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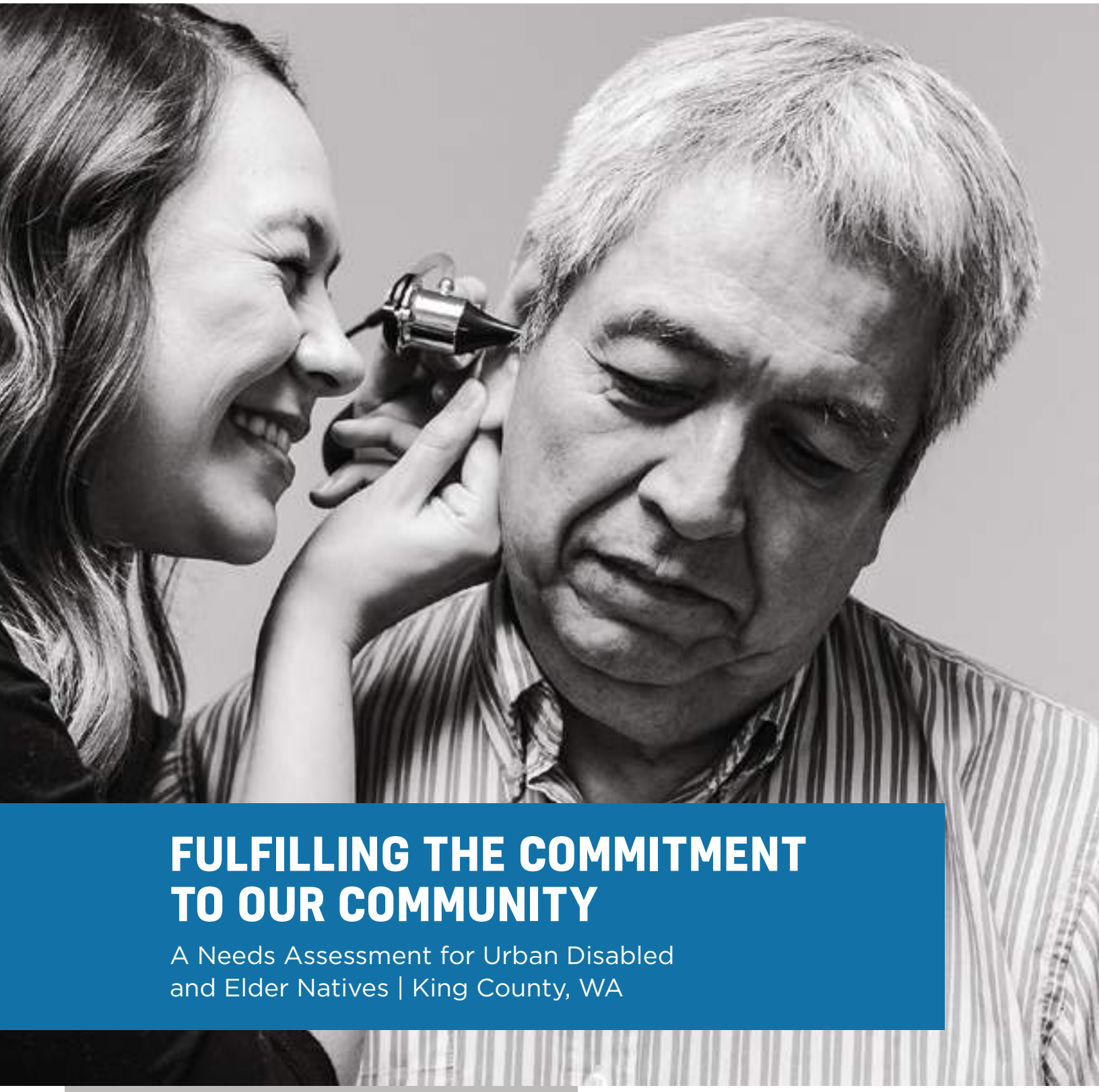

FULFILLING THE COMMITMENT TO OUR COMMUNITY

A Needs Assessment for Urban Disabled and Elder Natives | King County, WA

Urban Indian Health Institute
A Division of the Seattle Indian Health Board

Acknowledgements
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A Division of the Seattle Indian Health Board

The mission of Urban Indian Health Institute (UIHI) is to decolonize data, for Indigenous people, by Indigenous people.

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ABOUT URBAN INDIAN HEALTH INSTITUTE

The mission of Urban Indian Health Institute (UIHI) is to decolonize data, for indigenous people, by indigenous people.

Urban Indian Health Institute (UIHI) was established in 2000 as a division of Seattle Indian Health Board (SIHB), which is a community health center for urban American Indians and Alaska Natives (AI/ANs). UIHI is one of 12 Tribal Epidemiology Centers (TECs) funded by the Indian Health Service (IHS). While the other 11 TECs work with tribes regionally, UIHI focuses on the nationwide urban AI/AN population.

As a crucial component of the health care resources for all AI/ANs, TECs are responsible for:

- Managing public health information systems
- Investigating diseases of concern
- Managing disease prevention and control programs
- Communicating vital health information and resources
- Responding to public health emergencies
- Coordinating these activities with other public health authorities

Urban Indians experience a disproportionate burden of disease, including chronic disease, infectious disease, and unintended injury with extraordinarily high levels of co-morbidity and mortality. For all AI/ANs, there are systemic issues which give rise to health disparities: genocide, uprooting from homelands and tribal structure, racism, poverty, poor education, limited economic opportunity, and forced relocation due to 1950's federal relocation and termination policies. Today, AI/ANs come to the city for educational, employment, and health care needs, resulting in an indigenous urban population that is enormously diverse and inter-tribal.

To meet the unique health needs of urban Indians, there are numerous programs located across the United States that are culturally grounded and focus on providing holistic care. These include private, non-profit corporations, funded in part under Subchapter IV of the Indian Health Care Improvement Act, that reserve limited grants and contracts from IHS. In addition, there are numerous social service and faith-based organizations serving the public health needs of AI/ANs. These are defined as Urban Indian Health (UIH) service areas. UIHs provide traditional health services, cultural activities and a culturally-appropriate place for urban AI/ANs to receive health care.

UIHI provides technical assistance and research support to more than 42 UIHs located in 21 states supporting over 1.2 million AI/ANs. UIHI staff work on multiple, ongoing research projects to benefit urban American Indian/Alaska Natives.

EXECUTIVE SUMMARY

There are few sustainable, culturally-competent programs to support the urban disabled and Elder AI/AN population in King County, Wash. To inform individuals and organizations that work with urban AI/AN populations, Urban Indian Health Institute (UIHI) gathered and analyzed data from survey results and key-informant interviews with community members residing in King County, Wash. to better understand the needs of the disabled and Elder AI/AN community. Out of this information, UIHI created this Needs Assessment.

The survey and interviews sought to find key demographics of the urban disabled and Elder population in King County, Wash., the most pressing health needs of this community, the social services and assistance programs that are currently being utilized, any additional programs that are needed to better serve this community, and whether or not this community would use long-term care services. To answer these questions, UIHI examined results and input in five key areas—demographics, social determinants of health, physical and mental health status, quality of life, and assistance needs.

UIHI's analysis confirmed the prevalence of common issues faced by the disabled and Elder community in general, while highlighting strengths and disparities unique to the AI/AN community. The majority of respondents had access to health care, were socially and culturally engaged, and were in relatively good physical and mental health. However, many of the common health concerns and needs faced by disabled and senior populations in general were apparent in King County, Wash.'s AI/AN community, including quality of life impairments and health concerns such as falls, memory problems, chronic conditions, and general frailty. The disabled non-Elder members of the community indicated lower levels of social and cultural participation and higher feelings of depression and isolation.

81.2% of respondents indicated regular participation in cultural events, while 78.9% of respondents indicated that they were satisfied with their social activities.

99.4% of respondents had some form of health insurance, but less than 1.0% had long-term care coverage.

KEY RESULTS

Community members identified multiple health concerns including diabetes, substance misuse, mental health issues, falls, cancer, and nutrition. They also identified several social service and assistance needs such as housing and financial assistance, transportation, health care literacy, access to traditional healing methods, and long-term care. This input from the community was invaluable and aligned closely with our key survey results:

1. The majority of survey respondents came from western King County, Wash. (Seattle in particular) and identified with more than **40 different tribes**.
2. 57.7% of respondents indicated that they were in **good or excellent physical health**, while 60.3% indicated that they were in **good to excellent mental health**, though falls, memory problems and arthritis were identified as the most prevalent health concerns.
3. 81.2% of respondents indicated **regular participation in cultural events**, while 78.9% of respondents indicated that they were **satisfied with their social activities**.
4. 99.4% of respondents had some form of health insurance, but **less than 1.0% had long-term care coverage**.
5. 90.1% of respondents felt culturally respected by their health care providers, while 76.9% of respondents felt that their wishes for the care they received were respected—**90.9% of respondents received care at Seattle Indian Health Board**.
6. Nearly three-quarters (73.7%) of respondents earned **less than $15,000 per year** compared to the median household income of $78,000 per year in King County, Wash.
7. 33.7% of respondents lacked permanent housing, 23.9% of whom identified as homeless—**more than 40 times greater** than the homeless rate of King County, Wash.'s general population
8. Nearly **two-thirds** of respondents (61.5%) indicated difficulty with typical activities of daily living such as climbing stairs, standing for long periods, getting dressed, shopping, or doing housework.
9. **54.9% of respondents had experienced one or more falls in the past year**, and many respondents indicated that they had fallen or were concerned about falls while using public transportation.
10. 31.4% of respondents reported using **some sort of personal help in their daily activities**, 35.4% of which was provided by a family member; **most of these family members (82.3%) were unpaid**.

"Don't come to us because you think we have the most problems; come to us because we have the answers."

Abigail Echo-Hawk (Pawnee), Director of Urban Indian Health Institute

AI/ANs hold the knowledge to create sustainable programs that are grounded in culture while also addressing their unique health needs. Disabled and Elder AI/ANs often find themselves in need of long-term care,[1] but there are limited long-term care programs that directly support the needs of urban AI/ANs in the United States.[2,3,4] In order to begin addressing this gap, Seattle Indian Health Board conducted a series of community-based surveys and key-informant interviews through Urban Indian Health Institute to better understand the needs of disabled and Elder urban Natives in King County, Wash.

Among AI/ANs, family members provide approximately 90% of long-term care to older adults and people with a disability—approximately 10% higher than the general U.S. population.[5] Most caregivers for disabled and Elder AI/ANs are considered informal caregivers i.e. they do not receive payment and usually do not have formal training.[5,6]

The need for structured, expert care among the AI/AN population in general is more pressing than ever. On average, AI/ANs are living longer but are also experiencing increasing rates of chronic disease.[7,8,9] The number of AI/AN people aged 65 and older is likely to double by 2060.[10] Rates are even higher in King County, Wash. where the 65 and older population is likely to double by 2030.[5] Older AI/AN adults are more likely to experience poverty and/or homelessness than other age groups,[10] and the housing cost burden has significantly increased in King Country, Wash., particularly among racial and ethnic minorities.[11] Elder AI/ANs also experience health disparities and vulnerability at increasingly earlier ages,[3,8,9] despite decreasing trends in the general population.[12] Health care and prescription drug costs have increased and disproportionately affect disabled and aging populations.[12]

Traditionally, AI/ANs have a cultural preference for in-home care.[2,5,6] Institutional care for AI/AN Elders and people with disabilities is generally not culturally-oriented,[2,5] and AI/AN Elders rarely thrive when taken from their communities or institutionalized in culturally-neutral environments.[3,4,13] In contrast, many Native cultural traditions emphasize respect for Elders and a community responsibility to provide care for the disabled and less fortunate.[2,6,15]

BACKGROUND

In 2017, Seattle Indian Health Board's data and research division, UIHI, contracted with the Washington Department of Social and Health Services (DSHS) Aging and Long-Term Support Administration (ALTSA) to develop an assessment for King County, Wash, that explored the health status and health care needs of the disabled and Elder members of the AI/AN community.

This program was funded through the Money Follows the Person Tribal Initiative (MFPTI), which aims to create sustainable, culturally-competent mechanisms to support AI/ANs currently residing in institutions or at risk of institutional placement. It is important to the health and well-being of urban AI/ANs to return from institutional placements or avoid placement altogether. This can be done by creating access to what each individual deems to be the most culturally-relevant living environments to them.

This initiative also aims to create best practices for the sustainable delivery of tribally-led and/or tribally-partnered long-term, community-based care in order to provide more accessible and culturally diverse paths into the State/Federal Long-Term Service and Support (LTSS) Medicaid system. LTSS are a set of health, personal, and social services delivered over an extended period of time to people unable to independently perform activities of daily living.

PURPOSE

This Needs Assessment is meant to inform the potential development and direct delivery of culturally appropriate and community-driven Medicaid-reimbursed long-term services and supports for disabled and Elder urban AI/ANs who wish to avoid placement in long-term care facilities and return to their communities.

KING COUNTY PROFILE

OVERVIEW

King County, Washington is the state's most populous county and the 13th most populous county in the United States.[11] The 2017 U.S. census estimated King County's population at 2,188,649 people,[14,15] two-thirds of whom live in the greater Seattle-Metropolitan area.[11] Along with Seattle, King County is home to five of the state's 10 largest cities, all of which are in the western part of the county.[17,18] Despite densely-populated urban areas, approximately two-thirds of the county consists of large, unincorporated, rural areas in the central and eastern sections.[11]

King County's population has increased approximately 45% percent over the last three decades.[11] This is significantly faster than the overall U.S. population growth rate of approximately 32% for the same time period.[19] Much of that growth has been centered around Seattle proper, which has grown by approximately 19% since 2010.[11] This is one of the fastest population growth rates among the 50 largest cities in the United States.[20]

Ethnic and racial diversity increased during this same period, particularly among the Asian and Hispanic populations.[11] Much of this diversification has been concentrated in specific parts of the county. South Seattle and southwest King County have seen increasingly higher concentrations of ethnic and racial minorities, while north Seattle and the eastern parts of the county remain less diverse.[11]

As the population of the county has grown, so have important socioeconomic indicators: 10.7% of the population remained below the poverty level in 2016 compared to 8.4% in 1999,[15] mean household income increased from $53,517 in 1999 to $78,302 in 2016,[26] the median house cost increased from $387,000 in 2008 to $634,000 in 2018, and homeless rates nearly doubled.[26,27]

AI/ANs IN KING COUNTY

King County is home to 47,852 AI/ANs per the 2017 U.S. census estimate—roughly 2.1% of the county's total population, most of whom reside in urban areas.[21] There are two federally-recognized tribes within King County—Muckleshoot and Snoqualmie—and a number of other tribes whose traditional lands lie in surrounding counties and throughout the state. Alaska Natives also represent a large percentage of the AI/AN population in the county and have strong cultural and historical ties.[21]

AI/ANs in King County are more likely to be of lower socioeconomic status (SES) with higher rates of poverty and unemployment and lower levels of education compared to the county's general population.[15,16] Additionally, AI/AN households in King County have lower median incomes when compared to the general population.[11,21] Notably, the gap in median incomes between the general population and AI/AN households is nearly $28,000 in King County, while nationally the gap between AI/AN and the general population is approximately $15,000.[11,16]

Despite these hardships, King County's AI/AN community has continued to grow and thrive, nearly doubling over the last decade. AI/ANs in King County are strong community and civic leaders, driving local economies, providing jobs, protecting the environment, and championing minority rights.[22]

King County's urban Indian community features a number of culturally-specific organizations that work together to improve the health and well-being of urban AI/ANs and provide traditional services and cultural opportunities to the county's vibrant Native population. This Needs Assessment is as much a story of the successes, resiliencies, and strengths of King County's urban AI/ANs as it is of the challenges and hardships faced by the community.

METHODS

A literature review was conducted in order to identify the most prevalent and pressing health concerns within the general disabled and senior populations in the United States and the disabled and Elder AI/AN populations. This research focused on identifying common needs and issues affecting these populations and attempted to identify trends and topics specific to the King County area. Key issues among the general disabled and Elder AI/AN population nationwide were homelessness, substance misuse, poverty, and racial and ethnic disparities.

Significant gaps existed in the available information on the disabled and Elder AI/AN community in general, specifically on the urban disabled and Elder AI/AN community in King County, resulting in this assessment. In order to fill these gaps and better assess the needs of the community, UIHI adopted a mixed-methods approach, developing a comprehensive, quantitative survey instrument implemented in conjunction with qualitative, key informant interviews with community members. Mixed-methods approaches offer valuable insight and a comprehensive perspective in the presence of insufficient data, limited information, and poorly understood results.[23,24] This method was applied using a priority-sequence model,[23] with the key informant interviews used as a qualitative follow-up to help explain and better understand the quantitative results of the survey data.

In general, these primary data collection efforts focused on the following areas:

1. Basic demographics
2. Overall physical and mental health status
3. Current usage of public benefits and social services
4. Additional public benefits and social service needs as identified by community members
5. Gaps in public benefits and social service needs as related to common health indicators

QUANTITATIVE METHODS

Survey Design

UIHI's survey instrument was developed in-part using scientifically-tested and validated surveys relevant to the urban AI/AN population.[25,26,27] The strength and relevance of these surveys and their questions were assessed, and questions deemed applicable were included and/or adapted as necessary. As limited instruments and information were available on the subject, many questions were developed internally to better measure and assess the relevant indicators identified in the literature review. These questions were developed to better measure and assess the health conditions and long-term care needs of disabled and Elder AI/ANs that were identified in the literature review.

