to live if current death rates remain the same during their lifetime. While King County’s life expectancy exceeds the national average, the county average masks broad disparities by place and race/ethnicity.

Life Expectancy

In 2016, the average life expectancy for newborns in Washington state was 82.6 years. In 2009-2016, the average life expectancy for King County newborns was 81.8 years.

Residents of the South Auburn neighborhood are expected to live an average of 10 fewer years than those in the West Bellevue neighborhood.

Leading Causes of Death

In 2014, the top three leading causes of death in Washington state for children and youth ages 1 to 24 were unintentional injuries, cancer and suicide. From 2009 to 2013, motor vehicle crashes, drowning and poisoning were ranked in the top three leading causes of injury deaths for most age groups under age 24.

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### Table 2. 10 Leading causes of death in Washington state by youth age, 2013

<table>
<thead>
<tr>
<th>Rank</th>
<th>Age Group</th>
<th>Rank</th>
<th>Age Group</th>
<th>Rank</th>
<th>Age Group</th>
<th>Rank</th>
<th>Age Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&lt;1</td>
<td>1</td>
<td>&lt;1</td>
<td>1</td>
<td>&lt;1</td>
<td>1</td>
<td>&lt;1</td>
</tr>
<tr>
<td></td>
<td>Congenital Anomalies</td>
<td></td>
<td>Unintentional Injury</td>
<td></td>
<td>Unintentional Injury</td>
<td></td>
<td>Malignant Neoplasms</td>
</tr>
<tr>
<td>94</td>
<td></td>
<td>20</td>
<td></td>
<td>14</td>
<td></td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Short Gestation</td>
<td>53</td>
<td>Congenital Anomalies</td>
<td>11</td>
<td>Malignant Neoplasms</td>
<td>---</td>
<td>Suicide</td>
</tr>
<tr>
<td>3</td>
<td>SIDS</td>
<td>47</td>
<td>Malignant Neoplasms</td>
<td>---</td>
<td>Congenital Anomalies</td>
<td>---</td>
<td>Unintentional Injury</td>
</tr>
<tr>
<td>4</td>
<td>Maternal Pregnancy Comp.</td>
<td>30</td>
<td>Homicide</td>
<td>---</td>
<td>Perinatal Period</td>
<td>---</td>
<td>Congenital Anomalies</td>
</tr>
<tr>
<td>5</td>
<td>Placenta Cord Membranes</td>
<td>23</td>
<td>Influenza &amp; Pneumonia</td>
<td>---</td>
<td>Anemias</td>
<td>---</td>
<td>Cerebrovascular</td>
</tr>
<tr>
<td>6</td>
<td>Unintentional Injury</td>
<td>20</td>
<td>Perinatal Period</td>
<td>---</td>
<td>Chronic Lower Respiratory Disease</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>7</td>
<td>Necrotizing Enterocolitis</td>
<td>---</td>
<td>Heart Disease</td>
<td>---</td>
<td>Meningitis</td>
<td>---</td>
<td>Cerebrovascular</td>
</tr>
<tr>
<td>8</td>
<td>Respiratory Distress</td>
<td>---</td>
<td>Acute Bronchitis</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>Congenital Anomalies</td>
</tr>
<tr>
<td>9</td>
<td>Intrauterine</td>
<td>---</td>
<td>Chronic Lower Respiratory Disease</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>Influenza</td>
</tr>
<tr>
<td>10</td>
<td>Atelectasis &amp; Circulatory System Disease (tie)</td>
<td>---</td>
<td>Diseases of Appendix</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>Pneumonitis</td>
</tr>
</tbody>
</table>

Note: counts less than 10 are suppressed as --- to prevent identification of individual cases.

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Community Health Assessment 2016
Leading Causes of Hospitalization

Hospitalization data offer another perspective on the health of residents. Here are a few takeaways in King County:

- For infants under age 1, newborn delivery (referring to the routine hospitalization of a newborn infant after birth), respiratory infections, jaundice and congenital anomalies were the leading causes of hospitalizations from 2010 to 2014.
- For children ages 1 to 14 over that same time period, the leading causes of hospitalization were asthma, respiratory infections, unintentional injuries and lower gastrointestinal disorders. Major sub-causes of unintentional injuries include falls, burns, motor vehicle crashes and poisoning.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Infants (&lt;1 year)</th>
<th>Age 1-14</th>
<th>Age 15-24</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rate (per 100,000)</td>
<td>Count (per year)</td>
<td>Rate (per 100,000)</td>
</tr>
<tr>
<td>1</td>
<td>Newborn delivery</td>
<td>97142.8</td>
<td>24137</td>
</tr>
<tr>
<td>2</td>
<td>Respiratory infections</td>
<td>1514.8</td>
<td>376</td>
</tr>
<tr>
<td>3</td>
<td>Jaundice</td>
<td>1332.1</td>
<td>331</td>
</tr>
<tr>
<td>4</td>
<td>Congenital anomalies</td>
<td>982.8</td>
<td>244</td>
</tr>
<tr>
<td>5</td>
<td>Urinary tract infections</td>
<td>317.1</td>
<td>79</td>
</tr>
<tr>
<td>6</td>
<td>Unintentional injuries</td>
<td>257.6</td>
<td>64</td>
</tr>
<tr>
<td>7</td>
<td>Infectious and parasitic diseases</td>
<td>182.7</td>
<td>45</td>
</tr>
<tr>
<td>8</td>
<td>Short gestation &amp; low birth weight</td>
<td>165.8</td>
<td>41</td>
</tr>
<tr>
<td>9</td>
<td>Upper gastrointestinal disorders</td>
<td>137.6</td>
<td>34</td>
</tr>
<tr>
<td>10</td>
<td>Fever of unknown origin</td>
<td>124.0</td>
<td>31</td>
</tr>
</tbody>
</table>


Table 3. Leading Causes of Hospitalization by Age, King County, 2010-14 average.

77 Public Health-Seattle & King County. (2016). Leading causes of hospitalization by age, King County, 2010-2014 average. 78 Ibid.
• Also from 2010 to 2014, pregnancy/childbirth complications, mental illness, unintentional injuries and lower gastrointestinal disorders topped the list of the leading causes of hospitalization for teens and young adults ages 15 to 24. Major pregnancy and childbirth complications include prolonged pregnancy, high blood pressure, and conditions like preeclampsia or eclampsia. Major sub-causes of mental illness include bi-polar disorder, depression, schizophrenia, and alcohol and substance-related disorders. Major sub-causes of injury include motor vehicle crashed, suicide, homicide and poisoning.

At Seattle Children’s, the top reason for emergency department and urgent care visits in 2015-16 was respiratory problems, followed by diarrhea/vomiting/dehydration and fever/infection.

Children and Youth with Special Health Care Needs and Chronic Conditions

Children with special healthcare needs are infants, children and youth up to age 18 years who are defined as having or are at risk for chronic physical, developmental, behavioral, or emotional conditions. They require health and related services of a type or amount beyond what is generally needed. Chronic illnesses (e.g. asthma, diabetes, cancer, heart disease) are among the leading causes of death, disability and hospitalization in King County, Washington state, and the United States. They are generally characterized by multiple risk factors, a long period of development, prolonged course of illness, and increased incidence with age. We use two phrases interchangeably to describe children with complex chronic conditions: children and youth with chronic conditions and children with special health care needs (CSHCN).

Overview of Children and Youth with Special Health Care Needs/Chronic Conditions

In the U.S. and Washington state, about 20% and 18% of children have special healthcare needs, respectively. In Washington, 27.6% of these children have health conditions that greatly affect their daily activities, and 6.3% experienced a period of time without insurance at some point during the past year. Of CSHCN families in Washington, 25.5% pay $1,000 or more in medical expenses per year, and 24.5% report one or more unmet needs for specific healthcare services. Additionally, 9.4% of caregivers spend 11 or more hours per week providing and/or coordinating healthcare for their child.

Care Coordination

Care coordination, also known as care or case management, “is the set of activities which occurs in the space between visits, providers, and hospital stays.” It has been identified as
a key issue and high priority for Medicaid and the pediatric and adolescent population. Care coordination within healthcare systems involves deliberately organizing patient care activities and sharing information among all participants concerned with a patient’s care to achieve safer and more effective care.

For CSHCN and their families, care coordination can be critical for linking them to needed medical and non-medical services, and for providing logistical assistance and emotional support. These children, their families, and their providers face myriad challenges including coverage of specialty items, access to pediatric specialists, and navigating the various health and non-health systems. This can be very time consuming and frustrating. As a result, CSHCN receive fragmented or duplicative services and typically have many more unmet medical needs than other children. Research has demonstrated that care coordination decreases unmet specialty care needs among CSHCN and that the effect of care coordination is greater among low-income families.

For parents of CSHCN, it is often overwhelming to manage their children’s entire universe of care, from traveling to appointments with multiple providers, to administering treatments and medicine, to managing educational needs and making sense of insurance coverage. This is even more challenging among non-English speaking families.

Therefore, care coordination is seen as essential to ensuring children and families get the right care, at the right time, in the right setting, which is the basis for achieving the Triple Aim. In a 2012 survey, families with CSHCN identified care coordination as their top priority. At its best, care coordination should be a covered service that addresses the interrelated medical, social, developmental, behavioral, educational, and financial needs of children and their families.

Currently, there is great confusion over who is responsible for providing care coordination services, who should pay, and how to get reimbursed for such services. In Washington state, there is a Medicaid investment in care coordination. Through the Department of Social and Health Services (DSHS), there are home- and community-based case management services that provide some level of care coordination, and there are expectations of Medicaid managed care plans that care coordination is provided for CSHCN.

Nevertheless, in Washington state, 47.1% of CSHCN reported that they received effective care coordination compared to 75.2% of non-CSHCN children. Moreover, care coordination is often fragmented and limited, with minimal linkages across systems (e.g., social services and the medical home; home and community case management and hospitals). For families, the vast majority of care coordination is provided telephonically with no connection to a trusted person in the community or from the health care setting.

Another potential community resource are locally based CSHCN coordinators, who ensure that a child’s and family’s needs and preferences are known ahead of time and communicated at the right time to the right people, and that this information is used to provide safe, appropriate, and effective care to the patient. Although they are not placed in a practitioner’s office, they are uniquely qualified to provide care coordination. Historically, this service has been largely provided by the local health jurisdictions (LHJs) or other local organizations. With budget cuts and changes in the public health delivery system, access to a CSHCN coordinator is limited.


Adolescent Transition

Medicaid and Children’s Health Insurance Program (CHIP) serve a disproportionately large and ever-increasing number of children with special health care needs (CSHCN), who will likely remain publicly insured when they become young adults. These CSHCN, along with their healthier peers, will need to transition from pediatric to adult healthcare. Of youth ages 12 to 17 with special needs, only half received services needed for transition to adult life, adult healthcare, work, and independence. This lack of transition support is disproportionately experienced by publicly insured CSHCN, 75% of whom are not receiving needed transition support, a rate almost 50% higher than among privately-insured CSHCN.99

In 2013, Medicaid and CHIP covered 7.8 million adolescents ages 12 to 17,90 and 38.4%91 or 3 million of these have a special health care need. Over time, the proportion of CSHCN who are publicly insured has increased dramatically—from 25.8% in 2005/200692 to 38.4% in 2011/2012.93 Medicaid covers an additional 4.8 million young adults, ages 18 to 25.94 Prevalence estimates of chronic conditions for this age group are unavailable. The population of CSHCN is approximately 60,000 for 14 to 17 year olds and about 84,000 for 18 to 25 year olds.95 This assumes that 38% of Medicaid clients have a special healthcare need. Certain youth and young adults covered by Medicaid are particularly vulnerable during the transition period from early adolescence into young adulthood, including the 1.2 million SSI recipients between the ages of 13 and 25.96

The benefits for adolescent transition are documented with many cited on the Got Transition/Center for Health Care Transition Improvement site funded through Maternal and Child Health Bureau and The National Alliance to Advance Adolescent Health. Furthermore, adolescent transition is highlighted in the national “Standards for Systems of Care for Children and Youth with Special Health Care Needs.”97 Since the release in 2011 of the new transition model - the Six Core Elements of Health Care Transition - states are refining and updating their transition objectives and strategies. A total of 32 states, including the District of Columbia, selected transition as a priority for their Title V State Action Plans. Of the states in the WAMI region, only Montana selected transition as a priority for its Action Plan.98 The Washington State Department of Health offers information and resources for families through The Center for Children with Special Needs Website’s Teens and Young Adult section. It includes materials to keep track of medical information, age-specific transition booklets, advocacy tips and resources to help teens plan for the future.

Transition planning between youth, family, and provider has been associated with improvements in satisfaction, continuity of care, and greater adherence to care.99 100 Yet most pediatric providers have no organized clinical process for transition, which should include a description of the practice transition policy and recommended age for transfer.

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90 Special tabulations prepared by the State Health Access Data Assistance Center (SHADAC) from the 2013 American Community Survey.
91 Special tabulations prepared by the Data Resource Center for Child and Adolescent Health from the 2011/12 National Survey of Children’s Health.
93 Special tabulations prepared by the Data Resource Center for Child and Adolescent Health from the 2011/12 National Survey of Children’s Health.
94 Special tabulations prepared by the State Health Access Data Assistance Center (SHADAC) from the 2013 American Community Survey.
95 WA State Health Care Authority-Medicaid Program. Received 01/11/16.
99 McDonagh JE. Transition of care from paediatric to adult rheumatology. Archives of Disease in Childhood. 2007;92 (9):802-807.
In 2002 and again in 2011, the American Academy of Pediatrics (AAP), American Academy of Family Physicians (AAFP), and the American College of Physicians (ACP) published joint clinical reports and consensus statements regarding transition for youth/children with special health care needs (YSHCN/CSHCN), calling for sweeping but simple improvements to a well-recognized issue. In its HealthyPeople 2020 objectives, the US DHHS specifically identified improvements in transition for YSHCN as a public health goal. A recent study also showed racial and socioeconomic disparities in transition services: patients who are white (non-Hispanic ethnicity), have income four times the poverty level, privately-insured, and whose condition has little or no daily impact on activities were more likely to receive transition services. Improving transition represents not only a medical and public health priority, but one issue of equity. Recent studies show that CSHCN continue to experience worse outcomes specifically at the time of transition. As a result, they frequently undergo delayed transitions, staying with their pediatric providers into young adulthood. Ultimately, some of them receive worse care when treated as young adults in pediatric environments. Only 47% of CSHCN in Washington reported receiving effective care coordination during transition.

As stated earlier, in Washington, 14-17% of children aged 0-17 years have special health care needs. Historically, many children would pass away from special health care conditions like cystic fibrosis, blood cancers, congenital heart disease, and premature birth. However, now more than 90% of CHSCN survive past into adulthood. At Seattle Children’s, 70% of our patients are CSHCN, two-thirds of whom are considered complex CSHCN. We have done well to help them survive we are now in a position to help them launch into adulthood as well.

105 (McManus 2013).
Asthma is the leading cause of hospitalization for children ages 1 to 14 in Washington state. In 2014, hospitalization rates for asthma were 123 per 100,000 children in King County compared to 79 per 100,000 children in Washington state. Males, young children, and children who live in high or medium-poverty areas all have higher rates of asthma hospitalization. At Seattle Children’s, asthma was the number one reason for hospital admission in 2015.

Fortunately, national organizations have been beginning to address this problem. One notable organization is GotTransition, a collaboration of the non-profit National Alliance to Advance Adolescent Health and the Department of Health and Human Services Maternal and Child Health Bureau. They outline Six Core Elements of transition, which provide a national standard for the framework of adolescent transition care:

1. **Transition policy**: Develop policy statements, educate staff, share with youth and families
2. **Transition tracking and monitoring**: Identify youth, track progress, and incorporate into electronic medical record
3. **Transition readiness**: Regular readiness assessments, develop shared goals/actions
4. **Transition planning**: Develop provider transfer package, develop youth transfer plans, counsel on “care at 18”, provide linkages
5. **Transfer of care**: Confirm providers, complete transfer packages, first full adult appointment
6. **Transfer completion**: Confirm and elicit feedback, build collaboration.

### Childhood Asthma

In King County, 5% of children from birth to age 17 had asthma in 2016, compared to 6% of children in Washington state and 8.6% of children throughout the United States in 2014. Only one third of Washington youth with asthma report having a written asthma plan to help them control their medications and exposures.

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110 Ibid.

111 Ibid.
Childhood Diabetes

In 2014, 3% of Washington state and King County students in eighth, 10th and 12th grades had doctor-diagnosed diabetes, which includes type 1 and type 2 diabetes. Native Hawaiian/Pacific Islander and black students were almost two times as likely as white students to have been diagnosed with diabetes. In contrast to adult diabetes, children’s diabetes rates declined from 2006 to 2014, for the county as a whole and in Seattle and the southern part of King County.

Cancer

Cancer incidence in children from birth to age 20 in Washington state (2009 to 2013) was 17.6 per 100,000, comparable to the U.S. incidence of 17.4 per 100,000. Skagit and Benton Franklin counties had the highest cancer incidence rates at 21.6 per 100,000 and 20 per 100,000, respectively. King County had a cancer incidence of 18.8 per 100,000 in children birth to age 20. On average, there are 313 cases of childhood cancer per year in the state.

 Teens and young adults with cancer have different needs and treatment challenges than children or older adults. Many teens fall into a gap between cancer treatment programs designed for children and those created for adults, increasing the time it takes for diagnosis and treatment. Teens and young adults are much less likely than children to get the most advanced treatments by taking part in research studies. For certain cancers, teens and young adults have much better results when they are treated at a pediatric hospital.

About 70,000 teens and young adults ages 15-39 are diagnosed with cancer each year in the United States. This accounts for 5% of cancer diagnoses in the country. Cancer is the leading cause of disease-related death for young adults, outpaced only by accidents, suicide and homicide.

Figure 22: Rates of Diabetes Among Subgroups of School-age Children in King County, 2014 Average

Source: Healthy Youth Survey.
Prepared by Public Health – Seattle & King County, APDE, 09/2016
——— Confidence intervals shown range that includes true value 95% of the time.
\* Too few cases to protect confidentiality and/or report reliable rates.
\$ Too few cases to meet precision standard, interpret with caution.
Data by income or poverty level not available.
Children who survive cancer need careful attention for the rest of their lives. Up to two-thirds of childhood cancer survivors have treatment-related side effects months or even years later. These include organ damage, second cancers and problems with mental tasks that can impact school and work performance. Teachers and future employers may not understand the unique needs of childhood cancer survivors, or may have misconceptions about survivors’ abilities. Community physicians may also have limited knowledge of cancer survivors’ needs.

In Washington state, the incidence rate for all cancers among young adults ages 15-39 across all genders and races is 420.3 per 100,000. In comparison, the incidence rate for all cancers across all ages was 450.3 per 100,000 in 2013. In 2015, cancer was the second leading cause of death for children ages 1-14, the fourth cause of death for people ages 15-24 and the third cause for young adults ages 24-35.

**Figure 23: Common Types of Cancer Affecting AYAs**

Children who survive cancer need careful attention for the rest of their lives. Up to two-thirds of childhood cancer survivors have treatment-related side effects months or even years later. These include organ damage, second cancers and problems with mental tasks that can impact school and work performance. Teachers and future employers may not understand the unique needs of childhood cancer survivors, or may have misconceptions about survivors’ abilities. Community physicians may also have limited knowledge of cancer survivors’ needs.

Heart Disease

Congenital heart disease (CHD) is the most common birth defect in the United States. Individuals with this chronic disorder have a high risk of developing additional problems and require lifelong monitoring. The majority of children born with a congenital heart defect survive into adulthood, yet many require specialized and ongoing medical treatment. The cause of most congenital heart diseases is still unknown and can be genetic, but some congenital heart defects can be prevented. Being obese, having diabetes, and smoking during pregnancy increase the chances of having a baby born with a heart defect.

