

Community Health Needs Assessment

2019



Ashley, North Dakota

Lynette Dickson, MS, RD, LRD
Associate Director

Shawn Larson, BA
Project Coordinator



Center for Rural Health
University of North Dakota
School of Medicine & Health Sciences

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Executive Summary

To help inform future decisions and strategic planning, Ashley Medical Center (AMC) conducted a community health needs assessment (CHNA) in 2019, the previous CHNA having been conducted in 2016. The Center for Rural Health (CRH) at the University of North Dakota School of Medicine and Health Sciences (UNDSMHS) facilitated the assessment process, which solicited input from area community members and healthcare professionals as well as analysis of community health-related data.



To gather feedback from the community, residents of the area were given the opportunity to participate in a survey. Seventy-four AMC service area residents completed the survey. Additional information was collected through seven key informant interviews with community members. The input from the residents, who primarily reside in McIntosh County, represented the broad interests of the communities in the service area. Together with secondary data gathered from a wide range of sources, the survey presents a snapshot of the health needs and concerns in the community.

With regard to demographics, McIntosh County's population from 2010 to 2018 decreased 8.1%. The average of residents under age 18 (18.4%) for Eddy County is nearly 5% lower than the North Dakota state average (23.3%). The percentage of residents ages 65 and older for McIntosh County (31%) is more than twice the North Dakota average (15.0%), and the rates of education are significantly lower for McIntosh County (80.2%) than the North Dakota average (92.0%). The median household income in McIntosh County (\$46,012) is also quite a bit lower than the state average for North Dakota (\$61,285).

Data compiled by County Health Rankings show McIntosh County is doing better than or equal to North Dakota in health outcomes/factors for 13 categories, while performing poorly compared to the rest of the state in 12 categories.

Of 82 potential community and health needs set forth in the survey, the 74 AMC service area residents who completed the survey indicated the following ten needs as the most important:

- Alcohol use and abuse – youth
- Assisted living options – seniors
- Availability of dental care
- Availability of resources for elderly to stay in their homes
- Availability of specialists
- Attracting and retaining young families
- Cancer – adults
- Cost of long-term/nursing home care
- Not enough activities for children and youth
- Not enough jobs with livable wages

The survey also revealed the biggest barriers to receiving healthcare (as perceived by community members). They included not enough specialists (N=23), not enough evening or weekend hours (N=16), and distance from health facility and not being affordable each receiving the same number of votes (N=11).

When asked what the best aspects of the community were, respondents indicated the top community assets were:

- Active faith community
- Family friendly; good place to raise kids
- Healthcare
- Local events and festivals
- People are friendly, helpful and supportive
- People who live here are involved in their community
- Recreational and sports activities
- Safe place to live

Input from community leaders, provided via key informant interviews, and the community focus group echoed many of the concerns raised by survey respondents. Concerns emerging from these sessions were:

- Ability to retain primary care providers (MD, DO, NP, PA) and nurses in the community
- Alcohol use and abuse
- Assisted living options
- Cancer
- Attracting and retaining young families

Overview and Community Resources

With assistance from the CRH at the UNDSMHS, the Ashley Medical Center completed a CHNA of the AMC service area. The hospital identifies its service area as McIntosh County. Many community members and stakeholders worked together on the assessment.

AMC is located in southcentral North Dakota, approximately 120 miles southeast of Bismarck and six miles north of the South Dakota border. Along with the hospital, the courthouse, school, and agriculture provide the economic base for the town of Ashley and McIntosh County. According to the 2010 U.S. Census, McIntosh County had a population of 2,809 while Ashley, the county seat, had a population of 689.



AMC has a number of community assets and resources that can be mobilized to address population health improvement. The community has a number of physical assets and features, including a fitness trail, swimming pool, city park, tennis courts, golf course and fitness center. Lake Hoskins Park and Dry Lake offer recreation, fishing, and camping opportunities. McIntosh County offers prime hunting opportunities. Ashley offers cultural attractions with the Heritage Center which pays tribute to the early history of the area.

Each major town in McIntosh County has a fitness center. Public transportation is provided by South Central Services. Progressive downtown Ashley businesses provide necessary services and retail goods and are valued assets of the community. The Ashley Public School system offers a comprehensive program for students in pre-K through grade 12.

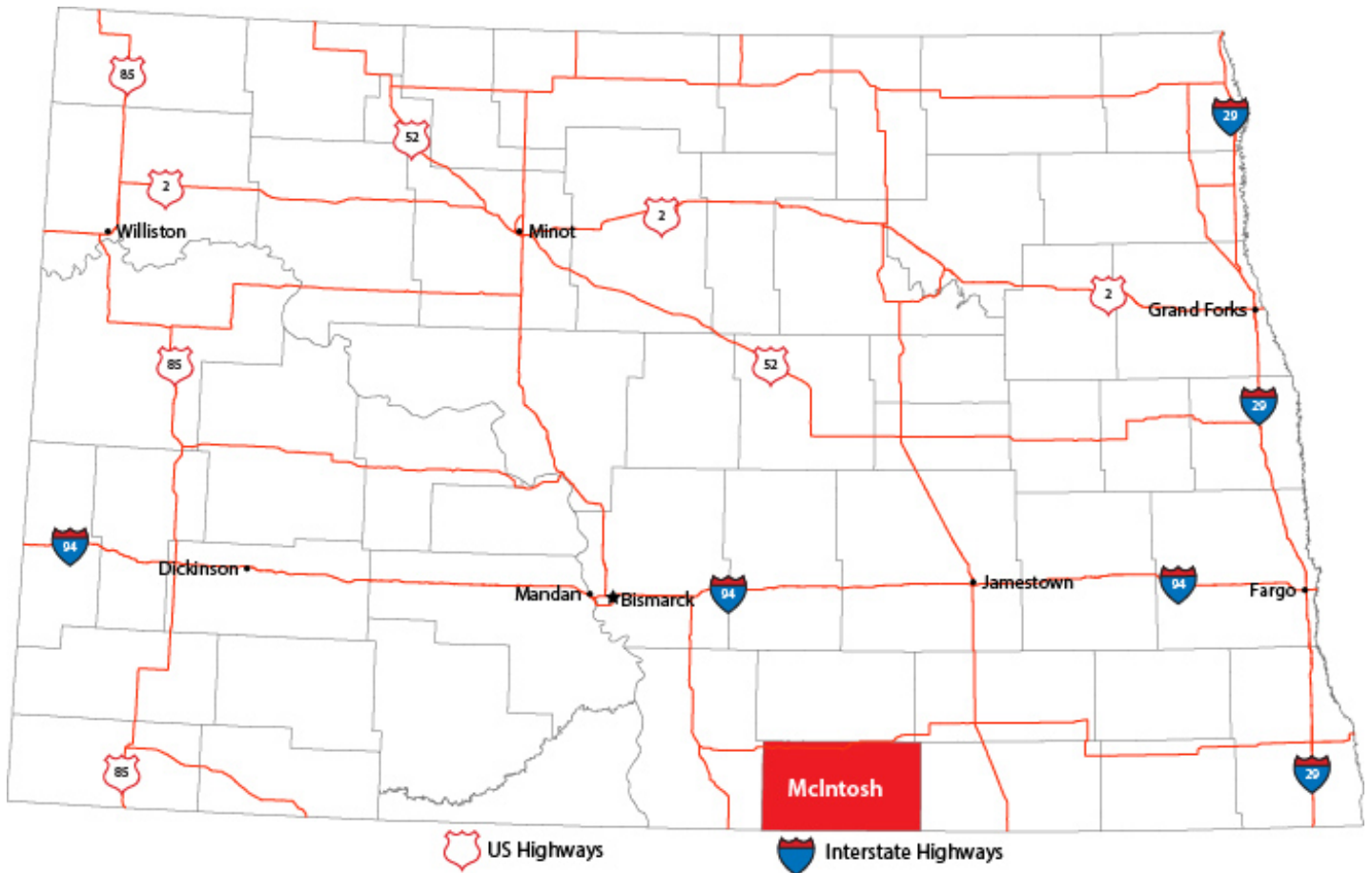


Other healthcare facilities and services in the area include AMC Clinic in Zeeland and Ashley, pharmacy, optometrist, chiropractor, massage therapy, Women Infants & Children (WIC Program is based at AMC). Wishek Hospital Clinic Association also provides healthcare services to the county with a 24-bed critical access hospital and clinic located in Wishek. The Wishek Living Center has a 60-bed nursing home and operates the Prairie Hills Assisted Living with 19 assisted living units, serving residents of McIntosh County.

Ashley has a volunteer ambulance service that provides advanced life support services with paramedics that are also employed by AMC. The Ashley Ambulance Service

provides emergency services throughout the county, and are the primary responders and emergency responder educators for the Acciona Wind Farm, 24 miles southeast of Ashley.

Figure 1: McIntosh County



Ashley Medical Center

The Ashley Medical Center (AMC) opened its doors in 1952. Today, AMC has grown into a fully integrated healthcare system with a 20-bed critical access hospital along with swing beds and a level 5 trauma emergency room and a 40-bed skilled nursing home. AMC operates two rural health clinics. Low income housing is offered by the 25-unit Harmony Home apartment complex, and an eight-unit apartment area within the main facility.

AMC provides acute care services, including inpatient, outpatient, swing bed, and 24/7 emergency room care. AMC also staffs the AMC Ashley Clinic and AMC Zeeland Clinic. A 40-bed attached skilled nursing home is part of AMC and serviced by their provider staff. AMC manages a professional building with a chiropractor, an optometrist, and an ophthalmologist practice. The ophthalmologist performs cataract surgery at AMC on a monthly basis. In addition, surgical consultations and outpatient surgery are provided by a general surgeon. Monthly clinic hours are also available with a general practice physician at the AMC Clinic.

Services offered locally by AMC include:

General and Acute Services

- Acne treatment
- Allergy, flu & pneumonia shots
- Blood pressure checks
- Clinic
- Emergency room
- Hospital (acute care)
- Independent senior housing
- Mole, wart & skin lesion removal
- Ophthalmology evaluation and surgical services (visiting physician)

- Pharmacy
- Physicals – annual, DOT, sports & insurance
- Podiatry – evaluation (visiting physician)
- Prenatal care up to 32 weeks
- Sports medicine

Screening/Therapy Services

- Chronic disease management
- Holter monitoring
- Laboratory services
- Lower extremity circulatory assessment
- Occupational physicals

Radiology Services

- CT scans
- DEXA scan (bone, density, mobile unit)
- Digital mammography
- Echocardiograms

Laboratory Services

- Blood bank
- Blood types
- Chemistry
- Clot times
- Hematology
- Rapid cardiac diagnostics
- Urine testing

Services Offered by Other Providers/Organizations

- Ambulance
- Chiropractic services
- Hospice/palliative
- Massage therapy
- Nursing training program
- Optometric/ vision services (visiting physician)

- Surgical services – biopsies, outpatient
- Surgical services – visiting physician
- Swing bed services

- Pediatric services
- Physical therapy
- Psych services
- Sleep studies (mobile unit)
- Social Services

- EKG
- General x-ray
- MRI (mobile unit)
- Ultrasound (mobile unit)

McIntosh District Health Unit

McIntosh District Health Unit (MDHU) provides public health services that include environmental health, nursing services, health screenings, and education services. The health unit works primarily with ages 0-18 and those 55 and over. Each of these programs provides a wide variety of services in order to accomplish the mission of public health, which is to assure that North Dakota is a healthy place to live and each person has an equal opportunity to enjoy good health.

Specific services that MDHU provides are:

- Bicycle helmet safety education
- Blood pressure checks
- Breastfeeding resources
- Car seat program
- Child health (well-baby checks)
- Correction facility health
- Diabetes screening
- Emergency preparedness services
- Environmental health services
- Flu shots
- Health Tracks
- Immunizations
- Medication setup – home visits
- Member of Child Protection Team and county interagency team
- Newborn home visits
- Nutrition education
- Preschool education programs & screening
- Safe sleep for infants education
- School health – vision, hearing health education and resource to the schools
- Tobacco prevention and control
- Tuberculosis testing and management
- West Nile program – surveillance and education
- Worksite wellness – coordinator for county employees and sheriff's dept.
- Youth education programs (first aid, bike safety, babysitting classes)



Assessment Process

The purpose of conducting a CHNA is to describe the health of local people, identify areas for health improvement, identify use of local healthcare services, determine factors that contribute to health issues, identify and prioritize community needs, and help healthcare leaders identify potential action to address the community's health needs.

A CHNA benefits the community by:

- 1) Collecting timely input from the local community members, providers, and staff;
- 2) Providing an analysis of secondary data related to health-related behaviors, conditions, risks, and outcomes;
- 3) Compiling and organizing information to guide decision making, education, and marketing efforts, and to facilitate the development of a strategic plan;
- 4) Engaging community members about the future of healthcare; and
- 5) Allowing the community hospital to meet the federal regulatory requirements of the Affordable Care Act, which requires not-for-profit hospitals to complete a CHNA at least every three years, as well as helping the local public health unit meet accreditation requirements.

This assessment examines health needs and concerns in McIntosh County. In addition to Ashley, located in the county are the communities of Lehr, Venturia, Wishek, and Zeeland.

The CRH, in partnership with AMC and MDHU, facilitated the CHNA process. Community representatives met regularly in-person, by telephone conference, and email. A CHNA liaison was selected locally, who served as the main point of contact between the CRH and Ashley. A small steering committee (see Figure 2) was formed that was responsible for planning and implementing the process locally. Representatives from the CRH met and corresponded regularly by teleconference and/or via the eToolkit with the CHNA liaison. The community group (described in more detail below) provided in-depth information and informed the assessment process in terms of community perceptions, community resources, community needs, and ideas for improving the health of the population and healthcare services. Eleven people, representing a cross section demographically, attended the focus group meeting. The meeting was highly interactive with good participation. AMC staff and board members were in attendance as well but largely played a role of listening and learning.

Figure 2: Steering Committee

Brenda Meyer	Board Member, AMC & Ashley Park Board Member
Jerry Lepp	CFO, AMC
Holly Wolff*	Administrator, AMC
Eric Heupel*	Administrator, AMC
Cheryl Reise Schilling	Public Health Administrator, MDHU
Kaitlyn Weszner	Ashley Economic Development Coordinator
Lucy Meidinger	CHNA Liaison, AMC

**Holly resigned from her position, which was assumed by Eric midway through the process.*

The original survey tool was developed and used by the CRH. In order to revise the original survey tool to ensure the data gathered met the needs of hospitals and public health, the CRH worked with the North Dakota Department of Health's public health liaison. CRH representatives also participated in a series of meetings that garnered input from the state's health officer, local North Dakota public health unit professionals, and representatives from North Dakota State University.

As part of the assessment's overall collaborative process, the CRH spearheaded efforts to collect data for the assessment in a variety of ways:

- A survey solicited feedback from area residents;
- Community leaders representing the broad interests of the community took part in one-on-one key informant interviews;
- The community focus group, comprised of community leaders and area residents, was convened to discuss area health needs and inform the assessment process; and
- A wide range of secondary sources of data were examined, providing information on a multitude of measures, including demographics, health conditions, indicators, outcomes, rates of preventive measures; rates of disease; and at-risk behavior.

The CRH is one of the nation's most experienced organizations committed to providing leadership in rural health. Its mission is to connect resources and knowledge to strengthen the health of people in rural communities. The CRH is the designated State Office of Rural Health and administers the Medicare Rural Hospital Flexibility (Flex) program, funded by the Federal Office of Rural Health Policy, Health Resources Services Administration, and Department of Health and Human Services. The CRH connects the UND-SMHS and other necessary resources, to rural communities and their healthcare organizations in order to maintain access to quality care for rural residents. In this capacity, the CRH works at a national, state, and community level.

Detailed below are the methods undertaken to gather data for this assessment by convening a community group, conducting key informant interviews, soliciting feedback about health needs via a survey, and researching secondary data.

Community Group

A community group consisting of 11 community members was convened and first met on April 23, 2019. During this first community group meeting, group members were introduced to the needs assessment process, reviewed basic demographic information about the community, and served as a focus group. Focus group topics included community assets and challenges, the general health needs of the community, community concerns, and suggestions for improving the community's health.

The community group met again on May 30, 2019 with ten community members in attendance. At this second meeting the community group was presented with survey results, findings from key informant interviews and the focus group, and a wide range of secondary data relating to the general health of the population in McIntosh County. The group was then tasked with identifying and prioritizing the community's health needs.

Members of the community group represented the broad interests of the community served by AMC and MDHU. They included representatives of the health community, business community, political bodies, law enforcement, education and agricultural community. Not all members of the group were present at both meetings.

Interviews

One-on-one interviews with six key informants were conducted in person in Ashley on April 23, 2019. One additional key informant interview was conducted over the phone in May of 2019. A representative from the CRH conducted the interview. Interviews were held with selected members of the community who could provide insights into the community's health needs. Included among the informants were public health professionals with special knowledge in public health acquired through several years of direct experience in the community, including working with medically underserved, low income, and minority populations, as well as with populations with chronic diseases.

Topics covered during the interviews included the general health needs of the community, the general health of the community, community concerns, delivery of healthcare by local providers, awareness of health services offered locally, barriers to receiving health services, and suggestions for improving collaboration within the community.

Survey

A survey was distributed to solicit feedback from the community and was not intended to be a scientific or statistically valid sampling of the population. It was designed to be an additional tool for collecting qualitative data from the community at large – specifically, information related to community-perceived health needs. A copy of the survey instrument is included in Appendix A and a full listing of direct responses provided for the questions that included “Other” as an option are included in Appendix D.

The community member survey was distributed to various residents of McIntosh County, which is included in the AMC service area.

The survey tool was designed to:

- Learn of the good things in the community and the community’s concerns;
- Understand perceptions and attitudes about the health of the community and hear suggestions for improvement; and
- Learn more about how local health services are used by residents.

Specifically, the survey covered the following topics:

- Residents’ perceptions about community assets;
- Broad areas of community and health concerns;
- Awareness of local health services;
- Barriers to using local healthcare;
- Basic demographic information;
- Suggestions to improve the delivery of local healthcare; and
- Suggestions for capital improvements.

To promote awareness of the assessment process, an informative ad was placed in the Ashley Tribune. Additionally, information was published in the AMC/SNF newsletter. The AMC Facebook page and website were also utilized and an ad ran on the local access channel. Community functions including fundraisers, a meeting at the Ashley Senior Citizens, and staff meetings at the AMC were also presented with information about the process.

Approximately 175 community member surveys were available for distribution in McIntosh County. The surveys were distributed in several locations in the community including the café, banks, grocery store, city office, public health, clinics, AMC lobby, and C-store. Decorative drop boxes were placed with an informative overview of the survey, and a business card with the online survey link and QR code were available at the business sites.

To help ensure anonymity, included with each survey was a postage-paid return envelope to the CRH. In addition, to help make the survey as widely available as possible, residents also could request a survey by calling AMC or MDHU. The survey period ran from March 28, 2019 April 26, 2019. Thirty-nine completed paper surveys were returned.

Area residents also were given the option of completing an online version of the survey, which was publicized using the same channels as the paper survey. Thirty-five online surveys were completed. Ten of those online respondents used the QR code to complete the survey. In total, counting both paper and online surveys, 74 community member surveys were completed, equating to a 13.2% response rate. This response rate is slightly above the average for this type of unsolicited survey methodology and indicates an engaged community.

Secondary Data

Secondary data was collected and analyzed to provide descriptions of: (1) population demographics, (2) general health issues (including any population groups with particular health issues), and (3) contributing causes of community health issues. Data was collected from a variety of sources, including the U. S. Census Bureau; Robert Wood Johnson Foundation's County Health Rankings, which pulls data from 20 primary data sources (www.countyhealthrankings.org); the National Survey of Children's Health, which touches on multiple intersecting aspects of children's lives (www.childhealthdata.org/learn/NSCH); and North Dakota KIDS COUNT, which is a national and state-by-state effort to track the status of children, sponsored by the Annie E. Casey Foundation (www.ndkidscount.org).

Social Determinants of Health

According to the World Health Organization, social determinants of health are, *"The circumstances in which people are born, grow up, live, work, and age and the systems put in place to deal with illness. These circumstances are in turn shaped by wider set of forces: economics, social policies and politics."*

Income-level, educational attainment, race/ethnicity, and health literacy all impact the ability of people to access health services. Basic needs such as clean air and water and safe and affordable housing are all essential to staying healthy and are also impacted by the social factors listed previously. The barriers already present in rural areas, such as limited public transportation options and fewer choices to acquire healthy food can compound the impact of these challenges.

Healthy People 2020, (<https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health>) illustrates that health and healthcare, while vitally important, play only one small role (approximately 20%) in the overall health of individuals, and ultimately of a community. Social and community context, education, economic stability, neighborhood and built environment play a much larger part (80%) in impacting health outcomes. Therefore, as needs or concerns were raised through this community health needs assessment process, it was imperative to keep in mind how they impact the health of the community and what solutions can be implemented. See Figure 3.

Figure 3: Social Determinants of Health



Figure 4 (Henry J. Kaiser Family Foundation, <https://www.kff.org/disparities-policy/issue-brief/beyond-health-care-the-role-of-social-determinants-in-promoting-health-and-health-equity/>), provides examples of factors that are included in each of the social determinants of health categories that lead to health outcomes.

For more information and resources on social determinants of health, visit the Rural Health Information Hub website, <https://www.ruralhealthinfo.org/topics/social-determinants-of-health>.