The concept of frailty was identified as a growing health concern in the general senior population, but limited information on the subject was available for AI/AN Elders. For this reason, the survey also incorporated the Vulnerable Elders Survey 13 (VES-13) instrument.[28] The VES-13 was developed by a team of UCLA, Department of Veteran's Affairs, and RAND Corporation researchers as part of an initiative to help measure quality of care for seniors and identify those at risk of increased health decline and mortality.[28]

The VES-13 is scored along the four indicators: age, self-reported health, difficulty with physical activities, and difficulty with instrumental activities of daily living or activities of daily living.[35] A total score of three or more indicates vulnerability, and higher VES-13 scores are associated with higher probability of imminent functional decline and death.[28,29]

The VES-13 combined with the other questions identified and developed resulted in the survey that was administered which consisted of a mix of dichotomous, write-in, multiple response, and Likert-scale questions.

Survey Administration

A total of 181 community members were surveyed by UIHI staff a 4-month period at three locations in King County, WA: the annual SeaFair PowWow held at Daybreak Star Cultural Center in August 2018; in SIHB's Leschi Clinic; and through the SIHB Elders Program. To ensure uniform implementation of the survey, UIHI staff were trained prior to survey administration to familiarize them with the content and purpose of the survey as well as survey administration techniques and expectations.

Participants were asked to self-identify on three inclusion criteria: aged 55 and over or disabled, King County residency, and self-identified American Indian or Alaska Native status. The Elder population was defined as 55 years and older. A 65 years and older cutoff is typically used for inclusion in senior populations, as this is the Medicare eligibility age.[30] Many AI/AN cultural traditions, however, include Elders at earlier ages.[2,4,5,31] Additionally, research conducted at UIHI shows that members of the AI/AN population in general experience

age-related health concerns at an earlier age than the general population. For these reasons, the 55-year age cut-off was used for inclusion in the Elders category.

The 55 years and older age requirement applied only to the members of the Elders community, while the age requirement for those who self-identified as disabled was 18 years or older. The disabled-only members of the population were defined as respondents between 18 and 55 years of age with a self-identified disability. King County residency was determined by self-reported zip code. Members of the community who lacked permanent housing were encouraged to use a zip code in the county where they slept most often or spent the majority of their time. With the exception of clear spelling differences, self-identified tribal affiliation was left unaltered.

In addition, survey participants were offered a ten-dollar gift card as compensation for their time. The survey was offered via touch-screen tablet, consisted of a maximum of 90 questions, and took an average of 18 minutes to complete.

Quantitative Data Analysis

The quantitative analysis began with results from the primary data collection efforts and were reviewed and cleaned. Missing data were excluded from the final analysis and significant outliers were removed. Where possible, minor discrepancies in the survey entries were corrected in order to maximize the sample size. This included spelling and numerical errors for write-in responses. Discrepancies that were not able to be corrected were omitted from the final data set.

The population was stratified by gender and 5-year age category. Gender identity was defined as three categories: male, female, and other. "Other" included transgender, two-spirit and other non-binary gender identities. It was decided that transgender, two-spirit, and other non-binary gender identities would be collapsed into the "Other" category due to a small number of respondents for these categories. This also allowed for improved statistical strength for the "Other" category.

Proportional differences between and within those stratifications were further analyzed for statistical significance using chi-square tests of independence or Fisher's exact test for questions that had less than 30 total responses. Statistical significance was defined at a probability level (p-value) of 0.05. P-values represent the probability of obtaining results equal to or more precise than those observed. A p-value less than 0.05 indicates a statistically significant difference between groups and suggests a low probability that observed differences were due to random error.

Where statistical significance between groups was identified, a 95% confidence interval bound odds ratio (OR) was calculated to capture the direction and magnitude of the difference. The OR specifies the likelihood or probability of a condition or event for one group compared to another group. An odds ratio of one indicates that the condition or event under study

is equally likely to occur in both groups. An odds ratio greater than one indicates that the condition or event is more likely to occur in the first group than the second group. An odds ratio less than one indicates that the condition or event is less likely to occur in the first group than the second group.

Data analysis and visualizations were conducted using R: A Language and Environment for Statistical Computing[41] and Tableau (version 12.2).[42]

Limitations

The "Other" gender category used throughout this report represents a significantly smaller segment of respondents and, as such, is not representative of the general, urban disabled and Elder AI/AN population in King County. This sample size limitation further extends to the entire survey population when stratified by other categories captured in this assessment. Though our total sample size of n = 181 represents acceptable statistical power, smaller subsets of the sample do not necessarily retain the same power, especially when stratifications contain less than 30 respondents.

Survey participants were not uniquely identified, and duplicate respondents may exist. Over half of the surveys were administered through the SIHB Elders program and in the SIHB clinic. As a result, a certain degree of sample area bias exists. Additionally, survey respondents were not randomly selected—they represent a convenience sample, which is inherently at risk for self-selection bias, so it cannot be assumed that this sample is representative of the entire disabled and Elder AI/AN population in King County nor that the results of this survey are generalizable to the AI/AN population as a whole. Because of this, any comparison of the survey results to external rates or benchmarks should be interpreted with caution as the observed results may not exist at the population level. This includes the comparisons made throughout this assessment, which are meant to serve as guidance on areas that should be considered for more targeted programs and interventions after more rigorous testing and exploration.

METHODS

QUALITATIVE METHODS

Key informant interviews were conducted from August to November 2018 with six members of Seattle Indian Health Board's Elders council. This council is comprised of Elders who are a part of the SIHB Elders program, a community service provided to AI/AN Elders in the area, the majority of whom reside in urban areas. Interviews took 30–45 minutes with four of the interviews conducted by the UIHI Evaluator II and two conducted by the Epidemiologist II. Five of the respondents were female and one respondent was male. All were aged 55 years or older and lived in King County. All participants were read a consent form and gave verbal consent for participation and permission to audio record the interviews. Participants were offered a ten-dollar gift card as compensation for their time.

These semi-structured interviews asked questions that focused on determining what the Elders felt were the most important needs of their community. Questions focused on what they perceived to be the most pressing health concerns for the Elders population, the type of care they currently receive, types of care and services they would like to receive, and their own personal experiences that impact their health. All questions were open ended, and the semi-structured form allowed the Elders to talk broadly about their experiences while also allowing the interviewers the flexibility to explore and follow up on topics or themes as they occurred during the conversation. The semi-structured form is also crucial in this context as the knowledge and wisdom of American Indian and Alaska Native Elders must be respected, and the flexibility allows for knowledge transfer without structure and allows for genuine connection between the interviewers and Elder participants.

Audio-recordings of the interviews were transcribed using Temi transcription service.[32] Temi is a secure and confidential online platform that securely stores and transmits data using TLS 1.2 encryption. Transcription is done by computers and files are never seen by Temi employees. The provided transcripts were reviewed for accuracy and confidentiality by UIHI's Master of Public Health intern and the Epidemiologist II. Analysis of the transcripts was done using Dedoose 8.1, a cross-platform, web-based application for analyzing qualitative and mixed-methods data.[33] Three members of UIHI independently read the transcripts. They then discussed general impressions regarding patterns in the data and together created a working set of codes using these patterns. The team also used open coding and constant comparative methods rooted in a grounded theory approach to qualitative data analysis.[34] The framework of the coding scheme included categories for "discrimination", "food security", "health literacy/education", "homelessness", "housing", "safety", "sense of community", "traditional culture", "traditional medicine", and "transportation". Under each code, subcodes for "long term health care support" and "short term health care support" were included as well as the additional subcodes of "community" and "individual" level for the code of "safety" and the subcode of "loneliness" underneath the code "sense of community". The following table defines each code.

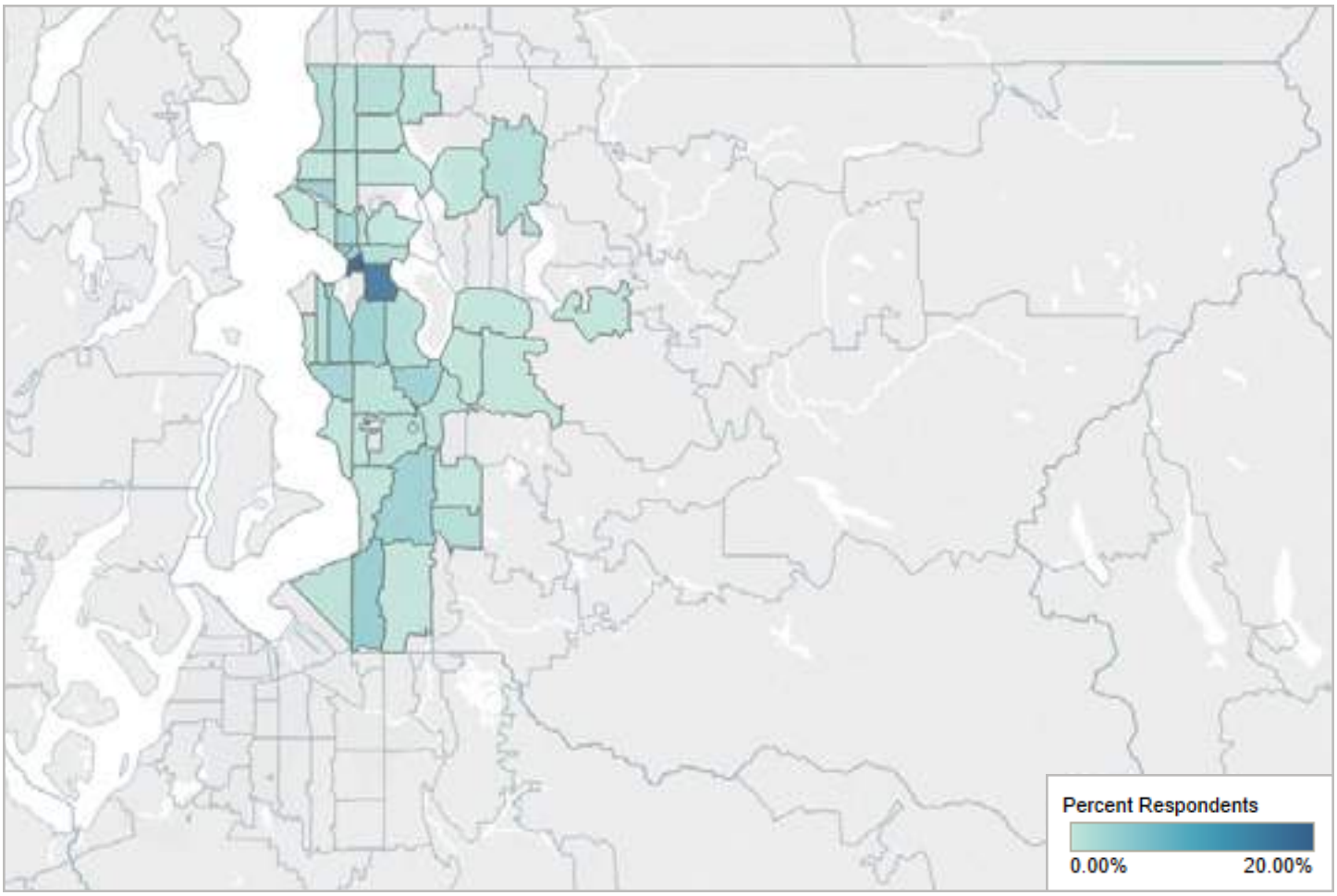
Code	Definition
Discrimination	References to race-based, age-based, and social class-based discrimination.
Food Security	References to hunger, lack, need, and importance of food.
Subcode: Long term care support	Long term care support suggestions that can be implemented over time and would be beneficial to improving health outcomes.
Subcode: Short term care support	Short term care support suggestion. Needed in the immediate future.
Health Literacy/Education	References to knowledge or uncertainty about health (i.e., symptoms of disease, how to manage/treat disease, etc.)
Subcode: Long term care support	
Subcode: Short term care support	
Homelessness	
Subcode: Long term care support	
Subcode: Short term care support	Reference to homelessness, whether personal or those experiencing it in the Elders' community. Includes the physical, social, and emotional impacts.
Safety	References to anything that made them feel unsafe, suggestions for improvements in safety.
Subcode: Long term care support	
Subcode: Short term care support	
Subcode: Community	References to larger community, city, and state safety concerns. May include social safety concerns.
Subcode: Individual	References to individual level safety. Includes references to individual safety concerns around falling, living alone, and health safety.
Sense of Community	References to the need of community, including family, fellow Elders, or youth. Importance of the feeling of belonging.
Subcode: Long term care support	
Subcode: Short term care support	
Traditional Culture	References to the need, want, or experience, with traditional culture in Elders' community, health care services, or individual lives.
Subcode: Long term care support	
Subcode: Short term care support	
Traditional Medicine	References to the need, importance, and experiences with traditional cultural medicine.
Subcode: Long term care support	
Subcode: Short term care support	
Transportation	Any reference to the need, lack, or importance of transportation.
Subcode: Long term care support	
Subcode: Short term care support	

DEMOGRAPHICS

Geographic Distribution

As shown in Figure 1, Most respondents came from western King County. Of these, over 30 percent came from two zip codes located in the downtown Seattle area—98114 and 98104 (Figure 1).

Figure 1. Geographic distribution of respondents in King County by zip code



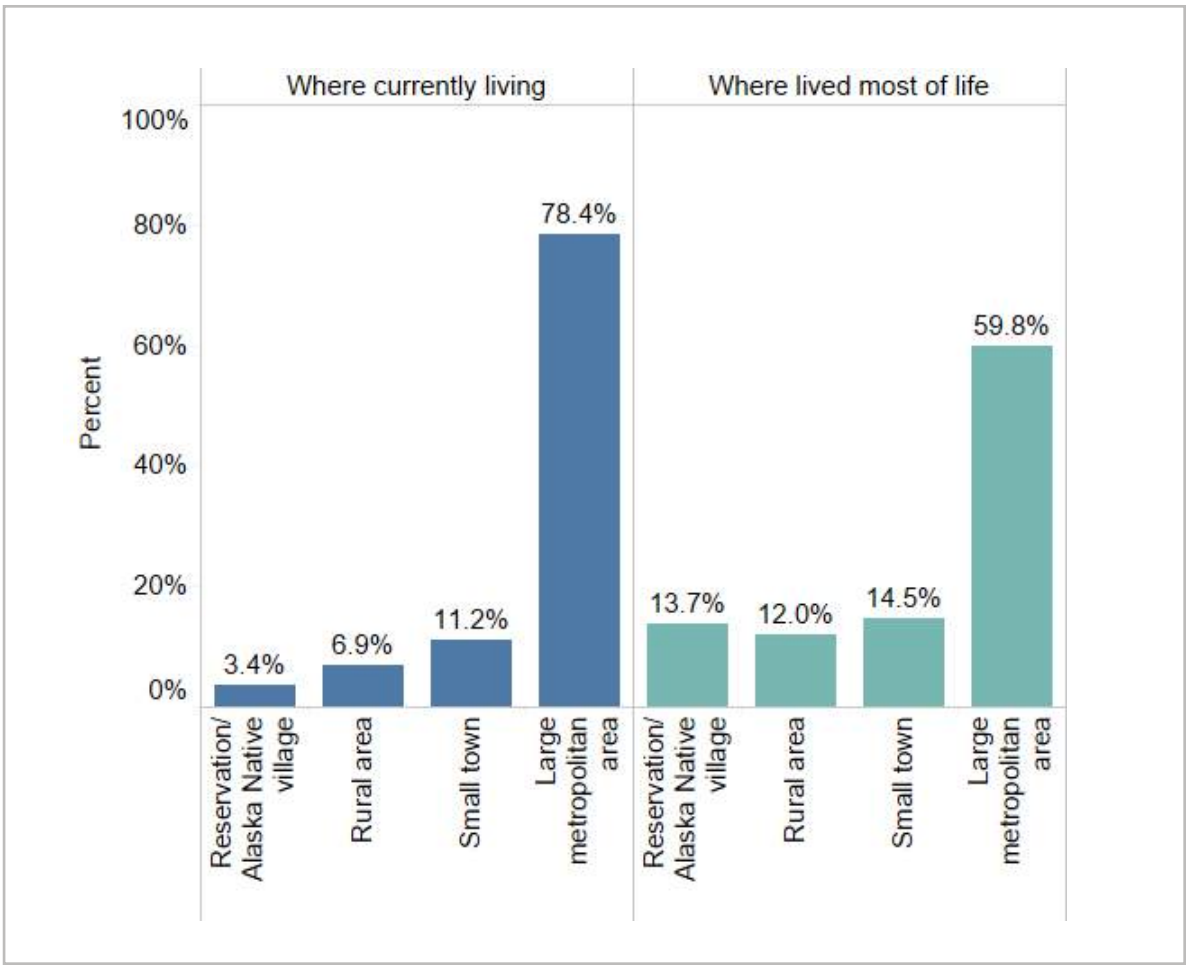
Residency History

Survey respondents were asked about where they were currently living and where they had lived most of their lives. Nearly eighty percent (78.4%) of respondents indicated that they now lived in a large metropolitan area (Figure 2), which generally corresponds to the geographic distribution of respondents shown in Figure 1.

Only 59.8% of respondents, however, indicated that they had lived in a large metropolitan area for most of their lives. Similarly, only 18.1% of respondents indicated that they now lived in small towns or rural areas, compared to 26.5% of respondents who indicated that they had lived in small towns or rural areas most of their lives. Another 3.4% of respondents indicated that they currently lived on a reservation or in an Alaska Native village, compared to 13.7% indicated that they had lived most of their lives on reservations or in an Alaska Native village.