In the United States, about 40,000 infants are born with a heart defect each year. Washington State does not have a comprehensive birth defects registry thus making it difficult to find specific birth defect rate information, the Collaborative on Health and the Environment – Washington (CHE-WA) “estimates that about 800 babies are born with heart defects or congenital heart disease every year in Washington State.”

Transplant

More than 121,000 people in the U.S. are waiting for a life-saving organ transplant. An average of 21 people, children and adults, die each day from the lack of available transplant organs. All patients waiting for a deceased-donor transplant in the U.S. have equal access to donated organs. Potential recipients waiting for a deceased-donor organ are listed with the United Network for Organ Sharing (UNOS). More than 3,400 people in the Northwest (UNOS region 6: Washington, Alaska, Idaho, Montana, Oregon and Hawaii) are currently in need of life-saving organ transplants. UNOS, however, gives special allowances for children in certain circumstances. For example, pediatric liver transplant candidates need smaller organs so they receive priority if the donor is younger than 18.

Table 4. Washington State Cancer Incidence Data 2009-13

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Average Annual Population</th>
<th>Average Annual Observations</th>
<th>Age-Spec. Rate per 100,000</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-19</td>
<td>455682</td>
<td>107</td>
<td>23.4</td>
<td>[21.5, 25.5]</td>
</tr>
<tr>
<td>20-24</td>
<td>467660</td>
<td>215</td>
<td>46</td>
<td>[43.3, 48.8]</td>
</tr>
<tr>
<td>25-29</td>
<td>477620</td>
<td>366</td>
<td>76.5</td>
<td>[73.1, 80.1]</td>
</tr>
<tr>
<td>30-34</td>
<td>461542</td>
<td>521</td>
<td>112.8</td>
<td>[108.5, 117.2]</td>
</tr>
<tr>
<td>35-39</td>
<td>443680</td>
<td>717</td>
<td>161.6</td>
<td>[156.4, 167.0]</td>
</tr>
</tbody>
</table>

Table 5. Children and Youth on Waitlist for Organ Transplant in Washington State as of 02/26/2016

<table>
<thead>
<tr>
<th>YEARS</th>
<th>&lt; 1</th>
<th>1-5</th>
<th>6-10</th>
<th>11-17</th>
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</thead>
<tbody>
<tr>
<td>All organs</td>
<td>3</td>
<td>14</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Kidney</td>
<td>0</td>
<td>10</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>Liver</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Pancreas</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Kidney/ Pancreas</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Heart</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Lung</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Heart/ Lung</td>
<td>0</td>
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<td>0</td>
</tr>
<tr>
<td>Intestine</td>
<td>0</td>
<td>1</td>
<td>6</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 4. Washington State Cancer Incidence Data 2009-13

Table 5. Children and Youth on Waitlist for Organ Transplant in Washington State as of 02/26/2016

126 Ibid.
127 Ibid.
128 Ibid.
132 Ibid.
Community Assets and Resources

Care Coordination

• The benefits for care coordination are well documented. There are nationally recognized curricula, such as Boston’s Children’s Hospital Curriculum for Pediatric Care Coordination. The Center for Medicare and Medicaid Services (CMS) has endorsed this in the 2014 publication “Making Connections: Strategies for Strengthening Care Coordination in the Medicaid Benefit for Children and Adolescents.” Further, care coordination is called out as a strategy in the national “Standards for Systems of Care for Children and Youth with Special Health Care Needs” which has outlined evidence based strategies on many key domains to support optimal outcomes for this population. Seattle Children’s Pediatric Partners in Care (PPIC) program is improving outcomes and reducing the total cost of care for children with special health care needs. Launched with a federal grant, PPIC strives to keep children out of the hospital, reduce the use of emergency services for non-emergent care, and prevent unplanned inpatient returns.

Chronic Conditions

• The Stanley Stamm Camp provides a medically supported one-week overnight camp experience in an outdoor wilderness setting for children ages 6 to 14 with terminal or chronic medical illnesses. The camp is free to all who attend.

• The Center for Children with Special Needs at Seattle Children’s has developed a directory with an additional 68 camps for children with special needs in Washington state.

Cancer

• The Seattle Cancer Care Alliance (SCCA) brings together Seattle’s top cancer research organizations: Fred Hutchinson Cancer Research Center, University of Washington Medicine and Seattle Children’s. Through the SCCA partnership, Seattle Children’s cares for hundreds of new pediatric cancer patients each year. Research has found that teenagers with cancer do better if they are given treatment plans designed for children. Through the SCCA, teenagers can continue to be treated on pediatric protocols as they enter adulthood.

• The Fred Hutchinson Cancer Research Center conducts research to improve prevention and treatment of cancer and related diseases. The center pioneered bone marrow transplantation procedures.

• The Adolescent and Young Adults With Cancer (AYA) Program at Seattle Children’s provides expert medical care and support for teens and young adults with most forms of cancer into their late 20s. The program offers a weekly “Teen Hangout” staffed by a hematology/oncology social worker where young people with cancer can meet peers and address their psychosocial needs. The AYA is open to anyone in the community. The group partners with other community organizations that provide support for young adult patients and survivors.

• Seattle Children’s Cancer Survivor Program is a follow-up program for childhood cancer survivors, whether they were treated at Seattle Children’s or elsewhere. It aims to keep survivors healthy throughout their lives by providing care and education about their health risks. The Cancer Survivor Program was designed to meet the unique needs of survivors treated during childhood. The program serves survivors who are still children, as well as adults who were treated for cancer during childhood. It also gives survivors the chance to take part in research.
studies so we can learn more about the best ways to keep survivors well.

• Seattle Children’s is a regional and national leader in fertility preservation services and education. Children who have had cancer may experience decreased fertility as a result of their treatment. We lack resources, treatment guidelines and systems for treating pediatric cancer patients’ reproductive issues. Data shows that fertility preservation improves hope and resilience among cancer therapy patients. In response to patient/family requests and community needs, Seattle Children’s Cancer Center developed the fertility preservation program, providing fertility counseling and reproductive services for cancer patients. Seattle Children’s offers a standard process for sperm banking to all at-risk boys over age 12.

• Through Seattle Children’s Cancer and Blood Disorders Center, the multidisciplinary team of pediatric cancer experts treats about 250 children newly diagnosed with cancer every year — more than any other institution in the region — and provides follow-up care to more than 12,700 children and adolescents. In outpatient clinics and in the 48-bed inpatient unit, children receive advanced diagnoses and treatments, participate in state-of-the-art research studies and get specialized care.

• Seattle Children’s is specifically:
  - Implementing health awareness efforts targeting secondary cancer prevention (testicular, breast and skin cancers).
  - Working to increase awareness and health promotion for the Gardasil vaccine (for boys and girls).
  - Promoting community education regarding the Gardasil vaccine and skin cancer.
  - Addressing myths associated with sperm banking.
  - Providing web-based education to any cancer patient with materials such as “Having a Life With Cancer” and

“Fertility and Cancer,” which is a fertility preservation informational video for girls.

- Using social media for patient education and support.

• Seattle Children’s providers:
  - Share practice guidelines, resources and systems with other healthcare institutions regarding fertility preservation and reproductive services for cancer patients.
  - Provide consultation and share expertise, resources and guidelines through Continuing Medical Education to community practitioners about adolescent and young adult oncology, fertility preservation and other topics.

Adolescent Transition

• A new clinical intervention, called the “Six Core Elements of Health Care Transition,” was published in 2014 for widespread implementation to address the adolescent transition gap within the medical home. This tested transition model – available for use in pediatric and adult care settings – is aligned with the AAP/AAFP/ACP Clinical Report on Transition. The Six Core Elements, a multi-team transition model for youth and young adults between the ages of 12 and 26, is different from the plethora of transition care coordination efforts designed to improve transfer from one setting to the next. It extends over a longer time and includes a broader set of services. For pediatric practices, the core elements include a transition policy, transition tracking, transition readiness assessment, transition planning, transfer of care, and transfer completion. For adult practices, the core elements include a young adult transition and care

Heart Disease

- The American Heart Association’s mission is to build healthier lives free of cardiovascular diseases and stroke through advocacy, research and educational resources for healthcare providers, patients, families and the community. In Washington state, the American Heart Association’s branches in Seattle, Tacoma and Spokane organize awareness events and campaigns, offer online resources and fund state-specific research. Seattle Children’s Heart Center is working on the following goals to improve heart health in the community:
  - Create a Heart Center family advisory group
  - Build a stronger relationship with the Heart-to-Heart Congenital Heart Defects group
  - Address the need for heart services for Latino families from Central Washington
  - Provide community education on heart-healthy behaviors for children, teens and young adults.

Additionally, the Heart Center promotes education through several programs, including:
  - Heart-to-Heart, a monthly support group for families who are dealing with CHD, illness-related heart conditions or heart transplant
  - An adolescent transplant support group where teens can share concerns and providers can address noncompliance issues
  - Free, in-school cardiovascular screenings and electrocardiograms (ECGs) for student athletes. These screenings are offered in partnership with the Nick of Time Foundation and are conducted every two months during the school year by volunteer physicians, ECG technicians and echocardiographers, with cardiologist referrals provided as needed.

The Heart Center also promotes provider education, such as conferences for primary care, tracking of new young adult patients, orientation to adult practice, integration into adult practice, initial visit, and ongoing care. The Six Core elements include sample tools for each transition element along with measurement and consumer feedback forms.

- Seattle Children’s new multidisciplinary Adolescent Health Transition Committee and Family Task Force have formed to develop an infrastructure for adolescent health transition at the hospital. Ten clinics, centers and departments have offerings in place to support families with adolescent health transition. We have updated our patient and family education resources and have made them more accessible to both families and healthcare providers.

- The Center for Children with Special Needs Website’s Teens and Young Adult section has many materials for teens and young adults who have special needs and are transitioning to adult care.

- The University of Washington Medicine’s Transition Care Program works with young adult patients who are between 18 and 24 years old and have complex medical needs as they transition from to adult healthcare.

Transplant

- The Washington State Medical Association offers information to inspire and facilitate organ donation.

- LifeCenter Northwest is the organ and tissue program that services the WAMI region.

- Seattle Children’s Transplant Center is the largest and only pediatric transplant center serving UNOS Region 6 (Washington, Alaska, Idaho, Montana, Oregon and Hawaii). Seattle Children’s delivers world-class care to patients with end-stage diseases of the kidneys, heart, liver and intestine, and has been transplanting organs for more than 25 years. The center focuses on patient care, provider education, community partnerships and advocacy.
Identifying opportunities to incorporate the nationally developed Standards of Care for Children and Youth with Special Health Care Needs into systems development and improvements.

Cancer

Several public health strategies have been recommended by the Centers for Disease Control and Prevention (CDC) to improve Cancer Survivorship:

- Ensure all cancer survivors have adequate access to high-quality treatment and other post-treatment services.
- Establish or maintain training for healthcare professionals to improve delivery of services and increase awareness of issues faced by cancer survivors.
- Identify appropriate mechanisms and resources for ongoing surveillance of people living with, through and beyond cancer.
- Increase awareness among the general public, policymakers, survivors, providers and others of cancer survivorship and its impact.

Transplant

- Continue to raise awareness about organ donation and encourage people to become donors because the recipient need is larger than the number of available organs.
- Seattle Children's must continue to act as a regional expert and partner resource for pediatric transplants.

Heart Disease

- Increase cardiovascular screening in athletes. The goal of performing cardiovascular screening of young athletes...

Opportunities

Via community input focus groups and listening sessions, many strategies for addressing the needs of CSHCN were brainstormed. These include promoting adequate reimbursement, working with families to assure insurance coverage, training providers in how to care for patients with special needs and encouraging medical homes.

CSHCN Overall

Overall, children with special health care needs have concerns above and beyond the healthy population. CSHCN are more likely to have difficulty meeting the criteria for care for a medical home and obtaining needed referrals than children without special needs. They are also less likely to have adequate insurance to meet their healthcare needs. (See the Access to Care for Children With Special Health Care Needs/Chronic Conditions section on page 39.)

Opportunities to address these issues include:

- Improving data systems used to identify clients needing care coordination;
- Supporting comprehensive systems of care with fiscally sustainable reimbursement;
- Ensuring that there is a viable system of CSHCN Coordinators to serve children with special health care needs and that managed care organizations need to reimburse appropriately for care coordination;
- Addressing the safety net for undocumented children with special health care needs. Currently, children who are "undocumented" remain in fee-for-service Medicaid and children in foster care have the option of either fee-for-service or managed care;
is to reduce sudden cardiac death through early detection and appropriate medical interventions, activity modification or withdrawal from athletic participation. 

• In early adolescence, CHD survivors needing lifelong congenital heart care should begin to transition to appropriate adult congenital heart disease care. CHD survivors should be educated on how to choose adult congenital heart care and be made aware of care guidelines and the benefits of cardiac heart surveillance. A successful transition will include:

- Obtaining health insurance
- Selecting an adult care physician to provide and coordinate comprehensive care
- Receiving reproductive, genetic and career counseling
- Educating adult healthcare providers about the patient's congenital heart disease
- Maintaining communication between patients, families and healthcare providers

Access to Care, Use of Clinical Preventive Services and Oral Health

Access to comprehensive, high-quality healthcare facilitates prevention and early detection of disease and varies by type of insurance and geographic location. Health insurance reduces the out-of-pocket costs of health care and has been shown to be the single most important predictor of healthcare utilization. Without health insurance coverage, many people find health care unaffordable and forgo care even when they think they need it, thus disparities in insurance coverage perpetuate disparities in health and quality of life.

Access to health insurance has improved with the expansion of Medicaid eligibility and implementation of health insurance marketplaces for Qualified Health Plans. However, there are still children in King County without health insurance, especially among American Indian/Alaska Native children, low-income households, and children living in South King County. In part due to inadequate insurance coverage, too many adults and children in King County do not receive recommended clinical preventive services or regular oral healthcare services.

Access to Care

Insurance Coverage

While the Affordable Care Act (ACA) was primarily designed to address uninsured adults, its implementation, coupled with the expansion of Medicaid and the transition of Medicaid clients into managed care, benefitted children, as well.

For children who are United States citizens and meet financial eligibility standards, including those in foster care and adoption support, the ACA implementation means they are now part of the Medicaid managed care plan (versus fee-for-service). Children who are in an undocumented status are in Fee-For-Service (FFS). Tribal members can choose FFS or MC.

In 2015, 4% (or 77,200) of Washington state children had no health insurance coverage. After the Medicaid expansion and the launch of the WA Healthplanfinder health exchange, uninsurance rates drop significantly. The percent of children without health insurance fell to 1.6. The ACA implementation had other immediate benefits for children, including no denials for pre-existing conditions, no cap on lifetime benefits, no out-of-pocket costs for preventive care, and allowances for young adults to stay on their parent’s policy up to age 26. The uninsurance rate for young adults between 19 and 25 years old dropped from 31.9% in 2008 to 9.3% in 2015.

American Indian/Alaska Native children were five times more likely than non-Hispanic, white children to be uninsured. Children in low-income households (less than 200% of the federal poverty level) were five times more likely than those in the highest income households to be uninsured. Children living in the South Region were more than twice as likely to be uninsured than children living in the East Region. However, the implementation of the ACA also required families to apply or renew their Medicaid coverage through the Washington Healthplanfinder. This process has been challenging for many, including those with limited English skills and families who have the additional responsibilities of caring for a child with special health care needs.

Many families live in areas with limited internet access and have long wait times when calling a call center, which may use up their cellphone minutes. Additional supports such as health navigators who have an additional set of challenges, as they must work with up to five different Medicaid managed care plans, each with different sets of rules, processes, and reimbursement rates.

States administer their Medicaid managed care programs within general federal rules. States must identify individuals with special health care needs to managed care organizations (MCOs), to identify any ongoing conditions that require treatment or monitoring.

Care coordinators for children with special health care needs and chronic conditions (CSHCN) have been put in place at the local health jurisdictions to assist this vulnerable population. These providers have knowledge of and connections with community resources.
However, care coordinator also face challenges due to budget cuts and changes to local public health delivery system.

Children who are non-U.S. citizens and undocumented are not in managed care. As of February 2014, there were over 17,000 children in this group. Undocumented children with special health care needs will age out of Medicaid coverage at age 18, even though their medical needs will not go away. There are extremely limited options for coverage after age 18.150

Incomplete Vaccinations

In 2014, 45.9% of children ages 19 to 35 months in Washington state and 38% of those in King County had not completed the recommended series of immunizations for young children (4:3:1:3:3:1:4 series).151 These estimates are based on vaccination records submitted by healthcare providers to the Washington State Immunization Information System (WSIIS). According to past statewide assessments, WSIIS estimates of vaccination coverage underestimate true coverage due to incomplete submission of vaccine records and retention of vaccine records of children after they have moved to another area.

According to these same statewide assessments, children do not receive vaccines for a variety of reasons, including barriers to accessing clinical preventive services and family choices to not have children vaccinated. Completion rates are lowest in the South and North regions, representing both low-income and high-income areas of King County, respectively.152

Oral Healthcare

Tooth decay in children leads to an increase in missed school, pain, discomfort and difficulty with daily activities.154 Rates of tooth decay in Washington state children are higher today than in 2000. Significant oral health disparities exist for minority, low-income, non-English-speaking children, and children with special healthcare needs. These groups have the highest levels of dental disease and the lowest levels of access to preventive and restorative services.

In 2010, 40.2% of kindergarten and third-grade children in King County had treated or untreated cavities. Children eligible for free or reduced-price school meals were almost two times more likely than those from higher-income families to have untreated dental disease. Untreated dental disease was also more likely among children of color (compared to white, non-Hispanic children) and children whose family spoke a language other than English at home.

152 Ibid.
Community Input

Access to Care

While many residents have found coverage since the implementation of the Affordable Care Act, some are not eligible for subsidies or Medicaid, choose not to enroll, or struggle to afford premiums. Community members stressed that the healthcare system should continue to provide charity care for people who fall through the cracks.

For those with coverage, ongoing challenges include access to specialty care, adult dental care and behavioral health services. Even

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157 Ibid.

158 Ibid.

with increased health insurance coverage, high deductibles and co-pays may deter an individual from seeking care when faced with the challenges of meeting basic needs, like food and housing.

The potential loss health insurance means loss of services, such as case management, integrated mental health, nutrition counseling and other nonclinical services, presents another challenge to maintaining good health.

**Workforce Capacity**

Community health centers report severe shortages of primary care providers. Community members stress the importance of a workforce that reflects our communities’ diversity. In focus groups and listening sessions with community health center providers, they explain that their primary care providers are considered safety net providers because they deliver health care to uninsured patients and Medicaid patients. Safety net providers work in community health centers, federally qualified health centers, public hospitals, school-based clinics, and community and teaching hospitals. Without these safety net providers, many communities would have little or no contact with the health care system. Therefore a further (or ongoing) shortage of providers reflects a challenge in caring for this population. In order to ensure that our workforce is able to meet the demands of delivering primary care or specialty care to patients many challenges were mentioned: Program funding, financing mechanisms and incentives, and implementing infrastructure changes are all needed to ensure that clinicians are attracted to primary care, faculty are in place to educate health care professionals, and health care delivery is efficient and effective. Ameliorating the problems presently impeding primary care delivery involves more than just training additional doctors to become primary care physicians. Drs. Sherman and Moscou explain that at the core of the debate are several issues: (1) how to address the financial reimbursement inequities seen in primary care and specialty care; (2) how health care will be delivered; (3) which professionals will provide primary care, oral health care, and behavioral health care; and (4) how emerging technologies will be used.

**Incomplete Vaccinations**

In focus groups and listening sessions, parents expressed that incomplete vaccinations remain a concern. King County does not meet the Healthy People 2020 objective of reducing incomplete vaccination coverage to 20% of children ages 19 to 35 months.