Figure 4: Social Determinants of Health

Economic Stability	Neighborhood and Physical Environment	Education	Food	Community and Social Context	Health Care System
Employment	Housing	Literacy	Hunger	Social integration	Health coverage
Income	Transportation	Language	Access to healthy options	Support systems	Provider availability
Expenses	Safety	Early childhood education		Community engagement	Provider linguistic and cultural competency
Debt	Parks	Vocational training		Discrimination	Quality of care
Medical bills	Playgrounds	Higher education		Stress	
Support	Walkability				
	Zip code / geography				

Health Outcomes
Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations



Demographic Information

TABLE 1: MCINTOSH COUNTY: INFORMATION AND DEMOGRAPHICS

	McIntosh County	North Dakota
Population (2017)	2,585	755,393
Population change (2010-2017)	-8.1%	12.3%
People per square mile (2010)	2.9	9.7
Persons 65 years or older (2016)	31%	15.0%
Persons under 18 years (2016)	18.4%	23.3%
Median age (2016 est.)	53.5	35.2
White persons (2016)	96.7%	87.5%
Non-English speaking (2016)	19.5%	5.6%
High school graduates (2016)	80.2%	92.0%
Bachelor's degree or higher (2016)	17.2%	28.2%
Live below poverty line (2016)	12%	10.7%
Persons without health insurance, under age 65 years (2016)	14.5%	8.1%

Source: <https://www.census.gov/quickfacts/fact/table/ND,US/INC910216#viewtop> and https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml#

While the population of North Dakota has grown in recent years, McIntosh County has seen a decrease in population since 2010. The U.S. Census Bureau estimates show that McIntosh County’s population decreased from 2,813 (2010) to 2,585 (2018).

County Health Rankings

The Robert Wood Johnson Foundation, in collaboration with the University of Wisconsin Population Health Institute, has developed County Health Rankings to illustrate community health needs and provide guidance for actions toward improved health. In this report, Cavalier County is compared to North Dakota rates and national benchmarks on various topics ranging from individual health behaviors to the quality of healthcare.

The data used in the 2019 County Health Rankings are pulled from more than 20 data sources and then are compiled to create county rankings. Counties in each of the 50 states are ranked according to summaries of a variety of health measures. Those having high ranks, such as 1 or 2, are considered to be the “healthiest.” Counties are ranked on both health outcomes and health factors. Following is a breakdown of the variables that influence a county’s rank.

A model of the 2019 County Health Rankings – a flow chart of how a county’s rank is determined – may be found in Appendix B. For further information, visit the County Health Rankings website at www.countyhealthrankings.org.

Health Outcomes <ul style="list-style-type: none">• Length of life• Quality of life Health Factors <ul style="list-style-type: none">• Health behavior<ul style="list-style-type: none">- Smoking- Diet and exercise- Alcohol and drug use- Sexual activity	Health Factors (continued) <ul style="list-style-type: none">• Clinical care<ul style="list-style-type: none">- Access to care- Quality of care• Social and Economic Factors<ul style="list-style-type: none">- Education- Employment- Income- Family and social support- Community safety• Physical Environment<ul style="list-style-type: none">- Air and water quality- Housing and transit
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Table 2 summarizes the pertinent information gathered by County Health Rankings as it relates to McIntosh County. It is important to note that these statistics describe the population of a county, regardless of where county residents choose to receive their medical care. In other words, all of the following statistics are based on the health behaviors and conditions of the county’s residents, not necessarily the patients and clients of MHDU and AMC or of any particular medical facility.

For most of the measures included in the rankings, the County Health Rankings’ authors have calculated the “Top U.S. Performers” for 2019. The Top Performer number marks the point at which only 10% of counties in the nation do better, i.e., the 90th percentile or 10th percentile, depending on whether the measure is framed positively (such as high school graduation) or negatively (such as adult smoking).

McIntosh County rankings within the state are included in the summary following. For example, McIntosh County ranks 28th out of 49 ranked counties in North Dakota on health outcomes and 35th on health factors. The measures marked with a with a bullet point (•) are those where a county is not measuring up to the state rate/percentage; a square (■) indicates that the county is not meeting the U.S. Top 10% rate on that measure. Measures that are not marked with a colored checkmark but are marked with a plus sign (+) indicate that the county is doing better than the U.S. Top 10%.

The data from County Health Rankings shows that McIntosh County is doing better than many counties compared to the rest of the state on all of the outcomes, landing at or above rates for other North Dakota counties. McIntosh County is also performing well in many areas when it comes to the U.S. Top 10% ratings. On health factors, McIntosh performs below the North Dakota average for counties in several areas.

Data compiled by County Health Rankings show McIntosh County is doing better than North Dakota in health outcomes and factors for the following indicators:

- Poor or fair health
- Poor physical health days
- Poor mental health days
- Low birth weight
- Adult smoking
- Adult obesity
- Excessive drinking
- Unemployment
- Income inequality
- Social associations
- Violent crime
- Air pollution
- Drinking water violations
- Severe housing problems

Outcomes and factors in which McIntosh County is performing poorly relative to the rest of the state include:

- Food environment index
- Physical inactivity
- Access to exercise opportunities
- Uninsured individuals
- Primary care physicians
- Dentists
- Preventable hospital stays
- Mammography screenings
- Flu vaccinations
- Children in poverty
- Children in single-parent households
- Injury deaths

TABLE 2: SELECTED MEASURES FROM COUNTY HEALTH RANKINGS 2019 –MCINTOSH COUNTY

● = Not meeting North Dakota average

■ = Not meeting U.S. Top 10% Performers

+ = Meeting or exceeding U.S. Top 10% Performers

Blank values reflect unreliable or missing data

TABLE 2: SELECTED MEASURES FROM COUNTY HEALTH RANKINGS 2019 – MCINTOSH COUNTY			
	McIntosh County	U.S. Top 10%	North Dakota
Ranking: Outcomes	28th		(of 49)
Premature death		5,400	6,700
Poor or fair health	14% ■	12%	14%
Poor physical health days (in past 30 days)	2.9 +	3.0	3.0
Poor mental health days (in past 30 days)	2.8 +	3.1	3.1
Low birth weight	6% +	6%	6%
Ranking: Factors	35th		(of 49)
<i>Health Behaviors</i>			
Adult smoking	14% +	14%	20%
Adult obesity	31% ■	26%	32%
Food environment index (10=best)	9.0 ●●	8.7	9.1
Physical inactivity	28% ●■	19%	22%
Access to exercise opportunities	70% ●■	91%	74%
Excessive drinking	18% ■	13%	26%
Alcohol-impaired driving deaths		13%	46%
Sexually transmitted infections		152.8	456.5
Teen birth rate		14	23
<i>Clinical Care</i>			
Uninsured	11% ●■	6%	8%
Primary care physicians	1,330:1 ●■	1,050:1	1,320:1
Dentists	2,610:0 ●■	1,260:1	1,530:1
Mental health providers		310:1	570:1
Preventable hospital stays	6,215 ●■	2,765	4,452
Mammography screening (% of Medicare enrollees ages 65-74 receiving screening)	41% ●■	49%	50%
Flu vaccinations (% of fee-for-service Medicare enrollees receiving vaccination)	20% ●■	52%	47%
<i>Social and Economic Factors</i>			
Unemployment	2.6% +	2.9%	2.6%
Children in poverty	17% ●■	11%	11%
Income inequality	4.3 ■	3.7	4.4
Children in single-parent households	34% ●■	20%	27%
Social associations	37.7 +	21.9	16.0
Violent crime	74 ■	63	258
Injury deaths	133 ●■	57	69
<i>Physical Environment</i>			
Air pollution – particulate matter	5.3 +	6.1	5.4
Drinking water violations	No +		
Severe housing problems	9% +	9%	11%

Source: <http://www.countyhealthrankings.org/app/north-dakota/2018/rankings/outcomes/overall>

Children's Health

The National Survey of Children's Health touches on multiple intersecting aspects of children's lives. Data is not available at the county level; listed below is information about children's health in North Dakota. The full survey includes physical and mental health status, access to quality healthcare, and information on the child's family, neighborhood, and social context. Data is from 2011-12. More information about the survey is found at www.childhealthdata.org/learn/NSCH.

Key measures of the statewide data are summarized below. The rates highlighted in red signify that the state is faring worse on that measure than the national average.

Table 3: Selected Measures Regarding Children's Health (For children aged 0-17 unless noted otherwise)

Source: <http://childhealthdata.org/browse/data-snapshots/nsch-profiles?geo=1&geo2=36&rpt=16>

Health Status	North Dakota	National
Children born premature (3 or more weeks early)	10.8%	11.6%
Children 10-17 overweight or obese	35.8%	31.3%
Children 0-5 who were ever breastfed	79.4%	79.2%
Children 6-17 who missed 11 or more days of school	4.6%	6.2%
Healthcare		
Children currently insured	93.5%	94.5%
Children who had preventive medical visit in past year	78.6%	84.4%
Children who had preventive dental visit in past year	74.6%	77.2%
Young children (10 mos.-5 yrs.) receiving standardized screening for developmental or behavioral problems	20.7%	30.8%
Children aged 2-17 with problems requiring counseling who received needed mental healthcare	86.3%	61.0%
Family Life		
Children whose families eat meals together 4 or more times per week	83.0%	78.4%
Children who live in households where someone smokes	29.8%	24.1%
Neighborhood		
Children who live in neighborhood with a park, sidewalks, a library, and a community center	58.9%	54.1%
Children living in neighborhoods with poorly kept or rundown housing	12.7%	16.2%
Children living in neighborhood that's usually or always safe	94.0%	86.6%

The data on children's health and conditions reveal that while North Dakota is doing better than the national averages on a few measures, it is not measuring up to the national averages with respect to:

- Obese or overweight children ages 10-17;
- Children with health insurance;
- Preventive primary care and dentist visits;
- Developmental/behavioral screening for children 10 months to 5 years of age;

- Children who have received needed mental healthcare; and
- Children living in smoking households.

Table 4 includes selected county-level measures regarding children's health in North Dakota. The data come from North Dakota KIDS COUNT, a national and state-by-state effort to track the status of children, sponsored by the Annie E. Casey Foundation. KIDS COUNT data focuses on the main components of children's well-being. More information about KIDS COUNT is available at www.ndkidscount.org. The measures highlighted in blue in the table are those in which the counties are doing worse than the state average. The year of the most recent data is noted.

The data show that McIntosh County is performing better than the North Dakota average on all of the examined measures except the percentage of uninsured children and children enrolled in Health Steps. The most marked difference was on the measure of licensed child care capacity (almost 14% higher rate in McIntosh County).

Table 4: Selected County-Level Measures Regarding children's Health

	McIntosh County	North Dakota
Uninsured children (% of population age 0-18), 2016	13.0%	9.0%
Uninsured children below 200% of poverty (% of population), 2016	48.4%	41.9%
Medicaid recipient (% of population age 0-20), 2017	32.8%	28.3%
Children enrolled in Healthy Steps (% of population age 0-18), 2013	5.6%	2.5%
Supplemental Nutrition Assistance Program (SNAP) recipients (% of population age 0-18), 2017	13.1%	20.1%
Licensed childcare capacity (% of population age 0-13), 2018	58.0%	44.3%
4-Year High School Cohort Graduation Rate, 2017	95.5%	88.0%

Source: <https://datacenter.kidscount.org/data#ND/5/0/char/0>

Another means for obtaining data on the youth population is through the Youth Risk Behavior Survey (YRBS). The YRBS was developed in 1990 by the Centers for Disease Control and Prevention (CDC) to monitor priority health risk behaviors that contribute markedly to the leading causes of death, disability and social problems among youth and adults in the United States. The YRBS was designed to monitor trends, compare state health risk behaviors to national health risk behaviors and intended for use to plan, evaluate and improve school and community programs. North Dakota began participating in the YRBS survey in 1995. Students in grades, 7-8 & 9-12 are surveyed in the spring of odd years. The survey is voluntary and completely anonymous.

North Dakota has two survey groups, selected and voluntary. The selected school survey population is chosen using a scientific sampling procedure which ensures that the results can be generalized to the state's entire student population. The schools that are part of the voluntary sample, selected without scientific sampling procedures, will only be able to obtain information on the risk behavior percentages for their school and not in comparison to all the schools.

Table 5 depicts some of the YRBS data that has been collected in 2013, 2015, and 2017. At this time, the North Dakota-specific data for 2017 is not available, so data for 2013 and 2015 are shown for North Dakota. They are further broken down by rural and urban percentages. The trend column shows a "=" for statistically insignificant change (no change), "↑" for an increased trend in the data changes from 2013 to 2015, and "↓" for a decreased trend in the data changes from 2013 to 2015. The final column shows the 2017 national average percentage. For a more complete listing of the YRBS data, see Appendix C.

TABLE 5: Youth Behavioral Risk Survey Results

North Dakota High School Survey

Sources: <https://www.nd.gov/dpi/uploads/1298/2015NDHStatewideYRBSReport20151110FINAL2NoCover.pdf>;
<https://www.nd.gov/dpi/uploads/1298/2015NDHTrendReportUpdated42016.pdf>; <https://www.cdc.gov/healthyouth/data/yrbs/results.htm>

	ND 2013	ND 2015*	ND Trend ↑, ↓, =	Rural ND Town Average	Urban ND Town Average	National Average 2017
Injury and Violence						
% of students who rarely or never wore a seat belt.	11.6	8.5	↓	10.5	7.5	5.9
% of students who rode in a vehicle with a driver who had been drinking alcohol (one or more times during the 30 prior to the survey)	21.9	17.7	↓	21.1	15.2	16.5
% of students who talked on a cell phone while driving (on at least 1 day during the 30 days before the survey)	67.9	61.4	↓	60.7	58.8	NA
% of students who texted or e-mailed while driving a car or other vehicle (on at least 1 day during the 30 days before the survey)	59.3	57.6	=	56.7	54.4	39.2
% of students who were in a physical fight on school property (one or more times during the 12 months before the survey)	8.8	5.4	↓	6.9	6.1	8.5
% of students who were ever physically forced to have sexual intercourse (when they did not want to)	7.7	6.3	=	6.5	7.4	7.4
% of students who were bullied on school property (during the 12 months before the survey)	25.4	24.0	=	27.5	22.4	19.0
% of students who were electronically bullied (includes e-mail, chat rooms, instant messaging, websites, or texting during the 12 months before the survey)	17.1	15.9	=	17.7	15.8	14.9
% of students who made a plan about how they would attempt suicide (during the 12 months before the survey)	13.5	13.5	=	12.8	13.7	13.6
Tobacco, Alcohol, and Other Drug Use						
% of students who currently use an electronic vapor product (e-cigarettes, vape e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens at least 1 day during the 30 days before the survey)	NA	22.3	↑	19.7	22.8	13.2
% of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey)	27.5	20.9	↓	22.9	19.8	14.0
% of students who drank five or more drinks of alcohol in a row (within a couple of hours on at least 1 day during the 30 days before the survey)	21.9	17.6	↓	19.8	17.0	13.5
% of students who currently used marijuana (one or more times during the 30 days before the survey)	15.9	15.2	=	13.2	17.1	19.8
% of students who ever took prescription drugs without a doctor's prescription (such as OxyContin, Percocet, Vicodin, codeine, Adderall, Ritalin, or Xanax, one or more times during their life)	17.6	14.5	↓	13.2	16.0	14.0
Weight Management, Dietary Behaviors, and Physical Activity						
% of students who were overweight (\geq 85th percentile but $<95^{\text{th}}$ percentile for body mass index)	15.1	14.7	=	15.4	14.6	15.6
% of students who were obese (\geq 95th percentile for body mass index)	13.5	14.0	=	16.3	12.9	14.8

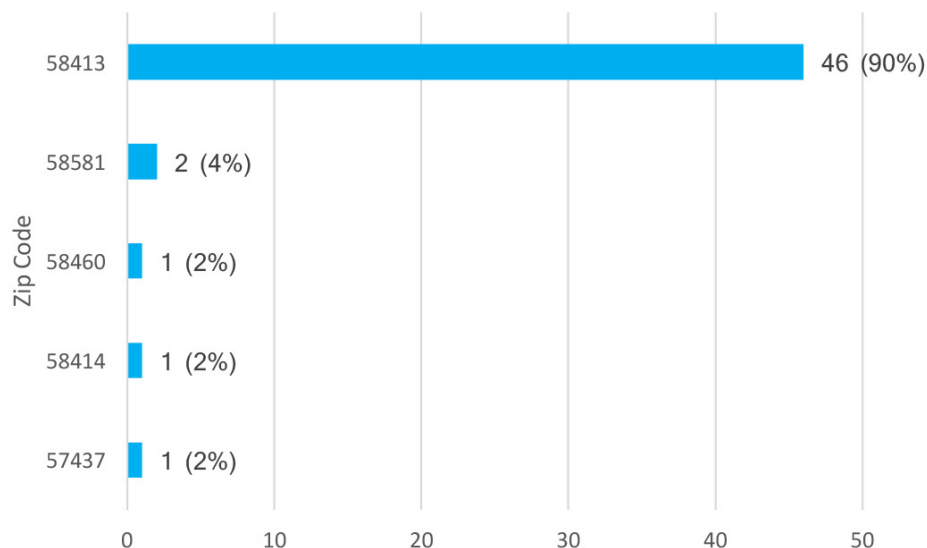
% of students who did not eat fruit or drink 100% fruit juices (during the 7 days before the survey)	3.4	3.9	=	4.3	4.1	5.6
% of students who did not eat vegetables (green salad, potatoes [excluding French fries, fried potatoes, or potato chips], carrots, or other vegetables, during the 7 days before the survey)	6.0	4.7	=	4.5	5.2	7.2
% of students who drank a can, bottle, or glass of soda or pop one or more times per day (not including diet soda or diet pop, during the 7 days before the survey)	23.4	18.7	=	21.4	18.0	18.7
% of students who did not drink milk (during the 7 days before the survey)	11.1	13.9	↑	11.6	13.7	26.7
% of students who did not eat breakfast (during the 7 days before the survey)	10.5	11.9	=	10.7	11.8	14.1
% of students who most of the time or always went hungry because there was not enough food in their home (during the 30 days before the survey)	3.1	2.2	=	2.4	2.8	NA
% of students who were physically active at least 60 minutes per day on 5 or more days (doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the 7 days before the survey)	50.6	51.3	=	51.7	50.1	46.5
% of students who watched television 3 or more hours per day (on an average school day)	21.0	18.9	=	20.7	18.2	20.7
% of students who played video or computer games or used a computer 3 or more hours per day (for something that was not school work on an average school day)	34.4	38.6	↑	39.4	38.0	43.0
Other						
% of students who ever had sexual intercourse	44.9	38.9	↓	39.3	39.1	39.5
% of students who had 8 or more hours of sleep (on an average school night)	30.0	29.5	=	34.5	28.7	25.4
% of students who brushed their teeth on seven days (during the 7 days before the survey)	71.5	71.0	=	67.8	70.1	NA

Sources: <https://www.nd.gov/dpi/uploads/1298/2015NDHStatewideYRBSReport20151110FINAL2NoCover.pdf>; <https://www.nd.gov/dpi/uploads/1298/2015NDHTrendReportUpdated42016.pdf>; <https://www.cdc.gov/healthyyouth/data/yrbs/results.htm>

Survey Results

As noted previously, 74 community members completed the survey in communities throughout the counties in the AMC service area. The survey requested that respondents list their home zip code. While not all respondents provided a zip code, 51 did, revealing that the large majority of respondents (90%, N=46) lived in Ashley. These results are shown in Figure 5. For all questions that contained an “Other” response, all of those direct responses may be found in Appendix D. In some cases, a summary of those comments is additionally included in the report narrative.

Figure 5: Survey Respondents’ Home Zip Code Total respondents: 51



Survey results are reported in six categories: demographics; healthcare access; community assets, challenges; community concerns; delivery of healthcare; and other concerns or suggestions to improve health.

Survey Demographics

To better understand the perspectives being offered by survey respondents, survey-takers were asked a few demographic questions. Throughout this report, numbers (N) instead of just percentages (%) are reported because percentages can be misleading with smaller numbers. Survey respondents were not required to answer all questions.

With respect to demographics of those who chose to complete the survey:

- 64% (N=39) were age 55 or older.
- The majority (79%, N=48) were female.
- Slightly more than a quarter of the respondents (27%, N=17) had bachelor’s degrees or higher.
- The number of those working full time (57%, N=35) was just less than two times higher than those who were retired (30%, N=18).
- 98% (N=59) of those who reported their ethnicity / race were white / Caucasian.
- 38% of the population (N=22) had household incomes of less than \$50,000.

Figures 6 through 12 show these demographic characteristics. It illustrates the range of community members’ household incomes and indicates how this assessment took into account input from parties who represent the varied interests of the community served, including a balance of age ranges, those in diverse work situations, and community members with lower incomes.