Data taken from the American Community Survey (ACS) for years 2007 to 2016 shows an overall demographic transition in King County from rural to metropolitan areas over the last decade.[11,15,17] This shift was reflected among survey respondents' responses as well and additionally highlights the growing importance of urban Indian programs in general.

Figure 2. Current versus longest previous residency locations

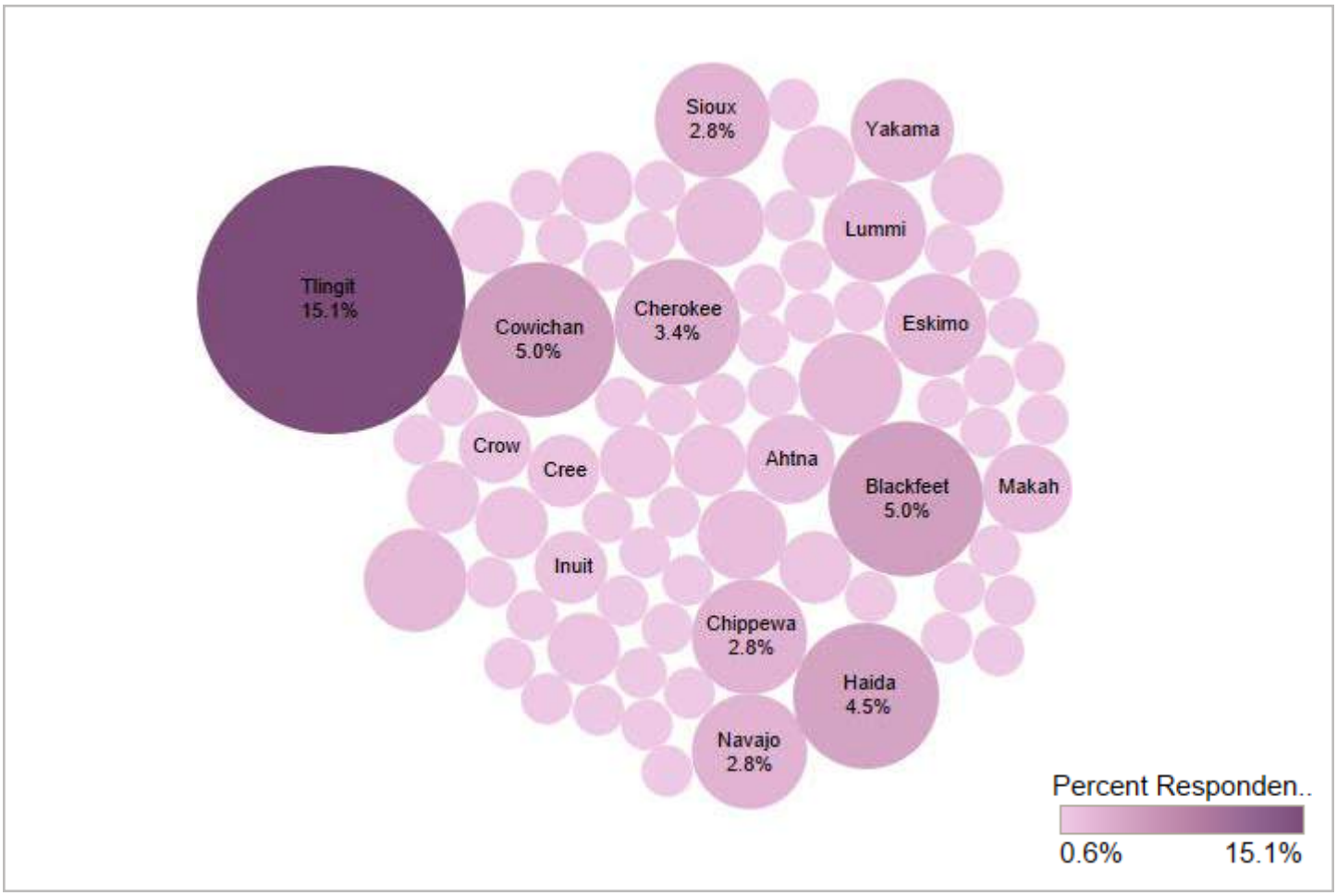


Tribal Affiliation

As part of the survey's inclusion criteria, respondents were asked to self-report their tribal affiliation, resulting in participants from more than 40 different tribes (Figure 3). Tlingit (15.1%), Blackfeet (5.0%), Cowichan (5.0%), Haida (4.5%), and Cherokee (3.4%) were the top five tribal affiliations identified in the survey. Additionally, 11.2% of survey respondents identified with two or more tribes.

This broad representation of tribal members in the Seattle-King County area highlights the important role that urban Indian programs such as Seattle Indian Health Board play in urban settings. AI/AN are usually under-counted or misclassified in urban areas and are often ineligible for services and support available from tribal organizations. This is particularly important in terms of long-term care. Urban disabled and Elder AI/AN often feel cut-off from their culture and isolated in institutional settings.[2,4,14] Because of this, programs and organizations oriented toward urban AI/AN populations fill a crucial role in meeting the unique social, cultural, and health needs of urban AI/ANs.

Figure 3. Tribal Affiliation



Elder and Disability

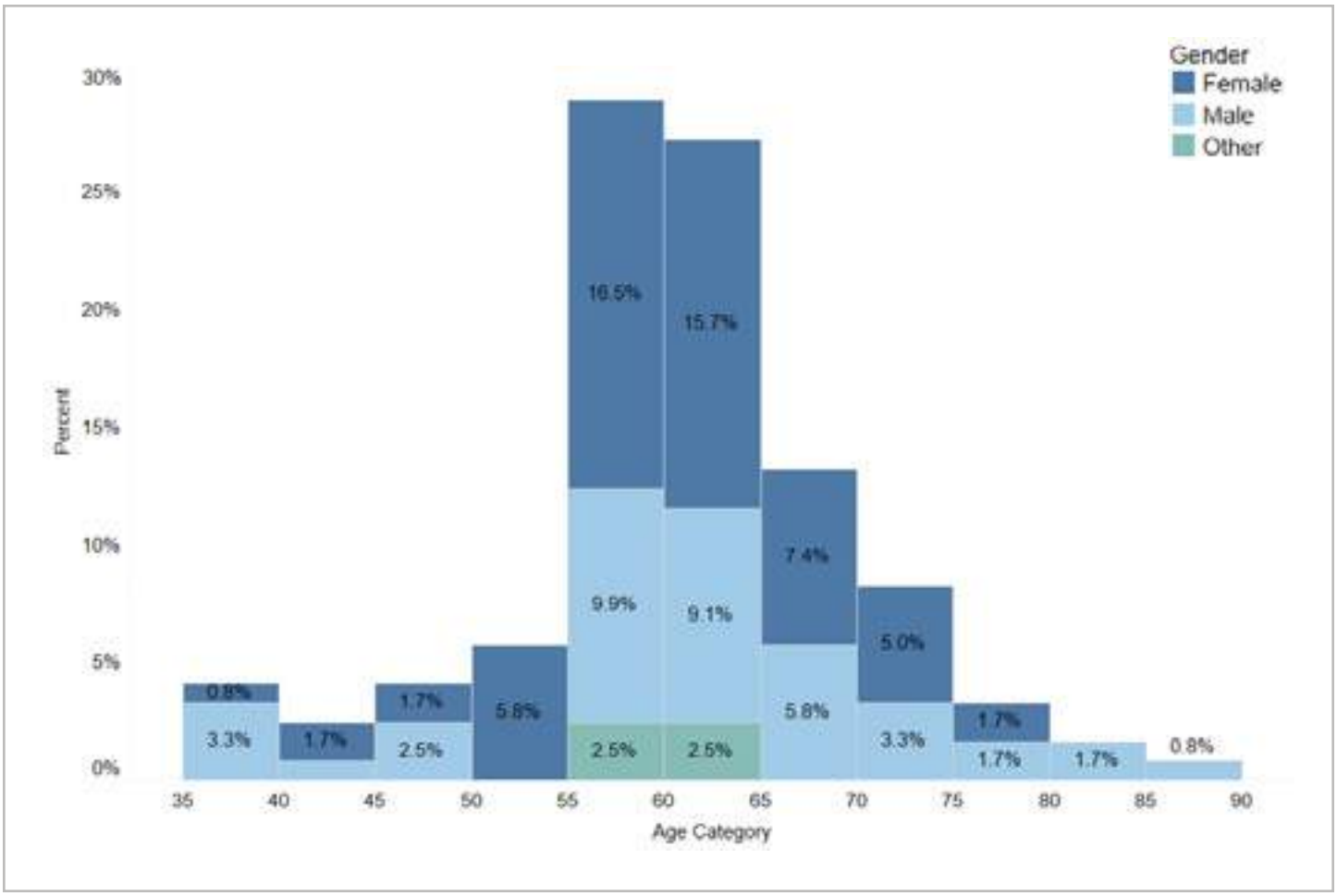
Eighty-four percent (83.8%) of respondents identified as Elders (aged 55 and older), 50.8% of respondents identified as both an Elder and disabled, and 14.0% identified as disabled-only. When expanding the definition of disabled-only (under 55 with a self-identified disability) to match the King County definition of 64 and under, the rate of disabled-only respondents increased to 35.8%.

Age and Gender

Respondents' ages ranged from 35 to 85 with an average age of 60.2 years. Age followed a generally standard distribution, but 56.2% of respondents were aged 55 to 65—a significantly higher number than other age categories.

Three categories were used to determine preferred gender among respondents: male, female, and "Other". Age was broken down into five-year age categories with no maximum age. Over half (56.2%) of respondents identified as female, 38.8% as male, and 5.0% identified as "Other", all of whom were between the ages of 55–65 (Figure 4).

Figure 4. Distribution of gender by 5-year age category



SOCIAL DETERMINANTS OF HEALTH

Social determinants of health are the social and environmental conditions into which people are born, live, work, and play.[35,36] They affect a wide range of quality-of-life and health-related outcomes and risks.[37] Factors such as social, economic, and physical conditions in various environments such as school, workplaces, and neighborhoods have been referred to as "place."[36] In addition to the physical attributes of place, the patterns of social engagement, sense of security, and well-being are also affected by where people live, work, and play.[38] Resources that enhance quality of life can have a significant influence on population health outcomes. Examples of these resources include safe and affordable housing, access to education and health care, public safety, availability of healthy nutrition, environments free of toxins and other harmful exposures, and strength of social services. Social determinants of health allow for a deeper understanding of the links between social structures and individual level health outcomes. Health interventions cannot be successful unless they are addressing the social structure that surrounds individual level health decisions.[38]

Understanding the relationship between how people experience place and its impact on health is fundamental to the social determinants of health. Factors of place considered in this assessment include income level, educational attainment, employment status, social and cultural interaction, housing, and health insurance. The combined effect of these factors and their interactions can have significant impact on the health and well-being of individuals and populations.

Figure 5. Percentage of respondents by income category

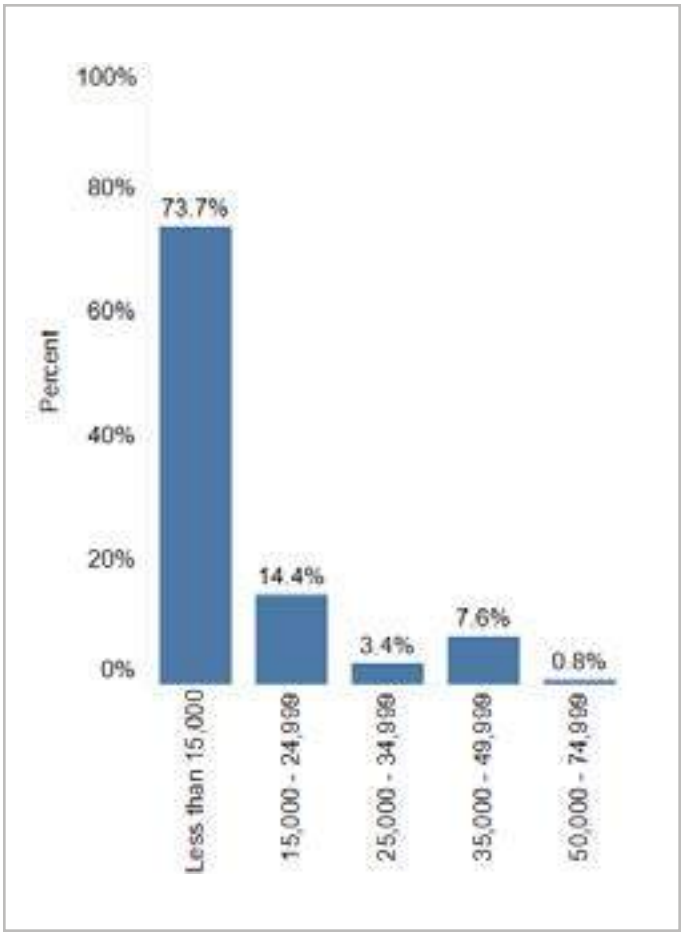
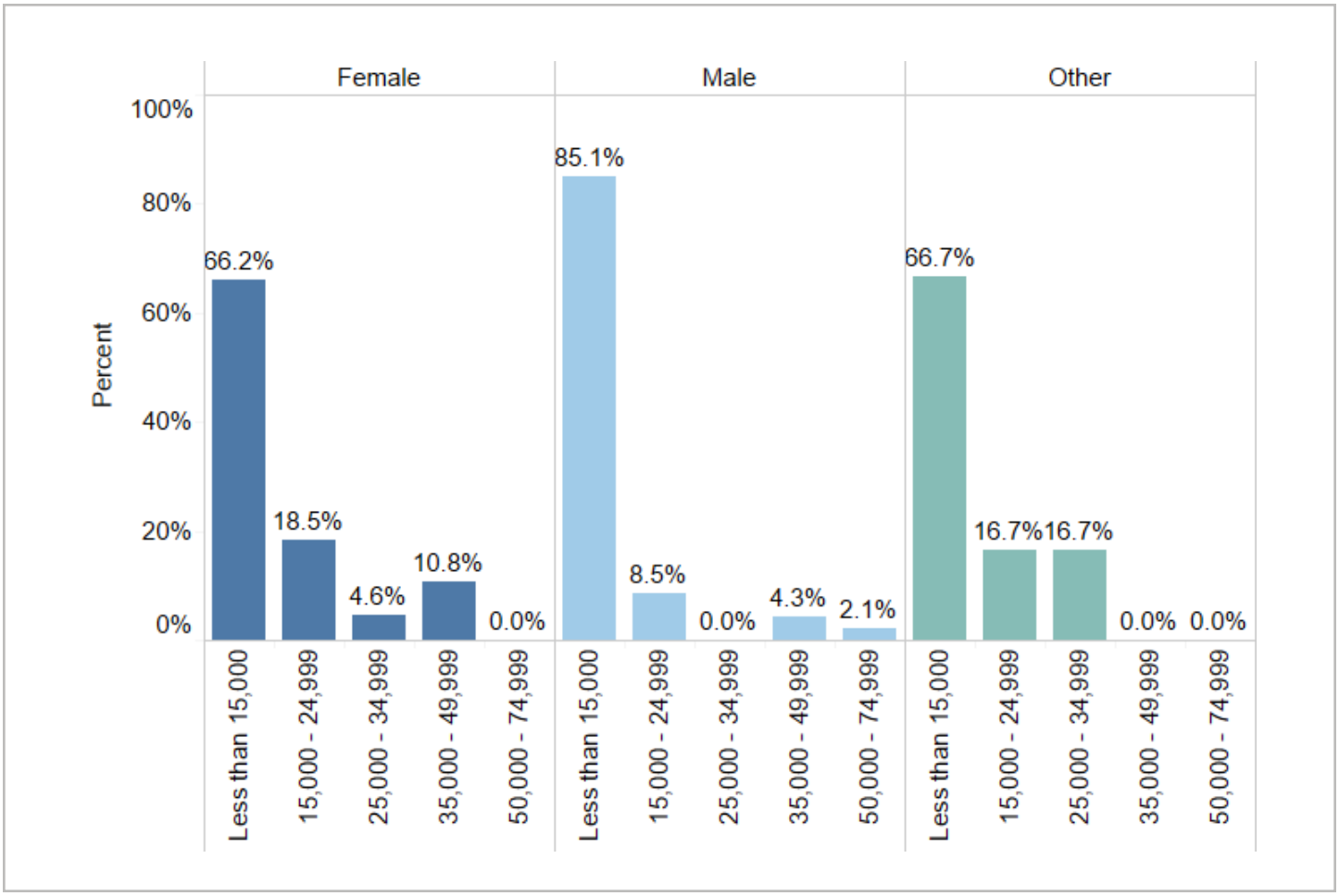


Figure 6. Income category by gender



Race

As members of a racial and ethnic group, AI/ANs are affected by race and racism across their life course which inhibits equitable access to resources and services resulting in stark health disparities.[39] Research demonstrates that these disparities are not rooted in biological difference but in the varying access to resources, racial attitudes, and physical environmental conditions.[40] Although the prevalence and impact of race and racism on King County's urban disabled and Elder AI/AN population was not fully explored in this Needs Assessment, we recognize its impact and the need for further research on its impact on the overall health and well-being of our community.

Income

There is a strong correlation between income level and health.[37,41,42] Those in higher income classes have greater access to health care and the resources necessary to improve health and well-being and prevent disease and illness.

Along with education level and employment status, income is a key component of socioeconomic status (SES).[43] There is a well-established link between higher SES and better health.[37,43] Wealthier, better-educated people tend to live longer and experience fewer health problems throughout their lives.