**Community Assets and Resources**

**Access to Care**

- The first open enrollment period for new health insurance options took place in 2013 and 2014. Organizations in King County partnered in the “Coverage Is Here King County” campaign and through their collective efforts enrolled 165,000 residents, 1,454 of whom were children with new coverage. Seattle Children’s played a role in helping families access new free and low-cost health insurance options. From 2013 to 2015, 12 Seattle Children’s staff members were trained and certified as in-person assisters to help families with enrollment in Medicaid, Apple Health for Kids, or a Qualified Health Plan through Washington Healthplanfinder. Countywide, hospital staff helped enrolled more than 3,557 individuals. For enrollment data, visit http://www.kingcounty.gov/healthservices/health/partnerships/HealthReform.aspx.

- In 2014, several hospitals provided funds to assist low-income households with the payment of insurance premiums. To qualify, household income needed to be less than 200% of the federal poverty level (in 2014...
that was about $47,700 a year for a family of four, which includes two children), and had to be enrolled through Washington Healthplanfinder, the state’s health benefit exchange. Project Access Northwest manages this ongoing program.

• In Washington, the DOH has a CSHCN Program within the Healthy Starts and Transitions unit in the Office of Healthy Communities. The CSHCN Program is primarily funded through the federal Maternal and Child Health Block Grant (Title V). The CSHCN program promotes an integrated system of services for infants, children and youth up to age 18 years who are defined as having or are at risk for chronic physical, developmental, behavioral, or emotional conditions and require health and related services of a type or amount beyond what is generally needed. DOH has strong ties with the Health Care Authority-Medicaid program (HCA) (now known as Apple Health) aimed at identifying children with special health care needs through a data sharing process and providing coordination and liaison activities for this population. This relationship has been beneficial to children and families as this population migrates into managed care.

• Historically, CSHCN coordinators have assisted with accessing eligibility for the CSHCN program, but are currently experiencing issues with timely enrollment of hospitalized newborns with complex medical needs. In order to better support these families, the state’s Health Care Authority has hired staff at the local level to assist families.

• Best practices outline strategies for medical care and care planning for child to adolescent to adult transitions and are posted on sites such as http://www.gottransition.org/. Local healthcare systems are using this website as a resource for best practices in helping children who are transitioning to adult care.

• Recently, the Association of Maternal and Child Health Programs (AMCHP) released Standards of Care for Children and Youth with Special Health Care Needs with the goal of influencing health policy across the nation. It is anticipated that these standards will help guide wise decisions by policymakers and payers to improve systems of care for children with special needs and their families. Having evidence-based guidelines for optimal care and support for CSHCN is essential to ensure that their care isn’t compromised. Sharing these with the HCA and the managed care plans and incorporating these standards, where appropriate, into contract language, should assist in the planning of care for children with special health care needs.

• The Health Coalition for Children and Youth (HCCY) is a coalition of organizations in Washington state that work to meet the full spectrum of health needs of children, including medical, dental and mental healthcare.

• Community health centers continue to serve all residents, regardless of their ability to pay. Public health centers, tribal clinics and school-based health centers also serve the health needs of the community.

• Seattle Children’s is committed to providing charity care to low-income individuals and enrolling residents in health insurance. In 2015, Seattle Children’s provided more than $111 million in uncompensated care.

• Project Access Northwest connects low-income and uninsured patients with specialty care and provides health literacy education.

• The Pacific Hospital Preservation and Development Authority provides funding for programs that address access to care issues.

• The First Friday Forum is a coalition of community health centers, social service organizations, government agencies and hospitals that share information related to publicly sponsored healthcare program eligibility, enrollment and best practices.
health screening and treatment for young people on or near school grounds. The center targets adolescents who are uninsured and underinsured, and serve youth with health insurance who desire confidential care and advice.

In 2014, several hospitals provided funds to assist low-income households with the payment of insurance premiums. To qualify, household income needed to be less than 200% of the federal poverty level (in 2014, that was about $47,700 a year for a family of four, which includes two children), and had to be enrolled through Washington Healthplanfinder, the state's health benefit exchange. Project Access Northwest manages this ongoing program.

Workforce Capacity

- Seattle Jobs Initiative’s Healthcare Career Pathway program trains diverse, low-income residents in healthcare careers.
- As part of its healthcare workforce strategic plan, Seattle Central Community College expanded its nursing and allied health programs by opening the Seattle Central Health Education Center at the Pacific Tower in January 2016. The new satellite location offers additional training opportunities and programs for students pursuing careers in healthcare. A consortium of local colleges is also creating a program for community healthcare workers/patient care navigators.
- The University of Washington School of Medicine is investing in the next generation of physicians by offering the only pediatric residency program in the WAMI region. Resident programs include:
  - **WAMI rotation**: Pediatric residents spend two months of their training in a rural primary care setting.
  - **Pathway program**: Eight residents per year participate in the Community Health...
and Global Health Pathways, which provide public health, clinical and research experience to understand and influence determinants of child health and health disparities at the community level.

- **Alaska track:** Four residents per year focused on primary care spend one-third of their training in Alaska.

- During the 2015 to 2016 school year, 877 residents and fellows completed rotations and 132 physicians participated in a pediatric subspecialty residency or fellowship at Seattle Children’s, which offers fellowships in more than 30 specialty areas. More than half of all Seattle Children’s-affiliated graduates practice in the Pacific Northwest after completing their training.

### Incomplete Vaccinations

- The VAX Northwest Immunity Community program trains parents to be immunization advocates in child care settings, preschools and elementary schools and aims to ensure that everyone can find accurate information about the value of vaccines.

- Almost all pediatric providers (around 340) are enrolled in the Vaccines for Children Program, a federal program that provides vaccines at no cost to children who otherwise may not be vaccinated.

- Each year, Public Health – Seattle & King County’s Immunization Program and the Washington State Department of Health visit 50% of clinics enrolled in the Vaccines for Children Program. They assess clinics for best immunization practices and provide education and recommendations to healthcare providers. Additionally, 25% of these clinics receive a site visit from the CDC’s Assessment, Feedback, Incentives and eXchanges (AFIX) quality improvement program to increase immunization coverage.

- The WithinReach Immunization Program promotes immunization coverage through a variety of programs, including

- the Immunization Action Coalition of Washington, which raises public awareness and provides education to groups ranging from healthcare providers to parents.

- The Washington State Department of Health’s Child Profile Health Promotion System helps ensure that Washington’s kids get the preventive healthcare they need, provides free educational resources to families, and tracks individual and population-level immunization coverage. The Child Profile Health Promotion System sends child health and safety information to all families with young children in Washington State by mail and email. Each mailing has age-specific reminders about well-child checkups and immunizations. They also give up-to-date information on growth and development, nutrition, safety, and many other health topics.

- A grassroots campaign led by Vashon Island resident Celina Yarkin has been lauded for working to improve vaccination coverage among the island’s children.

### Oral Healthcare

- Several community health centers opened new dental clinics in 2014 and 2015 to make dental care accessible on-site with medical care. Seattle Children’s provides dental services at OBCC for children ages 1 to 15, and The Dental Clinic at Seattle Children’s Hospital sees patients on the main hospital campus by referral.

- The Seattle and King County Access to Baby and Child Dentistry program connects low-income children from birth through age 5 with private dentists. The Seattle-King County Dental Society provides donated dental services for low-income residents who do not qualify for Medicaid.

- The SmileMobile is a mobile dental office offering oral health services to low-income children who have limited access to a dentist. Services range from examinations and preventive care to fillings and minor
oralsurgery. Seattle Children’s is a partner in operating the SmileMobile. Since 1995, the mobile clinic has treated more than 25,000 children throughout Washington — that’s an average of 60 children per week. In 2013, 38 volunteer dentists served 1,776 children.

Opportunities

Access to Care

• For the last few years, Seattle Children’s has worked with the Children’s Hospital Association on federal legislation called the Advancing Care for Exceptional (ACE) Kids Act of 2015. The proposed legislation focuses on creating networks to better manage the care for medically complex children insured by Medicaid in all states. The network would provide appropriate care close to a child’s home, thus decreasing the need for emergency room visits and hospital stays. If passed, the legislation will:
  - Address problems with fragmented care across state lines.
  - Improve coordination of care for children to reduce the burden on families.
  - Possibly save around $13 billion during its first 10 years.
  - Gather national data on complex conditions to help researchers improve treatments for rare diseases.

• Of those surveyed in Washington, 68.2% of families with CSHCN reported that they have adequate private or public insurance to pay for the services they need. What is not widely known is that families with a private insurance plan can also apply for Medicaid as a secondary insurance for their children. This is a crucial piece of information for families who may incur high additional medical expenditures (co-pays, deductibles, benefits and limits to services not present in Medicaid). Having Medicaid as a secondary insurance may mitigate the additional expenditures for this special population. There is an opportunity to include this information in navigator or in-person assistor training.

Incomplete Vaccinations

• Working with healthcare providers to improve vaccination coverage is extremely important. Since patients trust their healthcare providers, recommendations from their providers can shape a caregiver’s decision to vaccinate a child.

• Improving vaccination coverage data would help public health practitioners identify patient populations in particular need.

• Working with alternative as well as allopathic healthcare providers to improve vaccination coverage is also important and will help improve data on vaccination coverage.

Oral Healthcare

• Increasing reimbursement rates could provide incentive for dentists to accept patients with Medicaid.

162 Ibid.
Mental and Behavioral Health

Behavioral health refers to mental and emotional well-being and/or actions that affect wellness. Behavioral health conditions encompass both mental health and substance use disorders, and are related to physical health and wellness. Mental illness is the second leading cause of disability and premature mortality, and accounts for more than 15% of the burden of all diseases in the United States.

Health problems associated with substance abuse include psychosis, depression, drug overdose, skin and lung infections, HIV/AIDS, motor vehicle injuries and other injuries.

Early mental health interventions and support mechanisms are critical for our youth, as symptoms of mental illness can be obscured by the behavioral changes typical of puberty and adolescence. One in five children in the United States suffers from a mental disorder such as anxiety, depression or a behavior disorder, but only 20 percent of these children receive needed services. Half of adult mental disorders have their onset during childhood. According to Parity or Disparity: The State of Mental Health in America 2015, prepared by Mental Health America, Washington state ranked 47th in the country regarding youth behavioral health service needs and access to care.

Depression

Depression is a problem faced by many children and teens. At any given point in time, about 1 to 8% of children and teens are struggling with depression. By the age of 18, 1 in 5 youth have had a depressive episode and over half have had some depressive symptoms. During childhood, about the same amount of boys and girls have depression. Between the ages of 13 and 15, slightly more girls than boys are depressed. By middle to late adolescence, girls are twice as likely to be depressed. Children and teens become depressed for many reasons. There isn’t one single cause but stress plays a key role in the start of depression.

In 2014, about one in four (27%) of Washington state eighth graders and about one in three (35%) of 10th graders experienced depressive feelings.

- Students were considered to have had depressive feelings if, during the past year, they reported feeling so sad/hopeless almost every day for two or more consecutive weeks that they stopped doing some usual activities.
- Females were 1.5 times more likely than males to report depressive feelings.

![Figure 28: King County Youth With Depressive Feelings by Subgroup, 2008-2012 Average](image)

Source: Healthy Youth Survey
Prepared by Public Health - Seattle & King County, APDE, 08/2016
*Confidence intervals show range that includes true value 95% of the time.
†Too few cases to meet precision standard, interpret with caution.
Data by income or poverty level not available.

• Hispanic, Native Hawaiian/Pacific Islander and American Indian/Alaska Native youth were more likely than black and white youth to report depressive feelings.
• From 2004 to 2012, youth rates of depressive feelings decreased for King County overall and for Seattle and the North Region of the county.

In 2015-2016, the number one Seattle Children’s outpatient service by volume was psychiatry with 45,019 visits. In our clinics, we provide short-term individual and group treatment using methods that have been shown to help. Children with complex mental health problems may need to stay in the hospital at times. When this happens, we have the 41 bed Psychiatry and Behavioral Medicine Unit (PBMU), the focus of which is to help children during a mental health crisis and ensure their immediate safety. The PBMU works to resolve the crisis and to teach the child and family skills that can help after the child leaves the hospital. Most stays in the PBMU are seven to eight days. In 2015, Seattle Children’s Hospital treated approximately 1,000 youth as inpatients for various depressive episodes. In many stakeholder interviews, it was reiterated that the front line for identifying and coordinating treatment for these disorders is primary pediatric care — the medical home. The American Academy of Pediatrics recommends annual screening for depression and substance use starting at age 11. Screening would allow us to address many problems early, before children reach a crisis state. Unfortunately, Washington’s Medicaid program does not reimburse physicians for performing these screens or coordinating services when a child is in need of help.

Substance Abuse and Chemical Dependency

Youth Binge Drinking
From 2008 to 2012, 15% of King County students in eighth, 10th and 12th grades engaged in binge drinking, which is defined as having five or more alcoholic drinks in a row in the past 14 days.
• The binge drinking rate for American Indian/Alaska Native youth was 2.5 times that of the lowest King County rates.
• The binge drinking rate for 12th graders was 1.5 times the county average for students of all grades.
• From 2004 to 2012, binge drinking rates among youth declined for the county overall and for all regions except the East Region.

Figure 29: King County Binge Drinking Rates Among School-age Children by Subgroup, 2012-2014 Average

Substance Abuse

In 2014, an average of 25% of school-age youth in eighth, 10th and 12th grades in King County reported using alcohol, marijuana, painkillers or other illegal drugs during the past 30 days. The 2012 and 2014 average rates were highest among

12th graders, and American Indian/Alaska Native and Hispanic students. About 18% of Asian students reported using alcohol or drugs during the past 30 days, which was significantly less than the average.168 The average rate of alcohol-induced deaths in King County from 2010 to 2014 among all ages was 9.7 per 100,000 population. No cases were reported in youth under age 25 because there were too few cases to protect confidentiality and/or report reliable rates. Alcohol-induced deaths were highest in men, high-poverty neighborhoods and among American Indian/Alaska Native populations. In 2013, the rate of fatal crashes in King County involving a driver with a blood alcohol content of 0.08 or above was 1.0 per 100,000, which was down from 1.4 per 100,000 in 2012.169 Also from 2010 to 2014 in King County, the drug-induced death rate was 14.1 per 100,000 population for all age groups. The drug-induced death rate for young adults ages 18 to 24 was 11 per 100,000 population. Drug-induced deaths included deaths from poisoning, drug dependence and conditions resulting from acute or chronic exposure to drugs. Drug-induced deaths were higher than average in high-poverty neighborhoods and among American Indian/Alaska Native (32.4 per 100,000), Black (20.2 per 100,000) and white (14.2 per 100,000) populations.170

Figure 30: King County Youth Illegal Drug Use by Subgroup, 2012 & 2014

![Image of a bar chart showing illegal drug use by subgroup in King County, 2012 and 2014.]

Source: Healthy Youth Survey. Prepared by Public Health - Seattle & King County, APOE, 02/2018

Figure 31: King County Youth Alcohol-induced Deaths by Subgroup, 2008-2012 Average

![Image of a bar chart showing alcohol-induced deaths by subgroup in King County, 2008-2012 average.]

Source: Washington State DOH, Center for Health Statistics, Death Certificates. Prepared by Public Health - Seattle & King County, APOE, 02/2018
Autism

Autism is a complex neurological disorder that impacts brain development in social interaction, communication and repetitive behaviors. The definition of autism has broadened to be defined as a spectrum disorder that includes the disorders of autism, Asperger syndrome and pervasive developmental disorder—not otherwise specified. According to the Centers for Disease Control and Prevention, one in 68 children in the United States has an autism spectrum disorder (ASD).\(^{174}\) The Washington State Department of Health estimates that ASDs affect 8,000 to 12,000 children and youth in the state. In some school districts in the Puget Sound area, autism rates are estimated as high as one in 50.\(^{175}\)

The National Survey of Children with Special Healthcare Needs found that, compared with all families of children with special healthcare needs, ASD families were less likely to participate in decision-making with their providers and be satisfied with the services they receive; less likely to have a medical home; and less likely to find it easy to use community-based service systems.\(^{176}\)

Community Input

Interviews with members of community coalitions and organizations identified three key issues related to behavioral health: (1) access to behavioral healthcare; (2) integration of human services and behavioral and physical healthcare; and (3) boarding of mental health patients.

Access to Behavioral Healthcare

Those who are seriously mentally ill often face difficulty accessing behavioral healthcare in a primary care setting. Insurers’ regulatory barriers can also limit the range of needed services that are covered. Members of


\(^{175}\) Seattle Children’s. Autism case for support.

vulnerable populations struggle to access care and need a high level of assertive engagement. Families and children with mental health issues often face challenges related to access to care in moments of crisis and great need.

Integration of Human Services and Behavioral and Physical Healthcare

Community members strongly support hospitals’ efforts to integrate systems of human services and behavioral and physical healthcare. Serious mental illness is often associated with chronic disease and homelessness, so it is critical to cross-train staff to address physical health and human services, as well as behavioral health issues.

Boarding of Mental Health Patients

Community members identified the practice of psychiatric boarding — involuntarily placing mentally ill patients in emergency rooms without treatment — as a serious problem. Individuals who are in danger of hurting themselves or others should not be “warehoused.” Instead, they should receive appropriate treatment in a therapeutic setting.

Community Assets and Resources

Access to Behavioral Healthcare

- Odessa Brown Children’s Clinic (OBCC) provides mental health services, along with primary care and care coordination in multiple elementary, middle and high public schools, and Wellspring, which serves homeless children. This outreach allows OBCC to reach children who may not have other opportunities to receive primary and mental healthcare.
- OBCC also offers family-focused, evidence-based programs, such as the Promoting First Relationships program, which focuses on parents of children up to age 3, and Parent-Child Interactive Therapy for children who have difficulties with emotional regulation from ages 3 to 8. Seattle Children’s has experts who are involved in mental health-related prevention efforts, including violence prevention in collaboration with schools and community organizations.
- Seattle Children’s Autism Center and the Alyssa Burnett Adult Life Center provide specialized care and therapy to children and special programs for adults with autism spectrum disorders.
- Seattle Children’s publishes the Autism Blog and Teenology 101, which frequently addresses mental health in teens, in order to reach children and families beyond those who actually receive care at Seattle Children’s.
- Seattle Children’s offers support groups for deaf and hard-of-hearing teens and preteens who have mental illness, and meal support classes for parents of children or teens with eating disorders.
- The Partnership Access Line (PAL) is a state-funded, telephone-based child mental health consultation service in Washington that is administered by child psychiatrists at Seattle Children’s.
- Telemental Health through Seattle Children’s allows children with mental healthcare needs in certain underserved communities in the WAMI region to speak with a psychiatrist in a distant center through videoconferencing.
The Developmental Pathways Research Program with Seattle Public Schools provides training and consultation for 17 school-based mental healthcare providers in assessing and managing mental health concerns.

Seattle Children’s Autism Center provides assessment, diagnosis, treatment and support for autism spectrum disorders. Its clinicians provide medical, psychiatric, behavioral and speech services for babies, children and young adults. Approximately 45% of families seeking autism services at Seattle Children’s lack adequate insurance coverage for their child’s care. The Autism Center offers provider and community education, as well as individual patient and family education. The center offers monthly support groups and community classes for parents and caregivers of children with autism on a variety of topics. Classes are available statewide through Seattle Children’s video and teleconferencing outreach program.

Integration of Human Services and Behavioral and Physical Healthcare

OBCC provides pediatric mental healthcare in the same facility as primary care and also trains pediatrics to integrate mental health into primary care visits. OBCC has a Birth to 5 program (provided with financial support from Seattle Children’s Guild Association) embedded into the primary care setting in which families who have challenging situations are referred to a staff member who can support them. Tackling mental health in the medical environment reduces stigma and affirms that mental health is part of being healthy. The Birth to 5 Team (a mental health expert, a social worker and two community care coordinators) helps families focus on what they are doing well. By looking at positives, parents open their eyes to their own success and encourage them wherever they are.