Figure 6: Age Demographics of Survey Respondents

Total respondents = 61

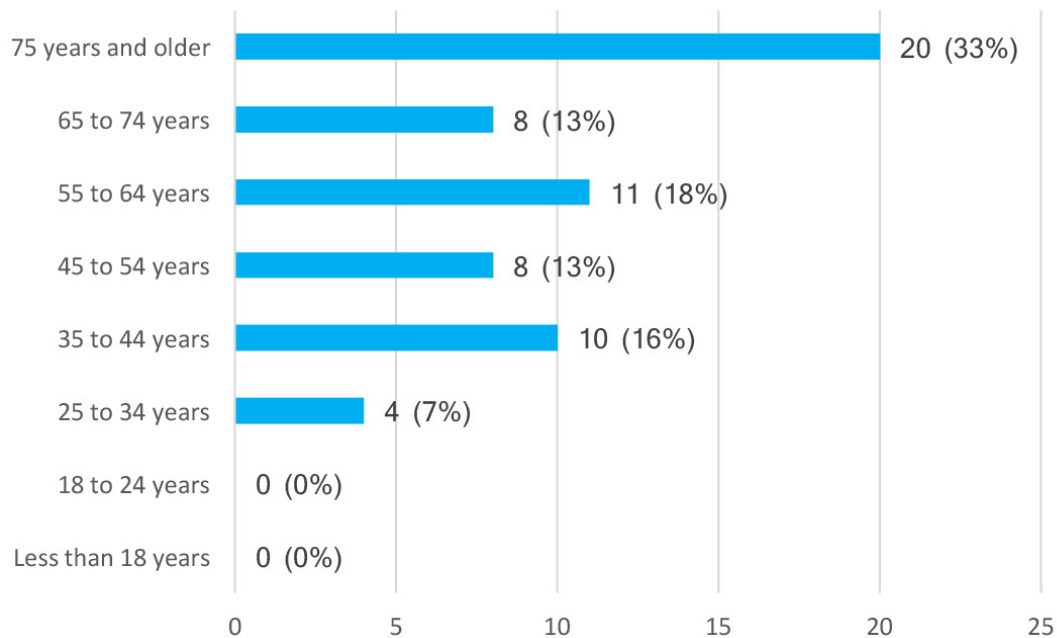


Figure 7: Gender Demographics of Survey Respondents

Total respondents = 61

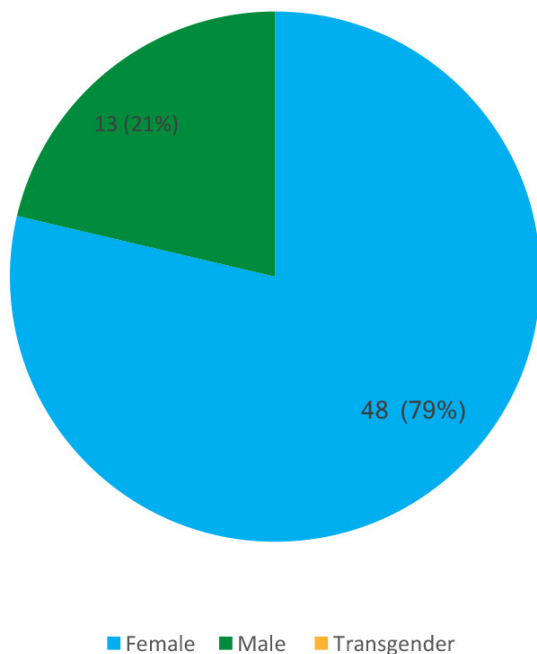


Figure 8: Educational Level Demographics of Survey Respondents

Total respondents = 62

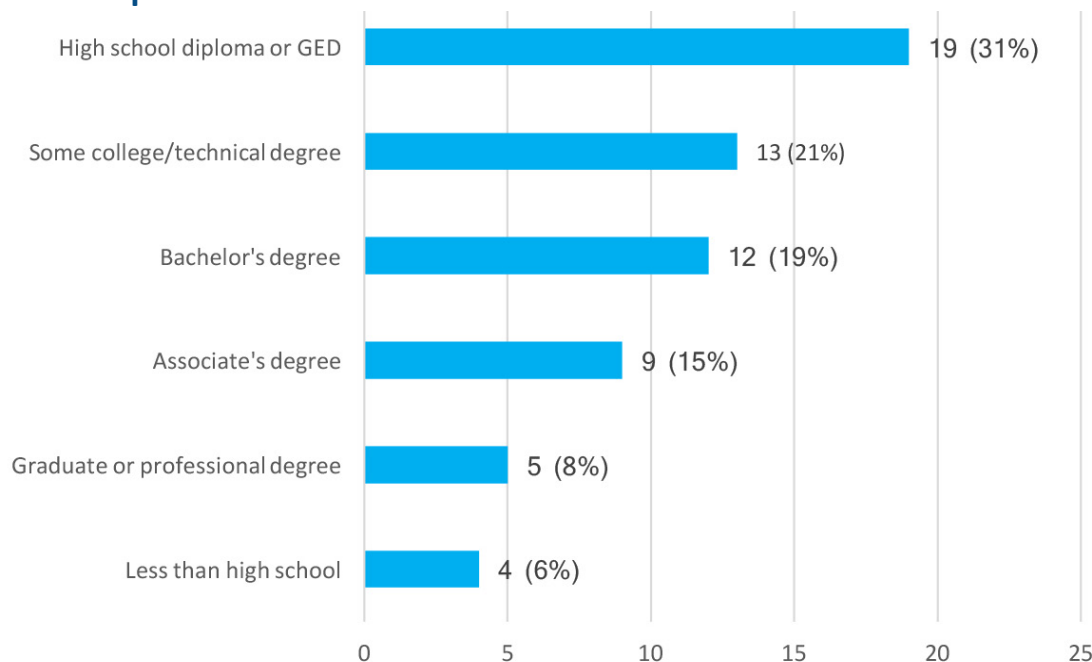
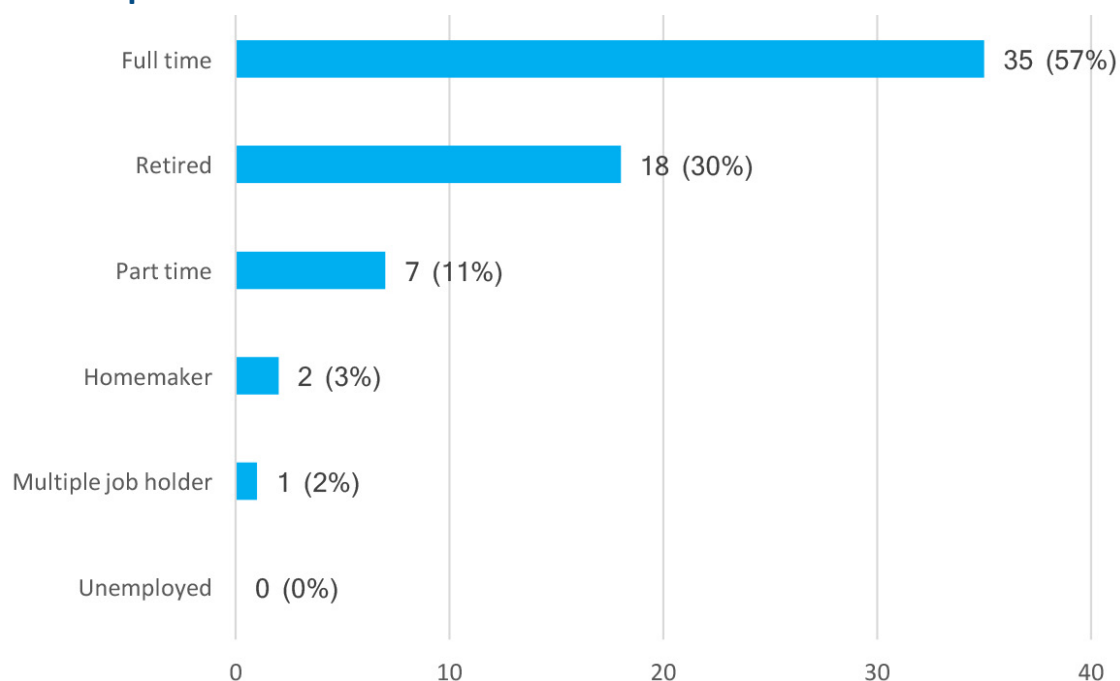


Figure 9: Employment Status Demographics of Survey Respondents

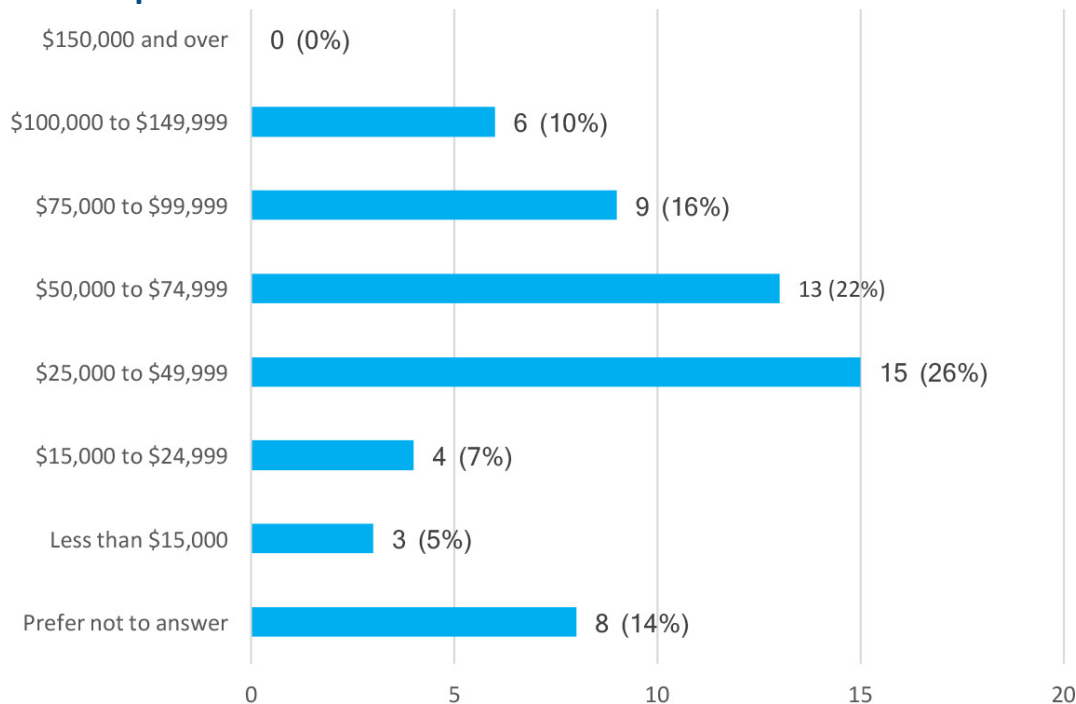
Total respondents = 63



Of those who provided a household income, 12% (N=7) community members reported a household income of less than \$25,000. Ten percent (N=6) indicated a household income of \$100,000 or more. This information is show in Figure 10.

Figure 10: Household Income Demographics of Survey Respondents

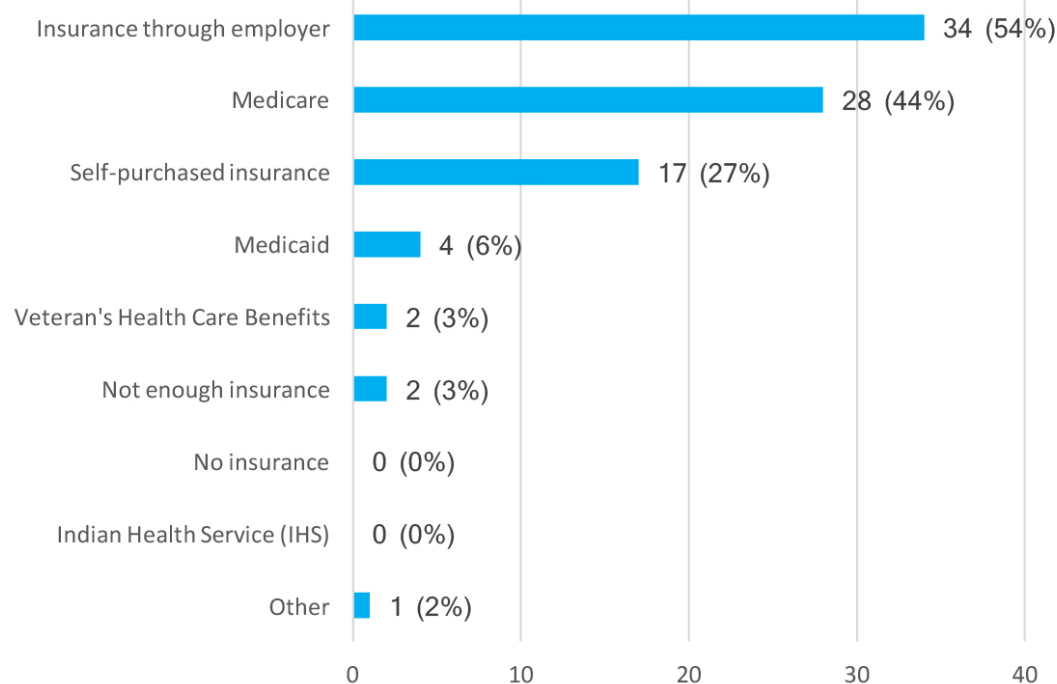
Total respondents = 58



Community members were asked about their health insurance status, which is often associated with whether people have access to healthcare. Three percent (N=2) of the respondents reported having no health insurance or being under-insured. The most common insurance types were insurance through one's employer (N=34), followed by Medicare (N=28) and self-purchased insurance (N=17).

Figure 11: Health Insurance Coverage Status of Survey Respondents

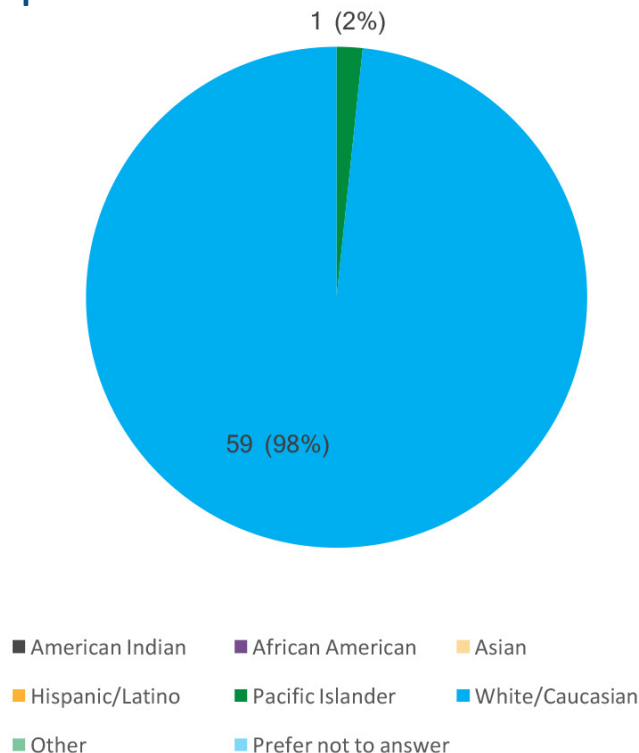
Total respondents = 88



As shown in Figure 12, nearly all of the respondents were white/Caucasian (98%). This was in-line with the race/ethnicity of the overall population of McIntosh County, which the U.S. Census indicates is 96.7%.

Figure 12: Race/Ethnicity Demographics of Survey Respondents

Total respondents = 60



Community Assets and Challenges

Survey-respondents were asked what they perceived as the best things about their community in four categories: people, services and resources, quality of life, and activities. In each category, respondents were given a list of choices and asked to pick the three best things. Respondents occasionally chose less than three or more than three choices within each category. If more than three choices were selected, their responses were not included. The results indicate there is consensus (with at least 50 respondents agreeing) that community assets include:

- Safe place to live, little/no crime (N=67)
- Family-friendly (N=59)
- People are friendly, helpful, supportive (N=58)
- People who live here are involved in their community (N=54)
- Healthcare (N=51)

Figures 13 to 16 illustrate the results of these questions.

Figure 13: Best Things about the PEOPLE in Your Community

Total responses = 190

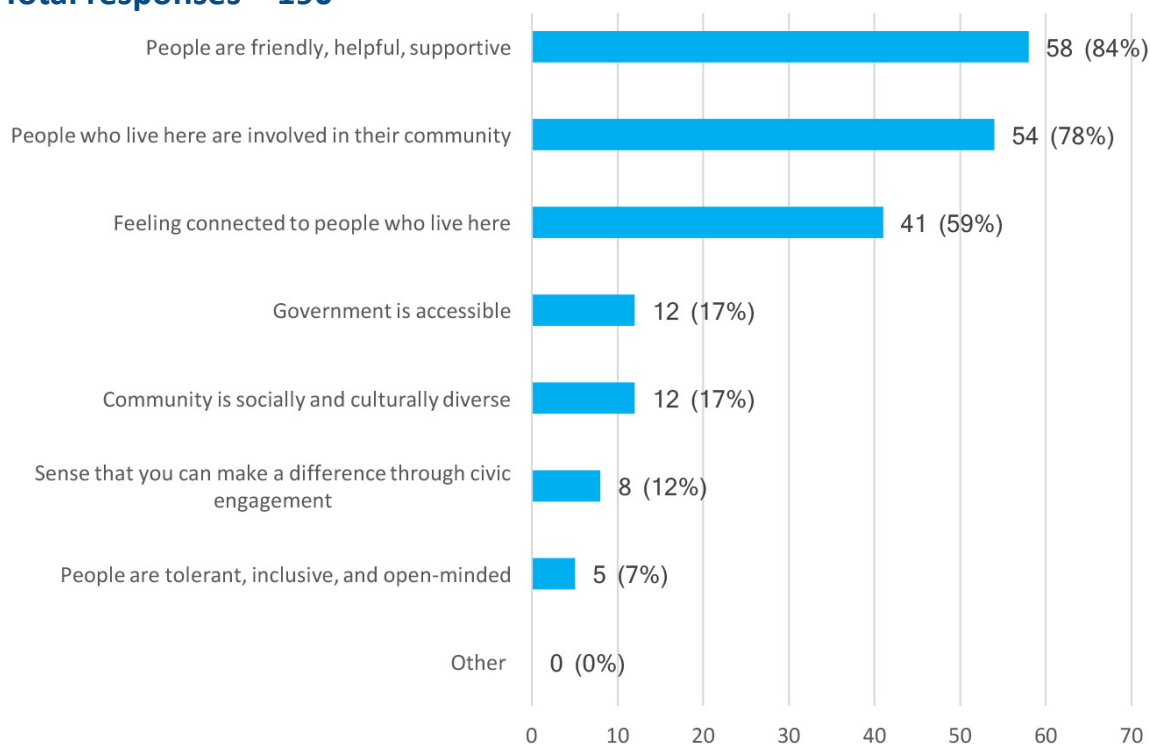


Figure 14: Best Things about the SERVICES AND RESOURCES in Your Community

Total responses = 198

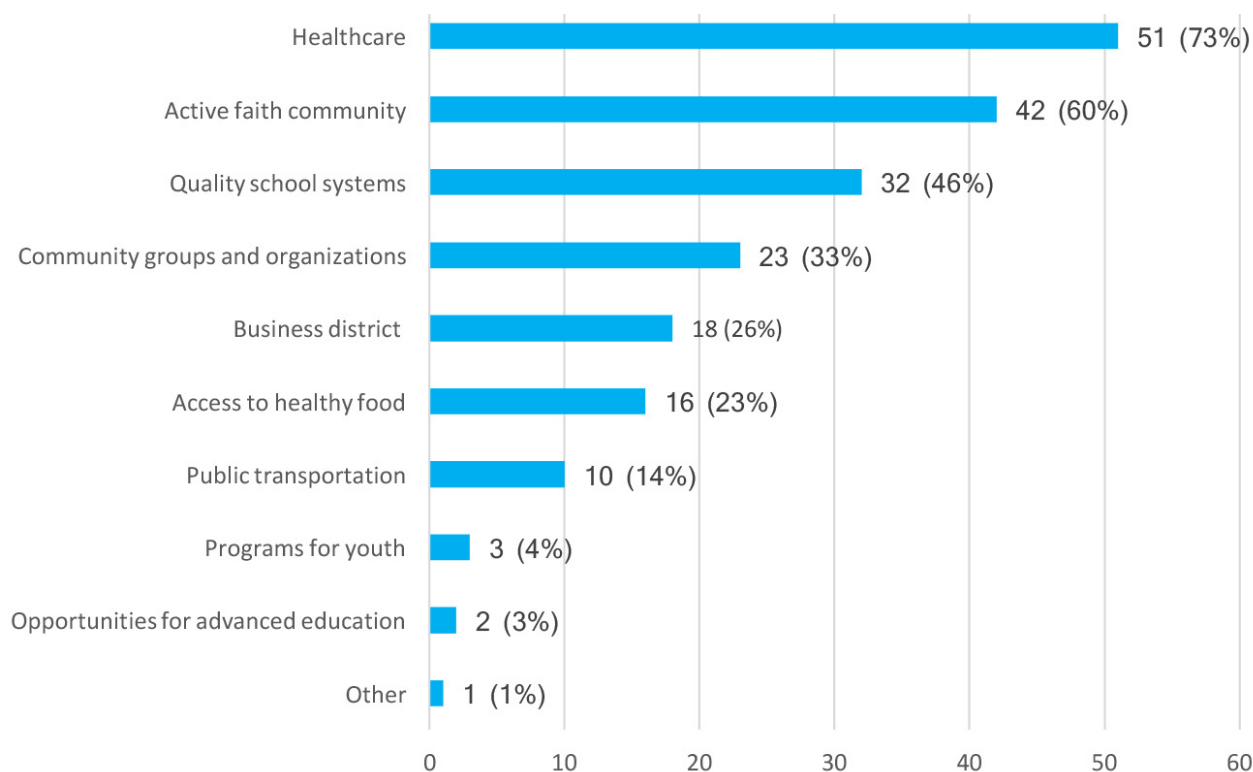
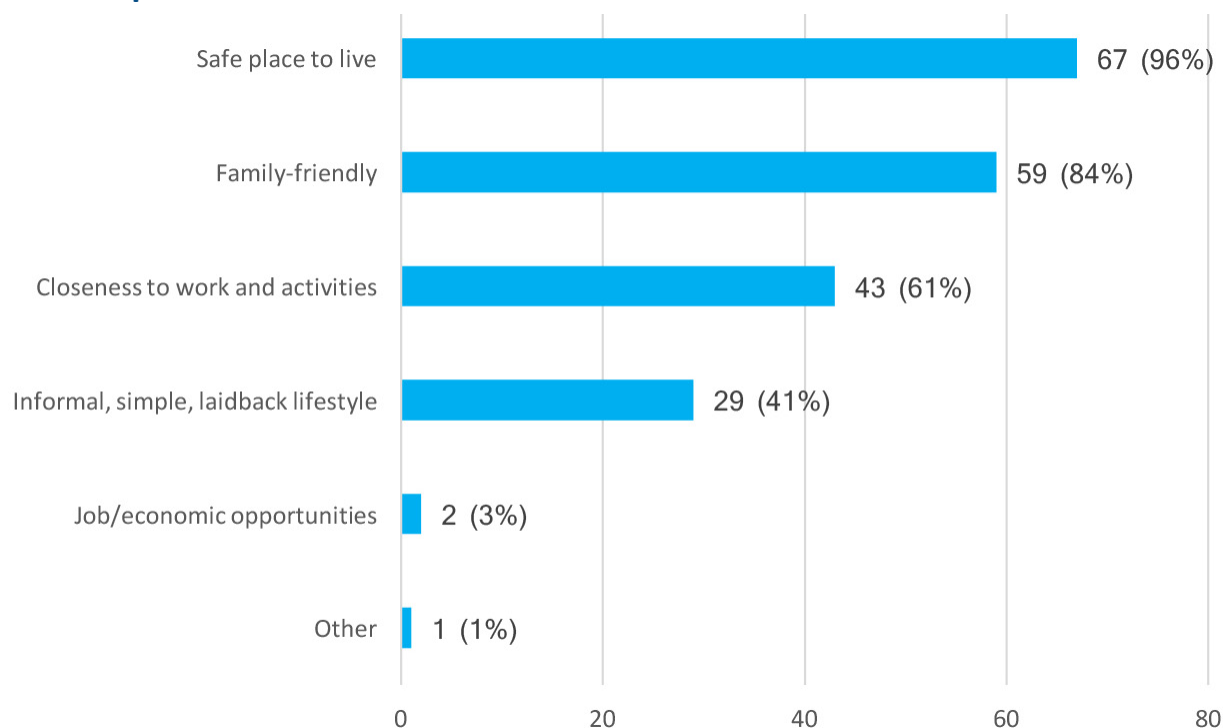