The majority of respondents (73.7%) earned less than $15,000 per year (Figure 5). When examined by gender, male respondents reported earning significantly less than other genders—85.1% of males earned less than $15,000 per year compared to 66.2% percent of females and 66.7% of other genders (Figure 6). Males were 1.3 times more likely to make less than $15,000 per year compared to females and other genders.

In 2017 the median household income in King County was $78,000.[11,15] Although we were not able to calculate the median household income of the survey population, we can infer that it was lower than the King County median based on respondents' self-reported income categories.

Educational Attainment

Like income, educational attainment is a key component of SES.[37,41] Not only does median income increase with educational attainment,[42,43] educational attainment improves the skills necessary to acquire employment, understand complex topics such as health care, and generally succeed in society.[42] Among respondents, 40.5% had completed high school or a GED equivalent (Figure 7), while just 8.3% had completed a college degree or higher—much lower than the King County average of 47.9%.[11,17]

Figure 7. Highest level of educational attainment

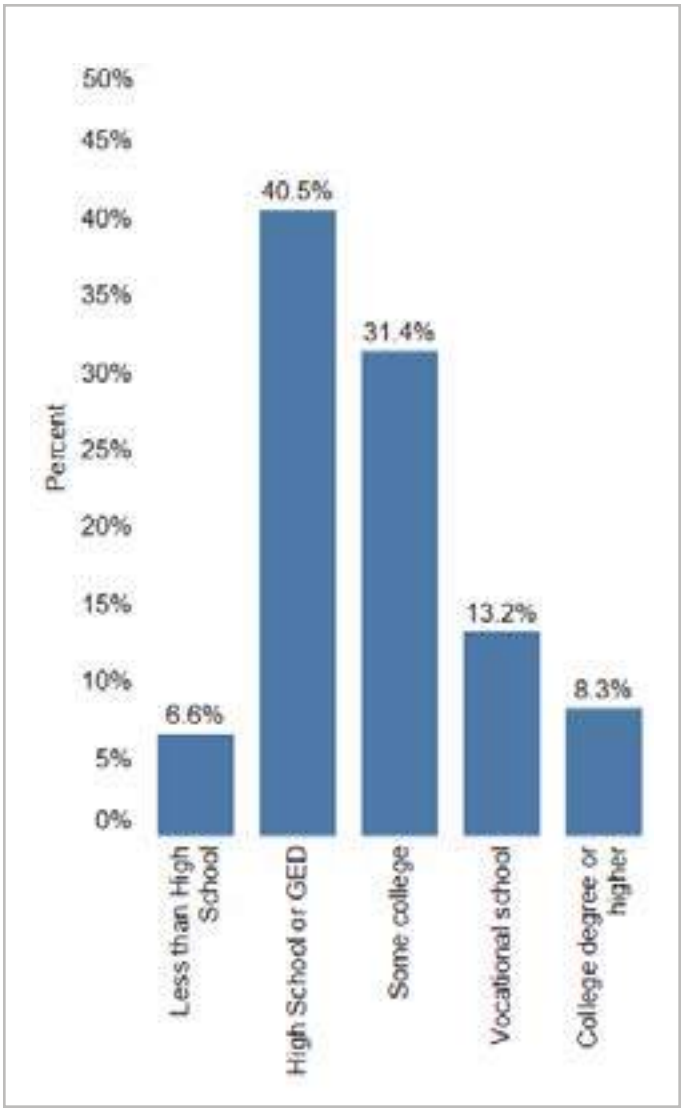
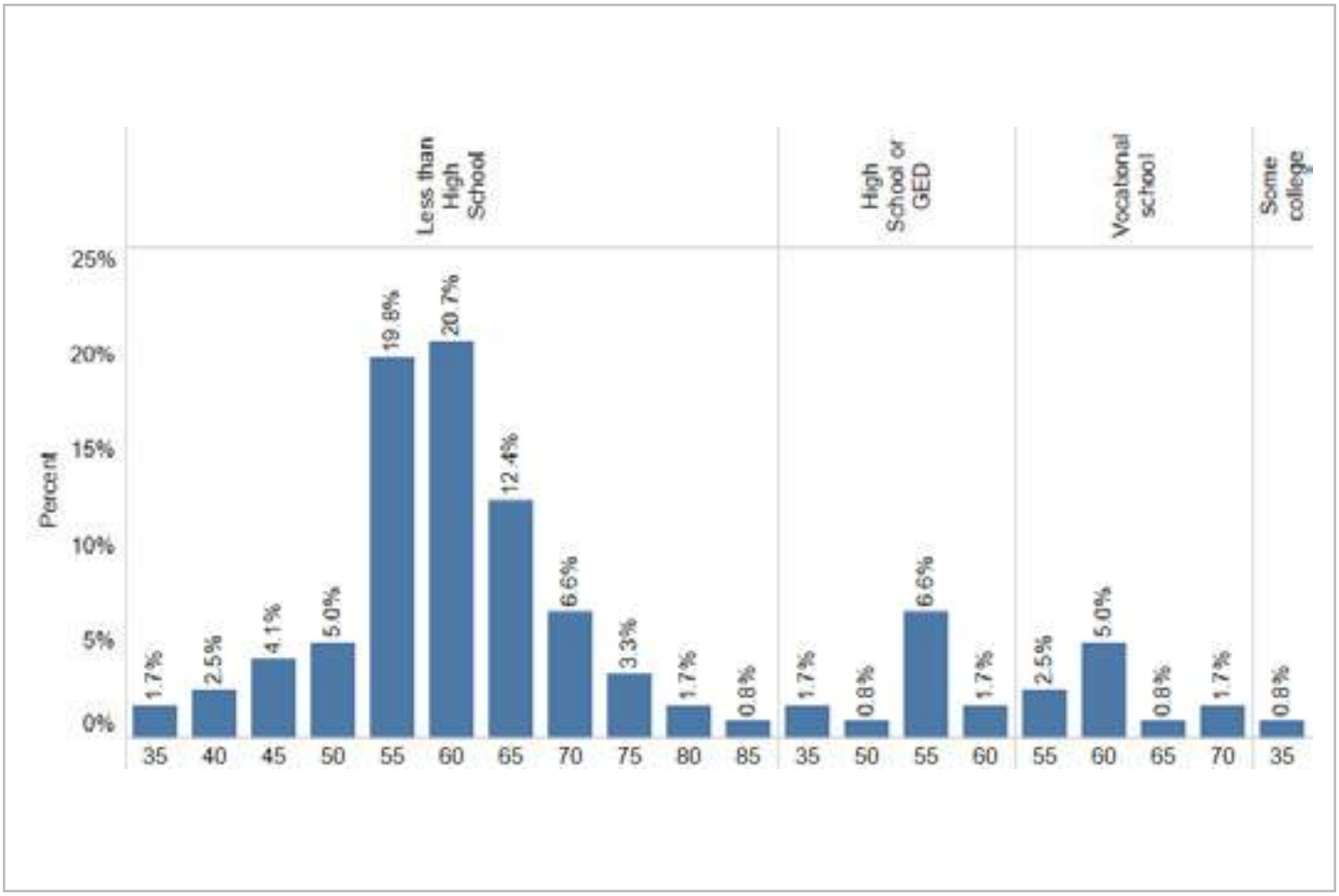


Figure 8. Employment Status by 5-year age category



Employment Status

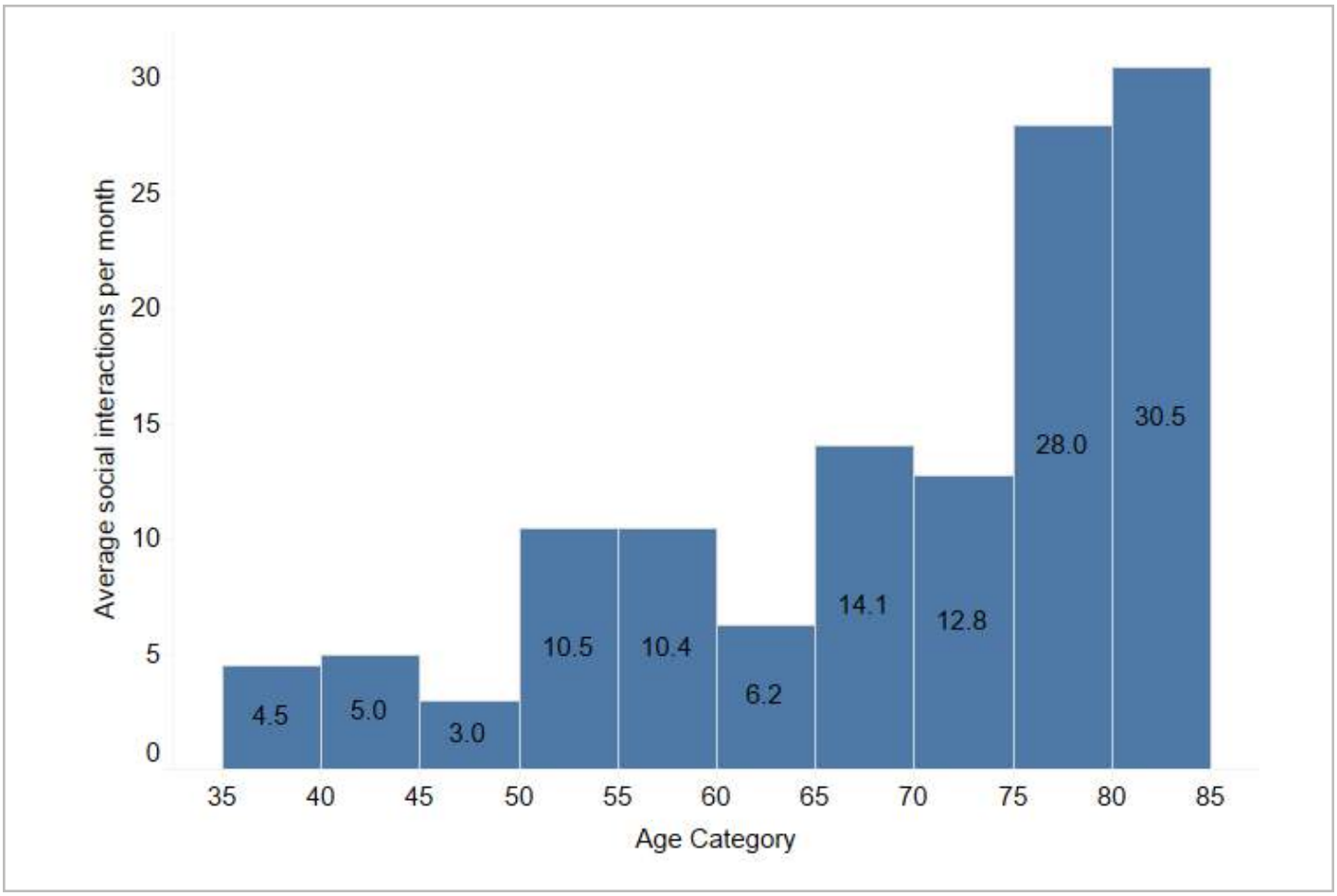
Along with income and educational attainment, employment status is a key component of SES.[41,42] Employment status generally corresponds to wealth and represents the ability to obtain the resources necessary to lead healthy, productive lives.[43] Survey respondents were asked to identify their employment status based on five categories: full-time, part-time, disabled and/or retired, military, and student. Nearly 80% (78.6%) of respondents were disabled or retired, while 21.6% continued to work full- or part-time (Figure 8), including 0.8% who self-identified as being in the military. No respondents identified as students. Of respondents working full- or part-time, the majority were identified in the strata between aged 55–65.

Social Interaction

An active social life has been shown to be positively associated with improved health and well-being. Feelings of community and belonging have been shown to be important physical and mental protective factors and have been linked to higher levels of overall happiness and satisfaction.[35] This includes participation in social activities with other individuals.[35]

Respondents were asked how many times per month they participated in social activities. On average, respondents indicated 9.8 days per month of social interaction. While there was no difference in levels of social interaction between gender, older ages were more likely to engage in social interactions compared to younger groups. When analyzed by age category, respondents aged 75–85 indicated higher levels of social interaction compared to other 5-year age categories, while respondents aged 35–45 had the lowest levels of social interaction (Figure 9).

Figure 9. Average social interactions per month by 5-year age category

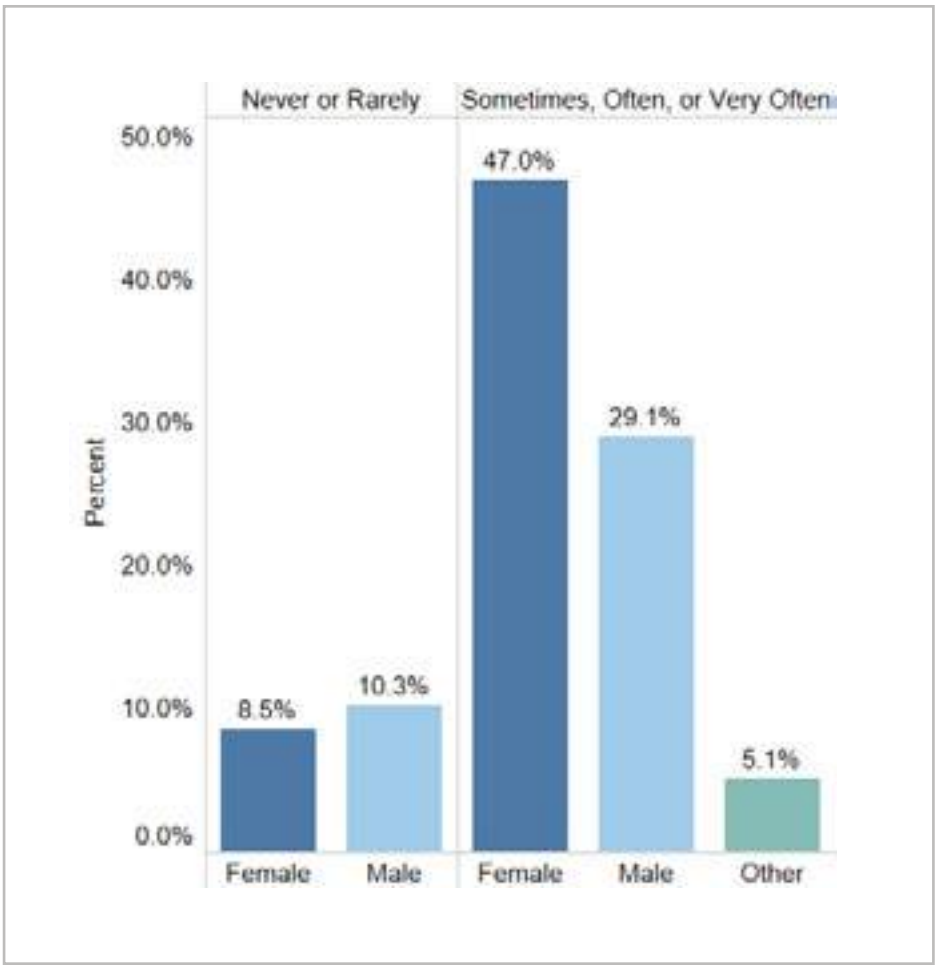


Cultural Interaction

As previously mentioned, cultural interaction and connectivity is often lacking in institutional, long-term care settings. While not traditionally considered a social determinant of health in the United States,[36] connection to culture and feelings of being grounded in tradition are key components of health and well-being in many AI/AN communities.[2,3,6]

Participants were asked how often they participated in cultural activities using a five-point Likert scale: never, rarely, sometimes, often, and very often. Eighty percent (81.2%) of respondents participated in cultural activities (ceremonies, sweats, dances, drumming, etc.) sometimes, often, or very often, while only 18.8% participated rarely or never. When examined by gender, there was a higher number of females who participated in cultural activities than males or other genders (47.0%) (Figure 10).