Opportunities

Access to Behavioral Healthcare

• Our current mental health system is inadequate to handle the volume of patients who need care. To address this, the state’s Managed Care Organizations should be held accountable for providing timely access to mental health care, and we need to invest in increased hospital capacity for inpatient and outpatient care. Creative use of telemedicine, like Seattle Children’s Hospital’s Physician Access Line, can help bridge gaps where there are too few providers in a region to care for all the kids who need services.

• Standardized referral guidelines for behavioral health treatment, created in coordination with behavioral healthcare providers, could streamline the process and improve access for patients.

• Providing additional outreach services in places where vulnerable children and families live through partnerships with community centers, schools and organizations could improve access to behavioral healthcare services.

• Providing support and educational opportunities to parents will reinforce their parenting skills and help them develop additional skills and obtain new knowledge about child health and development.

• Seattle Children’s and OBCC have expertise in pediatric mental healthcare with psychologists, psychiatrists and counselors who see patients and do groundbreaking research to improve care. These experts could potentially engage in efforts to build capacity among primary care providers to screen for mental health and manage treatment for some conditions.

Boarding of Mental Health Patients

• A new mobile crisis team and additional Program for Assertive Community Treatment (PACT) team will soon be available to help divert people from hospitals.

• A new transition program helps hospitals find placement solutions for psychiatric patients.

• The Crisis Solutions Center, operated by DESC, offers an alternative to hospitalization for adults.

• OBCC is partnering with Nowland Premier Soccer Academy Foundation to provide soccer training at the Rainier Vista Boys & Girls Club. The program is an example of using sports to help teach social and emotional skills. It is a high-level, year-round, free soccer training that aims to prepare teams in Rainier Valley to compete in Seattle leagues.

• The Partnership Group, consisting of community behavioral health providers, collaborates on policies and practices to promote integration and quality care.

• School-based integrated health centers provide behavioral and physical healthcare.

• Plymouth Housing Group and the Downtown Emergency Services Center (DESC) provide permanent, supportive housing to homeless people with chronic mental illness.

• Seattle Children’s Alyssa Burnett Adult Life Center offers classes and activities for adults with ASD and other developmental disabilities as they transition out of the education system and into adulthood. The Alyssa Burnett Adult Life Center hosts year-round classes and activities for adults ages 18 and older that promote lifelong learning and independence, enhance quality of life and provide meaningful ways to take part in the community.

• Public health messaging about mental health could inform and educate children and families.
- Seattle Children’s opened 21 additional psychiatric treatment beds (41 total beds), including beds for adolescents and individuals with severe autism spectrum disorders.
- Medicaid will cover psychiatric services within freestanding psychiatric hospitals for the next two years.
- A new 16-bed evaluation and treatment center recently opened in King County.
- The Early Detection and Intervention for the Prevention of Psychosis Program (EDIPPP) educates families and those who routinely interact with youth — teachers, mental health professionals and doctors — about key signs to look for in young people to identify and prevent psychosis.
- Applying trauma-informed care principles within healthcare facilities can reduce unnecessary trauma for people living with a mental illness or trauma impacts.
- Continued advocacy for improved coordination between mental and physical health services can highlight the importance of this issue.
- Boarding of Mental Health Patients:

Maternal and Child Health

Healthy pregnancies, healthy babies and healthy mothers are important goals for all communities. Mothers’ mental, physical, emotional and socioeconomic well-being — before, during and after pregnancy — can affect outcomes in infancy, childhood and adulthood. Maternal and child health outcomes are also markers of overall community health; a healthy community is one that ensures all children thrive and reach their full potential.

While King County has made progress in decreasing rates of poor birth outcomes, it does not meet the Healthy People 2020 objective for prenatal care. Disparities in birth outcomes persist, particularly among black/African American and American Indian/Alaska Native populations.

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. 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.

The Healthy People 2020 goal for infant mortality is 6.0 per 1,000 live births.\textsuperscript{179} In 2015, the infant mortality rate in Washington state was 4.8 deaths per 1,000 live births.\textsuperscript{180} From 2011 to 2015, King County’s average infant mortality rate was 4.1 deaths per 1,000 live births.


• Infants born to American Indian/Alaska Native and Black mothers were more likely than those born to white or Asian mothers to die before their first birthday.

• In King County, infant mortality has declined since 2000.

From 2010 to 2014, 69.2% of expectant mothers in Washington and 71.5% of expectant mothers in King County received early prenatal care. This is compared to 73.5% of expectant mothers in the United States, which still falls short of the Healthy People 2020 goal of 77.6%.

In King County:

• Only about half of teen mothers (54.3%) received early and adequate prenatal care.

• American Indian/Alaska Native, black, Hispanic Native Hawaiian/Pacific Islander and multiracial mothers were less likely than Asian and white mothers to receive early and adequate prenatal care.

• Early and adequate prenatal care increased recently in the South Region and Seattle, but declined in the East Region.

Starting prenatal care early in pregnancy and having regular visits improves the chances of a healthy pregnancy. The indicator of adequate prenatal care is the number of births for which prenatal care started before the end of the fourth month and 80% or more of the recommended number of visits occurred.

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Low Birth Weight

Any infant born weighing less than 2,500 grams (about 5.5 pounds) is considered low birth weight. Low birth weight infants are at higher risk of infant mortality, respiratory disorders and neurodevelopmental disabilities.

From 2010 to 2014, 6.5% of infants born in King County were low birth weight. That is compared to 6.3% in Washington state in 2010-2014 and 8.2% in the United States in 2010. Although King County meets the Healthy People 2020 objective of 7.8% or fewer infants born at low weight, 1,727 low birth weight babies were born in King County in 2014.

- Infants born to Black mothers were more likely to be low birth weight than infants born to mothers of any other race.
- After increasing in the early 2000s, rates of low birth weight have recently leveled out in King County, Seattle, North King County and Washington State. The increase has continued in the East and South Regions.

Community Input

A community needs assessment produced by United Indians of All Tribes Foundation cited the high rates of poverty among American Indian/Alaska Native families and inadequate support for these families to promote the healthy development of their infants.

Community groups stressed the importance of providing adequate opportunities for pregnant women to receive culturally competent care and social support. Without this, they may resort to using the emergency department or other hospital-based care.

Community members also emphasized the importance of recognizing how adverse childhood experiences can lead to chronic disease in adulthood and poor birth outcomes for the next generation.

Community Assets and Resources

- The Global Alliance to Prevent Prematurity and Stillbirth (GAPPS) — an initiative of Seattle Children’s — is dedicated to improving understanding of the causes of prematurity and stillbirth as a foundation for developing successful prevention and treatment strategies. GAPPS is home to a large repository of specimens collected from a large and diverse group of pregnant women. These specimens are available to investigators worldwide who aim to

Figure 36: King County Low Birth Weight Rates, 2010-2014 Average


1 Rate = per 100 live births.
2 Confidence interval shows range that includes true value 95% of the time.
3 Too few cases to protect confidentiality and/or report reliable rates.
4 Too few cases to meet precision standard. Interpret with caution.

Persons of Hispanic ethnicity can be of any race and are included in the racial categories.
understand the biological mechanisms of prematurity and stillbirth. GAPPS stewards the Preventing Preterm Birth initiative, a Grand Challenge in Global Health from the Bill & Melinda Gates Foundation, designed to unite the scientific community to combat and prevent prematurity. The Perinatal Interventions Program (PIP) will improve survival and reduce disability of newborns and mothers by standardizing the care of preterm infants and improving maternal conditions that lead to preterm birth, stillbirth and other life-threatening and disabling conditions.

• The Equal Start Community Coalition 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 is a native-led collective whose members are concerned about high rates of infant mortality in their communities.

• Governor Jay Inslee’s statewide “Results Washington” framework calls for reducing birth outcome disparities.

• An objective of the Public Health Improvement Partnership — convened by the Washington State Department of Health — is to prevent or reduce the impact of adverse childhood experiences, such as abuse and neglect.

• Nurse Family Partnership and other home-visiting and prenatal-support programs, including MOMs Plus, offers support for high-risk pregnant and parenting women. Providers remain concerned that there is not sufficient capacity within these programs.

• The Period of PURPLE Crying curriculum is a way to help parents understand this time in their baby’s life and is a promising strategy to reduce the risk of child abuse. Seattle Children’s Protection Program

The time to prevent chronic disease is during pregnancy and early childhood.

promotes the Period of PURPLE Crying Approach to Shaken Baby Prevention and hosts a statewide taskforce to disseminate this information through state hospitals, clinics and agencies that have contact with pregnant women and their partners, as well as to parents and caregivers of newborns.

Opportunities

• The Baby-Friendly Hospital Initiative encourages and recognizes hospitals and birthing centers that offer an optimal level of care for infant feeding and mother/baby bonding.

• Adverse Childhood Experiences (ACEs) are common and increasingly recognized as significant risk factors for poor child and adult health outcomes. The ACEs Collaborative, an informal work group of providers through Public Health-Seattle & King County, is developing a common framework of trauma-informed care and the life-course model (a strengths-based framework grounded in understanding and responding to the impact of trauma across the lifespan). The group’s goals are to offer technical guidance and support and to promote existing and emerging data and research on the life-course model.

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

• Many strong community-based organizations offer home visits and provide other support to pregnant and parenting women and are strong partners to healthcare systems.
Preventable Causes of Death

Every day, more than two dozen children die from an injury that was not intended. The number of potentially preventable deaths – premature deaths that could have been avoided – has been declining in Washington state overall.

Obesity, Physical Activity and Nutrition

Children who are overweight or obese often have worse health, limited ability to move and be active, lower self-esteem and increased risk for type 2 diabetes. Children and adolescents who are overweight or obese have a higher risk of being obese as adults. Many different factors are related to overweight and obesity, including characteristics of the child, and the child’s home and community environments. To be successful, efforts to prevent and reduce childhood obesity and overweight must consider these different factors.

Obesity and Overweight Prevalence

Children and adolescents are considered obese if their body mass index (BMI) is in the top 5% for their age and gender. They are considered overweight or obese if their BMI is in the top 15%.

In Washington state in 2014, 11% of students in 10th grade were obese, and 14% were overweight based on the statewide Healthy Youth Survey. These levels have held constant since 2002. In 2014, 8% of King County students in grades 8, 10 and 12 were obese, and 20% were overweight or obese.

In Washington state:

- Native Hawaiian/Pacific Islander students in 12th grade were about 2.7 times more likely to be obese than white students in the same grade.
- American Indian/Alaska Native, Black/African American, Native Hawaiian/Pacific Islander and Hispanic students were more likely than Asian or white students to be overweight.
- The South King County region had a significantly lower percent of students at a healthy weight than any other region.

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186 Strauss, R.S. Childhood obesity and self-esteem. Pediatrics. 200; 105(1)
In 2015-2016 for patients ages 2 to 18 at Seattle Children’s, 64% of patients were normal weight, 4% were underweight, 15% were overweight and 17% were obese. Native Hawaiian/Pacific Islander, American Indian/Alaska Native, Hispanic and black populations were more likely to be overweight or obese compared to white and Asian youth. Children on Medicaid were more likely to be overweight or obese than children with any other form of insurance.

In King County:
- Of all race/ethnicity groups, Asians were least likely to meet recommendations of physical activity in 2012-2014.
- As grade level increased, student participation in physical activity declined, with 12th graders 0.8 times as likely as 6th graders to meet recommendations.
- Rates of not meeting physical activity recommendations among youth decreased between 2006 and 2012 for the county and in all four regions.

**Physical Activity**

About 75% of school-age children in Washington state do not meet the recommendation of participating in at least 60 minutes of physical activity on seven of the past seven days, compared to 76% of school-age children in King County in 2012.\(^{196}\)

In King County:
- Of all race/ethnicity groups, Asians were least likely to meet recommendations of physical activity in 2012-2014.
- As grade level increased, student participation in physical activity declined, with 12th graders 0.8 times as likely as 6th graders to meet recommendations.
- Rates of not meeting physical activity recommendations among youth decreased between 2006 and 2012 for the county and in all four regions.

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drink soda or sweetened beverages every day.

- South Region students were more likely to consume sugary beverages daily than were students in the other three regions.
- From 2004 to 2014, rates of daily sugary drink consumption decreased for students in the county overall and in all four regions.

Fruit and Vegetable Consumption

Eating fruits and vegetables lowers the risk of developing many chronic diseases and can support weight management.

Eating fruits and vegetables lowers the risk of developing many chronic diseases and can support weight management. In 2014 in Washington State, 24% of 8th graders and...
22% of 10th and 12th graders ate five or more servings of fruit and vegetables per day over the past seven days. In King County, 27% of King County 8th, 10th and 12th graders ate five or more servings of fruits and vegetables per day during the past seven days. These rates are similar for children of all ages, race/ethnicity categories and residential location.

**Food Insecurity**

Food insecurity, referring to the inability to provide adequate food for one or more household members due to a lack of resources, is at its lowest level since before the Great Recession. In 2015, 12.7% of U.S. households experienced food insecurity compared to 14% in 2014, continuing the downward trend from a high of 14.9% in 2011. However, despite the significant progress, food insecurity remains a concern across the country. For years, food insecurity has been harming the health and well-being of millions in the United States. Furthermore, the United States Department of Agriculture (USDA) reports that food insecurity rates are higher for Hispanics and Blacks or African Americans than for their white counterparts.

In Washington state, one in five kids live in a household that struggles to put food on the table and one in seven Washingtonians relies on food stamps known as SNAP (Supplemental Nutrition Assistance Program). Half of all people on SNAP are kids. Although food insecurity is harmful to any individual, it can be particularly devastating among children due to their increased vulnerability and the potential for long-term consequences.

According to the Healthy Youth Survey (HYS) Analytic Report, compared to children from families who are food secure, children from families with food insecurity are more likely to have behavior problems, do poorly in school, need medical care and hospitalization, and develop chronic diseases. Food insecurity is also associated with poor-quality diet and obesity. Many overweight or obese children lack access to high quality nutritious foods at affordable prices. Hunger induces irregular eating patterns which can lead to being overweight and obese, reflecting the strong link between health and hunger.

In addition to contributing to the development and effects of certain chronic diseases, food insecurity causes people to adjust their health behaviors, causing further problems to their health and ability to manage chronic health conditions. Some living with food insecurity will reduce, skip, delay or use lower-cost medications as a result of using what little resource they have to purchase.

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206 Ibid.


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“I don’t think any family prefers to eat processed foods; but at certain times of the month, it’s what’s consumed because there’s not the funds to buy the fresh produce.”

– King County mother
Public Health – Seattle & King County’s Health Behaviors and Academic Risk report highlights the relationship between failing academically and 23 specific health-risk behaviors. Of King County students in grades 8, 10 and 12, 12.6% reported being food insecure in 2012 and 2014.

Academic risk, defined as receiving grades of mostly C’s, D’s or F’s in school, nearly doubled for students who were food insecure compared to those who were not food insecure. In 2012 and 2014, 39.1% of King County students who reported being food insecure were at academic risk, compared to 19.4% at academic risk among food secure students.

Certain groups in King County are more affected by food insecurity than others. Between 2010 and 2013, food insecurity increased significantly for low-income households and residents who were unemployed.

Across the country, households with children are more likely to be food insecure than households without children. The State of Washington’s Kids report states that 13.2% of 10th graders were food insecure in 2014. In 2015, 16.6% of all U.S. households with children experienced food insecurity, down significantly from 19.2% in 2014. In about half of these households, food insecurity only affected the adults, as many parents would sacrifice their own meals so their children wouldn’t have to go hungry. However, in 7.8% of these households, both the children and adults were food insecure.

“Hunger is a health issue and food is the best medicine.”
– Jason Gromley, The Root Cause Coalition
Figure 43: King County students at academic risk with and without health-risk behavior, 2012 & 2014 average

Students with health-risk behaviors reported being at academic risk more than students who did not have a specific health-risk behavior. For example, 51% of King County students who reported smoking cigarettes were at academic risk.
In western Washington state, there are approximately 673,000 food insecure people; one in seven are hungry, half of whom are children and seniors. 224 In 2014, 13.3% of King County residents were food insecure; 18% were children.

Of King County’s food insecure children, 53% were income-eligible for nutrition programs. 225

In King County, 36% of students received free or reduced-price meals in 2014, compared to 46% in Washington State and 50% throughout the United States. The rate varies from 4% of students receiving free or reduced-price meals in Mercer Island to 79% in Tukwila. 226

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226 Ibid.


to healthy children. In fact, based on research with children who are obese, their health-related quality of life is similar to the health-related quality of life of children with cancer.

Families’ stress and mental health issues can also impact a child’s health and weight, so it is important to consider the child’s family situation when determining how to support children dealing with obesity and overweight, and how to help prevent obesity and overweight.

- Adolescent girls who experience financial strain, family disruption and conflict are more likely to be overweight and obese.  
- Adolescent boys who are exposed to maternal risky health behaviors have a trend toward having a higher weight status.  
- Maternal depression is an important risk factor for child overweight and obesity because it affects mother-child relationships. Researchers have found that mothers with depression pay less attention to children about food and allow their children less independence in making decisions about eating, which can set the stage for obesity. Mothers who have symptoms of depression say they pressure their children to eat more frequently and tend to be more demanding about eating. They are also more likely to have the television on during meals and less likely to eat with their children.
- Children whose parents over control how they eat are more likely to overeat when

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**Figure 47: Percent of King County Public School Students with Free or Reduced Price Meals by School District, 2013-2014 School Year**

**Mental Health and Obesity**

In addition to physical activity and nutrition challenges, poor mental health is often linked to overweight and obesity. Physicians and dietitians at Seattle Children’s and OBCC have noticed this connection between mental health and the tendency to be overweight or obese. The following are key takeaways:

- It is difficult to determine whether poor mental health can lead to overweight and obesity, or if overweight and obesity can lead to poor mental health, but it is clear they are related.
- Research on low-income adults shows that adults who have depression have a higher risk of overweight and obesity.  
- Overweight and obesity can also have an impact on mental health. Youth who are overweight or obese are more likely to have depression, low self-esteem, social or school difficulties, and lower quality of life compared

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they are stressed than children of parents who do not.

- When mothers use food as a way to deal with their feelings instead of to satisfy hunger, their children seem to imitate that behavior.

### Youth Tobacco Use

In 2014 in King County, 21% of students in 8th, 10th and 12th grades were current cigarette smokers, compared to 25% in Washington state and 11.3% in the United States. Both cigarette smoking and use of smokeless tobacco have decreased from 2010 to 2014 in King County and Washington state. Use of electronic cigarettes and vapor products is on the rise among youth in King County, Washington state and in the U.S.

In King County:

- Native Hawaiians/Pacific Islanders and American Indians/Alaska Natives were about three times more likely than Asian students to be current smokers.
- From 2004 to 2014, rates of youth cigarette smoking declined for King County and all four of the county’s regions.

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242 Ibid.
results in children spending unsupervised time indoors, usually watching television or playing video games.

**Nutrition**

- Recent community-based surveys of low-income women and women of color reported on 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. Recent Metro bus service reductions may exacerbate this problem. There are fewer transportation options in suburban cities.

- Listening group participants shared concerns about the quality of school food (including breakfast and lunch) and appropriateness for their culture due to differences in the food they eat compared to U.S. food.

- Teen and adult participants have some knowledge about nutrition, such as the importance of eating fruits and vegetables and limiting soda consumption, but adults mention challenges finding time to cook, particularly if they have more than one job.

- Participants say they are not always sure if their child is a healthy weight. In some immigrant communities, this may be partly because of cultural perceptions that heavier weight in children is desirable or the perception that heavier weight shows success and prosperity.

**Youth Tobacco Use**

Community members working to reduce tobacco use report an overall decline in resources for prevention and cessation, and a corresponding leveling off of previous declines in smoking rates. Disparities persist among black and American Indian/Alaska Native communities. Stakeholders also report an increase in use of tobacco alternatives (including e-cigarettes and hookahs) by youth. According to Public Health-Seattle & King County compliance checks, tobacco retailers are illegally selling e-cigarettes to minors at more than twice the rate (16%) of cigarettes.