Figure 15: Best Things about the QUALITY OF LIFE in Your Community

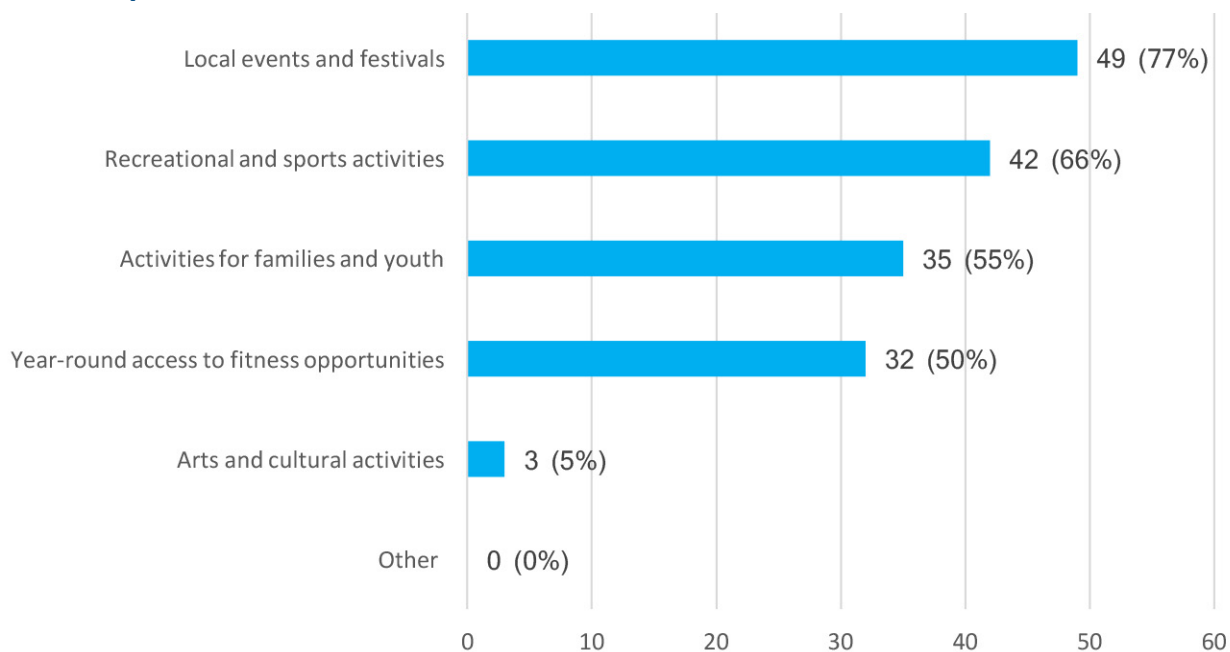
Total responses = 201



The one “Other” response regarding the best things about the quality of life in the community was the faith-based community.

Figure 16: Best Thing about the ACTIVITIES in Your Community

Total responses = 161



Community Concerns

At the heart of this community health assessment was a section on the survey asking survey respondents to review a wide array of potential community and health concerns in five categories and pick their top three concerns. The five categories of potential concerns were:

- Community / environmental health
- Availability / delivery of health services
- Youth population
- Adult population
- Senior population

With regard to responses about community challenges, the most highly voiced concerns (those having at least 25 respondents) were:

- Not enough jobs with livable wages (N=42)
- Availability of resources to help the elderly stay in their homes (N=33)
- Attracting and retaining young families (N=31)
- Alcohol use and abuse – youth (N=31)
- Assisted living options (N=30)
- Cost of long-term / nursing home care (N=30)
- Changes in population size (N=29)
- Not enough activities for children and youth (N=27)
- Having enough child daycare services (N=26)
- Cancer – adults (N=26)

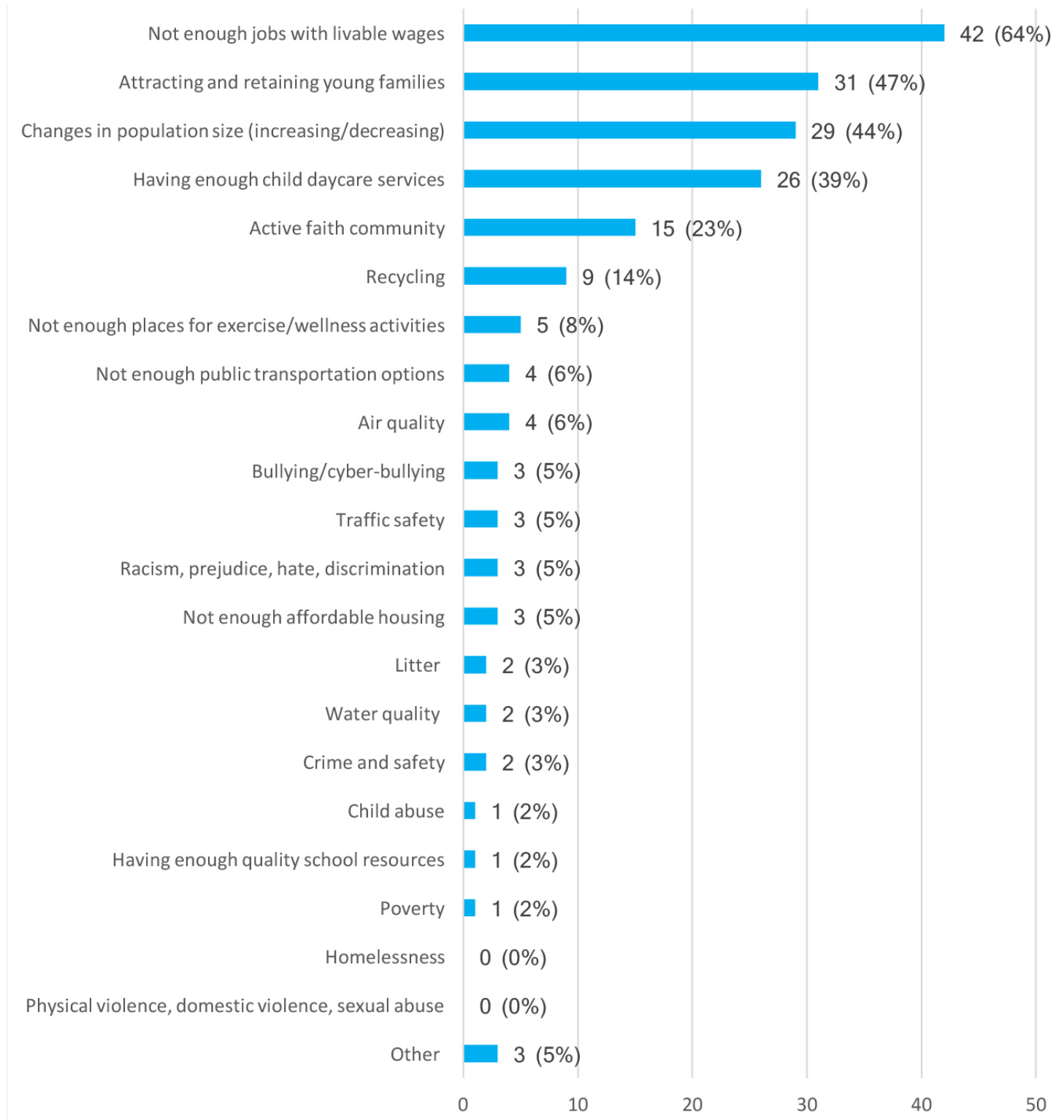
The other issues that had at least 15 votes included:

- Availability of dental care (N=24)
- Dementia / Alzheimer's – adults (N=21)
- Availability of specialists (N=19)
- Smoking and tobacco use, exposure to second-hand smoke or vaping / juuling – youth (N=19)
- Not getting enough exercise / physical activity – adults (N=19)
- Stress – adults (N=18)
- Depression / anxiety – youth (N=17)
- Availability of home health – seniors (N=17)
- Ability to meet needs of older population (N=16)
- Drug use and abuse (including prescription drugs) – youth (N=15)
- Active faith community (N=15)

Figures 17 through 21 illustrate these results.

Figure 17: Community/Environmental Health Concerns

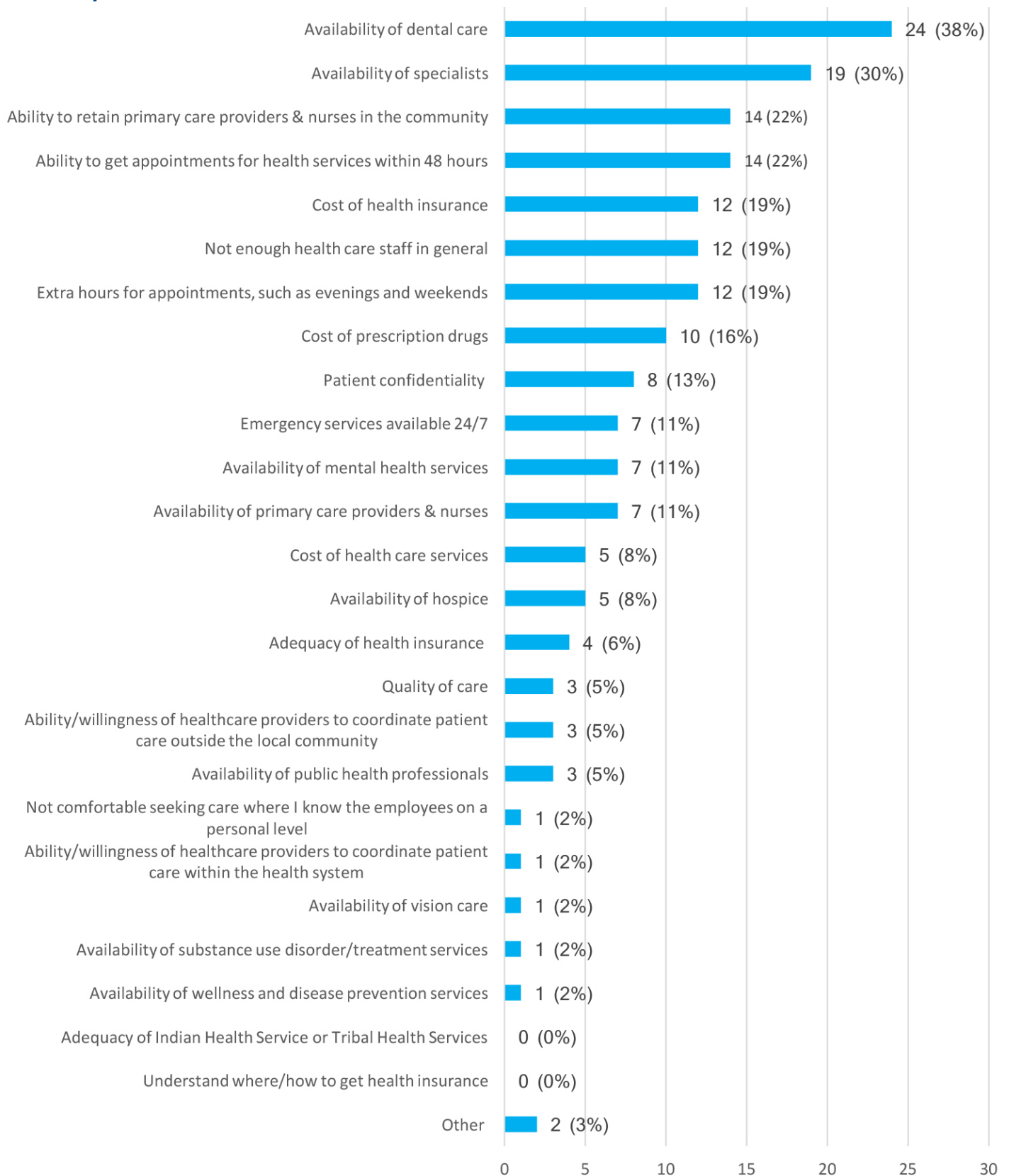
Total responses = 189



In the “Other” category for community and environmental health concerns, the following were listed: getting young people to settle here, in-home senior services, and no assisted living options or home healthcare service options.

Figure 18: Availability/Delivery of Health Services Concerns

Total responses = 174



The two responses in the “Other” category mentioned a lack of services to keep seniors in their homes and longer pharmacy hours.

Figure 19: Youth Population Health Concerns

Total responses = 162

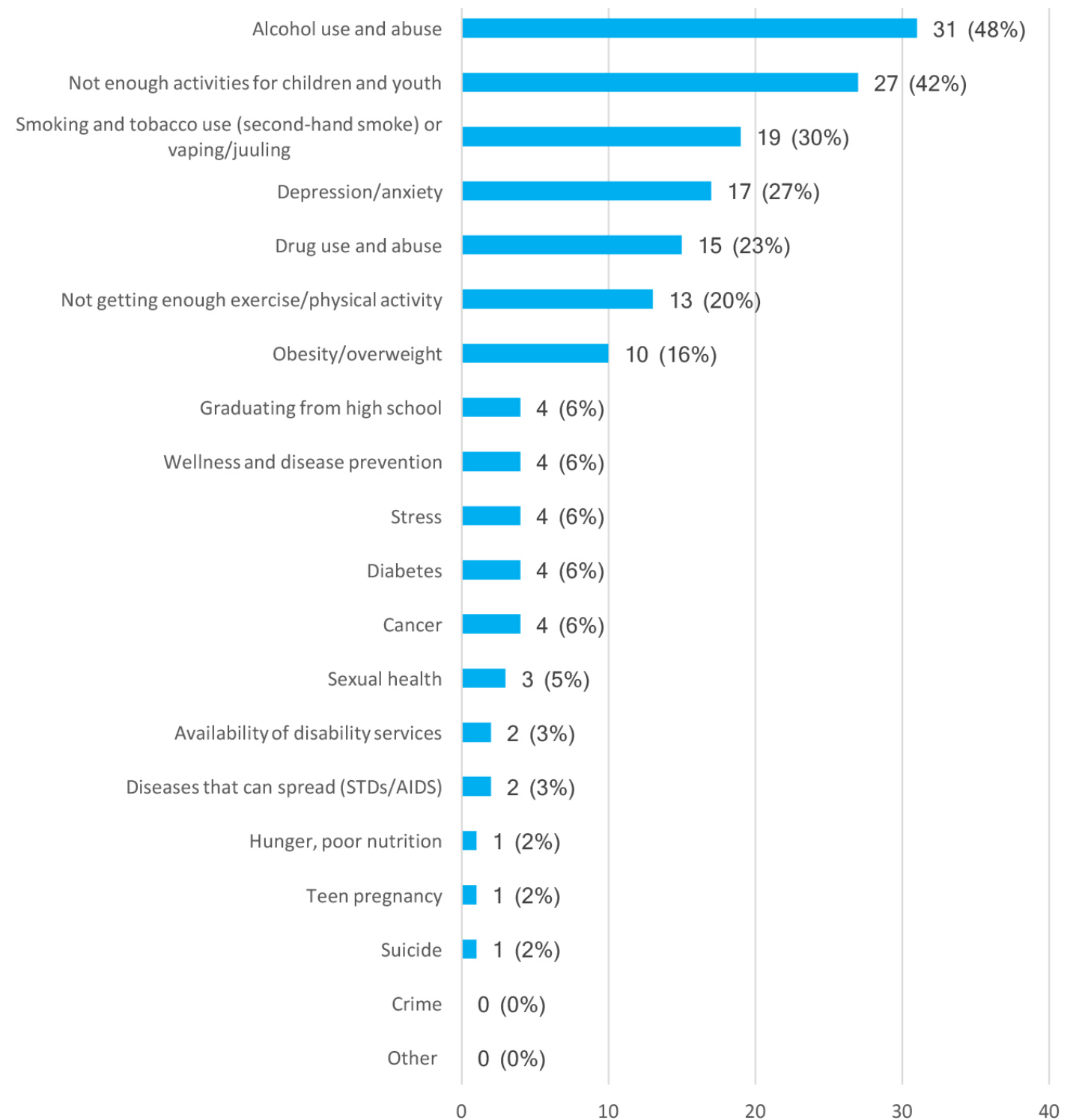


Figure 20: Adult Population Concerns

Total responses = 178

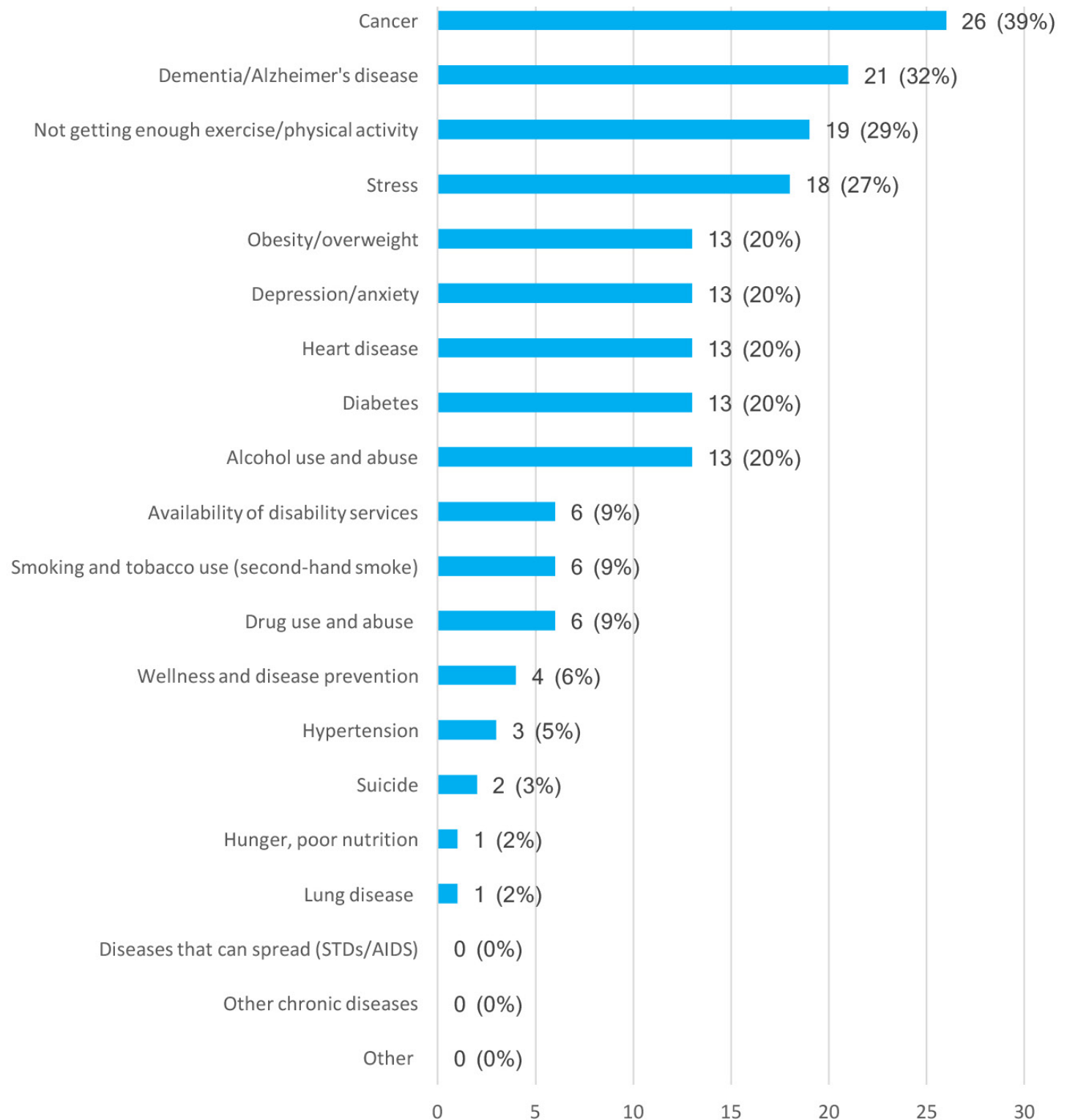
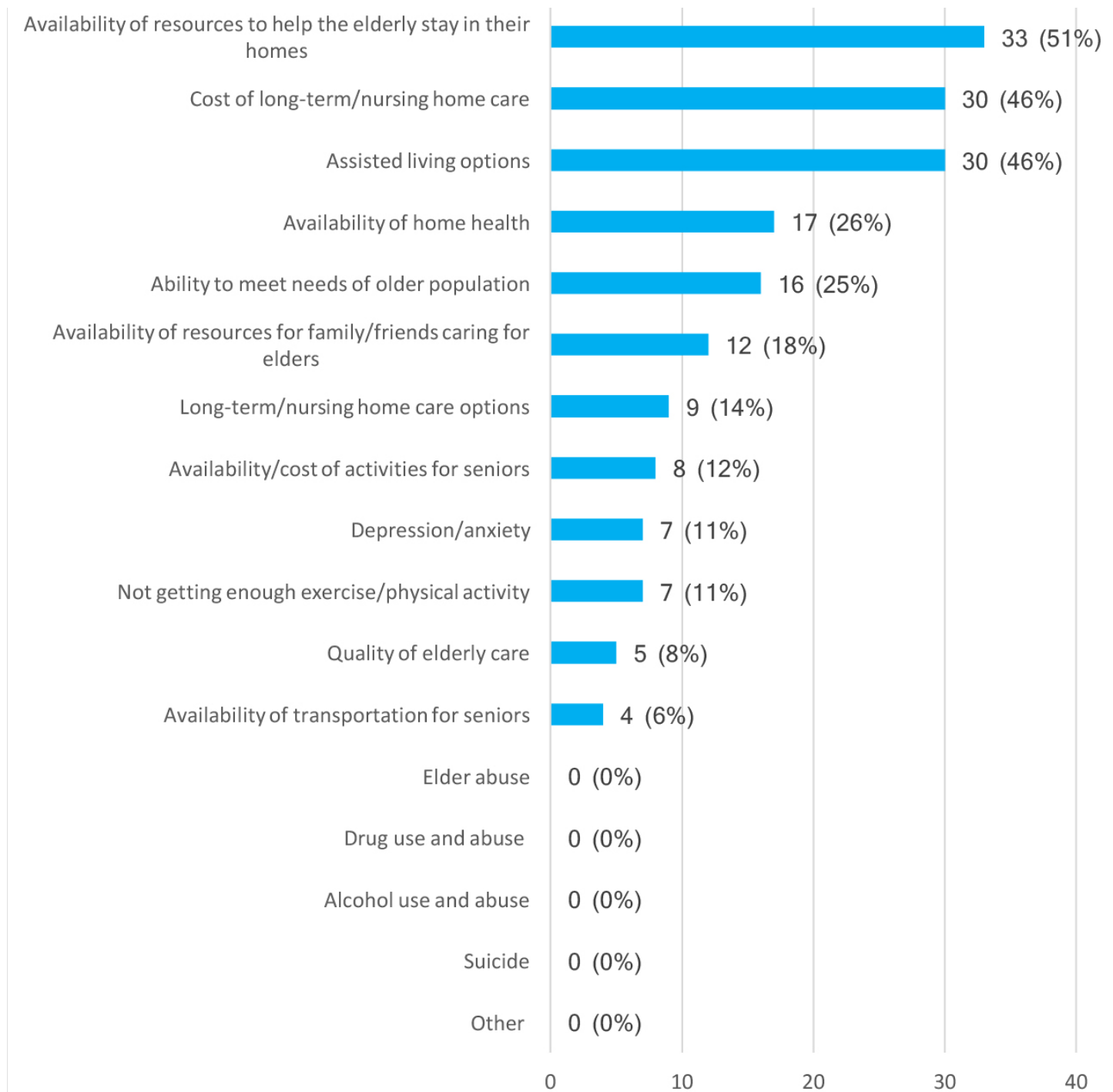