Figure 10. Participation in cultural activities by gender



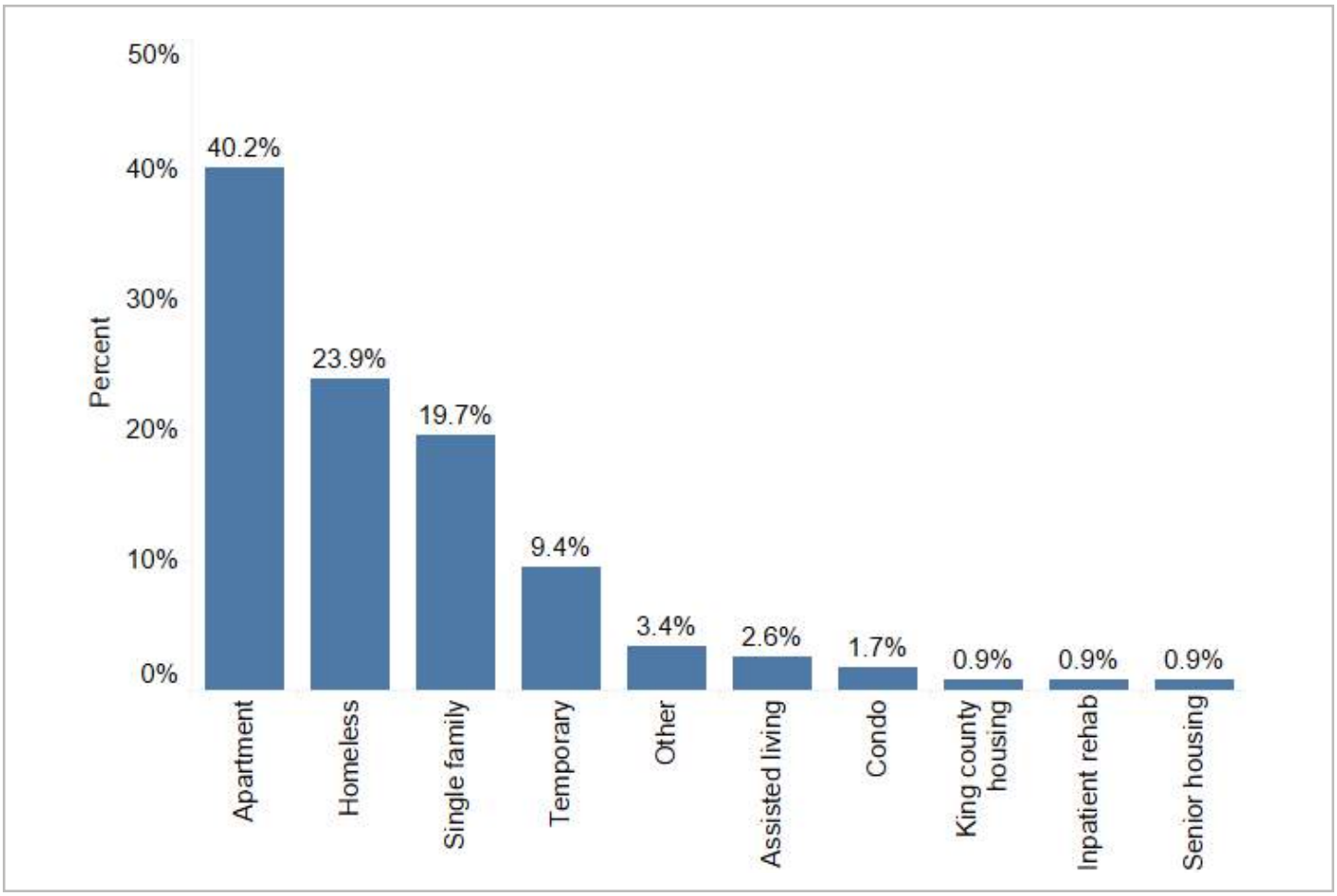
Housing

Safe and reliable housing is a major factor for health and well-being.[44,45] Housing quality and access has been increasingly associated with a variety of chronic and infectious health conditions, as well as poor nutrition, injury, and mental disorders.[46]

The majority of survey respondents (61.6%) indicated that they had some form of permanent housing, including 40.2% who lived in an apartment, 1.7% who lived in a condo, and 19.7% who lived in single-family housing (Figure 11). One-third (33.3%) of respondents, however, lacked permanent housing. This included 23.9% who identified as homeless and another 9.4% who were living in some form of temporary housing including renting a room or staying at a hotel. Another 3.5% lived in some sort of institutional setting, including 2.6% in assisted living and 0.9% in inpatient rehabilitation, while another 1.8% lived in senior or king county housing.

While there was no proportional difference between genders, there were more female respondents who self-identified as homeless than males or other genders.

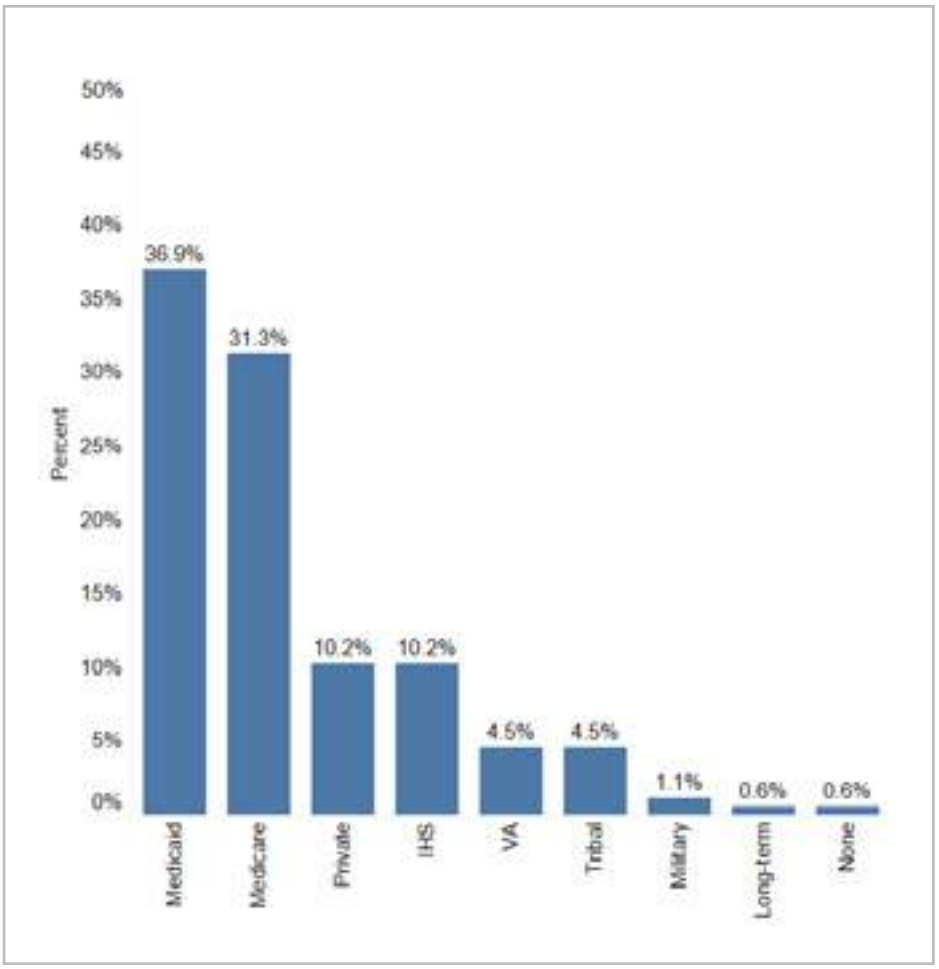
Figure 11. Current housing status



Health Insurance

Nearly all respondents (99.4%) had some form of health insurance. Among those who had health insurance, over two-thirds (68.2%) were on Medicare or Medicaid, while another 15.8% had some form of government-provided insurance through IHS, the Department of Veteran's Affairs, or the military (Figure 12). Another 10.2% had some form of private insurance, and 4.5% had coverage through a tribal entity. Less than 1% (0.6%) had some form of long-term care coverage, which may be supplemental or stand-alone insurance.

Figure 12. Health insurance coverage



HEALTH STATUS

While the purpose of this Needs Assessment was not to measure the presence of specific health conditions within the disabled and Elder urban AI/AN community, it was nonetheless important to develop a general understanding of the health status and concerns of survey participants.

Overall Health

When asked about their overall physical health, 57.9% of respondents indicated that they were in good, very good, or excellent physical health (not shown)—81.5% of females, 84.4% of males, and 66.6% of other genders (Figure 13).

Similarly, 60.3% of respondents indicated that they were in good, very good, or excellent mental health—61.6% of females, 55.6% of males, and 83.4% of other genders (Figure 14).

Figure 13. Overall physical health status by gender

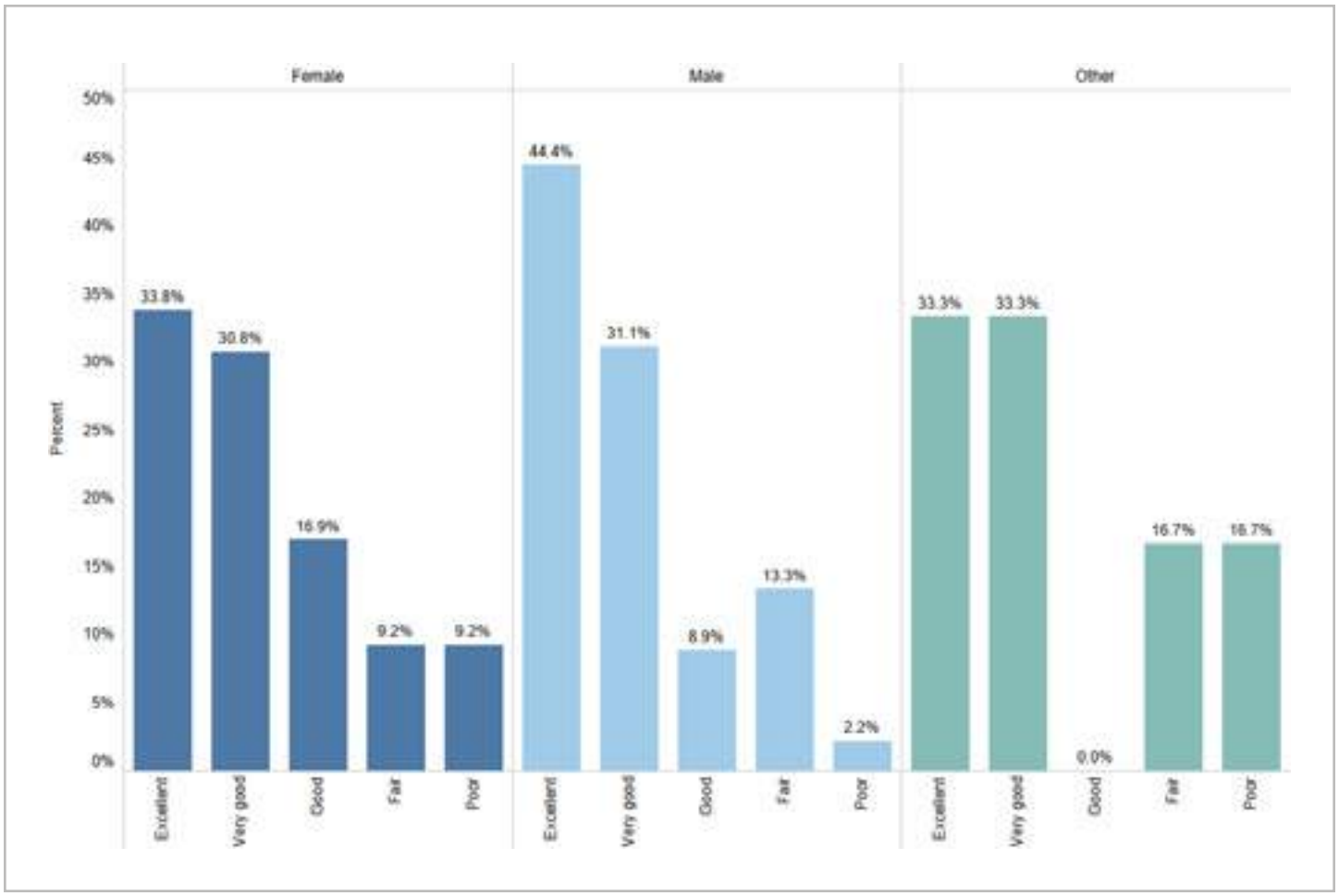
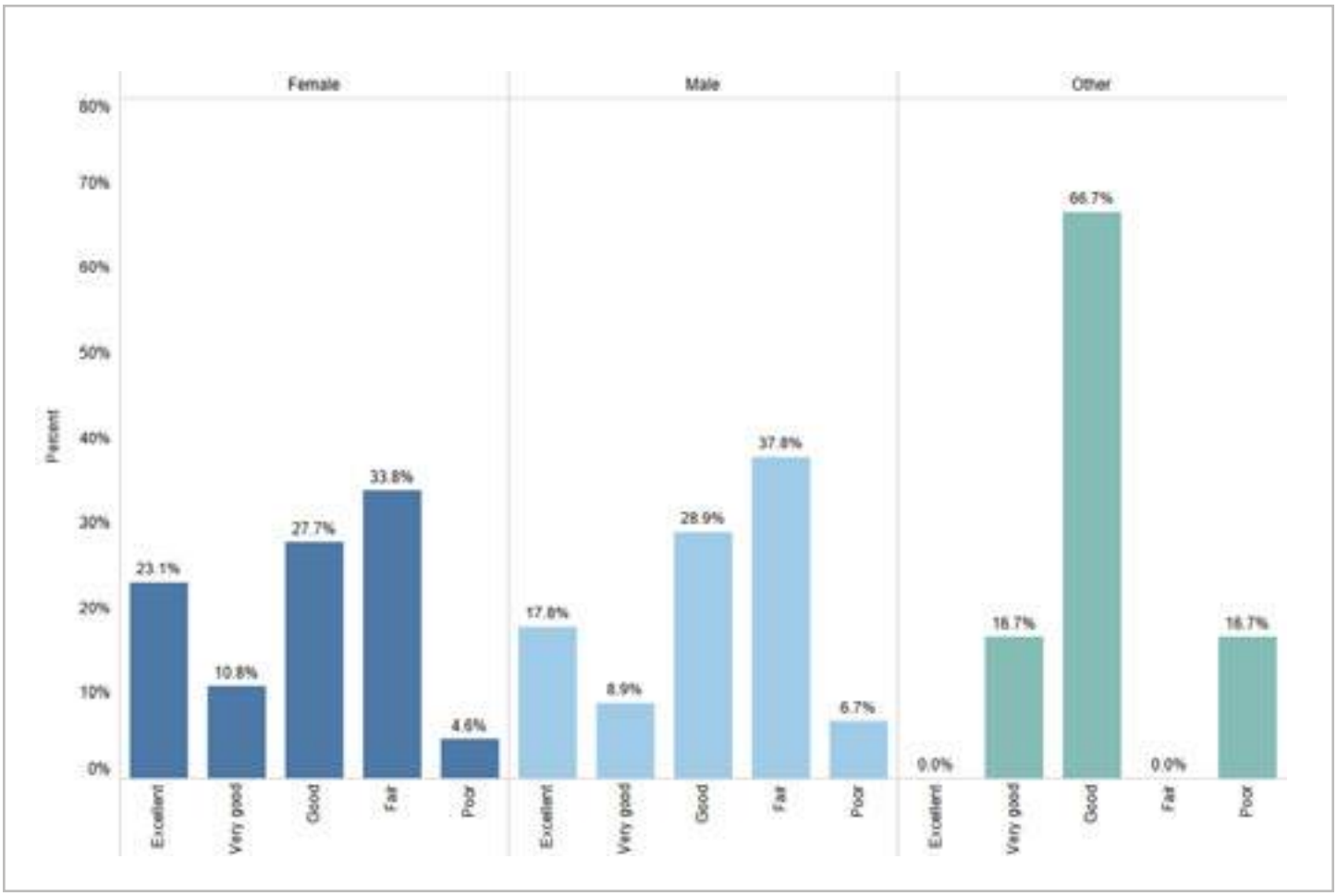


Figure 14. Overall mental health status by gender



Health Conditions

Participants were asked if they had ever been diagnosed with several physical and mental health conditions that are common to general disabled and Elder populations. Memory problems were identified as the most common health condition among respondents (54.9%), followed by arthritis (49.0%), vision problems (48.0%), hypertension (39.2%), and depression (35.3%) (Figure 15).

When examined by gender, the distribution of these health conditions changed considerably (Tables 1–3). Female and male respondents reported memory problems as their number one health condition, though two-thirds of males (67.6%) indicated having memory problems compared to just 47.5% of females. "Other" genders, meanwhile, reported depression, vision problems, arthritis, and hypertension equally as their top health concerns.