**Community Assets and Resources**

**Nutrition**

- As of this year, organizations in Washington have grouped together to propose a fruit and vegetable prescription program supported by the Food Insecurity Nutrition Incentive (FINI) Program. The idea is for healthcare providers and supportive housing sites to screen individuals for food insecurity, provide the food insecure with Fruit and Vegetable Prescriptions to use at participating retailers for fresh produce, and track their health outcomes. Such a program, mirrored after the Wholesome Wave’s Fruit and Vegetable Prescription Program (FVRx), would bring greater food security to food insecure households, reduce healthcare costs, support the local economy and help prevent diet-related chronic diseases.

- Community gardens and farmers’ markets provide the opportunity to learn about and access fruits and vegetables.

- The Fresh Bucks program enables shoppers who receive basic food assistance to double their money at farmers’ markets.

- The Women, Infants and Children Special Supplemental Nutrition program helps pregnant women, new mothers and young children eat well, learn about nutrition and stay healthy.

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244 Personal communication, Scott Neal, Tobacco Program Manager, Public Health-Seattle & King County, (2014, July 25).

• Food banks and other feeding programs sponsored by faith-based organizations are working to provide healthier options to customers.
• Seattle Children’s participates in several nutrition initiatives that benefit the community:
  The nutrition team offers healthier options on menus and provide nutrition education to employees, patients and visitors.
  Seattle Children’s contributes to local and regional initiatives to improve access to fruits and vegetables, such as Fresh Bucks, grocery store vouchers for produce, and free or low-cost food bags.
  Seattle Children’s has organic gardens and offers classes to patients and families about gardening and nutrition.

Healthy Eating and Active Living
• Local parks, community centers and pools offer public places for physical activities; some offer programs, such as single-gender swim times and scholarships for children.
• The Healthy King County Coalition aims to reduce health inequities by improving nutrition, increasing physical activity, and decreasing smoking rates and other tobacco use.
• The CDC-funded Partnership to Improve Community Health (PICH) will build on efforts to increase access to healthy foods and physical activity, and reduce exposure to unhealthy foods, beverages and tobacco products. ACT!, a YMCA-based healthy lifestyles program, provides support and education to overweight and obese youth (ages 8 to 14) who have a body mass index (BMI) greater than the 85th percentile, along with their families.
• OBCC promotes healthy lifestyles during well-child visits and offers follow-up visits for children who are overweight or obese.
• Families can learn about healthy eating and attend nutrition and cooking classes.
• Childhood Obesity Prevention Coalition, a coalition of 52 organizations, engages in legislative advocacy.

Youth Tobacco Use
• Strong partners committed to reducing the prevalence of Tobacco, Marijuana and Other Drugs (TMOD). These members are part of the Healthy King County Coalition TMOD committee and include the Center for Multicultural Health, Asian Pacific Islander Coalition Against Tobacco, Entre Hermanos, Neighborhood House, Gay City and the Seattle Indian Health Board.
• The Washington State Quitline provides telephone support, self-help materials and medications (when appropriate) for individuals wanting to quit tobacco.
• Cessation medication combined with counseling is the most effective cessation method. Behavioral health providers are increasingly addressing tobacco cessation with patients who have some of the highest smoking rates.

Opportunities

At Seattle Children’s
• Seattle Children’s has adopted the “Healthy Food in Healthcare” pledge and enrolled in the Healthier Hospitals Initiative Healthy Beverages Challenge, which calls on institutions to increase healthy beverage purchases by 20%. In 2012, Seattle Children’s removed all sugar-sweetened beverages from cafeterias, vending machines and gift shops. More than 57% of beverages purchased for the cafeteria, patient menus and vending machines are now healthy.
• Seattle Children’s is also working to increase the purchase of local and sustainable food by 15% each year.
• In fall 2016, Seattle Children’s opened a larger, better-equipped kitchen that has enabled staff to prepare made-to-order meals using fresh ingredients for hospitalized patients. The kitchen was designed with the goal of creating tasty, healthy, fresh whole foods, including locally sourced foods from the Pacific Northwest, more gluten-free and organic products, and antibiotic-free meats. Kitchen staff will also prepare food for the cafeteria and catering requests.

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

In Communities at High Risk
• Communities should offer free or low-cost education on cooking and grocery shopping for adults and children through fun, interactive activities that the whole family can enjoy together in settings that are convenient for community members. Educational opportunities and information should also be available online or through social media for families who are not able to attend in person. Opportunities should be culturally relevant and accessible to families who speak different languages. Immigrant families have different needs compared to U.S.-born families because they are exposed to and interested in both U.S. foods and familiar foods from their countries of origin.

• Increase access to affordable and healthy foods and beverages in low-income communities, including at retailers and farmers’ markets.

• Work with schools and childcare centers to increase consumption of healthier foods and improve physical activity offerings, including outdoor activities.

• Provide training and capacity-building around healthy eating and active living to teachers, administrators, school nurses, primary care providers and others who work with children.

• Improve access to physical activity in collaboration with employers, coalitions, agencies and communities. These groups are creating walking trails, building new exercise facilities, providing access to existing nearby facilities, reducing the cost of opportunities for physical activity and providing activities for the whole family. It is important to provide opportunities for physical activity that are inclusive and non-competitive.

• Provide culturally relevant education about positive parenting and incorporate content related to healthy eating and active living. Participants in listening groups representing different cultures and communities expressed their commitment to their children’s health, and several mentioned an interest in parenting education and support. For recent immigrants, this could include parenting in a new country and balancing U.S. culture with the preservation of original culture and traditions, potentially incorporating information related to eating and nutrition using both traditional and U.S. foods.

• Work with communities to improve community safety, increase active commuting to school and ensure access to safe places for physical activity and recreation. Communities with high rates of obesity and overweight frequently also have high rates of crime, and many listening group participants mentioned concerns that their neighborhood was not a safe place for children to play outside.

• Promote safe transportation options, including walking, riding a school bus and bicycling.

• Advocate for policies to support food security, healthy eating and active living at the local, state and federal levels.

• Help residents increase their earning capacity (and their ability to buy healthy food) by
supporting job training programs, community economic development and living wage ordinances.

- Tobacco-cessation coverage varies by health plan. No mandated coverage standard exists in King County. Continuing tobacco prevention and cessation messaging to the public and to patients, and implementing evidence-based brief tobacco screenings may decrease rates of tobacco use among children and adolescents.

Violence and Injury Prevention

This section reports on hospitalizations and deaths from both intentional and unintentional injuries. However, hospitalization numbers underestimate injury rates. For each case that results in hospitalization, many more injuries are never reported, and hospitalization data exclude cases where emergency department treatment was received but the patient was not admitted to the hospital.

While some types of injuries have declined since the 1990s, recent increases in deaths due to suicide and poisoning raise new concerns. Among all age groups, falls are a leading cause of emergency department visits and hospital readmissions. Intentional injuries and deaths (assaults, homicides and suicide) remain problematic for regional communities. Although motor vehicle fatalities have decreased sharply, distracted and impaired driving continue to endanger drivers, passengers, bicyclists and pedestrians.

Intentional Injuries

Suicide

Suicide is the second leading cause of death in Washington state and the third leading cause of death in the United States among children and young adults ages 10 to 24, with highest rates among white and American Indian youth. In 2014 in Washington state, 135 suicide deaths occurred among youth ages 5 to 24. This includes:

- 10 suicide deaths among children ages 5 to 14 (a rate of 1.1 per 100,000 population)
- 43 suicide deaths among teenagers ages 15 to 19 (a rate of 9.7 per 100,000 population)
- 82 suicide deaths among young adults ages 20 to 24 (a rate of 17.1 per 100,000 population)

The use of a firearm is the most lethal method of suicide and was the leading method of youth suicide in Washington state in 2014. The presence of a household firearm in the home is linked with an increased risk of adolescents using a firearm to attempt suicide. Moreover, risk of completed firearm suicides among King County children (<18 years) is 9.2 times greater when firearms in or around the home are stored unlocked compared to when firearms are stored locked. Securing or removing a firearm from the home reduces the opportunity that youth

248 Ibid.
249 Ibid.
250 Ibid.
and adults at risk for suicide will use it to harm themselves.

In Washington state in 2014, 9% of eighth graders, 10% of 10th graders, and 8% of 12th graders attempted suicide in the past year. The Healthy People 2020 goal is to reduce the percentage of youth in ninth through 12th grades who attempt suicide to 1.7%. In Washington state in 2014:

• Girls in grades 8, 10 and 12 were more likely than boys to attempt suicide.  257
• 10% of 10th graders reported they had attempted suicide in the past year. This is a significant increase from 2012, when 8% said they had attempted suicide. Prior to this increase, results had been consistent since 2002.  258

From 2004 to 2013, an average of 820 non-fatal suicide hospitalizations occurred in King County each year among all ages, with an average rate of 43.3 per 100,000 population. The suicide hospitalization rate for young adults ages 18 to 24 was 1.7 times the county average.  259

Over the same period, however, rates increased in the East Region and decreased in the South Region. The suicide hospitalization rate for young adults ages 18 to 24 was 1.7 times the county average.

Homicide Deaths

From 2009 to 2013, 302 homicide deaths among youth ages birth to 24 occurred in Washington state, which is an average of about 60 per year.  260 Women in violent relationships, young men, American Indians/Alaska Natives and black people of all ages are most likely to be homicide victims.  261

During that same period, in King County there were 77 homicides, an average of 15 deaths per year.  262 Homicide deaths for individuals ages 18 to 24 were 2.5 times the county average, and the rate of homicide deaths among black people was 4.4 times the county average from 2008 to 2012.

<table>
<thead>
<tr>
<th>Age</th>
<th>Washington State</th>
<th>King County</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total number of</td>
<td>Rate per</td>
</tr>
<tr>
<td></td>
<td>homicides,</td>
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<td></td>
<td>average per year</td>
<td>population</td>
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<tr>
<td>10-14 years</td>
<td>10, 2</td>
<td>0.5 for 1-4</td>
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<td>15-19 years</td>
<td>86, 17</td>
<td>2.9 for 15-17 year olds, 5 for 18-19 year olds</td>
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<tr>
<td>20-24 years</td>
<td>146, &gt;29</td>
<td>6.2 for 18-19 year olds</td>
</tr>
</tbody>
</table>

Table 6. Homicides among children and young adults from 2009 to 2013

256 Ibid.
257 Ibid.
261 Ibid.
263 Ibid.

Violence and injuries are preventable. They are also the leading causes of death for people between the ages of 1 and 44.
Nonfatal Assault-related Hospitalizations

From 2009 to 2013, there were an average of 2,252 nonfatal assault-related hospitalizations that occurred among youth ages birth to 24 in Washington state, which is an average of 450 per year.\(^{265}\) In King County over the same period, there were 660 nonfatal assault-related hospitalizations of youth ages birth to 24, which is an average of 132 per year.\(^{266}\) From 2000 to 2012, assault hospitalization rates decreased in King County, the North Region and Seattle.

<table>
<thead>
<tr>
<th>Age</th>
<th>Washington State (^{267})</th>
<th>King County (^{268})</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total number, average per year</td>
<td>Rate per 100,000 population</td>
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<tr>
<td>0-4 years</td>
<td>391, 78</td>
<td>8.14 for ages less than 1 year, 7.6 for 1-4 year-olds</td>
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<td>5-9 years</td>
<td>32, 6</td>
<td>1.5</td>
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<tr>
<td>10-14 years</td>
<td>91, 18</td>
<td>4.2</td>
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<td>15-19 years</td>
<td>642, 128</td>
<td>21.5 for 15-17 year olds, 37.8 for 18-19 year olds</td>
</tr>
<tr>
<td>20-24 years</td>
<td>1096, 219</td>
<td>46.9</td>
</tr>
</tbody>
</table>

Table 7. Nonfatal assault-related hospitalizations among children and young adults from 2009 to 2013

Child Maltreatment

In the United States, child protective services estimates that about 686,000 children were victims of child maltreatment, which is a rate of 9.2 per 1,000.\(^{269}\) As the affected child grows older, child abuse and neglect increase the risk of delinquency, substance abuse, adolescent pregnancy, adverse health behaviors, suicide attempts and HIV-risk behaviors.\(^{270}\) In 2011, 46,636 children were referred to Washington State Child Protective Services (CPS), which is rate of 30 per 1,000 children under age 18.\(^{271}\) Across the state, children ages 0 to 3 are at the greatest risk of any abuse. They have the highest abuse and neglect rates, and they are the most likely to experience recurrence of abuse and to die from abuse and neglect.\(^{272}\) Neglect is defined as “a failure to provide the basic needs required to sustain and promote a child’s health, safety and well-being.”\(^{273}\) Neglect accounts for 70% of validated child maltreatment cases in the state.

Unintentional Injuries

Unintentional injuries are the leading cause of death for children and youth ages 1 to 24. Unintentional injuries include those due to motor vehicle collisions, poisoning, fire, firearms, drowning and suffocation. Most of these injuries, and the deaths they cause, are preventable. The sections below summarize data on deaths and hospitalizations from all types of unintentional injuries. Falls accounted for the highest rate of unintentional injuries among children and young adults ages birth to 24, with more than 315 per year from 2009 to 2013 in King County\(^{274}\) and more than 1,161 per year in Washington state.\(^{275}\)

There are significant disparities in unintentional injury rates among racial and ethnic population subgroups. In Washington state and nationally, injury death rates increase as poverty increases.

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\(^{271}\) Ibid.

\(^{272}\) Ibid.


### Unintentional Injury Deaths

From 2009 to 2013 in Washington state, 1,441 unintentional injury deaths occurred among youth ages birth to 24, which is an average of 288 unintentional injury deaths per year. In King County over that same time period among youth ages birth to 24, 286 unintentional injury deaths occurred, which is an average of 57 unintentional injury deaths per year.

### Unintentional Injury Hospitalizations

From 2009 to 2013 in Washington state, 22,065 unintentional injury hospitalizations occurred among youth ages birth to 24, which is an average of 4,413 unintentional injury hospitalizations per year. In King County over that same time period among youth ages birth to 24, 5,313 unintentional injury hospitalizations occurred, which is an average of 1,062 unintentional injury hospitalizations per year.

#### Table 8. Unintentional injury deaths among children and young adults from 2009 to 2013

<table>
<thead>
<tr>
<th>Age</th>
<th>Total number, average per year</th>
<th>Rate per 100,000 population</th>
<th>Leading cause</th>
<th>Total number, average per year</th>
<th>Rate per 100,000 population</th>
<th>Leading cause</th>
</tr>
</thead>
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<tr>
<td>0-4 years</td>
<td>204, 40</td>
<td>28.3 for ages less than 1 year, 7.5 for 1-4 year-olds</td>
<td>Suffocation and drowning</td>
<td>19, 4</td>
<td>6.8 for ages less than 1 year, 3.2 for 1-4 year-olds</td>
<td>Suffocation</td>
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<td>5-9 years</td>
<td>62, 12</td>
<td>2.9</td>
<td>Motor vehicle accidents</td>
<td>16, 3</td>
<td>2.8</td>
<td>Fire and motor vehicle accidents</td>
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<tr>
<td>10-14 years</td>
<td>76, 15</td>
<td>3.5</td>
<td>Drowning, motor vehicle accidents</td>
<td>12, 2</td>
<td>2.2</td>
<td>Motor vehicle accidents</td>
</tr>
<tr>
<td>15-19 years</td>
<td>383, 76</td>
<td>12.1 for 15-17 year olds, 23.6 for 18-19 year olds</td>
<td>Motor vehicle accidents, poisoning</td>
<td>76, 15</td>
<td>8.1 for 15-17 year-olds, 20 for 18-19 year-olds</td>
<td>Motor vehicle accidents, poisoning</td>
</tr>
<tr>
<td>20-24 years</td>
<td>716, 143</td>
<td>30.6</td>
<td>Motor vehicle accidents, poisoning</td>
<td>163, 32</td>
<td>25.6</td>
<td>Motor vehicle accidents, poisoning</td>
</tr>
</tbody>
</table>

#### Table 9. Unintentional injury hospitalizations among children and young adults from 2009 to 2013

<table>
<thead>
<tr>
<th>Age</th>
<th>Total number, average per year</th>
<th>Rate per 100,000 population</th>
<th>Total number, average per year</th>
<th>Rate per 100,000 population</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4 years</td>
<td>4276, 855</td>
<td>326.5 for ages less than 1 year, 223.9 for 1-4 year-olds</td>
<td>1179, 235</td>
<td>318.2 for ages less than 1 year, 226.2 for 1-4 year-olds</td>
</tr>
<tr>
<td>5-9 years</td>
<td>2290, 458</td>
<td>105.8</td>
<td>553, 110</td>
<td>96.3</td>
</tr>
<tr>
<td>10-14 years</td>
<td>3048, 609</td>
<td>139.5</td>
<td>665, 133</td>
<td>119.6</td>
</tr>
<tr>
<td>15-19 years</td>
<td>5712, 1142</td>
<td>240.9 for 15-17 year olds, 264.7 for 18-19 year olds</td>
<td>1261, 252</td>
<td>204.1 for 15-17 year-olds, 232.2 for 18-19 year-olds</td>
</tr>
<tr>
<td>20-24 years</td>
<td>6739, 1347</td>
<td>288.2</td>
<td>1655, 331</td>
<td>259.9</td>
</tr>
</tbody>
</table>


Poisoning

From 2009 to 2013, an average of 16 King County youth ages birth to 24 and an average of 65 youth ages birth to 24 in Washington state died from unintentional poisonings each year. From 2008 to 2012 in King County, the unintentional poisoning death rate for American Indians/Alaska Natives was 17.4 times the rate for Asian residents. From 2000 to 2006, death rates from poisoning increased in King County overall, but have flattened out since then. The rate in the South Region began to plateau in 2008, but the rate continues to increase in the East Region. In addition, an average of 98 King County youth ages birth to 24 and 77 youth ages birth to 24 in Washington state were admitted to hospitals for unintentional, nonfatal poisonings each year.

Motor Vehicle Deaths

Motor vehicle deaths result from motor vehicle collision (MVC) and include deaths of vehicle occupants, motorcyclists, bicyclists and pedestrians. From 2009 to 2013, an average of 22 King County youth ages birth to 24 and 117 Washington state youth ages birth to 24 died from motor vehicle collisions each year. From 2008 to 2012 in King County, the MVC death rate for American Indians/Alaska Natives was three times the county average. Between 2000 and 2012, MVC death rates declined in King County, Seattle, the North Region and the South Region. The rate in the East Region began its decline in 2005.

<table>
<thead>
<tr>
<th>Age</th>
<th>Total number</th>
<th>Average per year</th>
<th>Total number</th>
<th>Average per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4 years</td>
<td>26</td>
<td>5</td>
<td>3</td>
<td>&lt;1</td>
</tr>
<tr>
<td>5-9 years</td>
<td>27</td>
<td>5</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>10-14 years</td>
<td>27</td>
<td>5</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>15-19 years</td>
<td>195</td>
<td>39</td>
<td>34</td>
<td>7</td>
</tr>
<tr>
<td>20-24 years</td>
<td>304</td>
<td>60</td>
<td>66</td>
<td>13</td>
</tr>
</tbody>
</table>

Table 10. Motor vehicle deaths among children and young adults from 2009 to 2013

Motor Vehicle Injury Hospitalizations

From 2009 to 2013, an average of 328 King County youth ages birth to 24 and 777 Washington state youth ages birth to 24 were hospitalized for nonfatal MVCs each year. In 2008 to 2012, the rate of MVC hospitalization for adults ages 18 to 24 was 1.6 times the county average. The rates of nonfatal MVC hospitalizations have been decreasing for all ages in King County overall and Seattle since 2006, and in the other three regions since 2000.