Figure 21: Senior Population Concerns

Total responses = 178



In an open ended question, respondents were asked what single issue they feel is the biggest challenge facing their community. Two categories emerged above all others as the top concerns:

1. Population decline
2. Lack of jobs with livable wages

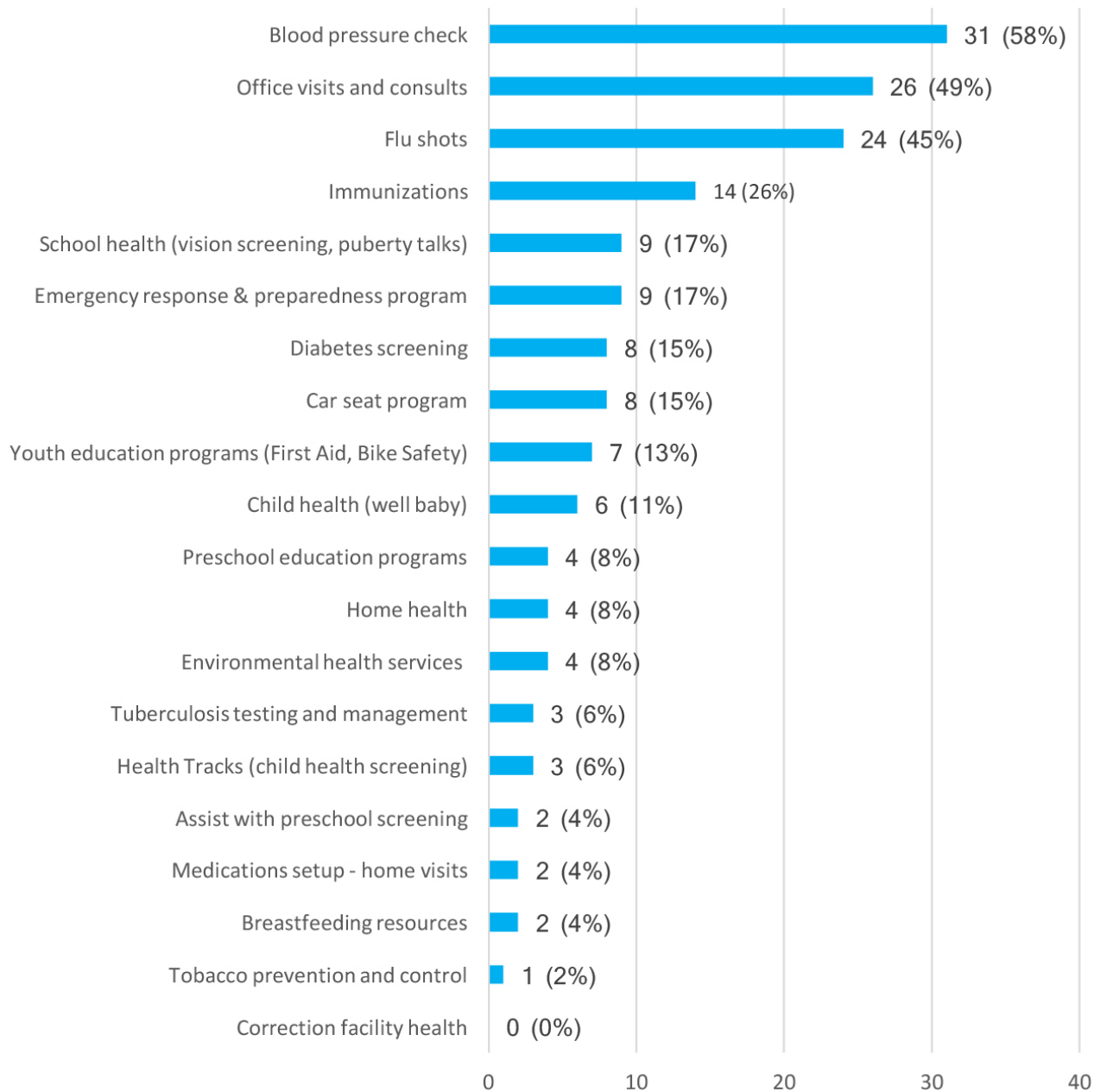
Other biggest challenges that were identified were cost of healthcare, keeping healthcare workers employed at AMC along with keeping AMC running as well, retaining young families and lack of home services for the elderly.

Delivery of Healthcare

Considering a variety of services offered by MDHU, respondents were asked which services they or a family member have used in the past year (Figure 22).

Figure 22: Utilization of Public Health Services

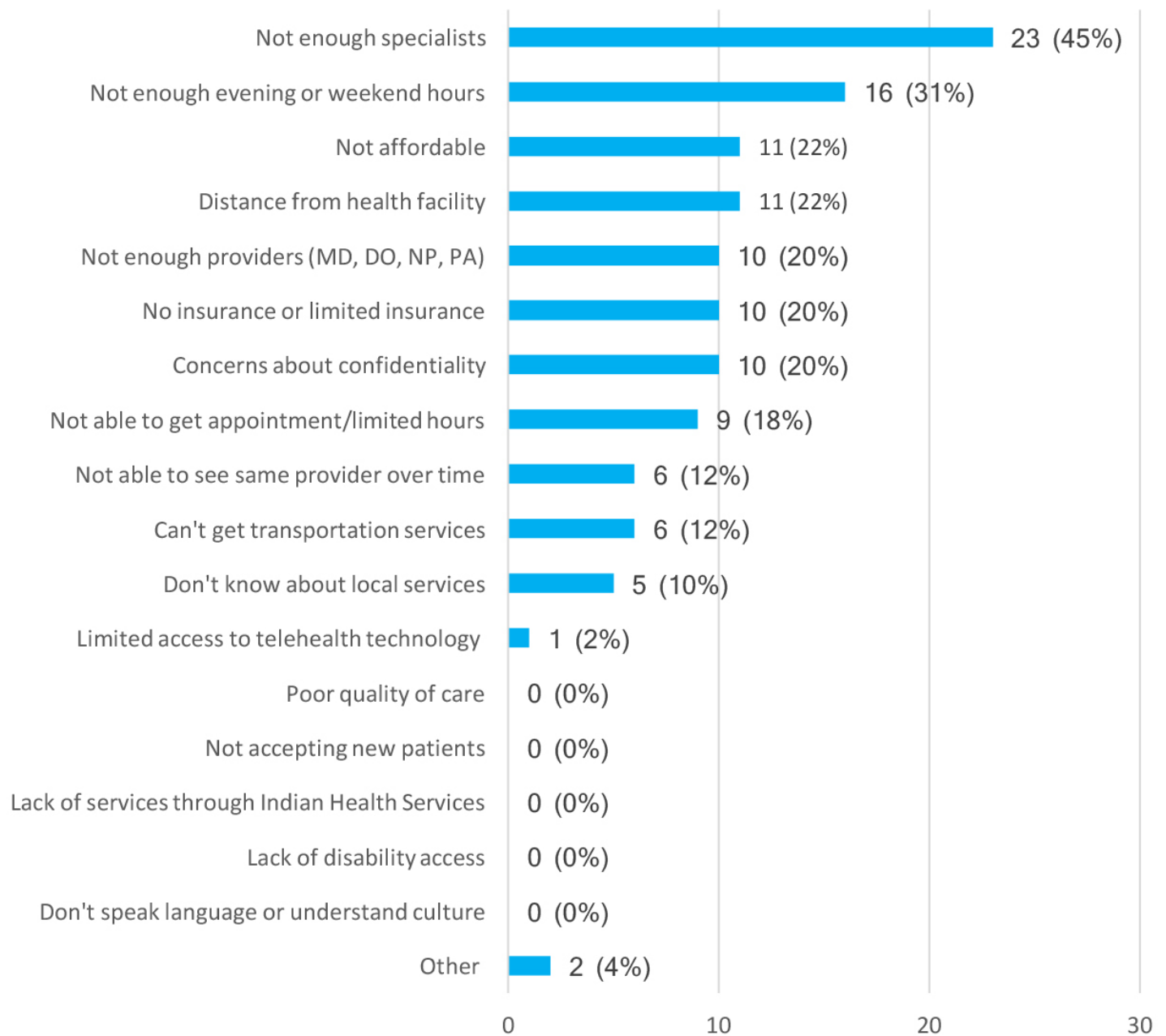
Total responses = 167



The survey asked residents what they see as barriers that prevent them, or other community residents, from receiving healthcare. The most prevalent barrier perceived by residents was not enough specialists (N=23), with the next highest being not enough evening or weekend hours (N=16). After these, the next most commonly identified barriers were care not being affordable (N=11), distance from health facility (N=11), and not enough providers (N=10). The one concern in the “Other” category was not being able to get an appointment with the provider gone frequently.

Figure 23 illustrates these results.

Figure 23: Perceptions about Barriers to Care



In an open-ended question, respondents were asked, if they do not receive healthcare at AMC, what could be done to encourage them to seek care there. The responses included more promotional ads, non-traditional hours, adding services that are currently not available, home healthcare or assisted living needs and name tags.

Figures 24 and 25 show the results from respondents being asked about their awareness of several services offered at AMC even if they are seeing an out-of-town specialist.

Figure 24: Awareness to Have Lab Work and X-rays Done at AMC

Total responses = 63

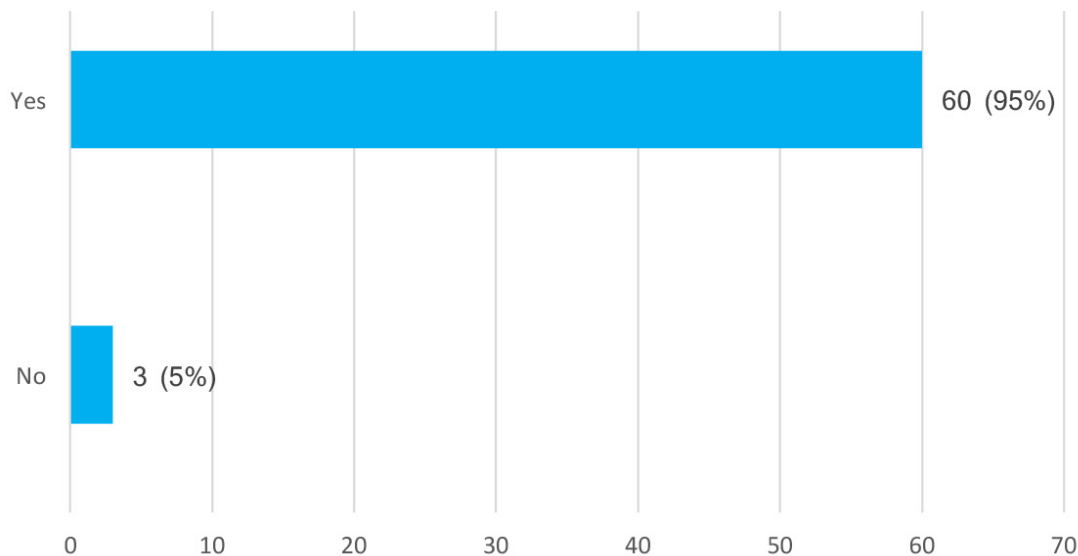
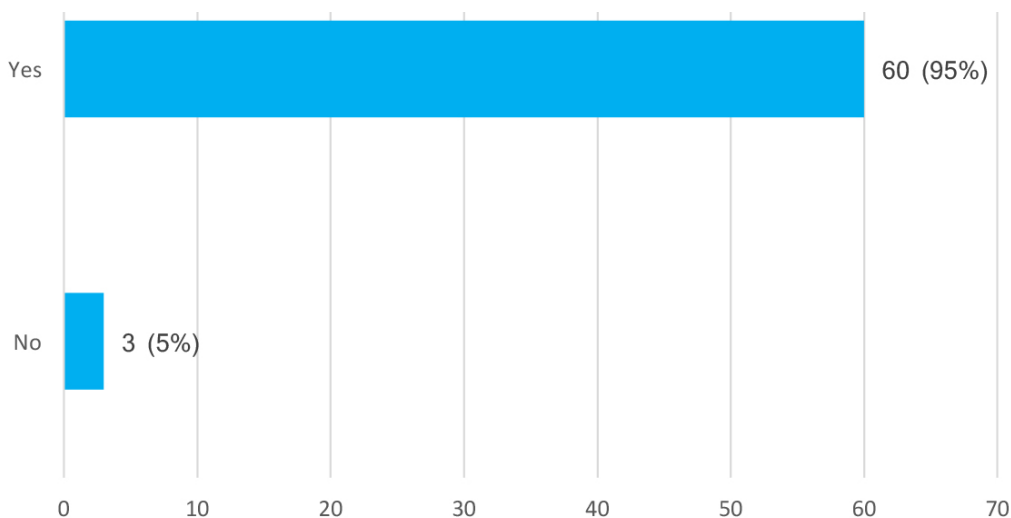


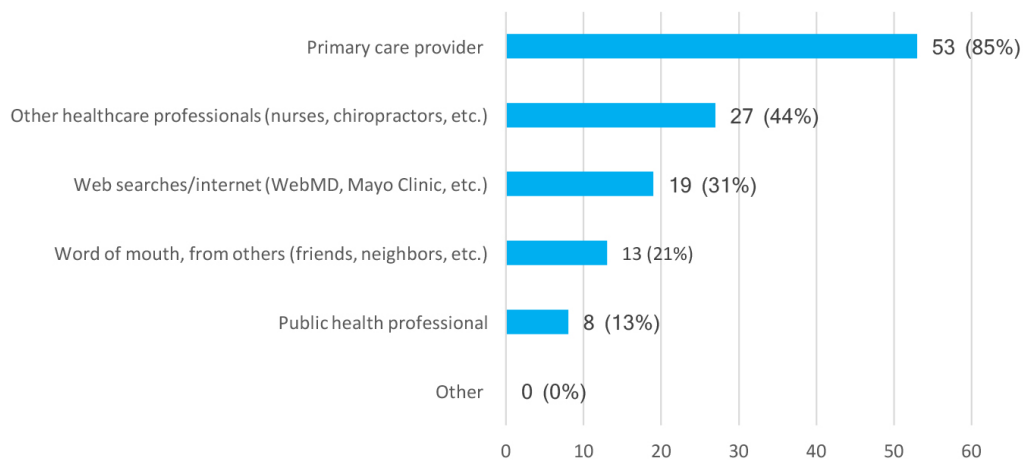
Figure 25: Awareness of Physical Therapy Services at AMC

Total Responses = 63



For Figure 26, community members were asked where they turn to for trusted health information.

Figure 26: Sources of Trusted Health Information



In an open-ended question, respondents were asked what specific healthcare services, if any, they think should be added locally. The number one desired service to add locally was dental services.

- Assisted living facilities
- Cardiology
- Dermatology
- Home health
- Mental health services
- More women's health and children services
- OB/GYN
- Private options for dementia personal care

While not a service, many respondents indicated that they would like to add either a medical or surgical doctor, though some mentioned that they are aware this would not necessarily be practical.

The key informant and focus group members felt that, while community members were generally aware of services offered by the hospital and public health, there were several that were highlighted as possibly being unknown by the general public. For the hospital, these included pediatrics, psych services, prenatal care, acne treatment, Holter monitoring, sleep studies, and mole, wart and skin lesion removal. For public health, members felt that bike safety, car seat services and generally most services that have to do with kids might not be well known. The aforementioned services, along with mammograms, were also cited as needing more marketing.

The final question on the survey asked respondents to share concerns and suggestions to improve the delivery of local healthcare. The most reoccurring response was the request for a local doctor. These community members feel that having a physician that lives in Ashley would be beneficial to their healthcare. Although there were calls for a local surgeon, as stated earlier this was recognized as not being practical for the area. There were also responses pertaining to attaining more quality nurses and other hospital employees, as well as a dentist for the community.

Community members stated concerns about the elderly community, citing a lack of home healthcare services and assisted living options. The cost of services for seniors was mentioned as a concern as well, but also for the general community, including health insurance costs. The need for more activities in the nursing home was included in suggestions for seniors. On the topic of activities, there were comments stating the desire for a gym and fitness center in Ashley.

Some respondents used the question to state their positive interactions with the AMC staff and high quality of care, as well as their satisfaction with the quantity of services provided. However, some members did feel that the services could be advertised more, and perhaps occasional weekend or evening hours could be added.

Findings from Key Informant Interviews & the Community Meeting

Questions about the health and well-being of the community, similar to those posed in the survey, were explored during key informant interviews with community leaders and health professionals and also with the community group at the first meeting. The themes that emerged from these sources were wide-ranging, with some directly associated with healthcare and others more rooted in broader social and community matters.

Generally, overarching issues that developed during the interviews and community meeting can be grouped into five categories (listed in alphabetical order):

- Ability to retain primary care providers (MD, DO, NP, PA) and nurses in the community
- Alcohol use and abuse
- Attracting and retaining young families
- Cost of living for the elderly
- Not enough jobs with livable wages

To provide context for the identified needs, following are some of the comments made by those interviewed about these issues:

Ability to retain primary care providers (MD, DO, NP, PA) and nurses in the community

- We need to look at getting actual doctors instead of just NPs.
- Getting more employees in the hospital should be a priority, and that starts with having a family medicine doctor.

Alcohol use and abuse

- Alcohol consumption in the area, the use and abuse for all ages, is getting out of hand.

Attracting and retaining young families

- Most of the population is elderly and we can't get any younger families to grow the community
- We have an aging population, and we need to attract young workers to come and stay here long-term

Cost of living for the elderly

- A lot of the community is elderly, so the cost of nursing home expenses and healthcare can be a problem for them
- The cost of services cause hardships for the Ashley senior community

Not enough jobs with livable wages

- People aren't able to make enough to support their families
- There is no room for growth because there aren't really jobs with wages to provide for a family

Community Engagement and Collaboration

Key informants and focus group participants were asked to weigh in on community engagement and collaboration of various organizations and stakeholders in the community. Specifically, participants were asked, “On a scale of 1 to 5, with 1 being no collaboration/community engagement and 5 being excellent collaboration/community engagement, how would you rate the collaboration/engagement in the community among these various organizations?” This was not intended to rank services provided. They were presented with a list of 13 organizations or community segments to rank. According to these participants, the hospital, pharmacy, public health, and other long-term care (including nursing homes/assisted living) are the most engaged in the community. The averages of these rankings (with 5 being “excellent” engagement or collaboration) were:



- Emergency services, including ambulance and fire (4.5)
- Hospital (healthcare system) (4.25)
- Business and industry (4.0)
- Faith-based (4.0)
- Public Health (4.0)
- Long-term care, including nursing homes and assisted living (4.0)
- Law enforcement (3.75)
- Schools (3.5)
- Economic development organizations (3.5)
- Clinics not affiliated with the main health system (3.5)
- Pharmacies (3.25)
- Social Services (3.25)
- Other local health providers (3.25)
- Human Services agencies (3.0)

Priority of Health Needs

A Community Group met on May 30, 2019. Ten community members attended the meeting. Representatives from the CRH presented the group with a summary of this report’s findings, including background and explanation about the secondary data, highlights from the survey results (including perceived community assets and concerns, and barriers to care), and findings from the key informant interviews.