Figure 15. Top 10 health conditions amongst survey respondents

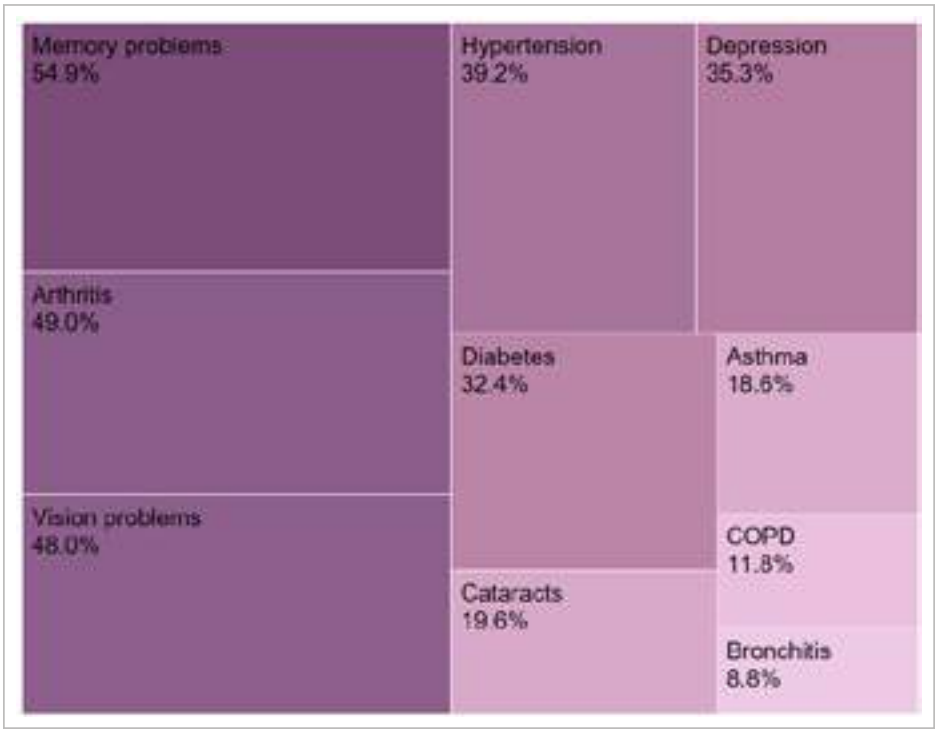


Table 1.
Top 10 health conditions among females

1	Memory problems	47.5%
2	Vision problems	47.5%
3	Arthritis	47.5%
4	Depression	28.8%
5	Hypertension	28.8%
6	Diabetes	28.8%
7	Asthma	16.9%
8	Cataracts	15.3%
9	Osteoporosis	11.9%
10	Bronchitis	8.5%

Table 2.
Top 10 health conditions among males

1	Memory problems	67.6%
2	Hypertension	51.4%
3	Arthritis	48.6%
4	Vision problems	45.9%
5	Diabetes	40.5%
6	Depression	40.5%
7	Asthma	21.6%
8	Cataracts	24.3%
9	COPD	18.9%
10	Blindness	13.5%

Table 3.
Top 10 health conditions among other genders

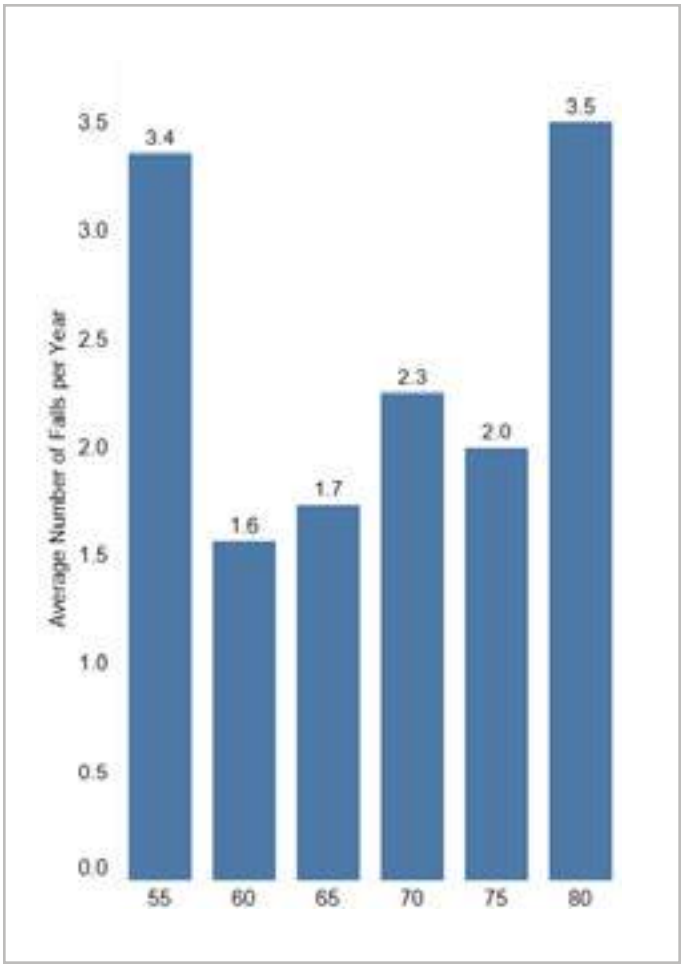
1	Depression	66.7%
2	Vision problems	66.7%
3	Arthritis	66.7%
4	Hypertension	66.7%
5	Memory problems	50.0%
6	Cataracts	33.3%
7	Diabetes	16.7%
8	CHF	16.7%
9	Asthma	16.7%
10	Bronchitis	16.7%

Falls

More than half of survey respondents reported having experienced at least one fall in the past year. Survey respondents experienced an average of 2.3 falls per year. Nearly three-quarters (73.9%) of these falls resulted in injury, 33.3% of which resulted in hospitalization. This is particularly important as hospitalization often results in institutional placement and/or a need for long-term care.

Additionally, the distribution of falls among participants followed a predictable pattern. While there was no difference between gender categories, the average number of falls per year followed a generally U-shaped distribution when examined by age category (Figure 16). The youngest and the oldest survey respondents experienced approximately 3.5 falls per year, which is typical of aging populations. Functionality tends to decrease with age and many people are initially unaware of this decline.[47] As a result, fall risk often increases before people are aware that it is an issue and take steps to actively mitigate its impact.[48]

Figure 16. Average falls per year by 5-year age category



FRAILTY

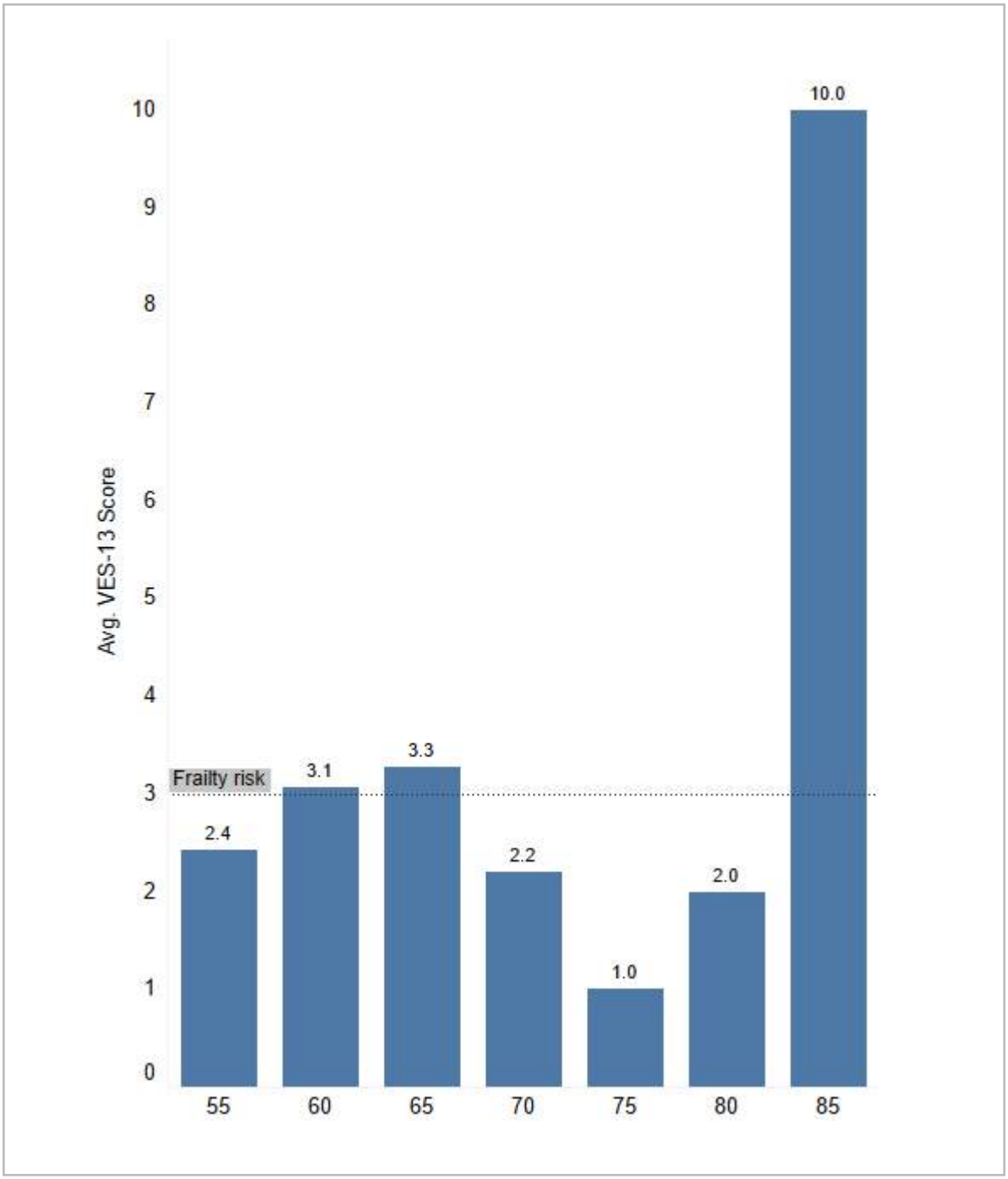
Frailty is generally recognized as vulnerability to the decline of biological functions, characterized by reductions in strength, endurance, and physiologic function.[49] The presence of multiple chronic health conditions has been linked to frailty onset at earlier ages,[49,50] which is concerning given the disproportionately high burden of chronic disease and multimorbidity among the AI/AN population in general.[7,8,14] In addition, frailty has been associated with adverse health outcomes such as falls, hospitalizations, institutionalization, functional decline, and death.[2,14] Identifying vulnerability to these health outcomes is useful for determining treatment plans and developing long-term care programs to prevent or delay the onset of such outcomes.[1,6]

Frailty was measured in King County's Elder urban AI/AN population using the VES-13 assessment tool. The VES-13 is scored on a continuous scale of 0–9, with zero indicating limited or no vulnerability and nine indicating extreme vulnerability. There is a strong correlation between higher scores and increased functional decline or death. Someone with a score of three or higher is 4.2 times more likely to experience functional decline or death over the next two years of their lives compared to those that scored lower than two.

The average VES-13 score among respondents was 2.8. Figure 17 shows the average VES-13 scores by 5-year age category. Nearly one-third (31.2%) of all participants answering all VES-13 questions scored three or more. Among participants age 55 and older, 37.1% scored three or more. Average scores generally decreased after age 65.

The only age category with an average score over four was age 85 and above. This age category represented a proportionately smaller number of respondents and had minimal impact when calculating the overall average score of the population (2.8 when excluded vs. 2.7 when included). Nevertheless, these scores are much higher than the average found among survey respondents and could represent a significantly higher degree of risk for respondents aged 85 and older.

Figure 17. Average VES-13 score by 5-year age category



PERSONAL CARE AND ASSISTANCE

Personal Care

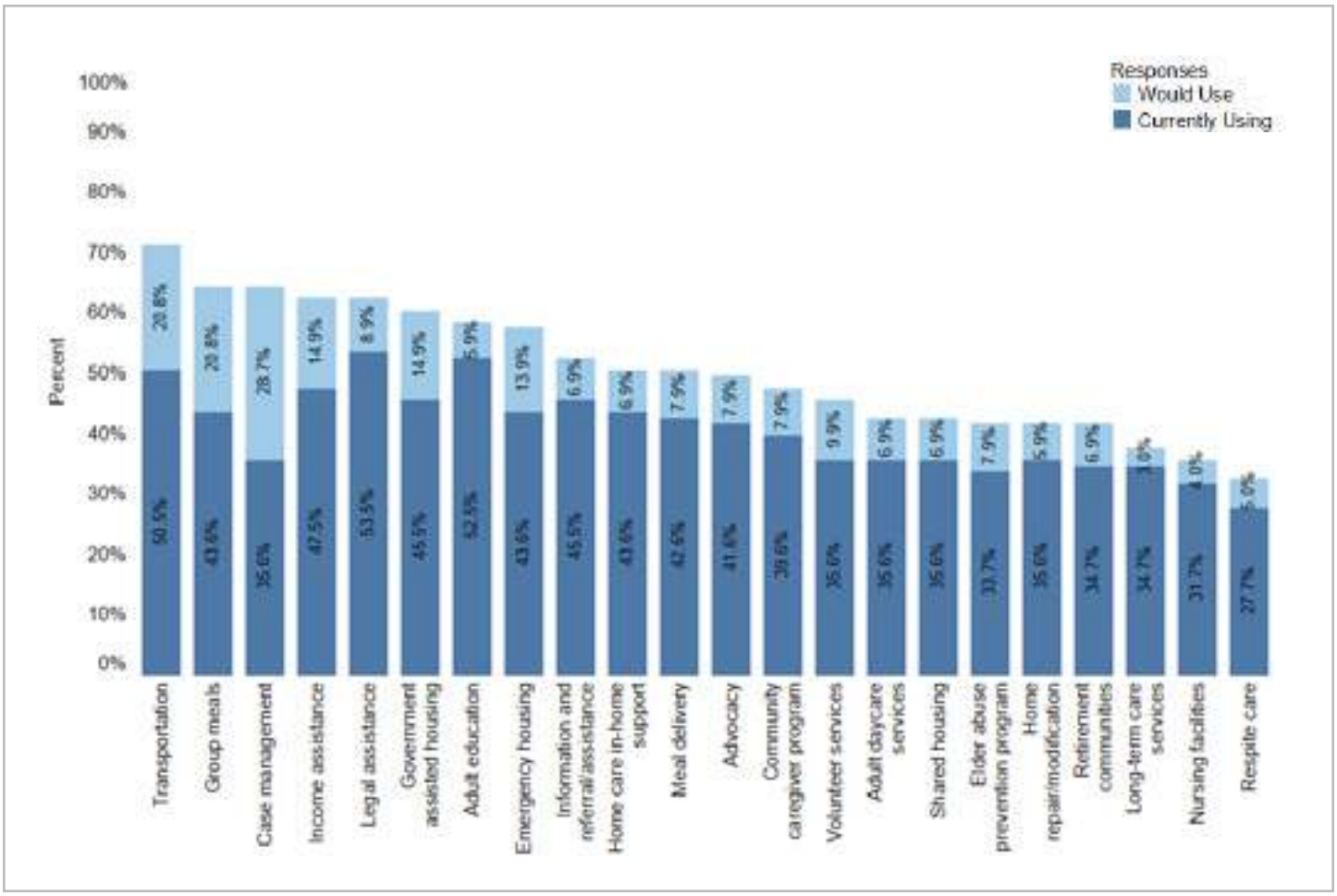
Just over half of respondents (51.7%) indicated that they did not need help with their daily activities, while 9.1% indicated that they needed help but did not receive it. Of those respondents who were receiving help with their daily activities, 35.4% reported that a family member was providing that assistance, 82.3% of whom were assisting unpaid. Only 8.1% of respondents indicated that they were receiving some form of paid personal help.

This generally corresponded to the proportion of respondents who indicated that they received all of the help that they needed in a typical week. Forty-four percent (44.2%) of respondents indicated that they received enough help, compared to 31.4% who indicated that they did not receive enough help during a typical week. Another 23.3% answered that they did not know if they received all of the help that they needed. Of those who indicated that they were not receiving the help that they needed, 76.3% indicated that not receiving the help that they needed affected their daily activities to some extent.

Assistance Needs

Participants were asked about what assistance needs they were currently using and what types of assistance they would potentially use if offered. Figure 18 shows the percentage of respondents currently using specific assistance and the assistance types they would use if offered. Current and potential use of transportation assistance was the most identified assistance need among respondents (50.5% and 20.8% respectively). Legal assistance (53.5%) and adult education (52.5%), however, were currently being used by more respondents, while case management (28.7%) was identified as the assistance need that respondents would most use if offered.

Figure 18. Assistance needs – would use versus currently using



QUALITY OF CARE

A limited number of survey questions were devoted to determining the type and quality of care that respondents and community members received. These mainly focused on whether participants felt culturally respected by their providers and if their wishes for the kind of care that they received were listened to and respected.

Almost all respondents (90.1%) indicated that they felt culturally respected by doctors and other health care providers (Figure 19), while 76.9% of respondents felt that their wishes for the kind of care they received were listened to and respected (Figure 20).

Figure 19. Percentage of respondents who felt culturally respected by their doctor

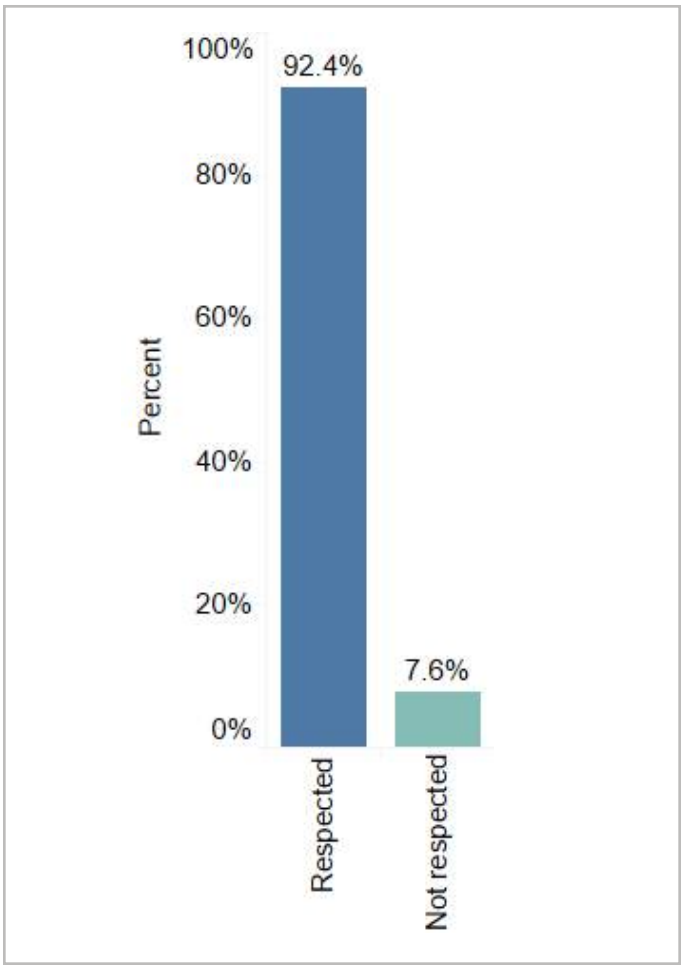
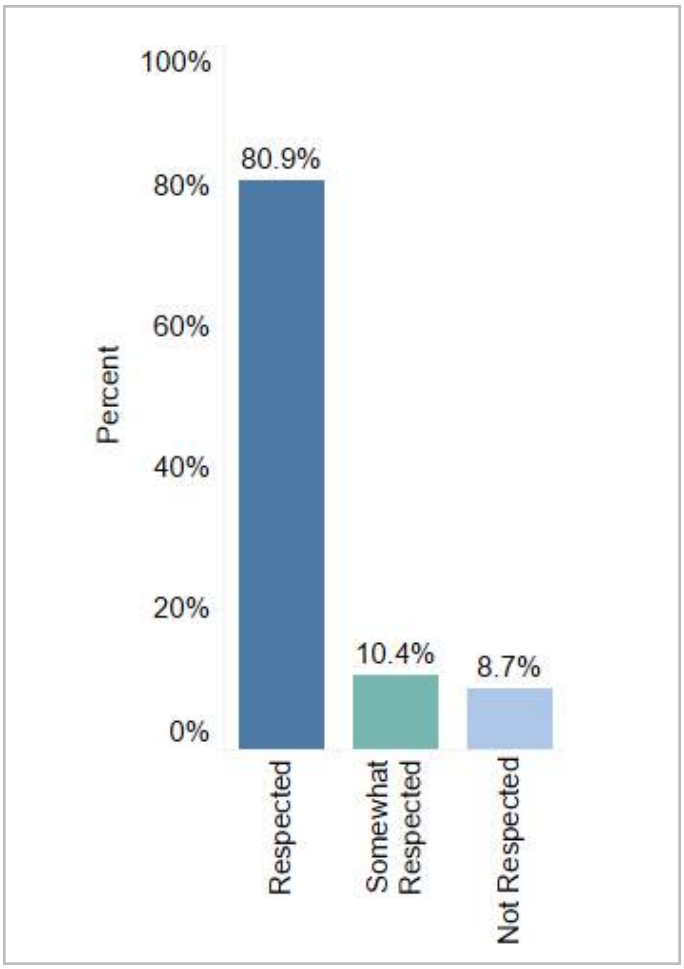


Figure 20. Percentage of respondents who felt their wishes for the type of care they wanted was respected



QUALITATIVE RESULTS: THE WISDOM OF ELDERS

The key informant interviews resulted in valuable information about Elder's health concerns, social concerns, and desired needs and services. It was an honor for UIHI staff to be able to sit down and discuss these areas with the six Elders who participated in the key informant interviews. They provided engaging, emotional, and rich stories to help inform this Needs Assessment.