<table>
<thead>
<tr>
<th>Age</th>
<th>Total number</th>
<th>Average per year</th>
<th>Total number</th>
<th>Average per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4 years</td>
<td>168</td>
<td>33</td>
<td>49</td>
<td>10</td>
</tr>
<tr>
<td>5-9 years</td>
<td>226</td>
<td>45</td>
<td>53</td>
<td>10</td>
</tr>
<tr>
<td>10-14 years</td>
<td>361</td>
<td>72</td>
<td>87</td>
<td>17</td>
</tr>
<tr>
<td>15-19 years</td>
<td>1,414</td>
<td>282</td>
<td>285</td>
<td>57</td>
</tr>
<tr>
<td>20-24 years</td>
<td>1,711</td>
<td>342</td>
<td>387</td>
<td>77</td>
</tr>
</tbody>
</table>

Table 11. Motor vehicle injury hospitalizations among children and young adults from 2009 to 2013

282 Ibid.
Child Passenger Safety

Nationally, 43% of children ages 4 to 7 are restrained in booster seats. Child safety seats reduce the risk of death in passenger cars by 71% for infants and by 54% for children ages 1 to 4. For children ages 4 to 7, booster seats reduce injury risk by 59% compared to seatbelts alone. Child-restraint systems are often used incorrectly. One study found that 72% of nearly 3,500 observed car and booster seats were misused in a way that could increase a child’s risk of injury during a crash.

Motor vehicle crashes remain the leading cause of injury and death for children and young adults in Washington state. A risk factor for most causes of injury is drug or alcohol impairment in supervising adults and older children. More than two-thirds of fatally injured children were killed while riding with a drinking driver. About 45% of children and teens in Washington who died in crashes were unrestrained by a child safety seat or seatbelt. Of those children ages 4 to 8 who died in car crashes, only one (5%) was in a booster seat.

The Healthy People 2020 initiative aims to:

- Reduce motor vehicle crash-related deaths.
- Reduce nonfatal motor vehicle crash-related injuries.
- Increase age-appropriate vehicle restraint system use in children where 95% of children ages 0 to 1 are restrained in a rear-facing child safety seat (baseline was 86% in 2008); 79% of children ages 1 to 3 are restrained in a front-facing child safety seat (baseline was 72% in 2008); 47% of children ages 4 to 7 are retrained in a booster seat (baseline was 43% in 2008); and 86% of children ages 8 to 12 use safety belts (baseline was 78% in 2008).

In Washington state:

- Teens ages 15 to 17 have the highest rate of motor vehicle occupant deaths and hospitalizations among youth ages 0 to 17.
- Compared to 10th grade youth without disabilities, Washington state 10th graders with disabilities are more likely to never or rarely wear seatbelts and to drive after drinking alcohol. Similar results were found for eighth and 12th graders.

Drowning

Unintentional drowning is the second leading cause of injury death for Washington children ages 1 to 14. From 2009 to 2013, unintentional drowning among Washington state youth ages birth to 17 accounted for an average of about 16 deaths and about 20 nonfatal hospitalizations per year. Drowning death rates are highest in children ages 1 to 4 and in adolescents ages 15 to 17.

287 Harborview Medical Center, Seattle Children’s Hospital, Public Health Seattle & King County. (2004-2006). Injury Free Coalition for Kids Seattle: Report to the Community.
292 Ibid.
293 Ibid.
Pedestrian Injuries

Pedestrian injuries are one of the leading causes of injury death for Washington children ages 1 to 9. Statewide from 2009 to 2013, pedestrian injuries in children ages 0 to 17 accounted for an average of nine deaths and 79 hospitalizations each year. Pedestrian death rates were highest in children ages 0 to 4 and 15 to 17. The majority of these deaths occurred on a driveway or city street and involved motor vehicles.

Bicycle Injuries

Head injury is the most common cause of death and serious disability in bicycle crashes. A correctly worn bicycle helmet reduces the risk of a head injury by nearly 85%. In a national study by Safe Kids, 41% of children observed were wearing a helmet while participating in wheeled sports. More than one-third of children wearing helmets wore them improperly.

There is a need for adolescent helmet education and awareness programs. In 2012, 31% of eighth graders, 27% of 10th graders and 26% of 12th graders who rode a bicycle in the past year wore a helmet most of the time or always.

Bicycle injuries among Washington children ages 0 to 17 accounted for an average of two deaths and 134 nonfatal injury hospitalizations per year between 2009 and 2013. Bicycle hospitalization rates were highest in the 10 to 14 age group. Bicycle injuries are the third leading cause of injury hospitalization for Washington children ages 5 to 14.

In Washington state:

- Infants are most likely to drown in a bathtub.
- Children ages 1 to 4 most often drown in open water and most of the swimming pool-related deaths occurred in this age group.
- None of the pools or hot tubs involved in a child drowning had a locked gate.
- A lifeguard was present in only three of the 58 drowning deaths that occurred in open water or in a pool.
- About 89% of children birth to age 5, 80% of children ages 6 to 12, and 50% of youth ages 13 to 17 wear life jackets in boats.
- The risk for drowning increases among individuals with less formal education and higher poverty rates and disproportionately affects minorities.
- Compared to 10th graders without disabilities, Washington state 10th graders with disabilities are less likely to use a life vest when in a small boat.
- People with a seizure disorder have a higher risk of drowning. Children and adolescents with a history of seizure disorder are at particular risk and need close monitoring and supervision when bathing and when in or near water. Of the child drowning deaths reviewed, 10% either had a history of seizure disorder or seizure was listed on the death certificate.

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303 Ibid.
Community Input

Community members expressed the need for increased regional coordination and standard implementation of best practices in violence and injury prevention.

Intentional Injuries

Strong community support was expressed for training all community providers — including social workers, medical providers and mental health providers — in suicide assessment and treatment interventions.

Unintentional Injuries

- Law enforcement officials and community members said they were increasingly concerned about texting, talking and other uses of mobile devices while driving.
- Law enforcement officials expressed concern about a possible rise in impaired driving related to the legalization of marijuana. They also said that quickly testing the blood of drivers arrested for suspicion of DUI is critical to accurately assessing the level of impairment.
- Individuals with few economic resources or little formal education are less likely to use safety devices due to lack of money. They are more likely to lack transportation to a store where they could purchase safety devices, to lack control over housing conditions, and to believe that injuries are preventable.

Community Assets and Resources

Intentional Injuries

- The Central EMS and Trauma Care Council, which promotes and supports a system of emergency, medical and trauma services in King County.
Mobile Impaired Driving Unit (MIDU), a self-contained mobile DUI processing center and incident command post. Employers are also creating policies related to the use of cell phones by drivers.

• The Target Zero Task Force, which focuses on reducing traffic crashes and traffic-related injuries to zero by the year 2030.

• The Safety Restraint Coalition collaborates with families, law enforcement, healthcare providers, government agencies and advocates to promote the use of seatbelts and car seats.

• In Washington state, several strong laws support child passenger safety, including the child passenger restraint law and the seat belt law. Seattle Children’s provides free, on-site car seat checks to the public each quarter to review individual car seats for proper installation and to educate parents.

• Safe Kids Washington, which includes Safe Kids Eastside and Safe Kids Seattle/South King County, implements evidence-based programs, such as car seat checks and safety workshops, to help prevent childhood injuries.

• To reduce drowning rates, local parks departments, YMCAs and other organizations provide swimming lessons and lifeguarded pools and beaches. The Washington State Parks Boating Program and Safe Kids Washington State also help coordinate and set up life jacket loaner programs.

• Several local organizations, including Feet First, advocate for safe walking in neighborhoods and cities, raise concerns of pedestrians in conversations with government agencies and community groups, and encourage Washingtonians to make alternate transportation choices, like taking a bus or train, riding a bike or walking. Seattle Children’s has made a strong commitment to promote alternate transportation options, improve pedestrian

**Unintentional Injuries**

• To address impaired driving, law enforcement conducts high-visibility patrols and uses the
Opportunities to tackle child maltreatment include more public education about what abuse is, how to recognize it and how to report it; and education to parents on positive, safe and nurturing strategies to raise children.

Unintentional Injuries

• Offer prevention-related primary care assessments/screenings, including intake assessments that include questions about the use of cell phones while driving, seatbelt use and driving while impaired.

• To promote child passenger safety, it is important to increase the availability of car seats by offering low-cost car seats or booster seats, and to promote car seat education by offering car seat checks to families in English and Spanish.

• To address drowning, community partners should offer education and awareness programs around drowning for children and adults; increase the use of life jackets through education and offering free or low-cost life jackets for all ages; increase access to swim lessons for low-income and culturally diverse children; develop a culturally competent water safety education campaign; and increase the number of lifeguarded swim beaches.

• Improvements in the community infrastructure to create safer walking environments (e.g. more pedestrian bridges, streetlights, playgrounds, sidewalks, paths and trails) will improve pedestrian safety.

• To improve bicycle safety, community organizations should increase the accessibility of bicycle helmets, especially to low-income families; boost education about bike safety; and offer additional helmet fittings in the community.

• To address sports injuries, players, parents and coaches need to learn the signs and symptoms of traumatic brain injuries, including concussions, and take appropriate action when they suspect such an injury.

Opportunities

Intentional Injuries

• Provide coordination between emergency department staff and law enforcement/first responders, including meetings to discuss challenges and opportunities of working with people who are homeless and/or have serious mental illnesses.

• Share emergency department data with the Washington State Department of Health to provide a more complete understanding of the impact of violence and injuries on youth.

• Utilize existing suicide-prevention tools and strategies, and offer low-barrier mental health and substance-abuse screenings at health fairs to help identify more people at risk for suicide.

• Continue research efforts, like the Collaborative Adolescent Research on Emotion and Suicide (CARES) study through the University of Washington and Seattle Children’s, which evaluates the effectiveness of dialectical behavior therapy among suicidal adolescents.

• Seattle Children’s promotes helmet safety by offering free helmet fittings in the community and offering low-cost helmet sales.

• To address sports injuries, several organizations work to prevent brain injury and support individuals and their families impacted by traumatic brain injury. Seattle Children’s offers several programs in the community, including youth sports participation exams and presentations on injury prevention. Seattle Children’s has also helped develop concussion care and treatment guidelines to determine if the patient is able to return to play.

• Seattle Children’s promotes helmet safety by offering free helmet fittings in the community and offering low-cost helmet sales.

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Community Health Assessment 2016
Appendix A: Methods

Methods for this 2016 Pediatric Community Health Assessment and the Jointly Authored 2015 King County Hospital’s Community Health Needs Assessment (CHNA) are summarized in the introduction and explained in detail below.

Identification of Health Needs and Selection of Indicators

A committee of representatives from King County Hospitals for a Healthier Community (HHC), facilitated by Public Health-Seattle & King County staff, used a community health framework and population-based approach for the CHNA to identify health needs and develop criteria for indicators used to measure health needs. The Pediatric Community Health Assessment (CHA) team also had sector representatives and the two groups finalized the selection of indicators with feedback from public health and hospital staff.

For each assessment, representatives planned a succinct report focused on key indicators that relate to the hospitals’ and communities’ assets and resources and inform future collective strategies. These indicators were to be focused on population-based preventive strategies and promote policy/systems/environmental change for maximum population health impact. It was also recognized that partnerships between hospitals, public health, community organizations and communities are key to successful strategies to address common health needs.

Representatives were subject matter experts who helped identify population-level health needs. The groups reached consensus to focus particularly on access to care, preventable causes of death, maternal and child health, behavioral health, and violence and injury prevention. Each hospital could also gather additional data and community input to address more specific service areas, such as cancer care, pediatrics and rural health.

Representatives for both assessments developed criteria to select indicators for the King County CHNA and the Pediatric Health Assessment recognizing that each assessment is not intended to provide all of the data necessary for each specialized topic. All topic areas were previously identified as areas of concern in other assessments. We used the criteria below to identify indicators other than those specified in the mandated topic areas.

1. Ability to address health equity, particularly by age, gender, race/ethnicity, geography, socioeconomic status, although not all demographic breakdowns may be available for all indicators.

2. Availability of high-quality data that are population-based (where possible), measurable, accurate, reliable and regularly updated. Data should focus on rates rather than counts.

3. Ability to make valid comparisons to a baseline or benchmark.

4. Prevention orientation with clear sense of direction for action by hospitals for individual, community, system, health service, or policy interventions that will lead to community health improvement.

5. Ability to measure progress of a condition or process that can be improved by intervention/policy/system change, and there exists a capacity to affect change.

6. Alignment with local and national healthcare reform efforts, including the triple aim, which involves enhancing the patient experience of care, improving the health of populations and reducing the per capita cost of healthcare.

Beyond the stakeholder interviews conducted with the CHNA, the pediatric assessment’s community input included meetings with over 10 coalitions; listening groups with 51 children and youth, over 84 parents and caregivers, and 17 providers and caregivers; feedback from 59 community organizations; two statewide
surveys with parents and caregivers as well as input from 65 Seattle Children’s leaders, faculty and staff.

Description of the Data

Quantitative data used in the CHNA/CHA and cited in this report are high-quality, population-based data sources and were analyzed by the PHSKC Assessment, Policy Development & Evaluation Unit. Data come from local, state and national sources, such as the U.S. Census Bureau, U.S. Centers for Disease Control and Prevention, Washington State Department of Health, King County and Public Health-Seattle & King County. Data sources for each indicator are shown in the each figure in each section and full details for each indicator are online. Some data, such as births, deaths and hospitalizations, are based on information for each event in King County.

Other data sources based on surveys follow rigorous sample design and complex survey analysis in order to present population-based percentages. In order to assess reliability of rates, 95% confidence intervals were calculated.

Community Input

As mentioned in the methodology section, community input included meetings with 10 coalitions; listening groups with 51 children and youth, 84 parents and caregivers, 17 providers and caregivers, feedback from 59 community organizations, two statewide surveys with parents and caregivers as well as input from 65 Seattle Children’s leaders, faculty and staff. The 2015 CHNA and 2016 Pediatric CHA took into account input from people who represent the broad interests of the communities served by hospitals and health systems. Three methods of gathering information from community members about identified health needs and assets were used.

1. In both the King County CHNA and Pediatric CHA between January and July 2014 conducted interviews with stakeholder coalitions with broad representation. This method maximized the number and diversity of stakeholders who could provide input. Coalitions were identified that have expertise on health needs identified through quantitative data, have diverse membership, and have a regional or subregional focus. Stakeholders included those who represent the broad interests of the community; representatives of medically underserved, low-income and minority populations, and populations with chronic disease needs; and representatives from the local health department. Stakeholder groups included human service providers; community health centers; behavioral health providers; state, county and local government staff; fire departments; law enforcement; advocacy organizations; hospital staff; groups focused on health disparities in communities of color; faith communities; labor organizations; and managed care organizations. A total of 10 coalitions and 276 individual organizations or key informants provided information.

2. An online survey was also available for those who were unable to attend the respective coalition meeting and wished to provide input in writing. Thirty-one individuals responded to the survey.

3. Recent reports on health needs were also reviewed for themes and relevant assets and resources.

The following interview questions were used for the in-person interviews and online survey:

1. What are the main concerns you or your organization have about (topic) right now?

2. What are the people, places, and things that make your community healthy, safe, and strong and 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?

The information collected through these methods was analyzed for themes about key issues, available assets and resources, and opportunities. The findings were included in this report.

Interviews were conducted with individuals belonging to the following coalitions, agencies and organizations:

**Those who represent the broad interests of the community:**

- Eastside Human Services Forum
- Aging & Disability Services
- The Arc of King County
- City of Bellevue
- City of Kirkland
- City of Redmond
- Friends of Youth
- Hopelink
- Issaquah Human Services Commission
- Issaquah Sammamish Interfaith Coalition
- King County Council
- Kirkland City Council
- Overlake Medical Center
- Redmond City Council
- Youth Eastside Services
- YWCA Seattle-King-Snohomish
- North Urban Human Services Alliance
- Center for Human Services
- City of Lake Forest Park
- City of Shoreline Human Services
- Hopelink
- Northshore/Shoreline Community Network
- Shoreline Community College
- Seattle Human Services Coalition
- South King Council of Human Services
- King County Traffic Safety Task Force
- Burien Police Department
- Kent Police Department
- Kirkland Police Department
- Issaquah Police Department
- Maple Valley Police Department
- Newcastle Police Department
- Redmond Police Department
- Renton Police Department
- Seatac Police Department
- King County Emergency Medical Services
- Safe Kids Seattle/South King County
- Feet First Pedestrian Safety Coalition
- Harborview Spine Center and Concussion Program
- Safe Kids Eastside
- Brain Injury Alliance
- CarSafe Kids
- Duvall Fire Department
- Eastside Aid Community
- EvergreenHealth
- Nick of Time Foundation
- Olympic Physical Therapy
- Central Region EMS & Trauma Care Council
- EvergreenHealth Emergency Department
- Group Health Emergency Department
- Harborview Medical Center Emergency Department
Representatives of medically underserved, low-income and minority populations, and populations with chronic disease needs assisted in the assessment, including:

- Carol Allen, coordinator, Access to Baby and Child Dentistry Program, Public Health-Seattle & King County
- Behavioral Health Partnership Group
- Asian Counseling and Referral Services
- Catholic Community Services
- Community House Mental Health
- Community Psychiatric Clinic
- Consejo Counseling
- DESC
- EvergreenHealth
- Harborview Mental Health
- NAVOS
- Seattle Counseling Service
- Sound Mental Health
- Valley Cities Counseling
- YMCA
- King County Mental Health Chemical Abuse and Dependency Services
- Country Doctor Community Health Center
- SeaMar Community Health Center
- Forefront
- Equal Start Community Coalition
- Children’s Alliance
- Local Hazardous Waste Management
- Open Arms Perinatal Services
- Native American Women’s Dialogue on Infant Mortality
- Center for Multicultural Health
- YWCA
- Odessa Brown Children’s Clinic
- Health Coalition for Children and Youth
- Cedar River Group
- Childhood Obesity Prevention Coalition
- Children’s Alliance
- Community Health Network of Washington
- Molina Healthcare
- Neighborhood House
- Northwest Health Law Advocates
- Odessa Brown Children’s Clinic
- Partners for our Children
- Seattle Children’s Hospital
- Service Employees International Union Healthcare
Review of Existing Reports

Recent reports including broad community needs assessments, strategic plans, or reports on specific health needs were reviewed for context and relevant assets, resources, and opportunities. The following reports were reviewed:

1. Preliminary information from the King County Accountable Community of Health (ACH) exploration
2. Delridge Women’s Food Access report, 2014
3. Duwamish Valley Cumulative Health Impacts Analysis, 2013
4. Distracted driving report card, 2013
5. Got Green Food Access report, 2014
6. High School Outcomes for DSHS involved youth, 2012
7. Ina Maka Family Program Community Needs Assessment 2012
8. King County Equity and Social Justice Report, 2013
9. King County Strategic Plan community adults report, 2014
11. Regional Equity Network Grantee Recommendations, 2013
15. United Way of King County Investment Plan, 2013
18. Washington State Department of Health Strategic Plan, 2014

Individuals with expertise in public health and representatives from the local health department also assisted, including:

- **Alan Abe**, program manager, Injury Prevention, King County Emergency Medical Services
- **Jennifer DeYoung**, health reform analyst, Public Health-Seattle & King County
- **Tony Gomez**, RS, manager, Violence and Injury Prevention, Public Health-Seattle & King County
- **Scott Neal**, tobacco program manager, Public Health-Seattle & King County
- **Lisa Podell**, interim health reform analyst, Public Health-Seattle & King County
- **Whitney Taylor**, program manager, Firearm Violence Prevention/Child Fatality Review Program, Public Health-Seattle & King County
- **Crystal Tetrick**, manager, Parent Child Health, Public Health-Seattle & King County
- **Sharon Toquinto**, prevention and treatment manager, Mental Health Chemical Abuse & Dependency Services Division, King County
- **Jim Vollendorff**, division director, Mental Health Chemical Abuse & Dependency Services Division, King County

- 1199NW
- Washington Chapter, American Academy of Pediatrics
- Washington Dental Service Foundation
- Washington State Hospital Association
- WithinReach
- Sallie Neillie, Executive Director, Project Access Northwest
22. Highline Medical Center Community Health Needs Assessment, 2013
27. Seattle Children’s Hospital Community Health Needs Assessment, 2013
28. Seattle Cancer Care Alliance Community Health Needs Assessment, 2013
29. Snoqualmie Valley Hospital District Community Health Needs Assessment, 2013
30. Swedish Hospital Community Health Needs Assessments, 2013

**Limitations**

Key limitations of this report include incomplete or inadequate quantitative data on some topics of interest and our inability to summarize every asset and opportunity in King County. For example, although we report data on fruit/vegetable consumption, comprehensive population-based data on healthy eating are simply not available. In addition, resource limitations prevent us from mentioning all of the valuable organizations and assets in our communities. We collected data from agencies that use varying data sets. A particular challenge was inconsistent age groupings in epidemiological and outcome data. Data were also inconsistent in defining life-stage categories, such as when a child is considered an adult.