Following the presentation of the assessment findings, and after considering and discussing the findings, all members of the group were asked to identify what they perceived as the top four community health needs. All of the potential needs were listed on large poster boards and each member was given four stickers to place next to each of the four needs they considered the most significant.

The results were totaled and the concerns most often cited were:

- Attracting and retaining young families (8 votes)
- Not enough jobs with livable wages (8 votes)
- Having enough child daycare services (6 votes)
- Depression/ anxiety – youth (5 votes)
- Availability of home health – seniors (5 votes)
- Ability to retain primary care providers (3 votes)
- Assisted living options (2 votes)
- Ability to get appointments for health services within 48 hours (1 vote)
- Changes in population size (1 vote)
- Dementia/ Alzheimer’s disease
- Not enough activities for children/youth

From those top three priorities, each person put one sticker on the item they felt was the most important. The rankings were:

1. Attracting and retaining young families (6 votes)
2. Having enough child daycare services (3 votes)
3. Assisted living options (1 vote)
4. Not enough jobs with livable wages (1 vote)

Following the prioritization process during the second meeting of the community group and key informants, the number one identified need was attracting and retaining young families. A summary of this prioritization may be found in Appendix D.

Comparison of Needs Identified Previously

Top Needs Identified 2016 CHNA Process	Top Needs Identified 2019 CHNA Process
Attracting and retaining young families	Attracting and retaining young families
Assisted living options	Having enough child daycare services
Jobs with livable wages	Assisted living options
Availability of resources to help the elderly stay in their homes	Not enough jobs with livable wages

The current process identified almost the exact same needs as the 2016 process. Availability of resources to help the elderly stay in their homes was replaced by having enough child daycare services, but beyond that the community sees the needs identified in the last process to still be concerns in 2019. Having enough child daycare services could be linked to attracting and retaining young families, as not being able to procure these services for children could deter young families from settling in the area.

Hospital and Community Projects and Programs Implemented to Address Needs Identified in 2016

In response to the needs identified in the 2016 CHNA process, the following actions were taken:

Need 1: Attracting and retaining young families – Since the last CHNA process, Ashley Medical Center has been working with other entities in the community. The AMC board consists of members from the city council, business community, and other community boards. The AMC is a member of the chamber of commerce. The AMC and community have welcomed a new business to the community in the past year. There has been an influx of younger families to our community in the past several years, due to expanding of local businesses and affordable housing. The community continues to work together to recruit new families to the community.

Need 2: Lack of assisted living facility – The community was concerned during the last CHNA process about lack of assisted living. The AMC board did research the possibility of converting the eight hospital apartments to assisted living. At this point the conversion is not financially feasible. Increased staffing would be a strain as we do struggle to staff the acute and long-term care facilities. The board will continue to entertain the possibility at a future date.

Need 3: Jobs with livable wages – The community was concerned with livable wages in the community. AMC is competitive with wages in the area. They continue to review and adjust their wages.

Need 4: Availability of resources to help the elderly stay in their homes – Due to the size of the community and limited resources this continues to be an issue. They now can provide palliative and hospice care in the community, since Hospice of the Red River Valley extended its service area to Ashley. The public health department offers services such as medication set up. A visiting nurse program has been discussed, however, there has been no decision made at this point.

Need 5: Shortage of specialists – AMC continues to utilize telemedicine to provide these services, and monthly psych services are provided in conjunction with specialists from Grand Forks. The telehealth program with St. Alexius is utilized for speech, swallow evaluations, and psych as well. These services are planned to continue and expand if possible. Ophthalmology and outpatient surgical services are also offered on a monthly basis. Local medical providers have attended training to provide additional services such as joint injections, Botox and skin fillers, complete skin exams and lesion removal. There are monthly clinic hours available with a general physician at the AMC clinic.

Need 6: Availability of healthcare service concerns – The AMC Facebook page, posters, and local newspaper have been utilized to raise awareness of services, events, and activities provided by AMC. This is an ongoing activity.

The above implementation plan for Ashley Medical Center is posted on AMC's website at <http://www.amctoday.org/contact-us/>.

Next Steps – Strategic Implementation Plan

Although a CHNA and strategic implementation plan are required by hospitals and local public health units considering accreditation, it is important to keep in mind the needs identified, at this point, will be broad community-wide needs along with healthcare system-specific needs. This process is simply a first step to identify needs and determine areas of priority. The second step will be to convene the steering committee, or other community group, to select an agreed upon prioritized need on which to begin working. The strategic planning process will begin with identifying current initiatives, programs, and resources already in place to address the identified community need(s). Additional steps include identifying what is needed and feasible to address (taking community resources into consideration) and what role and responsibility the hospital, clinic, and various community organizations play in developing strategies and implementing specific activities to address the community health needs selected. Community engagement is essential for successfully developing a plan and executing the action steps for addressing one or more of the needs identified.

"If you want to go fast, go alone. If you want to go far, go together." Proverb

Community Benefit Report

While not required, the CRH strongly encourages a review of the most recent Community Benefit Report to determine how/ if it aligns with the needs identified, through the CHNA, as well as the Implementation Plan.

The community benefit requirement is a long-standing requirement of nonprofit hospitals and is reported in Part I of the hospital's Form 990. The strategic implementation requirement was added as part of the ACA's CHNA requirement. It is reported on Part V of the 990. Not-for-profit healthcare organizations demonstrate their commitment to community service through organized and sustainable community benefit programs providing:

- Free and discounted care to those unable to afford healthcare.
- Care to low-income beneficiaries of Medicaid and other indigent care programs.
- Services designed to improve community health and increase access to healthcare.

Community benefit is also the basis of the tax-exemption of not-for-profit hospitals. The Internal Revenue Service (IRS), in its Revenue Ruling 69-545, describes the community benefit standard for charitable tax-exempt hospitals. Since 2008, tax-exempt hospitals have been required to report their community benefit and other information related to tax-exemption on the IRS Form 990 Schedule H.

What Are Community Benefits?

Community benefits are programs or activities that provide treatment and/or promote health and healing as a response to identified community needs. They increase access to healthcare and improve community health.

A community benefit must respond to an identified community need and meet at least one of the following criteria:

- Improve access to healthcare services.
- Enhance health of the community.
- Advance medical or health knowledge.
- Relieve or reduce the burden of government or other community efforts.

A program or activity should not be reported as community benefit if it is:

- Provided for marketing purposes.
- Restricted to hospital employees and physicians.
- Required of all healthcare providers by rules or standards.
- Questionable as to whether it should be reported.
- Unrelated to health or the mission of the organization.

Appendix A – CHNA Survey Instrument



Ashley Area Health Survey

Ashley Medical Center and McIntosh District Public Health are interested in hearing from you about community health concerns.

The focus of this effort is to:

- Learn of the good things in your community as well as concerns in the community
- Understand perceptions and attitudes about the health of the community, and hear suggestions for improvement
- Learn more about how local health services are used by you and other residents



If you prefer, you may take the survey online at <http://tinyurl.com/AshleyND19> or by scanning on the QR Code at the right.

Surveys will be tabulated by the Center for Rural Health at the University of North Dakota School of Medicine and Health Sciences. Your responses are anonymous, and you may skip any question you do not want to answer. Your answers will be combined with other responses and reported only in total. If you have questions about the survey, you may contact Kylie Nissen at 701.777.5380.

Surveys will be accepted through April 18, 2019. Your opinion matters – thank you in advance!

Community Assets: Please tell us about your community by **choosing up to three options** you most agree with in each category below.

1. Considering the **PEOPLE** in your community, the best things are (choose up to THREE):

- | | |
|--|--|
| <input type="checkbox"/> Community is socially and culturally diverse or becoming more diverse | <input type="checkbox"/> People who live here are involved in their community |
| <input type="checkbox"/> Feeling connected to people who live here | <input type="checkbox"/> People are tolerant, inclusive, and open-minded |
| <input type="checkbox"/> Government is accessible | <input type="checkbox"/> Sense that you can make a difference through civic engagement |
| <input type="checkbox"/> People are friendly, helpful, supportive | <input type="checkbox"/> Other (please specify) _____ |

2. Considering the **SERVICES AND RESOURCES** in your community, the best things are (choose up to THREE):

- | | |
|---|---|
| <input type="checkbox"/> Access to healthy food | <input type="checkbox"/> Opportunities for advanced education |
| <input type="checkbox"/> Active faith community | <input type="checkbox"/> Public transportation |
| <input type="checkbox"/> Business district (restaurants, availability of goods) | <input type="checkbox"/> Programs for youth |
| <input type="checkbox"/> Community groups and organizations | <input type="checkbox"/> Quality school systems |
| <input type="checkbox"/> Healthcare | <input type="checkbox"/> Other (please specify) _____ |

3. Considering the **QUALITY OF LIFE** in your community, the best things are (choose up to THREE):

- | | |
|--|--|
| <input type="checkbox"/> Closeness to work and activities | <input type="checkbox"/> Job opportunities or economic opportunities |
| <input type="checkbox"/> Family-friendly; good place to raise kids | <input type="checkbox"/> Safe place to live, little/no crime |
| <input type="checkbox"/> Informal, simple, laidback lifestyle | <input type="checkbox"/> Other (please specify) _____ |

4. Considering the **ACTIVITIES** in your community, the best things are (choose up to THREE):

- | | |
|--|---|
| <input type="checkbox"/> Activities for families and youth | <input type="checkbox"/> Recreational and sports activities |
| <input type="checkbox"/> Arts and cultural activities | <input type="checkbox"/> Year-round access to fitness opportunities |
| <input type="checkbox"/> Local events and festivals | <input type="checkbox"/> Other (please specify) _____ |

Community Concerns: Please tell us about your community by choosing up to three options you most agree with in each category.

5. Considering the **COMMUNITY /ENVIRONMENTAL HEALTH** in your community, concerns are (choose up to THREE):

- | | |
|--|--|
| <input type="checkbox"/> Active faith community | <input type="checkbox"/> Having enough quality school resources |
| <input type="checkbox"/> Attracting and retaining young families | <input type="checkbox"/> Not enough places for exercise and wellness activities |
| <input type="checkbox"/> Not enough jobs with livable wages, not enough to live on | <input type="checkbox"/> Not enough public transportation options, cost of public transportation |
| <input type="checkbox"/> Not enough affordable housing | <input type="checkbox"/> Racism, prejudice, hate, discrimination |
| <input type="checkbox"/> Poverty | <input type="checkbox"/> Traffic safety, including speeding, road safety, seatbelt use, and drunk/distracted driving |
| <input type="checkbox"/> Changes in population size (increasing or decreasing) | <input type="checkbox"/> Physical violence, domestic violence, sexual abuse |
| <input type="checkbox"/> Crime and safety, adequate law enforcement personnel | <input type="checkbox"/> Child abuse |
| <input type="checkbox"/> Water quality (well water, lakes, streams, rivers) | <input type="checkbox"/> Bullying/cyber-bullying |
| <input type="checkbox"/> Air quality | <input type="checkbox"/> Recycling |
| <input type="checkbox"/> Litter (amount of litter, adequate garbage collection) | <input type="checkbox"/> Homelessness |
| <input type="checkbox"/> Having enough child daycare services | <input type="checkbox"/> Other (please specify) _____ |

6. Considering the **AVAILABILITY/DELIVERY OF HEALTH SERVICES** in your community, concerns are (choose up to THREE):

- | | |
|---|---|
| <input type="checkbox"/> Ability to get appointments for health services within 48 hours. | <input type="checkbox"/> Emergency services (ambulance & 911) available 24/7 |
| <input type="checkbox"/> Extra hours for appointments, such as evenings and weekends | <input type="checkbox"/> Ability/willingness of healthcare providers to work together to coordinate patient care within the health system. |
| <input type="checkbox"/> Availability of primary care providers (MD,DO,NP,PA) and nurses | <input type="checkbox"/> Ability/willingness of healthcare providers to work together to coordinate patient care outside the local community. |
| <input type="checkbox"/> Ability to retain primary care providers (MD,DO,NP,PA) and nurses in the community | <input type="checkbox"/> Patient confidentiality (inappropriate sharing of personal health information) |
| <input type="checkbox"/> Availability of public health professionals | <input type="checkbox"/> Not comfortable seeking care where I know the employees at the facility on a personal level |
| <input type="checkbox"/> Availability of specialists | <input type="checkbox"/> Quality of care |
| <input type="checkbox"/> Not enough health care staff in general | <input type="checkbox"/> Cost of health care services |
| <input type="checkbox"/> Availability of wellness and disease prevention services | <input type="checkbox"/> Cost of prescription drugs |
| <input type="checkbox"/> Availability of mental health services | <input type="checkbox"/> Cost of health insurance |
| <input type="checkbox"/> Availability of substance use disorder/treatment services | <input type="checkbox"/> Adequacy of health insurance (concerns about out-of-pocket costs) |
| <input type="checkbox"/> Availability of hospice | <input type="checkbox"/> Understand where and how to get health insurance |
| <input type="checkbox"/> Availability of dental care | <input type="checkbox"/> Adequacy of Indian Health Service or Tribal Health Services |
| <input type="checkbox"/> Availability of vision care | <input type="checkbox"/> Other (please specify) _____ |

7. Considering the **YOUTH POPULATION** in your community, concerns are (choose up to THREE):

- | | |
|--|--|
| <input type="checkbox"/> Alcohol use and abuse | <input type="checkbox"/> Diseases that can spread, such as sexually transmitted diseases or AIDS |
| <input type="checkbox"/> Drug use and abuse (including prescription drug abuse) | <input type="checkbox"/> Wellness and disease prevention, including vaccine-preventable diseases |
| <input type="checkbox"/> Smoking and tobacco use, exposure to second-hand smoke, or vaping/juuling | <input type="checkbox"/> Not getting enough exercise/physical activity |
| <input type="checkbox"/> Cancer | <input type="checkbox"/> Obesity/overweight |
| <input type="checkbox"/> Diabetes | <input type="checkbox"/> Hunger, poor nutrition |
| <input type="checkbox"/> Depression/anxiety | <input type="checkbox"/> Crime |
| <input type="checkbox"/> Stress | <input type="checkbox"/> Graduating from high school |
| <input type="checkbox"/> Suicide | <input type="checkbox"/> Availability of disability services |
| <input type="checkbox"/> Not enough activities for children and youth | <input type="checkbox"/> Other (please specify) _____ |
| <input type="checkbox"/> Teen pregnancy | |
| <input type="checkbox"/> Sexual health | |

8. Considering the **ADULT POPULATION** in your community, concerns are (choose up to THREE):

- | | |
|---|--|
| <input type="checkbox"/> Alcohol use and abuse | <input type="checkbox"/> Stress |
| <input type="checkbox"/> Drug use and abuse (including prescription drug abuse) | <input type="checkbox"/> Suicide |
| <input type="checkbox"/> Smoking and tobacco use, exposure to second-hand smoke | <input type="checkbox"/> Diseases that can spread, such as sexually transmitted diseases or AIDS |
| <input type="checkbox"/> Cancer | <input type="checkbox"/> Wellness and disease prevention, including vaccine-preventable diseases |
| <input type="checkbox"/> Lung disease (i.e. emphysema, COPD, asthma) | <input type="checkbox"/> Not getting enough exercise/physical activity |
| <input type="checkbox"/> Diabetes | <input type="checkbox"/> Obesity/overweight |
| <input type="checkbox"/> Heart disease | <input type="checkbox"/> Hunger, poor nutrition |
| <input type="checkbox"/> Hypertension | <input type="checkbox"/> Availability of disability services |
| <input type="checkbox"/> Dementia/Alzheimer's disease | <input type="checkbox"/> Other (please specify) _____ |
| <input type="checkbox"/> Other chronic diseases: _____ | |
| <input type="checkbox"/> Depression/anxiety | |

9. Considering the **SENIOR POPULATION** in your community, concerns are (choose up to THREE):

- | | |
|---|---|
| <input type="checkbox"/> Ability to meet needs of older population | <input type="checkbox"/> Availability of transportation for seniors |
| <input type="checkbox"/> Long-term/nursing home care options | <input type="checkbox"/> Availability of home health |
| <input type="checkbox"/> Assisted living options | <input type="checkbox"/> Not getting enough exercise/physical activity |
| <input type="checkbox"/> Availability of resources to help the elderly stay in their homes | <input type="checkbox"/> Depression/anxiety |
| <input type="checkbox"/> Availability/cost of activities for seniors | <input type="checkbox"/> Suicide |
| <input type="checkbox"/> Availability of resources for family and friends caring for elders | <input type="checkbox"/> Alcohol use and abuse |
| <input type="checkbox"/> Quality of elderly care | <input type="checkbox"/> Drug use and abuse (including prescription drug abuse) |
| <input type="checkbox"/> Cost of long-term/nursing home care | <input type="checkbox"/> Availability of activities for seniors |
| | <input type="checkbox"/> Elder abuse |
| | <input type="checkbox"/> Other (please specify) _____ |

10. What single issue do you feel is the biggest challenge facing your community?

Delivery of Healthcare

11. Which of the following **SERVICES** provided by your local **PUBLIC HEALTH** unit have you or a family member used in the past year? (Choose ALL that apply)

- | | |
|--|--|
| <input type="checkbox"/> Blood pressure check | <input type="checkbox"/> Home health |
| <input type="checkbox"/> Breastfeeding resources | <input type="checkbox"/> Immunizations |
| <input type="checkbox"/> Car seat program | <input type="checkbox"/> Medications setup—home visits |
| <input type="checkbox"/> Child health (well baby) | <input type="checkbox"/> Office visits and consults |
| <input type="checkbox"/> Correction facility health | <input type="checkbox"/> School health (vision screening, puberty talks, school immunizations) |
| <input type="checkbox"/> Diabetes screening | <input type="checkbox"/> Preschool education programs |
| <input type="checkbox"/> Emergency response & preparedness program | <input type="checkbox"/> Assist with preschool screening |
| <input type="checkbox"/> Flu shots | <input type="checkbox"/> Tobacco prevention and control |
| <input type="checkbox"/> Environmental health services (water, sewer, health hazard abatement) | <input type="checkbox"/> Tuberculosis testing and management |
| <input type="checkbox"/> Health Tracks (child health screening) | <input type="checkbox"/> Youth education programs (First Aid, Bike Safety) |

12. What **PREVENTS** community residents from receiving healthcare? (Choose ALL that apply)

- | | |
|---|--|
| <input type="checkbox"/> Can't get transportation services | <input type="checkbox"/> Not able to get appointment/limited hours |
| <input type="checkbox"/> Concerns about confidentiality | <input type="checkbox"/> Not able to see same provider over time |
| <input type="checkbox"/> Distance from health facility | <input type="checkbox"/> Not accepting new patients |
| <input type="checkbox"/> Don't know about local services | <input type="checkbox"/> Not affordable |
| <input type="checkbox"/> Don't speak language or understand culture | <input type="checkbox"/> Not enough providers (MD, DO, NP, PA) |
| <input type="checkbox"/> Lack of disability access | <input type="checkbox"/> Not enough evening or weekend hours |
| <input type="checkbox"/> Lack of services through Indian Health Services | <input type="checkbox"/> Not enough specialists |
| <input type="checkbox"/> Limited access to telehealth technology (patients seen by providers at another facility through a monitor/TV screen) | <input type="checkbox"/> Poor quality of care |
| <input type="checkbox"/> No insurance or limited insurance | <input type="checkbox"/> Other (please specify) _____ |

13. If you do not receive health care at Ashley Medical Center what can we do to encourage you to seek health care at AMC? _____

14. Are you aware that you can have laboratory work and general x-rays completed at Ashley Medical Center, even if you are seeing an out-of-town specialist? (Example: Pre-op work up or follow up lab or x-ray)

- ☐ Yes
- ☐ No

15. Are you aware that you can get physical therapy services at Ashley Medical Center for all ages after you have a procedure at another facility? (Example: Following knee or shoulder surgery)

- ☐ Yes
- ☐ No

16. Where do you turn for trusted health information? (Choose ALL that apply)

- | | |
|--|--|
| <input type="checkbox"/> Other healthcare professionals (nurses, chiropractors, dentists, etc.) | <input type="checkbox"/> Web searches/internet (WebMD, Mayo Clinic, Healthline, etc.) |
| <input type="checkbox"/> Primary care provider (doctor, nurse practitioner, physician assistant) | <input type="checkbox"/> Word of mouth, from others (friends, neighbors, co-workers, etc.) |
| <input type="checkbox"/> Public health professional | <input type="checkbox"/> Other (please specify) _____ |

17. What specific healthcare services, if any, do you think should be added locally?

Demographic Information: Please tell us about yourself.