HEALTH CONCERNS

The top health concerns among the Elders were diabetes, substance misuse, and homelessness. Many of those interviewed were diagnosed with diabetes and discussed their own experience managing the disease and the way they witnessed others in the community do the same. There were many requests for more information about the way diabetes can affect physical life as age progresses, and they expressed the need to talk to others about the daily reality of living with diabetes.

During the interviews, the Elders also brought up the issue of overuse of drugs and alcohol that they saw some of their community struggling with. Discussion around this focused on the negative effects this can have on health but also the reasons why misuse of alcohol occurs—homelessness, loneliness, and lack of access to resources, among other things.

Concerns around personal safety also arose, specifically in regard to the fear of falling while alone. One respondent told the interviewers that she had won a 911 alert necklace at bingo, yet she gifted the necklace to her friend who had already fallen two times in her home. She said, "well, she's more in need of this than I am…." The respondent continued by expressing her own fear of falling and stated that she leaves their door unlocked when showering in case she falls and needs assistance. She suggested that all Elders be given a 911 alert necklace. Despite these concerns, she was practicing the traditional AI/AN value of giving individual wealth and resources for the good of others, which indicates a strengths-based resiliency factor.

Access to high-quality, healthy foods was discussed by Elders as a crucial need in their community. Many discussed their friends who experience chronic hunger, the quality of the food, types of food, and whether the food they have access to is actually good for health conditions they may have.

"I mean I appreciate all of these places that have free dinners and, you know… I know they're limited on resources…. For those that have diabetic issues, a lot of it includes a lot of starch and you know, carbohydrates and they need a little more protein, more vegetables. I mean they serve a salad all the time, but- some green vegetables would be good and it just needs to be a little more healthier. No starches and breads and all that carbohydrates is not good."

SOCIAL CONCERNS

Discrimination

It is well documented that the historical context of genocide, the legacy of boarding schools, and current structural and individual forms of racism toward American Indian and Alaska Natives has been and continues to be one of the most important contributors of health disparities.[51] The past cannot be divorced from the present.

Many respondents discussed boarding school experiences—both personal experiences or those of family members, the loss of respect for AI/AN Elders, and discrimination they faced due to the color of their skin. The importance of this cannot be understated as external social factors such as racism, are some of the most powerful social determinants of health.[51]

Throughout the interviews, the Elders recounted experiences of varying forms of discrimination they have encountered. A few Elders discussed experiencing racism, indicating that because the color of their skin was "brown," they received sub-standard care. One Elder recounted attending Franklin High School and talked about how they were not "permitted to do a whole lot of things because I wasn't white."

Although this event was at least 60 years ago, research demonstrates that encounters with racism and discrimination have a physiological stress response that accumulates over a life time and negatively affects health outcomes.[53] This is also particularly salient, as this experience speaks to the history of Seattle's racist foundings and the attempted erasure of indigenous people in this region that continues to have effects to this day.[54] It is imperative to note that one Elder expressed their fear of police bias: "And I think I'm disgusted with the police because they're biased about Natives because we have protested in some of the things they've done wrong...."

When asked the question "Do you feel supported as an Elder in the city, in King County, and in general outside of Seattle Indian Health Board?", the Elder responded "Actually no. I don't think Elders get the recognition as far as respect and anything else in that category. That—like in the past, like a little—my mom, grandparents, it's—it's totally different. They don't have much respect". To have even one Elder respond in this way is unacceptable. Elders are an integral part of the American Indian and Alaska Native community. They are teachers, healers, and key pieces to intergenerational knowledge transfer. Elders are a physical embodiment of the resilience of Native peoples and call for the utmost respect, care, and to have the best services available to them. Seattle Indian Health Board recognizes the meaning of the Elders community and in doing so strives to provide them with culturally attuned services with respect. **Community members mentioned that they noticed Seattle Indian Health Board had been incorporating traditional values and medicine more in recent years, with one participant saying that a lot of Elders were thriving on it.**

Homelessness and Housing

Homelessness was identified as a major concern for the Elders interviewed and their community at large. One respondent discussed moving to Seattle and giving up their apartment for their dying brother, yet neither had resources, so they became homeless together. Another Elder discussed the high number of homeless Elders they see daily and how they aren't able to access basic hygiene needs. In one of the most emotional interviews, an Elder, after a shared tear-filled heavy silence with the interviewer, discussed her time being homeless and the social stigma she received because of it:

"It's so sad because we're Elders and I'm like, well where do we go for help?... I used to feel like I was, like leprosy- 'stay away because- don't get near me' because I was homeless, so- and I'm like, 'well I'm no different.' I mean, you know, myself, as my personality, I'm the same person. It's just that I had- didn't have my own apartment, my own place. But today I do- it's, you know I feel for everybody- I already know what it's like to be like that- displaced."

Barriers to finding housing are another large issue for Native Elders. The lack of affordable housing, long wait times for housing, difficulty navigating the system to find housing resources, and the fact that this issue is much more common for American Indian and Alaska Natives were all mentioned. One participant discussed the low-income housing they live in and the fact that there is currently a 13 year wait to get an apartment. The building is not equipped with elevators making it difficult and often inaccessible for Elders who live there.

"Thirteen year wait list. I've been on that list for four years because I'm 76 years old and there's no elevator that goes to my floor. I live on the second floor. And it's a little more difficult for me these days to carry up groceries up and down the garbage, out to the dumpster, laundry up and down steps. So, I thought maybe I could move into a place that had an elevator that goes to the floor I'm going to live on. And I've been waiting for four years. And that's not to move in, that's just to transfer"

Need for Community

The interviews were also laced with the theme of loneliness. Participants voiced a need for more community-related programs, participation, and want for human connection. There was a strong desire for feelings of belonging. Elders discussed living alone and the affects this can have on mental health as well as the fact that it seems like others in the community also struggle with feelings of aloneness yet are hesitant to talk about it.

"...have a support group... you know, a senior gathering and you know senior things to do with the seniors so that they can- relate to other seniors and let 'em talk about things just to let them know that, um, they're not alone and that they're not the only one."

"...I know I don't like to eat alone or you know, just have someone sitting there with me to have some coffee or watch TV or to help them with little things, like fixing a little breakfast or whatever time of day it is. Or even just go out with them for a walk, or even bring a pet over if they like pets because pets are really calming. You know, so I think little home- some kind of home visitation or some kind of um, more companionship for those that are lonely and whatever would be good."

"I'm alone a lot, you know, because I live alone, number one- I like to come around the Elders Program and other people. So, I feel better about myself, too. Because too many people are my age, Elders are shut-in. We don't get to be- access to get around and be amongst each other. So, I like coming here to my Elders program and other health places that I couldn't get involved in."

These findings are important, especially in terms of mental and physical well-being, as loneliness and isolation are significant risk factors for increased morbidity and mortality among seniors.[55]

The feeling of community has been shown to be a protective factor against many mental health outcomes such as suicide and depression.[56] Elders also demonstrated how community came naturally to them, from the sharing of medical devices like that of the 911 alert necklace, to one Elder offering their own home to their friends who may be homeless. Community was a value that was clearly shown throughout the interviews and reflects a strength-based, traditional AI/AN value of the importance of taking care of others, not only through gifting, but also in holding community central.

DESIRED SERVICES

Better transportation options were one of the most important desired services. Several Elders discussed falls and injuries while trying use public transportation with their walkers. A need for improvements of the Access program (a transportation service ordered by King County Metro) was expressed—specifically, shorter wait times and door-to-door service, as many Elders have limited mobility. Improved transportation options would not only create easier access to the medical services but would also aid in connecting Elders with community.

"I have a fear of falling because I always do fall at least once [in the winter] and I have to be careful... if I had better transportation, I wouldn't have to walk so far to get on a bus."

Community members also discussed the kinds of treatments and programs they need and want. Traditional medicine/healing and the inclusion of culture in care was one of the most wanted services by participants. Community members further mentioned that they noticed that SIHB has been including traditional medicine within their services and that the Elders are not only thriving but are drawn to it. One participant wanted counseling and mental health services with the inclusion of traditional healings like group therapy and support groups. Another participant wanted medication counseling and education for using traditional

medicine along with their current prescriptions. Along with want for more traditional medicine, traditional culture was also desired. Literature shows that traditional culture acts as a protective factor against negative health outcomes.[57]

"Not only the traditional medicine, but also the prayers and the openness of a spirituality and I believe that we, some of us are lost generations and I'm one of them, so it fits right into something we knew we were looking for something, but we didn't know quite what."

"When powwows pop up in time for me, I love the powwows. I live and breathe the powwows because there I get, I go out and talk to all the Natives and find out what tribe they are and take pictures, you know… I love it because it does give everybody an opportunity to see Native traditional. You know, and I appreciate that very much. That's where I've learned how to do beading and work with cedar. Cedar roses, cedar hats- it's so hard to do cedar hats but I had to make one for me"

Support for independent living into older age was also among the most desired, with services such as caregiving, home visits, medication/appointment management, and companionship programs mentioned.

There was also a common theme of the need for food and nutrition programs. Through the interviews, it was obvious that the needs of people with diabetes and people who are homeless or do not have cooking facilities are important to take into consideration.

Another participant discussed a desire for educational classes—computer skills, life skills—as well as physical activity classes and exercises. One participant mentioned the need for a clinic room designated for those with limited mobility to better improve access to health services.

The health concerns and assistance needs expressed by community members were similar to those identified in the literature review as being most prevalent in the general Elders population. They also reinforced the health concerns and assistance needs identified in the survey results. As the input and needs of the community are always at the forefront, the comments, concerns, and stories shared in key informant interviews served as benchmarks and guides for the overall analysis, are referenced throughout this Needs Assessment, and include priority needs that should be immediately addressed at the county and state level.

The Elders that were interviewed not only willingly gave us valuable information to help better serve the needs of the American Indian and Alaska Native Elders population in King County, but also shared their personal stories and histories, some of which were very difficult. One Elder shared "there's a lot of healing going on" in the community. The Elders we interviewed are living manifestations of resiliency, and, as another Elder eloquently said in their interview, "…the natives that I know of and have met, I'm always amazed at how strong they can be. Regardless of what their circumstances are or what they're doing, you know, and I'm amazed at their strength."

DISCUSSION

Many strengths and resiliencies emerged in this analysis. The majority of respondents had access to health care, were socially and culturally engaged, and were in relatively good physical and mental health.

It is important to note that 9 in 10 survey respondents received care at SIHB. Not only was there a high degree of satisfaction with the care that they received, much of the qualitative feedback emphasized the importance and value of the types of programs, activities, and services that respondents found important and used through SIHB. Programs oriented toward urban AI/ANs play an important role in the physical, mental, and spiritual health and well-being of urban AI/ANs and could represent an important resiliency. The need for such programs is even more important given the rural-to-urban transition of AI/ANs indicated in the survey results

Despite overall high levels of good physical and mental health, many of the common health disparities and needs faced by urban disabled and Elder AI/AN populations in general were apparent in those AI/AN community members who participated in the survey. This included quality of life impairments and health concerns such as falls, memory problems, multiple chronic conditions, and general frailty. Furthermore, younger, disabled members of the community who participated in the survey indicated lower levels of social and cultural participation and higher feelings of depression and isolation.

Transportation assistance was a particularly prevalent need that emerged in both survey respondents and key informant interviews. This seemed to be related to concerns about falls among Elders, who expressed worries and experiences with falls while accessing, waiting for, and using public transportation. The relationship between transportation and falls could represent an immediate and readily-addressable need and should be further explored.

Additionally, nearly one-third of respondents indicated that they were not receiving all of the help they needed on a daily basis. Of those who were receiving help with their daily activities, less than 10% had paid help, while over one-third were receiving help from unpaid family members. Care provided by family members often takes a toll on the caregiver and is generally not recommended as a long-term solution to meeting the needs of disabled and senior community members.

The distribution of frailty scores among respondents was also an area of interest. Frailty is an important indicator of aging and generally increases with age. It is not, however, an inevitable outcome, and declining average scores seen among participants between ages 65 to 85 could

be indicative of protective factors or resiliencies unique to the community. Further analysis of frailty in the AI/AN population is needed to better explore this possibility.

Conversely, there were extremely high rates of disability among survey respondents of all ages. Nationwide, the AI/AN population has significantly higher rates of disability when compared to the general population. Although we cannot make direct comparisons to disability rates identified among the general AI/AN population, the high rates of disability among survey respondents is concerning. More rigorous research is necessary to better understand the frequency, distribution and determinants of such high disability rates among urban disabled and Elder AI/AN in the county.

Perhaps most importantly, extreme levels of poverty and homelessness were identified among survey respondents. The majority of participants reported earning less than $15,000 per year, which is well below the federal poverty level, and a significant portion reported being homeless.

The high levels of poverty and homelessness experienced by survey respondents cannot be emphasized enough. Housing stability and financial security were particularly powerful and emotional topics identified during key informant interviews and represent an immediate and pressing cause for concern. Race-specific information on homelessness in King County is limited and makes accurate comparisons difficult. Nevertheless, the homeless rate of 23.9% among survey respondents was higher than the homeless rate of approximately 0.78% for the county's general AI/AN population.[58] Although direct comparisons cannot be made due to the limitations discussed in the methods section, the high rate of homelessness found among survey respondents could be an indicator of significantly higher rates of homelessness in King County's general AI/AN population. Further exploration is needed to better understand the extent and magnitude of this issue.

While the survey is not representative of the general disabled and Elder AI/AN population in King County, the extreme poverty and homelessness experienced by survey respondents cannot be ignored. Simply put, with one of the highest median household incomes in the country, disproportionately expensive housing costs, and high costs of living, surviving on $15,000 or less in urban King County is difficult, if not impossible.

FEASABILITY

The need for improved long-term service and support for King County's urban disabled and Elder AI/ANs is important. SIHB fills an important need among the county's AI/AN population and provides a variety of crucial programs and invaluable cultural and community services. Nevertheless, SIHB does not currently have the capacity to directly deliver LTSS services such as adult day services, housing and residential services, or in-home care. SIHB does, however, currently operate a robust and active Elders program through Community Services. This program was identified by community members as an important source of social and cultural interaction and provides a protective resiliency for urban AI/AN Elders against the potentially harmful effects of disparities in many of the social determinants of health.

Implementation of a long-term care program to further improve the services offered by SIHB would require a significant investment of resources, most notably the training of qualified caregivers and financial investments into program development, management, and sustainability. Furthermore, while programs of this nature exist throughout the country, they are largely tribally-focused. As such, SIHB would need to study, adapt, and adopt best-practices from these existing programs to best fit the unique needs of the urban disabled and Elder AI/AN population. Development of such a program would greatly benefit the needs of disabled and Elder AI/ANs by offering community-based, culturally accessible mechanisms for long-term service and support. This would provide an opportunity for community members currently residing in institutional care or at risk of institutional placement to return to their communities.

As a program of this nature would be funded through the State and Federal LTSS Medicaid system, billing for these services would vary little from SIHB's existing mechanisms for CMS reimbursement. Additionally, the dedication of 100 housing units in SIHB's capital improvement project would provide an ideal foundation for long-term, in-home care and go great lengths to mitigate the extreme housing and poverty crisis faced by urban disabled and Elder AI/ANs in King County. Similar housing and long-term care programs exist among the Makah Tribe in Neah Bay, WA, and in Multnomah County, Oregon. These programs, while tribally-oriented, could serve as models and resources for the development, implementation, and management of an urban-focused program in the Seattle-King County area.