Inconsistencies in terminology and definitions made it difficult to make side-by-side comparisons. For example, the definition of “Hispanic” varies from one community to another. The definition of “community” also varies. Individuals participating in a CHNA and CHA likely define their community differently; a community can be a geographic area, a racial group, a school or a religious affiliation. This poses problems when analyzing interview and survey results.

We had fewer connections to community leaders in other areas of Washington state, so most of our respondents were from King County. While we gathered a great deal of community input from a wide range of stakeholders, limited resources made it impossible to reach all of our constituents. While we were able to conduct listening groups with multiple communities and interview several community members, these qualitative results should be interpreted as the perspective of the people who participated. While they are intended to provide insight into the assets, needs and ideas of the communities, they should not be interpreted as representing the whole community. These limitations may inadvertently reinforce health inequalities.

**Evidence-based Practices**

Additional information on evidence-based practices is available from the following sources. Hospitals should consult these guides when planning interventions.

1. The Robert Wood Johnson Foundation’s What Works for Health
2. The Centers for Disease Control and Prevention’s Community Guide to Preventive Services
3. Blueprints for Healthy Youth Development
4. The Substance Abuse and Mental Health Services Administration (SAMHSA)’s National Registry of Evidence-based Programs and Practices
Appendix B: Report Structure

For each indicator, this report includes the following (if available):

• A description of the indicator
• Overall estimate for King County and/or Washington state (if available)
• Multiple-year averaged estimates for select subpopulations (e.g., race/ethnicity and region) in either a bar chart or map
• A list of sub-populations that have a statistically significant higher burden of risk, disease or injury than the overall King County or Washington state population.

Appendix C includes more complete information for each indicator, including tables, charts, figures and other data sources.

Confidence interval (also known as error bar) is the range of values that includes the true value 95% of the time. If the confidence intervals of two groups do not overlap, the difference between groups is considered statistically significant (meaning that the chance or random variation is unlikely to explain the difference). For some indicators, results are reported with a 90% confidence interval, showing the range that includes the true value 90% of the time.

Crude, age-specific and age-adjusted rates

• Rates are usually expressed as the number of events per 100,000 population per year. When this applies to the total population (all ages), the rate is called the crude rate. When the rate applies to a specific age group (e.g., ages 15 to 24), it is called the age-specific rate.
• The crude and age-specific rates present the actual magnitude of an event within a population or age group.
• When comparing rates between populations, it is useful to calculate a rate that is not affected by differences in the age composition of the populations. This is the age-adjusted rate. For example, if a neighborhood with a high proportion of older people also has a higher-than-average death rate, it will be difficult to determine if that neighborhood’s death rate is higher than average for residents of all ages or if it simply reflects the higher death rate that naturally occurs among older people. The age-adjusted rate mathematically removes the effect of the population’s age distribution on the indicator.

• Some graphs have a * or § symbol. A * means that there are too few cases to protect confidentiality and/or report reliable rates. A § denotes that while rates are presented, there are too few cases to meet a precision standard, and results should be interpreted with caution.

Geographies

Whenever possible, indicators are reported for King County as a whole and for four regions within the county. If enough data are available for a valid analysis, they may also be reported by smaller geographic areas (cities, neighborhoods within large cities, and groups of smaller cities and unincorporated areas). Education data are reported by school district.

Federal poverty guidelines, issued by the U.S. Department of Health and Human Services, are a simplified version of the federal poverty thresholds. The guidelines are used to determine financial eligibility for various federal, state and local assistance programs. For a family of four, the federal poverty guideline was $22,050 in 2010; in 2013 it was $23,550 and in 2015 it was $24,250.

Neighborhood poverty levels are based on the proportion of households in a census tract in which annual household income (as reported in the U.S. Census Bureau’s American Community Survey) falls below the federal poverty threshold.

• High poverty: 20% or more households in the neighborhood fall below poverty threshold.
• Medium poverty: 5% to 19% of households fall below poverty threshold.
• Low poverty: fewer than 5% of households fall below poverty threshold.

**Race/ethnicity and discrimination**

Race and ethnicity are markers for complex social, economic and political factors that can influence community and individual health in important ways. Many communities of color have experienced social and economic discrimination and other forms of racism that can negatively affect the health and well-being of these communities. We continue to analyze and present data by race/ethnicity because we believe it is important to be aware of racial and ethnic group disparities in these indicators.

**Race/ethnicity terms**

Federal standards mandate that race and ethnicity (Hispanic origin) are distinct concepts requiring two separate questions when collecting data from an individual. “Hispanic origin” is meant to capture the heritage, nationality group, lineage or country of birth of an individual (or his/her parents) before arriving in the United States. Persons of Hispanic ethnicity can be of any race. The 2010 U.S. Census Bureau terms include: Hispanic or Latino; Not Hispanic or Latino; White alone (Not Hispanic or Latino); Black or African American; American Indian or Alaska Native; Asian; Native Hawaiian or Other Pacific Islander; White; Some Other Race; and Two or More Races. Persons of Hispanic ethnicity can be of any race and are included in other racial categories. Racial/ethnic groups are sometimes combined when sample sizes are too small for valid statistical comparisons of more discrete groups.

Some surveys collect race/ethnicity information using only one question on race. These terms are: Hispanic, non-Hispanic, white non-Hispanic, black, American Indian/Alaska Native (AIAN), Asian, Native Hawaiian/Pacific Islander (NHPI), white and multiple race (multiple).

**Rolling averages**

When the frequency of an event varies widely from year to year, rates are sometimes aggregated into averages – often in three-year intervals – to smooth out the peaks and valleys of the yearly data in order to view the trend. For example, for events occurring from 2001 to 2010, rates may be graphed as three-year rolling averages: 2001-2003, 2002-2004, 2005-2007 or 2008-2010. In this report, data is often used over five-year intervals, from 2008-2012 and from 2009-2013. Adjacent data points will contain overlapping years of data. Statistical tests comparing data points with overlapping times are not appropriate.

**Statistical significance**

Differences between sub-population groups and the overall county are examined for each indicator. Unless otherwise noted, all differences mentioned in the text are statistically significant (unlikely to have occurred by chance). The potential to detect differences and relationships (termed the statistical power of the analysis) is dependent, in part, on the number of events and size of the population, or, for surveys, the number of respondents or sample size. Differences that do not appear to be significant might reach significance with a large enough population or sample size.
Appendix C: Data for Report Indicators

Additional indicators are available online at www.kingcounty.gov/health/indicators.

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321 Source: Adapted from County Health Rankings, University of Wisconsin Public Health Institute.

322 U.S. Census Bureau, BRFSS, CHARS, data, map produced by Public Health - Seattle & King County.

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<table>
<thead>
<tr>
<th></th>
<th>King County, 1980</th>
<th>King County, 2015</th>
<th>Population under 18 King County, 2015</th>
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<tbody>
<tr>
<td>Population</td>
<td>1,266,886</td>
<td>1,981,249</td>
<td>432,471</td>
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</tbody>
</table>

324 US Census Bureau, Census 1980; WA Office of Financial Management 2015. Percentages may not add up to 100% due to rounding.


Figure 7: Percentage of Children Under 18 in Poverty in Washington State (2005-2014)

326 Seattle Children’s with 2013 5-year ACS data. (2015). Children Living in Poverty: Washington. This graph was created by Dr. John Mosser in r-studio using 2013 5-year ACS data, and represents the location of children living in poverty in Washington (absolute numbers). Each point represents a zip code, and the size of the circle is concordant with the size of the circle.


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338 https://data.kingcounty.gov/dataset/King-County-Vaccination-Rates/jd9t-d3p7/alt.
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Source: Healthy Youth Survey.
Prepared by Public Health - Seattle & King County, APDE, 07/2016.
#1 Confidence interval shows range that includes true value 95% of the time.
#2 Too few cases to protect confidentiality and/or report reliable rates.
#3 Too few cases to meet precision standard, interpret with caution.
Data by income or poverty level not available.


State DOH, Center for Health Statistics, Death Certificates.
Public Health - Seattle & King County, APDE, 08/2018.
As per 100,000 population, age-adjusted to the 2000 US population.
Confidence interval shows range that includes true value 95% of the time.
Uses to protect confidentiality and/or report reliable rates.
Ages to meet precision standard, interpret with caution.
Hispanic ethnicity can be of any race and are included in the racial categories.
Eighth poverty levels defined by median household income.

* Fatal crash involving a driver with a blood alcohol content (BAC) of 0.08 or above.

Data Source: Washington State Department of Transportation, King County collision data.

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N=60,862 patients

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Source: Healthy Youth Survey. Prepared by Public Health – Seattle & King County, APDE, 07/2016. *Confidence interval shows range that includes true value 95% of the time. †Too few cases to protect confidentiality and/or report reliable data. ‡Too few cases to meet precision standard, interpret with caution. Data by income or poverty level not available.

Source: Healthy Youth Survey. Prepared by Public Health – Seattle & King County, APDE, 07/2016. *Confidence interval shows range that includes true value 95% of the time. †Too few cases to protect confidentiality and/or report reliable data. ‡Too few cases to meet precision standard, interpret with caution. Data by income or poverty level not available.


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### Employment and Income

<table>
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<tr>
<th></th>
<th>Median Income in Dollars</th>
<th>90% Margin of Error</th>
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<tr>
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<td>$73,035</td>
<td>+/-697</td>
</tr>
<tr>
<td>Seattle</td>
<td>$67,365</td>
<td>+/-1,101</td>
</tr>
<tr>
<td>Auburn</td>
<td>$57,635</td>
<td>+/-2,066</td>
</tr>
<tr>
<td>Burien</td>
<td>$52,140</td>
<td>+/-2,586</td>
</tr>
<tr>
<td>Des Moines</td>
<td>$58,308</td>
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</tr>
<tr>
<td>Federal Way</td>
<td>$54,186</td>
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<tr>
<td>Kent</td>
<td>$57,490</td>
<td>+/-2,551</td>
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<td>Renton</td>
<td>$62,949</td>
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<tr>
<td>SeaTac</td>
<td>$46,595</td>
<td>+/-4,153</td>
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Table 1. Median Household Income in King County Region, 2010-2014

### Leading Causes of Death

<table>
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<tr>
<th>Rank</th>
<th>Age Groups</th>
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<th>10-14</th>
<th>15-19</th>
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<tr>
<td></td>
<td>Unintentional Injury</td>
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<td></td>
<td>Unintentional Injury</td>
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<td></td>
<td></td>
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<td>Malignant Neoplasms</td>
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<td>Unintentional Injury</td>
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<td>2</td>
<td>Short Gestation</td>
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<td></td>
<td>Congenital Anomalies</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Malignant Neoplasms</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Suicide</td>
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<tr>
<td></td>
<td>Suicide</td>
<td>57</td>
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<td>3</td>
<td>SIDS</td>
<td>47</td>
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<tr>
<td></td>
<td>Malignant Neoplasms</td>
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<tr>
<td></td>
<td>Congenital Anomalies</td>
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<tr>
<td></td>
<td>Unintentional Injury</td>
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<tr>
<td></td>
<td>Homicide</td>
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<td>4</td>
<td>Maternal Pregnancy Comp.</td>
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<td>Homicide</td>
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<td></td>
<td>Perinatal Period</td>
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<td></td>
<td></td>
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<tr>
<td></td>
<td>Malignant Neoplasms</td>
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<td></td>
</tr>
<tr>
<td>5</td>
<td>Placenta Cord Membranes</td>
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<tr>
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<td>Influenza &amp; Pneumonia</td>
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<td></td>
<td>Anemias</td>
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<tr>
<td></td>
<td>Cerebrovascular</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Heart Disease</td>
<td></td>
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<tr>
<td>6</td>
<td>Unintentional Injury</td>
<td>20</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Perinatal Period</td>
<td></td>
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<tr>
<td></td>
<td>Chronic Lower Respiratory Disease</td>
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<td></td>
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<tr>
<td></td>
<td>Meningitis</td>
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<tr>
<td>7</td>
<td>Necrotizing Enterocolitis</td>
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<td></td>
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<tr>
<td></td>
<td>Heart Disease</td>
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<td></td>
<td>Meningitis</td>
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<td>Cerebrovascular</td>
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<td>8</td>
<td>Respiratory Distress</td>
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<tr>
<td></td>
<td>Acute Bronchitis</td>
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<tr>
<td></td>
<td>Congenital Anomalies</td>
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</tr>
<tr>
<td>9</td>
<td>Intrauterine</td>
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<tr>
<td></td>
<td>Chronic Lower Respiratory Disease</td>
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<tr>
<td></td>
<td>Influenza</td>
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<tr>
<td>10</td>
<td>Atelectasis &amp; Circulatory System Disease (tie)</td>
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<td>Diseases of Appendix</td>
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<td>Pneumonitis</td>
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</tbody>
</table>

Note: counts less than 10 are suppressed as --- to prevent identification of individual cases.

Table 2. 10 Leading causes of death in Washington state by youth age, 2013


# Leading Causes of Hospitalization

| Rank | Infants (<1 year) | | Age 1-14 | | Age 15-24 |
|------|------------------|------------------|------------------|------------------|
|      | Rate (per 100,000) | Count (per year) | Rate (per 100,000) | Count (per year) | Rate (per 100,000) | Count (per year) |
| 1    | Newborn delivery  | 97142.8 | 24137 | Asthma | 163.2 | 533 | Pregnancy / childbirth complications | 1609.6 | 3946 |
| 2    | Respiratory infections | 1514.8 | 376 | Respiratory infections | 158.7 | 519 | Mental illness | 717.0 | 1758 |
| 3    | Jaundice | 1332.1 | 331 | Unintentional injuries | 119.4 | 390 | Unintentional injuries | 222.3 | 545 |
| 4    | Congenital anomalies | 982.8 | 244 | Lower gastrointestinal disorders | 93.2 | 305 | Lower gastrointestinal disorders | 166.1 | 407 |
| 5    | Urinary tract infections | 317.1 | 79 | Mental illness | 92.4 | 301 | Cancer and benign tumors | 93.9 | 230 |
| 6    | Unintentional injuries | 257.6 | 64 | Cancer and benign tumors | 77.8 | 254 | Infectious and parasitic diseases | 79.1 | 194 |
| 7    | Infectious and parasitic diseases | 182.7 | 45 | Epilepsy, convulsions | 69.2 | 226 | Self-inflicted injuries | 74.0 | 181 |
| 8    | Short gestation & low birth weight | 165.8 | 41 | Congenital anomalies | 63.5 | 208 | Diabetes with complications | 66.2 | 162 |
| 9    | Upper gastrointestinal disorders | 137.6 | 34 | Skin infections | 36.4 | 115 | Normal pregnancy & delivery | 55.2 | 135 |
| 10   | Fever of unknown origin | 124.0 | 31 | Infectious and parasitic diseases | 29.4 | 96 | Skin infections | 51.6 | 127 |


Table 3. Leading Causes of Hospitalization by Age, King County, 2010-14 average

---

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Average Annual Population</th>
<th>Average Annual Observations</th>
<th>Age-Spec. Rate per 100,000</th>
<th>95% CI</th>
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<tbody>
<tr>
<td>15-19</td>
<td>455682</td>
<td>107</td>
<td>23.4</td>
<td>[21.5, 25.5]</td>
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<tr>
<td>20-24</td>
<td>467660</td>
<td>215</td>
<td>46</td>
<td>[43.3, 48.8]</td>
</tr>
<tr>
<td>25-29</td>
<td>477620</td>
<td>366</td>
<td>76.5</td>
<td>[73.1, 80.1]</td>
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<tr>
<td>30-34</td>
<td>461542</td>
<td>521</td>
<td>112.8</td>
<td>[108.5, 117.2]</td>
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<tr>
<td>35-39</td>
<td>443680</td>
<td>717</td>
<td>161.6</td>
<td>[156.4, 167.0]</td>
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</tbody>
</table>

Table 4. Washington State Cancer Incidence Data 2009-13

---

350 Public Health-Seattle & King County. (2016). Leading causes of hospitalization by age, King County, 2010-2014 average.

### Table 5. Children and Youth on Waitlist for Organ Transplant in Washington State as of 02/26/2016

<table>
<thead>
<tr>
<th>ORGAN</th>
<th>&lt;1</th>
<th>1-5</th>
<th>6-10</th>
<th>11-17</th>
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<td>All organs</td>
<td>3</td>
<td>14</td>
<td>12</td>
<td>16</td>
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<tr>
<td>Kidney</td>
<td>0</td>
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<td>3</td>
<td>12</td>
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<tr>
<td>Liver</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Pancreas</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Kidney/Pancreas</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Heart</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Heart/Lung</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Intestine</td>
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<td>6</td>
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### Violence and Injury Prevention

#### Table 6. Homicides among children and young adults from 2009 to 2013

<table>
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<tr>
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<th>WASHINGTON STATE</th>
<th>KING COUNTY</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Total number</td>
<td>Rate per</td>
</tr>
<tr>
<td></td>
<td>homicides,</td>
<td>100,000</td>
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<tr>
<td></td>
<td>average per year</td>
<td>population</td>
</tr>
<tr>
<td>0-4 years</td>
<td>47, &gt;9</td>
<td>6 for ages less than 1 year, 1.9 for 1-4 year-olds</td>
</tr>
<tr>
<td>5-9 years</td>
<td>13, 2</td>
<td>0.6</td>
</tr>
<tr>
<td>10-14 years</td>
<td>10, 2</td>
<td>0.5</td>
</tr>
<tr>
<td>15-19 years</td>
<td>86, 17</td>
<td>2.9 for 15-17 year olds, 5 for 18-19 year olds</td>
</tr>
<tr>
<td>20-24 years</td>
<td>146, &gt;29</td>
<td>6.2</td>
</tr>
</tbody>
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### Table 7. Nonfatal assault-related hospitalizations among children and young adults from 2009 to 2013

#### Table 7. Nonfatal assault-related hospitalizations among children and young adults from 2009 to 2013

<table>
<thead>
<tr>
<th>AGE</th>
<th>WASHINGTON STATE</th>
<th>KING COUNTY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total number</td>
<td>Rate per</td>
</tr>
<tr>
<td></td>
<td>homicides,</td>
<td>100,000</td>
</tr>
<tr>
<td></td>
<td>average per year</td>
<td>population</td>
</tr>
<tr>
<td>0-4 years</td>
<td>391, 78</td>
<td>81.4 for ages less than 1 year, 7.6 for 1-4 year-olds</td>
</tr>
<tr>
<td>5-9 years</td>
<td>32, 6</td>
<td>1.5</td>
</tr>
<tr>
<td>10-14 years</td>
<td>91, 18</td>
<td>4.2</td>
</tr>
<tr>
<td>15-19 years</td>
<td>642, 128</td>
<td>21.5 for 15-17 year olds, 37.8 for 18-19 year olds</td>
</tr>
<tr>
<td>20-24 years</td>
<td>1096, 219</td>
<td>46.9</td>
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</table>
### Table 8. Unintentional injury deaths among children and young adults from 2009 to 2013