18. Do you work for the hospital, clinic, or public health unit?

☐ Yes

☐ No

19. Health insurance or health coverage status (choose ALL that apply):

- | | | |
|--|---------------------------------------|--|
| <input type="checkbox"/> Indian Health Service (IHS) | <input type="checkbox"/> Medicaid | <input type="checkbox"/> Veteran's Healthcare Benefits |
| <input type="checkbox"/> Insurance through employer | <input type="checkbox"/> Medicare | <input type="checkbox"/> Other (please specify) _____ |
| <input type="checkbox"/> Self-purchased insurance | <input type="checkbox"/> No insurance | |

20. Age:

- | | | |
|---|---|---|
| <input type="checkbox"/> Less than 18 years | <input type="checkbox"/> 35 to 44 years | <input type="checkbox"/> 65 to 74 years |
| <input type="checkbox"/> 18 to 24 years | <input type="checkbox"/> 45 to 54 years | <input type="checkbox"/> 75 years and older |
| <input type="checkbox"/> 25 to 34 years | <input type="checkbox"/> 55 to 64 years | |

21. Highest level of education:

- | | | |
|---|--|--|
| <input type="checkbox"/> Less than high school | <input type="checkbox"/> Some college/technical degree | <input type="checkbox"/> Bachelor's degree |
| <input type="checkbox"/> High school diploma or GED | <input type="checkbox"/> Associate's degree | <input type="checkbox"/> Graduate or professional degree |

22. Gender:

- | | | |
|---------------------------------|-------------------------------|--------------------------------------|
| <input type="checkbox"/> Female | <input type="checkbox"/> Male | <input type="checkbox"/> Transgender |
|---------------------------------|-------------------------------|--------------------------------------|

23. Employment status:

- | | | |
|------------------------------------|--|-------------------------------------|
| <input type="checkbox"/> Full time | <input type="checkbox"/> Homemaker | <input type="checkbox"/> Unemployed |
| <input type="checkbox"/> Part time | <input type="checkbox"/> Multiple job holder | <input type="checkbox"/> Retired |

24. Your zip code: _____

25. Race/Ethnicity (choose ALL that apply):

- | | | |
|---|---|---|
| <input type="checkbox"/> American Indian | <input type="checkbox"/> Hispanic/Latino | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> African American | <input type="checkbox"/> Pacific Islander | <input type="checkbox"/> Prefer not to answer |
| <input type="checkbox"/> Asian | <input type="checkbox"/> White/Caucasian | |

26. Annual household income before taxes:

- | | | |
|---|---|---|
| <input type="checkbox"/> Less than \$15,000 | <input type="checkbox"/> \$50,000 to \$74,999 | <input type="checkbox"/> \$150,000 and over |
| <input type="checkbox"/> \$15,000 to \$24,999 | <input type="checkbox"/> \$75,000 to \$99,999 | <input type="checkbox"/> Prefer not to answer |
| <input type="checkbox"/> \$25,000 to \$49,999 | <input type="checkbox"/> \$100,000 to \$149,999 | |

27. Overall, please share concerns and suggestions to improve the delivery of local healthcare.

Thank you for assisting us with this important survey!

Appendix B – County Health Rankings Explained

Source: <http://www.countyhealthrankings.org/>

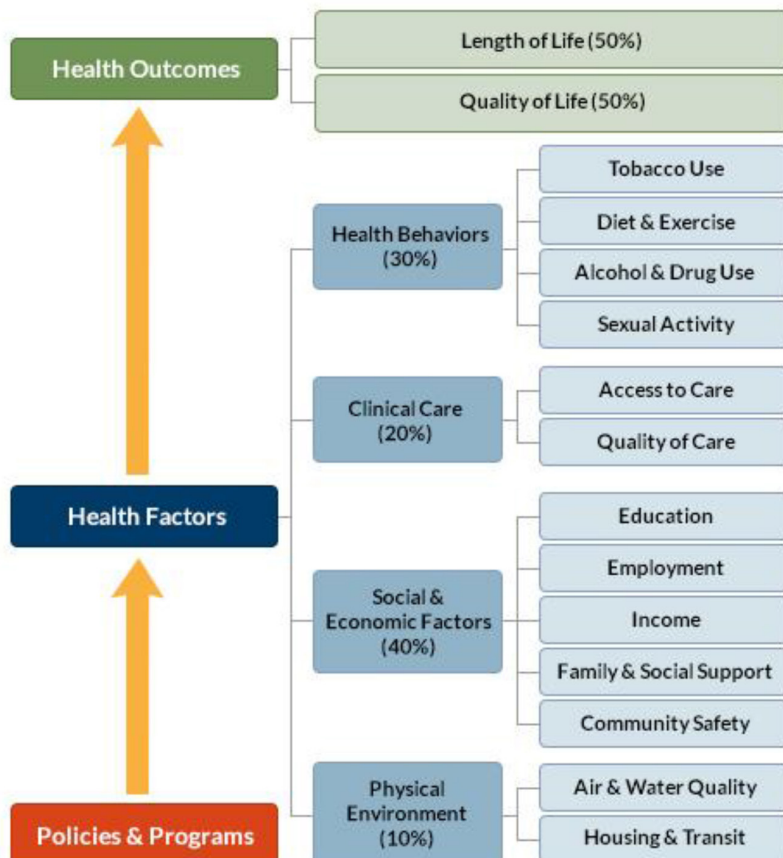
Methods

The County Health Rankings, a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, measure the health of nearly all counties in the nation and rank them within states. The Rankings are compiled using county-level measures from a variety of national and state data sources. These measures are standardized and combined using scientifically-informed weights.

What is Ranked

The County Health Rankings are based on counties and county equivalents (ranked places). Any entity that has its own Federal Information Processing Standard (FIPS) county code is included in the Rankings. We only rank counties and county equivalents within a state. The major goal of the Rankings is to raise awareness about the many factors that influence health and that health varies from place to place, not to produce a list of the healthiest 10 or 20 counties in the nation and only focus on that.

Ranking System



The County Health Rankings model (shown above) provides the foundation for the entire ranking process.

Counties in each of the 50 states are ranked according to summaries of a variety of health measures. Those having high ranks, e.g. 1 or 2, are considered to be the “healthiest.” Counties are ranked relative to the health of other counties in the same state. We calculate and rank eight summary composite scores:

1. **Overall Health Outcomes**
2. Health Outcomes – **Length of life**
3. Health Outcomes – **Quality of life**
4. **Overall Health Factors**
5. Health Factors – **Health behaviors**
6. Health Factors – **Clinical care**
7. Health Factors – **Social and economic factors**
8. Health Factors – **Physical environment**

Data Sources and Measures

The County Health Rankings team synthesizes health information from a variety of national data sources to create the Rankings. Most of the data used are public data available at no charge. Measures based on vital statistics, sexually transmitted infections, and Behavioral Risk Factor Surveillance System (BRFSS) survey data were calculated by staff at the National Center for Health Statistics and other units of the Centers for Disease Control and Prevention (CDC). Measures of healthcare quality were calculated by staff at The Dartmouth Institute.

Data Quality

The County Health Rankings team draws upon the most reliable and valid measures available to compile the Rankings. Where possible, margins of error (95% confidence intervals) are provided for measure values. In many cases, the values of specific measures in different counties are not statistically different from one another; however, when combined using this model, those various measures produce the different rankings.

Calculating Scores and Ranks

The County Health Rankings are compiled from many different types of data. To calculate the ranks, they first standardize each of the measures. The ranks are then calculated based on weighted sums of the standardized measures within each state. The county with the lowest score (best health) gets a rank of #1 for that state and the county with the highest score (worst health) is assigned a rank corresponding to the number of places we rank in that state.

Health Outcomes and Factors

Source: <http://www.countyhealthrankings.org/explore-health-rankings/what-and-why-we-rank>

Health Outcomes

Premature Death (YPLL)

Premature death is the years of potential life lost before age 75 (YPLL-75). Every death occurring before the age of 75 contributes to the total number of years of potential life lost. For example, a person dying at age 25 contributes 50 years of life lost, whereas a person who dies at age 65 contributes 10 years of life lost to a county's YPLL. The YPLL measure is presented as a rate per 100,000 population and is age-adjusted to the 2000 US population.

Reason for Ranking

Measuring premature mortality, rather than overall mortality, reflects the County Health Rankings' intent to focus attention on deaths that could have been prevented. Measuring YPLL allows communities to target resources to high-risk areas and further investigate the causes of premature death.

Poor or Fair Health

Self-reported health status is a general measure of health-related quality of life (HRQoL) in a population. This measure is based on survey responses to the question: "In general, would you say that your health is excellent, very good, good, fair, or poor?" The value reported in the County Health Rankings is the percentage of adult respondents who rate their health "fair" or "poor." The measure is modeled and age-adjusted to the 2000 US population. Please note that the methods for calculating this measure changed in the 2016 Rankings.

Reason for Ranking

Measuring HRQoL helps characterize the burden of disabilities and chronic diseases in a population. Self-reported health status is a widely used measure of people's health-related quality of life. In addition to measuring how long people live, it is important to also include measures that consider how healthy people are while alive.

Poor Physical Health Days

Poor physical health days is based on survey responses to the question: "Thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?" The value reported in the County Health Rankings is the average number of days a county's adult respondents report that their physical health was not good. The measure is age-adjusted to the 2000 US population. Please note that the methods for calculating this measure changed in the 2016 Rankings.

Reason for Ranking

Measuring health-related quality of life (HRQoL) helps characterize the burden of disabilities and chronic diseases in a population. In addition to measuring how long people live, it is also important to include measures of how healthy people are while alive – and people's reports of days when their physical health was not good are a reliable estimate of their recent health.

Poor Mental Health Days

Poor mental health days is based on survey responses to the question: "Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?" The value reported in the County Health Rankings is the average number of days a county's adult respondents report that their mental health was not good. The measure is age-adjusted to the 2000 US population. Please note that the methods for calculating this measure changed in the 2016 Rankings.

Reason for Ranking

Overall health depends on both physical and mental well-being. Measuring the number of days when people report that their mental health was not good, i.e., poor mental health days, represents an important facet of health-related quality of life.

Low Birth Weight

Birth outcomes are a category of measures that describe health at birth. These outcomes, such as low birthweight (LBW), represent a child's current and future morbidity — or whether a child has a “healthy start” — and serve as a health outcome related to maternal health risk.

Reason for Ranking

LBW is unique as a health outcome because it represents multiple factors: infant current and future morbidity, as well as premature mortality risk, and maternal exposure to health risks. The health associations and impacts of LBW are numerous.

In terms of the infant's health outcomes, LBW serves as a predictor of premature mortality and/or morbidity over the life course.[1] LBW children have greater developmental and growth problems, are at higher risk of cardiovascular disease later in life, and have a greater rate of respiratory conditions.[2-4]

From the perspective of maternal health outcomes, LBW indicates maternal exposure to health risks in all categories of health factors, including her health behaviors, access to healthcare, the social and economic environment the mother inhabits, and environmental risks to which she is exposed. Authors have found that modifiable maternal health behaviors, including nutrition and weight gain, smoking, and alcohol and substance use or abuse can result in LBW.[5]

LBW has also been associated with cognitive development problems. Several studies show that LBW children have higher rates of sensorineural impairments, such as cerebral palsy, and visual, auditory, and intellectual impairments.[2,3,6] As a consequence, LBW can “impose a substantial burden on special education and social services, on families and caretakers of the infants, and on society generally.”[7]

Health Factors

Adult Smoking

Adult smoking is the percentage of the adult population that currently smokes every day or most days and has smoked at least 100 cigarettes in their lifetime. Please note that the methods for calculating this measure changed in the 2016 Rankings.

Reason for Ranking

Each year approximately 443,000 premature deaths can be attributed to smoking. Cigarette smoking is identified as a cause of various cancers, cardiovascular disease, and respiratory conditions, as well as low birthweight and other adverse health outcomes. Measuring the prevalence of tobacco use in the population can alert communities to potential adverse health outcomes and can be valuable for assessing the need for cessation programs or the effectiveness of existing programs.

Adult Obesity

Adult obesity is the percentage of the adult population (age 20 and older) that reports a body mass index (BMI) greater than or equal to 30 kg/m².

Reason for Ranking

Obesity is often the result of an overall energy imbalance due to poor diet and limited physical activity. Obesity increases the risk for health conditions such as coronary heart disease, type 2 diabetes, cancer, hypertension, dyslipidemia, stroke, liver and gallbladder disease, sleep apnea and respiratory problems, osteoarthritis, and poor health status.[1,2]

Food Environment Index

The food environment index ranges from 0 (worst) to 10 (best) and equally weights two indicators of the food environment:

- 1) Limited access to healthy foods estimates the percentage of the population that is low income and does not live close to a grocery store. Living close to a grocery store is defined differently in rural and nonrural areas; in rural areas, it means living less than 10 miles from a grocery store whereas in nonrural areas, it means less than 1 mile. “Low income” is defined as having an annual family income of less than or equal to 200 percent of the federal poverty threshold for the family size.
- 2) Food insecurity estimates the percentage of the population who did not have access to a reliable source of food during the past year. A two-stage fixed effects model was created using information from the Community Population Survey, Bureau of Labor Statistics, and American Community Survey.

More information on each of these can be found among the additional measures.

Reason for Ranking

There are many facets to a healthy food environment, such as the cost, distance, and availability of healthy food options. This measure includes access to healthy foods by considering the distance an individual lives from a grocery store or supermarket; there is strong evidence that food deserts are correlated with high prevalence of overweight, obesity, and premature death.[1-3] Supermarkets traditionally provide healthier options than convenience stores or smaller grocery stores.[4]

Additionally, access in regards to a constant source of healthy food due to low income can be another barrier to healthy food access. Food insecurity, the other food environment measure included in the index, attempts to capture the access issue by understanding the barrier of cost. Lacking constant access to food is related to negative health outcomes such as weight-gain and premature mortality.[5,6] In addition to asking about having a constant food supply in the past year, the module also addresses the ability of individuals and families to provide balanced meals further addressing barriers to healthy eating. It is important to have adequate access to a constant food supply, but it may be equally important to have nutritious food available.

Physical Inactivity

Physical inactivity is the percentage of adults age 20 and over reporting no leisure-time physical activity. Examples of physical activities provided include running, calisthenics, golf, gardening, or walking for exercise.

Reason for Ranking

Decreased physical activity has been related to several disease conditions such as type 2 diabetes, cancer, stroke, hypertension, cardiovascular disease, and premature mortality, independent of obesity. Inactivity causes 11% of premature mortality in the United States, and caused more than 5.3 million of the 57 million deaths that occurred worldwide in 2008.[1] In addition, physical inactivity at the county level is related to healthcare expenditures for circulatory system diseases.[2]

Access to Exercise Opportunities

Change in measure calculation in 2018: Access to exercise opportunities measures the percentage of individuals in a county who live reasonably close to a location for physical activity. Locations for physical activity are defined as parks or recreational facilities. Parks include local, state, and national parks. Recreational facilities include YMCAs as well as businesses identified by the following Standard Industry Classification (SIC) codes and include a wide variety of facilities including gyms, community centers, dance studios and pools: 799101, 799102, 799103, 799106, 799107, 799108, 799109, 799110, 799111, 799112, 799201, 799701, 799702, 799703, 799704, 799707, 799711, 799717, 799723, 799901, 799908, 799958, 799969, 799971, 799984, or 799998.

Individuals who:

- reside in a census block within a half mile of a park or
- in urban census blocks: reside within one mile of a recreational facility or

- in rural census blocks: reside within three miles of a recreational facility
- are considered to have adequate access for opportunities for physical activity.

Reason for Ranking

Increased physical activity is associated with lower risks of type 2 diabetes, cancer, stroke, hypertension, cardiovascular disease, and premature mortality, independent of obesity. The role of the built environment is important for encouraging physical activity. Individuals who live closer to sidewalks, parks, and gyms are more likely to exercise.[1-3]

Excessive Drinking

Excessive drinking is the percentage of adults that report either binge drinking, defined as consuming more than 4 (women) or 5 (men) alcoholic beverages on a single occasion in the past 30 days, or heavy drinking, defined as drinking more than one (women) or 2 (men) drinks per day on average. Please note that the methods for calculating this measure changed in the 2011 Rankings and again in the 2016 Rankings.

Reason for Ranking

Excessive drinking is a risk factor for a number of adverse health outcomes, such as alcohol poisoning, hypertension, acute myocardial infarction, sexually transmitted infections, unintended pregnancy, fetal alcohol syndrome, sudden infant death syndrome, suicide, interpersonal violence, and motor vehicle crashes. [1] Approximately 80,000 deaths are attributed annually to excessive drinking. Excessive drinking is the third leading lifestyle-related cause of death in the United States.[2]

Alcohol-Impaired Driving Deaths

Alcohol-impaired driving deaths is the percentage of motor vehicle crash deaths with alcohol involvement.

Reason for Ranking

Approximately 17,000 Americans are killed annually in alcohol-related motor vehicle crashes. Binge/heavy drinkers account for most episodes of alcohol-impaired driving.[1,2]

Sexually Transmitted Infection Rate

Sexually transmitted infections (STI) are measured as the chlamydia incidence (number of new cases reported) per 100,000 population.

Reason for Ranking

Chlamydia is the most common bacterial STI in North America and is one of the major causes of tubal infertility, ectopic pregnancy, pelvic inflammatory disease, and chronic pelvic pain.[1,2] STIs are associated with a significantly increased risk of morbidity and mortality, including increased risk of cervical cancer, infertility, and premature death.[3] STIs also have a high economic burden on society. The direct medical costs of managing sexually transmitted infections and their complications in the US, for example, was approximately 15.6 billion dollars in 2008.[4]

Teen Births

Teen births are the number of births per 1,000 female population, ages 15-19.

Reason for Ranking

Evidence suggests teen pregnancy significantly increases the risk of repeat pregnancy and of contracting a sexually transmitted infection (STI), both of which can result in adverse health outcomes for mothers, children, families, and communities. A systematic review of the sexual risk among pregnant and mothering teens concludes that pregnancy is a marker for current and future sexual risk behavior and adverse outcomes [1]. Pregnant teens are more likely than older women to receive late or no prenatal care, have eclampsia, puerperal endometritis, systemic infections, low birthweight, preterm delivery, and severe neonatal conditions [2, 3]. Pre-term delivery and low birthweight babies have increased risk of child developmental delay, illness, and mortality [4]. Additionally, there are strong ties between teen birth and poor socioeconomic, behavioral, and mental outcomes. Teenage women who bear a child are much less likely to achieve an education level at or

beyond high school, much more likely to be overweight/obese in adulthood, and more likely to experience depression and psychological distress [5-7].

Uninsured

Uninsured is the percentage of the population under age 65 that has no health insurance coverage. The Small Area Health Insurance Estimates uses the American Community Survey (ACS) definition of insured: Is this person CURRENTLY covered by any of the following types of health insurance or health coverage plans: Insurance through a current or former employer or union, insurance purchased directly from an insurance company, Medicare, Medicaid, Medical Assistance, or any kind of government-assistance plan for those with low incomes or a disability, TRICARE or other military healthcare, Indian Health Services, VA or any other type of health insurance or health coverage plan? Please note that the methods for calculating this measure changed in the 2012 Rankings.

Reason for Ranking

Lack of health insurance coverage is a significant barrier to accessing needed healthcare and to maintaining financial security.

The Kaiser Family Foundation released a report in December 2017 that outlines the effects insurance has on access to healthcare and financial independence. One key finding was that “Going without coverage can have serious health consequences for the uninsured because they receive less preventative care, and delayed care often results in serious illness or other health problems. Being uninsured can also have serious financial consequences, with many unable to pay their medical bills, resulting in medical debt.”[1]

Primary Care Physicians

Primary care physicians is the ratio of the population to total primary care physicians. Primary care physicians include non-federal, practicing physicians (M.D.’s and D.O.’s) under age 75 specializing in general practice medicine, family medicine, internal medicine, and pediatrics. Please note this measure was modified in the 2011 Rankings and again in the 2013 Rankings.

Reason for Ranking

Access to care requires not only financial coverage, but also access to providers. While high rates of specialist physicians have been shown to be associated with higher (and perhaps unnecessary) utilization, sufficient availability of primary care physicians is essential for preventive and primary care, and, when needed, referrals to appropriate specialty care.[1,2]

Dentists

Dentists are measured as the ratio of the county population to total dentists in the county.

Reason for Ranking

Untreated dental disease can lead to serious health effects including pain, infection, and tooth loss. Although lack of sufficient providers is only one barrier to accessing oral healthcare, much of the country suffers from shortages. According to the Health Resources and Services Administration, as of December 2012, there were 4,585 Dental Health Professional Shortage Areas (HPSAs), with 45 million people total living in them.[1]

Mental Health Providers

Mental health providers is the ratio of the county population to the number of mental health providers including psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists, mental health providers that treat alcohol and other drug abuse, and advanced practice nurses specializing in mental healthcare. In 2015, marriage and family therapists and mental health providers that treat alcohol and other drug abuse were added to this measure.

Reason for Ranking

Thirty percent of the population lives in a county designated as a Mental Health Professional Shortage Area. As the mental health parity aspects of the Affordable Care Act create increased coverage for mental health services, many anticipate increased workforce shortages.

Preventable Hospital Stays

Preventable hospital stays is the hospital discharge rate for ambulatory care-sensitive conditions per 1,000 fee-for-service Medicare enrollees. Ambulatory care-sensitive conditions include: convulsions, chronic obstructive pulmonary disease, bacterial pneumonia, asthma, congestive heart failure, hypertension, angina, cellulitis, diabetes, gastroenteritis, kidney / urinary infection, and dehydration. This measure is age-adjusted.

Reason for Ranking

Hospitalization for diagnoses treatable in outpatient services suggests that the quality of care provided in the outpatient setting was less than ideal. The measure may also represent a tendency to overuse hospitals as a main source of care.

Diabetes Monitoring

Diabetes monitoring is the percentage of diabetic fee-for-service Medicare patients ages 65-75 whose blood sugar control was monitored in the past year using a test of their glycated hemoglobin (HbA1c) levels.

Reason for Ranking

Regular HbA1c monitoring among diabetic patients is considered the standard of care. It helps assess the management of diabetes over the long term by providing an estimate of how well a patient has managed his or her diabetes over the past two to three months. When hyperglycemia is addressed and controlled, complications from diabetes can be delayed or prevented.

Mammography Screening

Mammography screening is the percentage of female fee-for-service Medicare enrollees age 67-69 that had at least one mammogram over a two-year period.