Table 4. Self-Identified Tribal Affiliation

Self-Identified Tribal Affiliations
Yankton Sioux
Yakama
Warm Springs, Yakama
Turtle Mountains Band of Chippewa
Tulalip, Sac & Fox of Mississippi of Iowa
Tulalip
Tsimshian
Tlingit, Haida
Tlingit, Aleut
Tlingit
Tewa
Sumas
Standing Rock Sioux
Snohomish, Duwamish, Snoqualmie
Sisseton Wahpeton Dakota
Sioux
Seneca
Seminole, Creek
Samish
Raven
Puyallup
Prairie Band Potawatomi Nation
Port Gamble S'klallum
Pascua Yaqui
Pacheedaht
Oglala Lakota
Northern Cheyenne
Nooksack
Nez Perce
Navajo, Skokomish
Navajo, Tlingit
Navajo
Mohawk
Mille Lacs Band of Ojibwe
Metis Cree Duwamish
Makah
Lusino band
Lummi
Luiseno band
Lakota Sioux
Kwalthkwaypum
Inupiaq
Inuit
Heskimo
Haida
Flathead
Esselen Nation of Monterey County
Eskimo
Dine, Cheyenne
Diegueno
Descendant
Crow
Cree
Cowichan
Comanche
Choctaw, Cherokee, Sauk/Fox
Choctaw
Chippewa Cree
Chippewa
Chinook
Cheyenne, Dine'
Cherokee
Blackfoot
Blackfeet
Athabascan
Assiniboine Sioux
Arikara, Hidatsa
Apache, Kikapoo
Apache
Alaska Native
Ahtna
3 affiliated tribes

*With the exception of clear spelling differences, self-identified tribal affiliation was left unaltered.

APPENDIX

Table 5. Age and Gender

Age Category	Gender	Percentage of Total Respondents
35	Female	0.83%
40	Female	1.65%
45	Female	1.65%
50	Female	5.79%
55	Female	16.53%
60	Female	15.70%
65	Female	7.44%
70	Female	4.96%
75	Female	1.65%
35	Male	3.31%
40	Male	0.83%
45	Male	2.48%
55	Male	9.92%
60	Male	9.09%
65	Male	5.79%
70	Male	3.31%
75	Male	1.65%
80	Male	1.65%
85	Male	0.83%
55	Other	2.48%
60	Other	2.48%

Table 6. Income by Gender

Gender	Income	Percentage of Total Respondents
Female	Less than 15,000	66.15%
Female	15,000 – 24,999	18.46%
Female	25,000 – 34,999	4.62%
Female	35,000 – 49,999	10.77%
Female	50,000 – 74,999	0.00%
Male	Less than 15,000	85.11%
Male	15,000 – 24,999	8.51%
Male	25,000 – 34,999	0.00%
Male	35,000 – 49,999	4.26%
Male	50,000 – 74,999	2.13%
Other	Less than 15,000	66.67%
Other	15,000 – 24,999	16.67%
Other	25,000 – 34,999	16.67%
Other	35,000 – 49,999	0.00%
Other	50,000 – 74,999	0.00%

Table 7. Education by Gender

Gender	Responses	Percentage of Respondents by Gender
Female	Less than High School	2.48%
Female	High School or GED	23.14%
Female	Some college	16.53%
Female	Vocational school	8.26%
Female	College degree or higher	5.79%
Male	Less than High School	3.31%
Male	High School or GED	15.70%
Male	Some college	13.22%
Male	Vocational school	4.13%
Male	College degree or higher	2.48%
Other	Less than High School	0.83%
Other	High School or GED	1.65%
Other	Some college	1.65%
Other	Vocational school	0.83%
Other	College degree or higher	0.00%

Table 8. Employment Status by Gender

Gender	Responses	Percentage of Gender
Female	Disabled or Retired	79.41%
Female	Full-Time	13.24%
Female	Part-Time	7.35%
Female	Military	0.00%
Male	Disabled or Retired	78.72%
Male	Part-Time	12.77%
Male	Full-Time	6.38%
Male	Military	2.13%
Other	Disabled or Retired	66.67%
Other	Part-Time	0.00%
Other	Full-Time	33.33%
Other	Military	0.00%

APPENDIX

Table 9. Social Interaction by 5-year Age Category

Age Category	Average Number of Social Interactions
35	4.50
40	5.00
45	3.00
50	10.50
55	10.43
60	6.23
65	14.08
70	12.78
75	28.00
80	30.50

Table 10. Cultural Interaction by 5-year Age Category

Age Category	Response	Percentage of Total Respondents
35	Never or Rarely	1.71%
40	Never or Rarely	0.85%
45	Never or Rarely	1.71%
50	Never or Rarely	0.00%
55	Never or Rarely	4.27%
60	Never or Rarely	5.13%
65	Never or Rarely	3.42%
75	Never or Rarely	0.85%
80	Never or Rarely	0.85%
85	Never or Rarely	0.00%
35	Sometimes, Often, or Very Often	1.71%
40	Sometimes, Often, or Very Often	1.71%
45	Sometimes, Often, or Very Often	2.56%
50	Sometimes, Often, or Very Often	5.98%
55	Sometimes, Often, or Very Often	23.93%
60	Sometimes, Often, or Very Often	23.08%
65	Sometimes, Often, or Very Often	9.40%
70	Sometimes, Often, or Very Often	8.55%
75	Sometimes, Often, or Very Often	2.56%
80	Sometimes, Often, or Very Often	0.85%
85	Sometimes, Often, or Very Often	0.85%

Table 11. Housing Status by Gender

Gender	Housing Type	Percent of Gender
Female	Apartment	41.54%
Female	Homeless	26.15%
Female	Single family	21.54%
Female	Boarding house & Hotel	4.62%
Female	Other	3.08%
Female	Assisted living	1.54%
Female	Condo	1.54%
Female	King county housing	1.54%
Male	Apartment	34.78%
Male	Homeless	21.74%
Male	Single family	17.39%
Male	Boarding house & Hotel	13.04%
Male	Other	4.35%
Male	Assisted living	4.35%
Male	Condo	2.17%
Male	Senior housing	2.17%
Male	Inpatient rehab	2.17%
Other	Apartment	66.67%
Other	Homeless	16.67%
Other	Single family	16.67%

Table 12. Health Insurance Status by Gender

Gender	Insurance Type	Percent of Gender
Female	Medicaid	39.56%
Female	Medicare	32.97%
Female	Private	12.09%
Female	IHS	8.79%
Female	Tribal	4.40%
Female	Military	1.10%
Female	Long-term	1.10%
Male	Medicaid	32.91%
Male	Medicare	29.11%
Male	IHS	12.66%
Male	VA	10.13%
Male	Private	8.86%
Male	Tribal	3.80%
Male	Military	1.27%
Male	None	1.27%
Other	Medicaid	50%
Other	Medicare	33.33%
Other	Tribal	16.67%

Table 13. Assistance Needs by Gender

Gender	Assistance Need	Response	Percentage
Female	Case management	Now using	12.87%
Female	Transportation	Now using	8.91%
Female	Government assisted housing	Now using	7.92%
Female	Group meals	Now using	5.94%
Female	Emergency housing	Now using	5.94%
Female	Meal delivery	Now using	4.95%
Female	Elder abuse prevention program	Now using	4.95%
Female	Income assistance	Now using	3.96%
Female	Information and referral/assistance	Now using	3.96%
Female	Community caregiver program	Now using	3.96%
Female	Legal assistance	Now using	2.97%
Female	Adult education	Now using	2.97%
Female	Home care in-home support	Now using	2.97%
Female	Advocacy	Now using	2.97%
Female	Volunteer services	Now using	2.97%
Female	Shared housing	Now using	2.97%
Female	Retirement communities	Now using	2.97%
Female	Respite care	Now using	2.97%
Female	Long-term care services	Now using	1.98%
Female	Nursing facilities	Now using	1.98%
Female	Adult daycare services	Now using	0.99%
Female	Home repair/modification	Now using	0.99%

Table 13. Assistance Needs by Gender (Continued)

Gender	Assistance Need	Response	Percentage
Female	Transportation	Would use	22.77%
Female	Case management	Would use	13.86%
Female	Group meals	Would use	20.79%
Female	Income assistance	Would use	22.77%
Female	Legal assistance	Would use	20.79%
Female	Government assisted housing	Would use	18.81%
Female	Adult education	Would use	24.75%
Female	Emergency housing	Would use	16.83%
Female	Information and referral/assistance	Would use	17.82%
Female	Home care in-home support	Would use	14.85%
Female	Meal delivery	Would use	15.84%
Female	Advocacy	Would use	14.85%
Female	Community caregiver program	Would use	15.84%
Female	Volunteer services	Would use	17.82%
Female	Adult daycare services	Would use	15.84%
Female	Shared housing	Would use	14.85%
Female	Elder abuse prevention program	Would use	12.87%
Female	Home repair/modification	Would use	16.83%
Female	Retirement communities	Would use	15.84%
Female	Long-term care services	Would use	14.85%
Female	Nursing facilities	Would use	15.84%
Female	Respite care	Would use	12.87%

Table 13. Assistance Needs by Gender (Continued)

Gender	Assistance Need	Response	Percentage
Male	Transportation	Now using	10.89%
Male	Case management	Now using	14.85%
Male	Group meals	Now using	13.86%
Male	Income assistance	Now using	10.89%
Male	Legal assistance	Now using	5.94%
Male	Government assisted housing	Now using	6.93%
Male	Adult education	Now using	2.97%
Male	Emergency housing	Now using	5.94%
Male	Information and referral/assistance	Now using	2.97%
Male	Home care in-home support	Now using	3.96%
Male	Meal delivery	Now using	2.97%
Male	Advocacy	Now using	4.95%
Male	Community caregiver program	Now using	3.96%
Male	Volunteer services	Now using	6.93%
Male	Adult daycare services	Now using	5.94%
Male	Shared housing	Now using	2.97%
Male	Elder abuse prevention program	Now using	1.98%
Male	Home repair/modification	Now using	4.95%
Male	Retirement communities	Now using	3.96%
Male	Long-term care services	Now using	0.99%
Male	Nursing facilities	Now using	1.98%
Male	Respite care	Now using	1.98%

Table 13. Assistance Needs by Gender (Continued)

Gender	Assistance Need	Response	Percentage
Male	Transportation	Would use	23.76%
Male	Case management	Would use	17.82%
Male	Group meals	Would use	20.79%
Male	Income assistance	Would use	20.79%
Male	Legal assistance	Would use	28.71%
Male	Government assisted housing	Would use	21.78%
Male	Adult education	Would use	23.76%
Male	Emergency housing	Would use	23.76%
Male	Information and referral/assistance	Would use	24.75%
Male	Home care in-home support	Would use	23.76%
Male	Meal delivery	Would use	22.77%
Male	Advocacy	Would use	22.77%
Male	Community caregiver program	Would use	19.80%
Male	Volunteer services	Would use	14.85%
Male	Adult daycare services	Would use	15.84%
Male	Shared housing	Would use	18.81%
Male	Elder abuse prevention program	Would use	16.83%
Male	Home repair/modification	Would use	14.85%
Male	Retirement communities	Would use	15.84%
Male	Long-term care services	Would use	16.83%
Male	Nursing facilities	Would use	11.88%
Male	Respite care	Would use	12.87%

Table 13. Assistance Needs by Gender (Continued)

Gender	Assistance Need	Response	Percentage
Other	Transportation	Now using	0.99%
Other	Case management	Now using	0.99%
Other	Group meals	Now using	0.99%
Other	Emergency housing	Now using	1.98%
Other	Shared housing	Now using	0.99%
Other	Elder abuse prevention program	Now using	0.99%
Other	Transportation	Would use	3.96%
Other	Case management	Would use	3.96%
Other	Group meals	Would use	1.98%
Other	Income assistance	Would use	3.96%
Other	Legal assistance	Would use	3.96%
Other	Government assisted housing	Would use	4.95%
Other	Adult education	Would use	3.96%
Other	Emergency housing	Would use	2.97%
Other	Information and referral/assistance	Would use	2.97%
Other	Home care in-home support	Would use	4.95%
Other	Meal delivery	Would use	3.96%
Other	Advocacy	Would use	3.96%
Other	Community caregiver program	Would use	3.96%
Other	Volunteer services	Would use	2.97%
Other	Adult daycare services	Would use	3.96%
Other	Shared housing	Would use	1.98%
Other	Elder abuse prevention program	Would use	3.96%
Other	Home repair/modification	Would use	3.96%
Other	Retirement communities	Would use	2.97%
Other	Long-term care services	Would use	2.97%
Other	Nursing facilities	Would use	3.96%
Other	Respite care	Would use	1.98%

Table 14. Overall Health Status by Age

Gender	Response	Percentage of Total Respondents
35	Good, Very Good, or Excellent	2.99%
40	Good, Very Good, or Excellent	2.99%
45	Good, Very Good, or Excellent	1.49%
50	Good, Very Good, or Excellent	5.97%
55	Good, Very Good, or Excellent	29.85%
60	Good, Very Good, or Excellent	20.90%
65	Good, Very Good, or Excellent	16.42%
70	Good, Very Good, or Excellent	10.45%
75	Good, Very Good, or Excellent	5.97%
80	Good, Very Good, or Excellent	2.99%
35	Poor or Fair	4.08%
40	Poor or Fair	2.04%
45	Poor or Fair	6.12%
50	Poor or Fair	6.12%
55	Poor or Fair	26.53%
60	Poor or Fair	38.78%
65	Poor or Fair	8.16%
70	Poor or Fair	6.12%
85	Poor or Fair	2.04%

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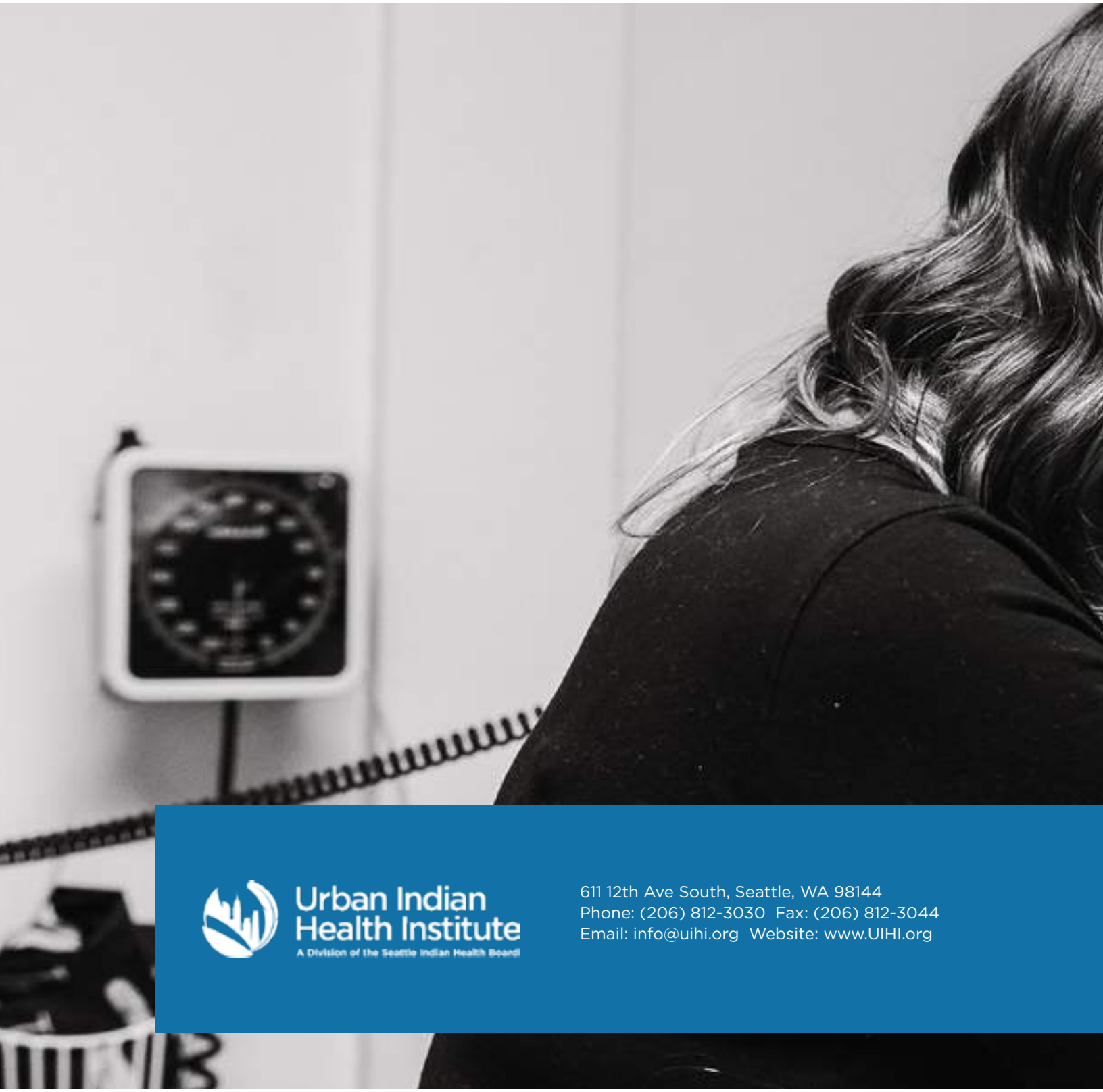
NOTES



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