<table>
<thead>
<tr>
<th>Age</th>
<th>Washington State</th>
<th>King County</th>
<th>Leading cause</th>
<th>Rate per 100,000 population</th>
<th>Leading cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4 years</td>
<td>204, 40</td>
<td>19, 4</td>
<td>Suffocation and drowning</td>
<td>28.3 for ages less than 1 year, 7.5 for 1-4 year-olds</td>
<td>6.8 for ages less than 1 year, 3.2 for 1-4 year-olds</td>
</tr>
<tr>
<td>5-9 years</td>
<td>62, 12</td>
<td>16, 3</td>
<td>Motor vehicle accidents</td>
<td>2.9</td>
<td>2.8 Fire and motor vehicle accidents</td>
</tr>
<tr>
<td>10-14 years</td>
<td>76, 15</td>
<td>12, 2</td>
<td>Drowning, motor vehicle accidents</td>
<td>3.5</td>
<td>2.2 Motor vehicle accidents</td>
</tr>
<tr>
<td>15-19 years</td>
<td>383, 76</td>
<td>76, 15</td>
<td>Motor vehicle accidents, poisoning</td>
<td>121.4 for 15-17 year-olds, 23.6 for 18-19 year-olds</td>
<td>8.1 for 15-17 year-olds, 20 for 18-19 year-olds</td>
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<tr>
<td>20-24 years</td>
<td>716, 143</td>
<td>163, 32</td>
<td>Motor vehicle accidents, poisoning</td>
<td>30.6</td>
<td>25.6 Motor vehicle accidents, poisoning</td>
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</table>

### Table 9. Unintentional injury hospitalizations among children and young adults from 2009 to 2013

<table>
<thead>
<tr>
<th>Age</th>
<th>Total number, average per year</th>
<th>Rate per 100,000 population</th>
<th>Leading cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4 years</td>
<td>4276, 855</td>
<td>326.5 for ages less than 1 year, 223.9 for 1-4 year-olds</td>
<td>Suffocation and drowning</td>
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<tr>
<td>5-9 years</td>
<td>2290, 458</td>
<td>105.8</td>
<td>Motor vehicle accidents</td>
</tr>
<tr>
<td>10-14 years</td>
<td>3048, 609</td>
<td>139.5</td>
<td>Motor vehicle accidents</td>
</tr>
<tr>
<td>15-19 years</td>
<td>5712, 1142</td>
<td>240.9 for 15-17 year-olds, 264.7 for 18-19 year-olds</td>
<td>Motor vehicle accidents, poisoning</td>
</tr>
<tr>
<td>20-24 years</td>
<td>6739, 1347</td>
<td>288.2</td>
<td>Motor vehicle accidents, poisoning</td>
</tr>
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</table>

### Table 10. Motor vehicle deaths among children and young adults from 2009 to 2013

<table>
<thead>
<tr>
<th>Age</th>
<th>Total number, average per year</th>
<th>Rate per 100,000 population</th>
<th>Rate per 100,000 population</th>
<th>Leading cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4 years</td>
<td>26</td>
<td>5</td>
<td>3</td>
<td>&lt;1</td>
</tr>
<tr>
<td>5-9 years</td>
<td>27</td>
<td>5</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>10-14 years</td>
<td>27</td>
<td>5</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>15-19 years</td>
<td>195</td>
<td>39</td>
<td>34</td>
<td>7</td>
</tr>
<tr>
<td>20-24 years</td>
<td>304</td>
<td>60</td>
<td>66</td>
<td>13</td>
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</table>

### Table 11. Motor vehicle injury hospitalizations among children and young adults from 2009 to 2013

<table>
<thead>
<tr>
<th>Age</th>
<th>Total number, average per year</th>
<th>Rate per 100,000 population</th>
<th>Leading cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4 years</td>
<td>168</td>
<td>33</td>
<td>49</td>
</tr>
<tr>
<td>5-9 years</td>
<td>226</td>
<td>45</td>
<td>53</td>
</tr>
<tr>
<td>10-14 years</td>
<td>361</td>
<td>72</td>
<td>87</td>
</tr>
<tr>
<td>15-19 years</td>
<td>1,414</td>
<td>282</td>
<td>285</td>
</tr>
<tr>
<td>20-24 years</td>
<td>1,711</td>
<td>342</td>
<td>387</td>
</tr>
</tbody>
</table>
Appendix D: Evaluation of Our Community Benefit Implementation Plan

Background

The federal government updated the community benefit requirements for tax exempt hospitals, starting in 2019, to include evaluating the impact of the actions taken to address the significant health needs identified in their prior community health assessment. While we realize that we are not mandated to evaluate our 2013-2016 community benefit initiatives, we do so in advance of being required to in large part because of our vision to be an innovative leader in pediatric health and wellness through our unsurpassed quality, clinical care, relentless spirit of inquiry, and compassion for children and their families.

Together with our partners in the community, we made significant progress in each of the five priority areas of our 2013-2016 Community Benefit Plan, developed in response to the most urgent health and safety needs of the children, teens and families in Washington state and King County identified through our first Community Health Assessment (2013). In this report we aim to document results of our priority area strategies implemented over the past three years.

Summary

5 Community Benefit Priorities/15 Strategies/47 Projects

• 9 Closed successfully
• 21 On target/ongoing
• 4 Some issues
• 3 On hold
• 0 Critical issues

Results

1. Access to High-Quality Healthcare

Highlights:

• Dollars provided in uncompensated care from 2013 to 2016: $349.5 million
• Contributions to community organizations in 2013-2016: $2.6 million
• Number of staff certified to be Washington Health Benefit Exchange Navigators: 9

1.1: Keep our promise to provide healthcare to all children in the WAMI region regardless of ability to pay.

• We educated families on how to obtain the insurance coverage they needed for their children’s healthcare. We informed patients 18 to 21 years old about their insurance options as young adults, established a dedicated phone line to answer questions from families and shared information online. We also educated state and federal decision makers about the importance of ensuring that all insurance plans in the Exchange offer all pediatric specialty services within their provider networks.

1.2: Increase access to mental and behavioral healthcare.

• The Health Coalition for Children and Youth - a statewide advocacy group chaired by Seattle Children’s that works to promote policies to improve child health - helped pass legislation to improve the state’s child mental health system during the 2015 legislative session.

2. Coordinated Care for Children and Teens with Chronic Conditions

Highlights:

• Number of patients participating in the Pediatric Partners in Care program: 4,200
• Number of organizations using the Pediatric Medical Complexity Algorithm: +20

2.1: Enhance care coordination.
• In 2014, Seattle Children’s won a $5.56 million innovation grant from the Centers for Medicare and Medicaid Services to create Pediatric Partners in Care (PPIC). This pilot program aims to improve outcomes and reduce the cost of caring for 3,000 disabled children in King and Snohomish counties who receive Supplemental Security Income benefits from Medicaid. We do a good job at caring for patients who have complex healthcare needs such as those enrolled in PPIC. We can do a better job at keeping track of them when they’re not in the hospital and consistently coordinate care with their other providers. PPIC helps us improve coordination and communication with patients’ families, providers, specialists and other hospitals involved in caring for these patients.

2.2: Develop a method to identify and track children and teens with chronic conditions.
• We developed the Pediatric Medical Complexity Algorithm, which distinguishes patients who are medically complex from those who are not in order to optimize the allocation of limited resources. The algorithm is publicly available and being used by many organizations nationwide, as well as at Seattle Children’s.

2.3: Develop an adolescent health transition structure and process.
• Ten clinics, centers and departments at Seattle Children’s have structures in place to support families with adolescent health transition. Also, we now work closely with and refer patients to the Transition Clinic at the University of Washington.

3. Equity and Access in South King County
Highlights:
• Number of people who provided input about the health of South King County communities: 211 children and youth, parents and caregivers, and community organization staff
• Number of cities benefitting from Partners in Community Health (PICH): 39 out of 39 cities in King County

3.1: Learn about the interests, strengths and needs of South King County residents and communities.
• We used a variety of strategies to learn about the health of South King County communities, including review of existing assessments and city plans, a tour of South King, interviews, and listening groups with children, teens, parents/caregivers, and community leaders. Also, two dozen youth described health in their communities through photos.

3.2: From a place of learning and humility, connect with businesses, government, healthcare providers and communities to help link economic vibrancy and health.
• We opened Seattle Children’s South Clinic in Federal Way to expand pediatric specialty care for families in south King and north Pierce counties. The clinic offers 15 specialty clinics, an urgent care clinic, imaging center, laboratory and infusion center.
• We increased the number of collaborations and partnerships with organizations that serve the South King County communities. Before 2013, our involvement in the area was limited to participating in a couple of community events. Now we have trusted relationships with organizations such as the Healthy King County Coalition, International Community Health Services, International Rescue Committee, South King County Council of Human Services, WA-CAN, and many others.
3.3: Work with communities on their goal for culturally respectful, educational and positive media stories.

- Media highlights about the many successes of joint efforts between Seattle Children’s and partners such as Public Health – Seattle & King County, the Healthy King County Coalition and community organizations contributed to efforts to change how South Seattle and South King County are depicted in the local news.

4. Obesity

Highlights:

- Number of Washington state counties represented in meetings to promote the use of a common healthy eating and active lifestyle message: 22
- External funding received and dedicated to obesity prevention: over $10 million
- Number of Healthier Hospital Initiative challenges that Seattle Children’s is pursuing: 6 of 6

4.1: Educate caregivers, providers and community leaders to be wellness advocates and promote policy change.

- Clinicians and community partners agreed on an evidence-based message to promote healthy eating and active lifestyles: 7-5-2-1-0. We conducted trainings, created healthcare provider packets, developed a toolkit with activities to teach children about healthy choices, and promoted 75210 through media, social media outlets and community events. In partnership with many partners, we hosted meetings attended by 79 representatives from 22 counties to build a collective movement to use the messages. We distributed and taught 75210 messages/materials to over 4,671 youth and their families in 2016 at 9 events in King County.
- Everyone Swims brought together over 20 community clinics, pools and water recreation programs to improve access to swimming and water recreation among low income and racially/ethnically diverse communities. Thanks to this program, applying for swim class scholarships is easier and available in multiple languages; clinic screening for swim ability is embedded in electronic medical records or well child checklists; single gender swims are allowed as part of public swim programs; and pool swim lesson registration increased.

4.2: Partner with community organizations for obesity prevention programs.

- In Washington state, 43 hospitals are participating in the Healthier Hospitals Initiative. Seattle Children’s is one of only four hospitals that have committed to all six challenges, which include purchasing and serving healthier foods and beverages to patients, employees, visitors and the communities we serve.
- Actively Changing Together! (ACT!), a Seattle Children’s and YMCA program to help children who are obese and overweight and their families lead healthier lifestyles, has grown from four Seattle-area YMCAs when it started to 17 locations statewide.
- The Community Transformation Grant (CTG), co-led by Seattle Children’s, Public Health – Seattle & King County and the Healthy King County Coalition, provided over $2 million to 19 organizations in South Seattle and South King County to develop, implement or support policies related to healthy eating and physical activity. As a result, two school districts implemented new physical activity curricula, and access to healthy beverages like water and availability of healthy foods in school cafeterias and hospitals increased.
- Partners in Community Health (PICH) has continued and expanded the work of CTG with an investment of $8 million over 3 years into partnerships and projects to foster communities that support health. PICH’s 29 different projects in King County build
healthy and affordable food systems, create physically active communities, and reduce tobacco use/exposure among families and youth.

4.3: Advocate for stronger insurance coverage for obesity.

- In 2013, we assessed the state of insurance coverage for obesity by interviewing insurance and medical experts, surveying health insurance companies and employee benefits staff of children’s hospitals across the nation, and reviewing published insurance policies and billing data from Seattle Children’s. Half of the insurers surveyed do not cover any services to treat obesity in youth.

- More patients and families have obesity reimbursement coverage because obesity reimbursement has improved over time. We are part of a broader advocacy effort to address this issue, for example serving on the Executive Committee of the American Academy of Pediatrics Section on Obesity, which is interested in obesity reimbursement.

5. Mental and Behavioral Health

Highlights:

- Increase of number of inpatient beds for children and teens needing psychiatric care: from 20 to 41

- Percentage of patients seeking mental health services in the Emergency Department who have care plans: 100%

- Centers of Excellence with ongoing research studies: 4 of 4

5.1: Increase number of inpatient beds for children and teens needing psychiatric care.

- We have doubled our previous bed capacity so we can better meet the community’s pressing need for greater mental health services. Our Psychiatry and Behavioral Medicine Unit has 41 single-patient rooms plus a family reception area, a classroom, a comfort room, a dining area, an exercise/recreation area and a designated space for the Autism Spectrum Disorders Program.

5.2: Sustain mental health care support in the Emergency Department as a safety net.

- Every patient who seeks mental health services in the Emergency Department and is waiting for admission receives a care plan. Those patients discharged from the ED receive a crisis plan.

5.3: Develop research portfolios in four Centers of Excellence (Disruptive Behavior Disorders, Mood Disorders, Pediatric Psychology and Autism) to improve outcomes and better serve healthcare providers and patients with complex behavioral health conditions.

- Researchers at Seattle Children’s studied an intervention that integrates mental health treatment into primary care by having teens diagnosed with depression meet with a care manager in the primary care clinic. In a study comparing two groups, we found 86% of the intervention group received evidence-based treatment for their depression versus only 27% of those whose primary care doctor refers them to mental health specialists. In addition, 67% of the first group had at least a 50% reduction in depression symptoms compared to 39% of the second.

- OwlOutcomes, a program developed by researchers from Seattle Children’s and the University of Washington, monitors mental health treatment objectively. The program uses computerized surveys to track progress between each therapy session. Parents and patients (if they’re old enough) respond to statements in the surveys about the severity of their symptoms. The responses are plotted on graphs that show how the severity changes over time. All of the providers in our Psychiatry and Behavioral Medicine Clinic were trained to use the program.
5.4: Foster and sustain collaborations for mental and behavioral health continuum of care.

- Our Partnership Access Line (PAL) offers mental and behavioral health telephone consultation to primary care providers when they need help caring for patients showing symptoms of mental health issues. Child psychiatrists from Seattle Children’s and the University of Washington School of Medicine help providers across Washington and Wyoming diagnose conditions, prescribe treatment, make referrals and guide families to resources in their home community.

- Seattle Children’s opened the Alyssa Burnett Adult Life Center to help young adults with developmental disabilities and their families find resources in the community to meet many of their unique educational and social needs. It offers classes ranging from music to fitness to cooking and provides a gathering place for young adults with developmental disabilities of all kinds.

Looking Forward

Our community benefit evaluation is an ongoing process of asking and answering questions about the quality and effectiveness of our strategies to address identified pediatric health and safety needs. We endeavor to collect information about our hospital’s activities and the impact of programs we offer on community health. We attempt to use this information to make informed decisions about the program, including how to address future health needs.

During 2013 to 2016 we sought to make a positive impact in five priority areas by embarking on 15 strategies and 47 projects. In total, we proudly accomplished 19, are continuing the good work of 21, are reevaluating the impact of 4 and are pausing 3; all in all a successful three year effort. To learn more about our Community Benefit work, please visit: www.seattlechildrens.org/communitybenefit
## Seattle Children’s Community Benefit Implementation Plan 2013-2016 Progress Report

Last updated December 2016

<table>
<thead>
<tr>
<th>CB Priority</th>
<th>Anticipated Impact</th>
<th>Project/Tactic</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Access to High Quality Healthcare</strong></td>
<td>Access to high quality care for every child.</td>
<td>Advocacy for Medicaid &amp; Apple Health for Kids</td>
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<tr>
<td></td>
<td></td>
<td>Enrollment of youth in Apple Health for Kids</td>
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<tr>
<td></td>
<td></td>
<td>Utilizing Emergency &amp; Urgent Care: the right care at the right time</td>
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<tr>
<td></td>
<td></td>
<td>Partnerships to improve access including Health Coalition for Children and Youth, Pediatric Partners in Care and CIN</td>
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<tr>
<td></td>
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<td>Family education about accessing health care</td>
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<tr>
<td></td>
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<td>Financial assistance up to 400% Federal Poverty Line</td>
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<tr>
<td></td>
<td></td>
<td>Exchange promotion with King County Hospitals for a Healthier Community (KCHHC)</td>
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<tr>
<td></td>
<td></td>
<td>Monitoring and advocating for changes in new health care environment focusing on network adequacy</td>
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<tr>
<td><strong>Increased access to Mental and Behavioral Health.</strong></td>
<td></td>
<td><strong>CB Priority</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Coordinated Care for Children with Chronic Conditions</strong></td>
<td>Greater understanding of needs/assets, new models, improved government policies.</td>
<td>Assessment</td>
<td>▲</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Education to policymakers</td>
<td>▲</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cost effective sites of care partnerships including Pediatric Partners in Care CMS grant</td>
<td>▲</td>
</tr>
<tr>
<td></td>
<td>Successful method(s) identified, researched and analyzed.</td>
<td>Parameters to identify patients who would benefit most from care coordination</td>
<td>▲</td>
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<tr>
<td></td>
<td></td>
<td>Review of other registries</td>
<td>▲</td>
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<tr>
<td></td>
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<td>Dissemination of Pediatric Medical Complexity Algorithm</td>
<td>●</td>
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<tr>
<td><strong>Shared care plan across providers and caregivers developed and piloted.</strong></td>
<td></td>
<td><strong>CB Priority</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Health Equity and Access in South King County (SKC)</strong></td>
<td>Better understand interests, strengths and needs of South King County.</td>
<td>Assessment</td>
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<tr>
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<td>SKC needs, strengths assessments review</td>
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<td>Inclusion of assets on King County Hospitals CHNA</td>
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<td></td>
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<td>SKC asset mapping</td>
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<td>Community interests via comm. cafés, focus groups, photo voice</td>
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<tr>
<td><strong>Support respectful, educational &amp; positive media.</strong></td>
<td></td>
<td><strong>CB Priority</strong></td>
<td></td>
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<tr>
<td><strong>Partnerships with South King County organizations to help link economic, vibrancy &amp; health</strong></td>
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<td><strong>CB Priority</strong></td>
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<tr>
<td><strong>Development of common HEAL messaging</strong></td>
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<td>Implementation action for each of the #s within 75210</td>
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<td></td>
<td></td>
<td>Common obesity message education</td>
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<td></td>
<td></td>
<td>HEAL policy promotion</td>
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<td></td>
<td>Hospital food and beverage improvements</td>
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<tr>
<td><strong>Care is coordinated and consistent. Improved access to consultation services.</strong></td>
<td></td>
<td><strong>CB Priority</strong></td>
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<tr>
<td><strong>Children's &amp; partners obtain funding to develop campaign to prevent &amp; eliminate childhood obesity.</strong></td>
<td></td>
<td><strong>CB Priority</strong></td>
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<tr>
<td><strong>Experts agree on obesity benefit for staff &amp; dependents, partner with Human Resources. Children's creates obesity benefit, discuss a pilot program with state.</strong></td>
<td></td>
<td><strong>CB Priority</strong></td>
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</tr>
<tr>
<td><strong>Mental and Behavioral Health</strong></td>
<td>Inpatient psychiatric beds are available when needed.</td>
<td>Psychiatric inpatient bed increase</td>
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<tr>
<td></td>
<td>Patients/families have access to emergent mental health evaluations. Patients going to ED are referred to appropriate resources for treatment.</td>
<td>24/7 mental and behavioral services in the Emergency Department</td>
<td>▲</td>
</tr>
<tr>
<td></td>
<td>Increased knowledge of evidence-based treatments among mental health providers.</td>
<td>Mental/behavioral health care plan in the Emergency Department</td>
<td>●</td>
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<tr>
<td></td>
<td>Care is coordinated and consistent. Improved access to consultation services.</td>
<td>Research on mental and behavioral health treatments, including improved outcomes for patients in treatment</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Clinical pathways across continuum of mental health services established</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Mental health consult expansion</td>
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</tr>
</tbody>
</table>

**Project Status Legend:**

- ▲ On Target/Ongoing
- ● Some Issues
- ▼ Critical Issues
- ○ Proposed/On Hold
- ● Closed