Reason for Ranking

Evidence suggests that mammography screening reduces breast cancer mortality, especially among older women.[1] A physician's recommendation or referral—and satisfaction with physicians—are major factors facilitating breast cancer screening. The percent of women ages 40-69 receiving a mammogram is a widely endorsed quality of care measure.

Unemployment

Unemployment is the percentage of the civilian labor force, age 16 and older, that is unemployed but seeking work.

Reason for Ranking

The unemployed population experiences worse health and higher mortality rates than the employed population.[1-4] Unemployment has been shown to lead to an increase in unhealthy behaviors related to alcohol and tobacco consumption, diet, exercise, and other health-related behaviors, which in turn can lead to increased risk for disease or mortality, especially suicide.[5] Because employer-sponsored health insurance is the most common source of health insurance coverage, unemployment can also limit access to healthcare.

Children in Poverty

Children in poverty is the percentage of children under age 18 living in poverty. Poverty status is defined by family; either everyone in the family is in poverty or no one in the family is in poverty. The characteristics of the family used to determine the poverty threshold are: number of people, number of related children under 18, and whether or not the primary householder is over age 65. Family income is then compared to the poverty threshold; if that family's income is below that threshold, the family is in poverty. For more information, please see Poverty Definition and/or Poverty.

In the data table for this measure, we report child poverty rates for black, Hispanic and white children. The rates for race and ethnic groups come from the American Community Survey, which is the major source of data used by the Small Area Income and Poverty Estimates to construct the overall county estimates. However, estimates for race and ethnic groups are created using combined five year estimates from 2012-2016.

Reason for Ranking

Poverty can result in an increased risk of mortality, morbidity, depression, and poor health behaviors. A 2011 study found that poverty and other social factors contribute a number of deaths comparable to leading causes of death in the US like heart attacks, strokes, and lung cancer.[1] While repercussions resulting from poverty are present at all ages, children in poverty may experience lasting effects on academic achievement, health, and income into adulthood. Low-income children have an increased risk of injuries from accidents and physical abuse and are susceptible to more frequent and severe chronic conditions and their complications such as asthma, obesity, and diabetes than children living in high income households.[2]

Beginning in early childhood, poverty takes a toll on mental health and brain development, particularly in the areas associated with skills essential for educational success such as cognitive flexibility, sustained focus, and planning. Low income children are more susceptible to mental health conditions like ADHD, behavior disorders, and anxiety which can limit learning opportunities and social competence leading to academic deficits that may persist into adulthood.[2,3] The children in poverty measure is highly correlated with overall poverty rates.

Income Inequality

Income inequality is the ratio of household income at the 80th percentile to that at the 20th percentile, i.e., when the incomes of all households in a county are listed from highest to lowest, the 80th percentile is the level of income at which only 20% of households have higher incomes, and the 20th percentile is the level of income at which only 20% of households have lower incomes. A higher inequality ratio indicates greater division between the top and bottom ends of the income spectrum. Please note that the methods for calculating this measure changed in the 2015 Rankings.

Reason for Ranking

Income inequality within US communities can have broad health impacts, including increased risk of mortality, poor health, and increased cardiovascular disease risks. Inequalities in a community can accentuate differences in social class and status and serve as a social stressor. Communities with greater income inequality can experience a loss of social connectedness, as well as decreases in trust, social support, and a sense of community for all residents.

Children in Single-Parent Households

Children in single-parent households is the percentage of children in family households where the household is headed by a single parent (male or female head of household with no spouse present). Please note that the methods for calculating this measure changed in the 2011 Rankings.

Reason for Ranking

Adults and children in single-parent households are at risk for adverse health outcomes, including mental illness (e.g. substance abuse, depression, suicide) and unhealthy behaviors (e.g. smoking, excessive alcohol use).[1-4] Self-reported health has been shown to be worse among lone parents (male and female) than for parents living as couples, even when controlling for socioeconomic characteristics. Mortality risk is also higher among lone parents.[4,5] Children in single-parent households are at greater risk of severe morbidity and all-cause mortality than their peers in two-parent households.[2,6]

Violent Crime Rate

Violent crime is the number of violent crimes reported per 100,000 population. Violent crimes are defined as offenses that involve face-to-face confrontation between the victim and the perpetrator, including homicide, rape, robbery, and aggravated assault. Please note that the methods for calculating this measure changed in the 2012 Rankings.

Reason for Ranking

High levels of violent crime compromise physical safety and psychological well-being. High crime rates can also deter residents from pursuing healthy behaviors, such as exercising outdoors. Additionally, exposure to crime and violence has been shown to increase stress, which may exacerbate hypertension and other stress-related disorders and may contribute to obesity prevalence.[1] Exposure to chronic stress also contributes to the

increased prevalence of certain illnesses, such as upper respiratory illness, and asthma in neighborhoods with high levels of violence.[2]

Injury Deaths

Injury deaths is the number of deaths from intentional and unintentional injuries per 100,000 population. Deaths included are those with an underlying cause of injury (ICD-10 codes *U01-*U03, V01-Y36, Y85-Y87, Y89).

Reason for Ranking

Injuries are one of the leading causes of death; unintentional injuries were the 4th leading cause, and intentional injuries the 10th leading cause, of US mortality in 2014.[1] The leading causes of death in 2014 among unintentional injuries, respectively, are: poisoning, motor vehicle traffic, and falls. Among intentional injuries, the leading causes of death in 2014, respectively, are: suicide firearm, suicide suffocation, and homicide firearm. Unintentional injuries are a substantial contributor to premature death. Among the following age groups, unintentional injuries were the leading cause of death in 2014: 1-4, 5-9, 10-14, 15-24, 25-34, 35-44.[2] Injuries account for 17% of all emergency department visits, and falls account for over 1/3 of those visits.[3]

Air Pollution-Particulate matter

Air pollution-particulate matter is the average daily density of fine particulate matter in micrograms per cubic meter (PM2.5) in a county. Fine particulate matter is defined as particles of air pollutants with an aerodynamic diameter less than 2.5 micrometers. These particles can be directly emitted from sources such as forest fires, or they can form when gases emitted from power plants, industries and automobiles react in the air.

Reason for Ranking

The relationship between elevated air pollution (especially fine particulate matter and ozone) and compromised health has been well documented.[1,2,3] Negative consequences of ambient air pollution include decreased lung function, chronic bronchitis, asthma, and other adverse pulmonary effects.[1] Long-term exposure to fine particulate matter increases premature death risk among people age 65 and older, even when exposure is at levels below the National Ambient Air Quality Standards.[3]

Drinking Water Violations

Change in measure calculation in 2018: Drinking Water Violations is an indicator of the presence or absence of health-based drinking water violations in counties served by community water systems. Health-based violations include Maximum Contaminant Level, Maximum Residual Disinfectant Level and Treatment Technique violations. A “Yes” indicates that at least one community water system in the county received a violation during the specified time frame, while a “No” indicates that there were no health-based drinking water violations in any community water system in the county. Please note that the methods for calculating this measure changed in the 2016 Rankings.

Reason for Ranking

Recent studies estimate that contaminants in drinking water sicken 1.1 million people each year. Ensuring the safety of drinking water is important to prevent illness, birth defects, and death for those with compromised immune systems. A number of other health problems have been associated with contaminated water, including nausea, lung and skin irritation, cancer, kidney, liver, and nervous system damage.

Severe Housing Problems

Severe housing problems is the percentage of households with at least one or more of the following housing problems:

- housing unit lacks complete kitchen facilities;
- housing unit lacks complete plumbing facilities;
- household is severely overcrowded; or

- household is severely cost burdened.
- Severe overcrowding is defined as more than 1.5 persons per room. Severe cost burden is defined as monthly housing costs (including utilities) that exceed 50% of monthly income.

Reason for Ranking

Good health depends on having homes that are safe and free from physical hazards. When adequate housing protects individuals and families from harmful exposures and provides them with a sense of privacy, security, stability and control, it can make important contributions to health. In contrast, poor quality and inadequate housing contributes to health problems such as infectious and chronic diseases, injuries and poor childhood development.

Appendix C – Youth Behavioral Risk Survey Results

North Dakota High School Survey

*2017 YRBS North Dakota Data is not yet available, so the 2015 data was used.

Rate Increase ↑, rate decrease ↓, or no statistical change = in rate.

	ND 2013	ND 2015*	ND Trend ↑, ↓, =	Rural ND Town Average	Urban ND Town Average	National Average 2017
Injury and Violence						
Percentage of students who rarely or never wore a seat belt.	11.6	8.5	↓	10.5	7.5	5.9
Percentage of students who rode in a vehicle with a driver who had been drinking alcohol (one or more times during the 30 prior to the survey)	21.9	17.7	↓	21.1	15.2	16.5
Percentage of students who talked on a cell phone while driving (on at least 1 day during the 30 days before the survey, among students who drove a car or other vehicle)	67.9	61.4	↓	60.7	58.8	NA
Percentage of students who texted or e-mailed while driving a car or other vehicle (on at least 1 day during the 30 days before the survey, among students who had driven a car or other vehicle during the 30 days before the survey)	59.3	57.6	=	56.7	54.4	39.2
Percentage of students who never or rarely wore a helmet (during the 12 months before the survey, among students who rode a motorcycle)	29.8	28.7	=	32.8	24.7	NA
Percentage of students who carried a weapon on school property (such as a gun, knife, or club on at least 1 day during the 30 days before the survey)	6.4	5.2	=	6.6	4.5	3.8
Percentage of students who were in a physical fight on school property (one or more times during the 12 months before the survey)	8.8	5.4	↓	6.9	6.1	8.5
Percentage of students who were ever physically forced to have sexual intercourse (when they did not want to)	7.7	6.3	=	6.5	7.4	7.4
Percentage of students who experienced physical dating violence (one or more times during the 12 months before the survey, including being hit, slammed into something, or injured with an object or weapon on purpose by someone they were dating or going out with among students who dated or went out with someone during the 12 months before the survey)	9.7	7.6	=	6.9	8.0	8.0
Percentage of students who have been the victim of teasing or name calling because someone thought they were gay, lesbian, or bisexual (during the 12 months before the survey)	9.6	9.7	=	10.4	9.7	NA
Percentage of students who were bullied on school property (during the 12 months before the survey)	25.4	24.0	=	27.5	22.4	19.0
Percentage of students who were electronically bullied (including being bullied through e-mail, chat rooms, instant messaging, websites, or texting during the 12 months before the survey)	17.1	15.9	=	17.7	15.8	14.9
Percentage of students who felt sad or hopeless (almost every day for 2 or more weeks in a row so that they stopped doing some usual activities during the 12 months before the survey)	25.4	27.2	=	24.9	28.9	31.5
Percentage of students who seriously considered attempting suicide (during the 12 months before the survey)	16.1	16.2	=	15.8	16.7	17.2
Percentage of students who made a plan about how they would attempt suicide (during the 12 months before the survey)	13.5	13.5	=	12.8	13.7	13.6
Percentage of students who attempted suicide (one or more times during the 12 months before the survey)	11.5	9.4	↓	10.3	11.3	7.4

	ND 2013	ND 2015*	ND Trend ↑, ↓, =	Rural ND Town Average	Urban ND Town Average	National Average 2017
Tobacco Use						
Percentage of students who ever tried cigarette smoking (even one or two puffs)	41.4	35.1	↓	37.3	32.5	28.9
Percentage of students who smoked a whole cigarette before age 13 years (for the first time)	7.9	7.2	=	7.3	6.7	9.5
Percentage of students who currently smoked cigarettes (on at least 1 day during the 30 days before the survey)	19.0	11.7	↓	13.2	11.8	8.8
Percentage of students who currently frequently smoked cigarettes (on 20 or more days during the 30 days before the survey)	6.6	4.3	↓	4.3	4.7	2.6
Percentage of students who currently smoked cigarettes daily (on all 30 days during the 30 days before the survey)	3.9	3.2	=	3.2	3.2	2.0
Percentage of students who usually obtained their own cigarettes by buying them in a store or gas station (during the 30 days before the survey among students who currently smoked cigarettes and who were aged <18 years)	7.8	16.9	↑	0.2	1.0	NA
Percentage of students who tried to quit smoking cigarettes (among students who currently smoked cigarettes during the 12 months before the survey)	55.5	47.4	=	49.1	52.7	NA
Percentage of students who currently use an electronic vapor product (e-cigarettes, vape e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens at least 1 day during the 30 days before the survey)	NA	22.3	↑	19.7	22.8	13.2
Percentage of students who currently used smokeless tobacco (chewing tobacco, snuff, or dip on at least 1 day during the 30 days before the survey)	13.8	10.6	↓	12.6	9.5	5.5
Percentage of students who currently smoked cigars (cigars, cigarillos, or little cigars on at least 1 day during the 30 days before the survey)	11.7	9.2	↓	9.7	9.7	8.0
Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey)	27.5	20.9	↓	22.9	19.8	14.0
Alcohol and Other Drug Use						
Percentage of students who ever drank alcohol (at least one drink of alcohol on at least 1 day during their life)	65.8	62.1	=	64.5	59.9	60.4
Percentage of students who drank alcohol before age 13 years (for the first time other than a few sips)	15.2	12.4	=	15.3	12.9	15.5
Percentage of students who currently drank alcohol (at least one drink of alcohol on at least 1 day during the 30 days before the survey)	35.3	30.8	↓	32.8	29.3	29.8
Percentage of students who drank five or more drinks of alcohol in a row (within a couple of hours on at least 1 day during the 30 days before the survey)	21.9	17.6	↓	19.8	17.0	13.5
Percentage of students who usually obtained the alcohol they drank by someone giving it to them (among students who currently drank alcohol)	37.0	41.3	=	41.1	40.4	43.5
Percentage of students who tried marijuana before age 13 years (for the first time)	5.6	6.3	=	5.8	5.8	6.8
Percentage of students who currently used marijuana (one or more times during the 30 days before the survey)	15.9	15.2	=	13.2	17.1	19.8
Percentage of students who ever took prescription drugs without a doctor's prescription (such as OxyContin, Percocet, Vicodin, codeine, Adderall, Ritalin, or Xanax, one or more times during their life)	17.6	14.5	↓	13.2	16.0	14.0
Percentage of students who were offered, sold, or given an illegal drug on school property (during the 12 months before the survey)	14.1	18.2	↑	15.9	19.9	19.8

	ND 2013	ND 2015*	ND Trend ↑, ↓, =	Rural ND Town Average	Urban ND Town Average	National Average 2017
Percentage of students who attended school under the influence of alcohol or other drugs (on at least one day during the 30 days before the survey)	9.9	8.6	=	7.9	9.0	NA
Sexual Behaviors						
Percentage of students who ever had sexual intercourse	44.9	38.9	↓	39.3	39.1	39.5
Percentage of students who had sexual intercourse before age 13 years (for the first time)	3.8	2.6	=	3.3	3.3	3.4
Weight Management and Dietary Behaviors						
Percentage of students who were overweight (≥ 85th percentile but <95th percentile for body mass index, based on sex and age-specific reference data from the 2000 CDC growth chart)	15.1	14.7	=	15.4	14.6	15.6
Percentage of students who were obese (≥ 95th percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth chart)	13.5	14.0	=	16.3	12.9	14.8
Percentage of students who described themselves as slightly or very overweight	32.0	32.2	=	34.2	31.5	31.5
Percentage of students who were trying to lose weight	45.4	44.7	=	45.0	43.0	47.1
Percentage of students who did not eat fruit or drink 100% fruit juices (during the 7 days before the survey)	3.4	3.9	=	4.3	4.1	5.6
Percentage of students who ate fruit or drank 100% fruit juices one or more times per day (during the 7 days before the survey)	64.7	62.5	=	8.5	8.8	60.8
Percentage of students who did not eat vegetables (green salad, potatoes [excluding French fries, fried potatoes, or potato chips], carrots, or other vegetables, during the 7 days before the survey)	6.0	4.7	=	4.5	5.2	7.2
Percentage of students who ate vegetables one or more times per day (green salad, potatoes [excluding French fries, fried potatoes, or potato chips], carrots, or other vegetables, during the 7 days before the survey)	62.8	58.5	↓	61.2	60.0	59.4
Percentage of students who did not drink a can, bottle, or glass of soda or pop (not including diet soda or diet pop, during the 7 days before the survey)	25.3	25.6	=	23.5	21.7	27.8
Percentage of students who drank a can, bottle, or glass of soda or pop one or more times per day (not including diet soda or diet pop, during the 7 days before the survey)	23.4	18.7	=	21.4	18.0	18.7
Percentage of students who did not drink milk (during the 7 days before the survey)	11.1	13.9	↑	11.6	13.7	26.7
Percentage of students who drank two or more glasses per day of milk (during the 7 days before the survey)	42.4	35.8	↓	36.6	35.3	17.5
Percentage of students who did not eat breakfast (during the 7 days before the survey)	10.5	11.9	=	10.7	11.8	14.1
Percentage of students who most of the time or always went hungry because there was not enough food in their home (during the 30 days before the survey)	3.1	2.2	=	2.4	2.8	NA
Physical Activity						
Percentage of students who were physically active at least 60 minutes per day on 5 or more days (doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the 7 days before the survey)	50.6	51.3	=	51.7	50.1	46.5
Percentage of students who watched television 3 or more hours per day (on an average school day)	21.0	18.9	=	20.7	18.2	20.7
Percentage of students who played video or computer games or used a computer 3 or more hours per day (for something that was not school work on an average school day)	34.4	38.6	↑	39.4	38.0	43.0

	ND 2013	ND 2015*	ND Trend ↑, ↓, =	Rural ND Town Average	Urban ND Town Average	National Average 2017
Other						
Percentage of students who had 8 or more hours of sleep (on an average school night)	30.0	29.5	=	34.5	28.7	25.4
Percentage of students who brushed their teeth on seven days (during the 7 days before the survey)	71.5	71.0	=	67.8	70.1	NA
Percentage of students who most of the time or always wear sunscreen (with an SPF of 15 or higher when they are outside for more than one hour on a sunny day)	11.2	12.5	=	10.3	12.8	NA
Percentage of students who used an indoor tanning device (such as a sunlamp, sunbed, or tanning booth [not including getting a spray-on tan] one or more times during the 12 months before the survey)	19.6	12.2	↓	13.3	12.8	NA

Appendix D – Prioritization of Community’s Health Needs

Community Health Needs Assessment

Ashley, North Dakota

Ranking of Concerns

The top four concerns for each of the seven topic areas, based on the community survey results, were listed on flipcharts. The numbers below indicate the total number of votes (dots) by the people in attendance at the second community meeting. The “Priorities” column lists the number of yellow/green/blue dots placed on the concerns indicating which areas are felt to be priorities. Each person was given four dots to place on the items they felt were priorities. The “Most Important” column lists the number of red dots placed on the flipcharts. After the first round of voting, the top five priorities were selected based on the highest number of votes. Each person was given one dot to place on the item they felt was the most important priority of the top five highest ranked priorities.

	Priorities	Most Important
COMMUNITY/ENVIRONMENTAL HEALTH CONCERNS		
Attracting & retaining young families	8	6
Changes in population size	1	
Having enough child daycare services	6	3
Not enough jobs with livable wages	8	1
AVAILABILITY/DELIVERY OF HEALTH SERVICES CONCERNS		
Ability to retain primary care providers (MD, DO, NP, PA)	3	
Ability to get appointments for health services within 48 hours	1	
Availability of dental care	0	
Availability of specialists	0	
YOUTH POPULATION HEALTH CONCERNS		
Alcohol use and abuse	0	
Depression/anxiety	5	
Not enough activities for children/youth	1	
Smoking & tobacco use, second-hand smoke or vaping/juuling	0	
ADULT POPULATION HEALTH CONCERNS		
Cancer	0	
Dementia/Alzheimer’s disease	1	
Not getting enough exercise/physical activity	0	
Stress	0	
SENIOR POPULATION HEALTH CONCERNS		
Assisted living options	2	1
Availability of home health	5	
Availability of resources to help elderly stay in their homes	0	
Cost of long-term/nursing home care	0	

Appendix E – Survey “Other” Responses

The number in parenthesis () indicates the number of people who indicated that EXACT same answer. All comments below are directly taken from the survey results and have not been summarized.

Community Assets: Please tell us about your community by choosing up to three options you most agree with in each category below.

2. Considering the SERVICES AND RESOURCES in your community, the best things are: “Other” responses:
 - There really isn’t any
3. Considering the QUALITY OF LIFE in your community, the best things are: “Other” responses:
 - Faith-based community

Community Concerns: Please tell us about your community by choosing up to three options you most agree with in each category.

5. Considering the COMMUNITY / ENVIRONMENTAL HEALTH in your community, concerns are: “Other” responses:
 - Getting young people to settle here – no jobs for them
 - In-home senior services
 - No assisted living options or home healthcare service options
6. Considering the AVAILABILITY / DELIVERY OF HEALTH SERVICES in your community, concerns are: “Other” responses:
 - Lack of services to keep seniors in their homes
 - Longer pharmacy hours
10. What single issue do you feel is the biggest challenge facing your community?
 - Aging population, decline in census
 - Attracting and keeping families
 - Cost of care
 - Cost of long-term / nursing home care
 - Daycare
 - Declining population and limited resources to provide services
 - Declining population due to aging population adequate employment; opportunities for young workers – to attract them to come here and stay long-term
 - Decreasing population
 - Dwindling population – too few job opportunities for younger people
 - Horrible schooling / activities for teens
 - I’m deeply concerned with the future of AMC building – staffing especially those directly involved (CNAs)
 - Jobs
 - Jobs – being on welfare too easy
 - Keeping elderly in their homes, home health lacking, and homemaker services
 - Keeping healthcare workers employed at the hospital
 - Low-paying jobs – not enough people to join the workforce / younger ones don’t want to work

- Main population growth are senior-aged people
- Need for a medical doctor
- No assisted living
- No in-home services aging in place
- No jobs
- Not enough resources and attractions for young families to be enticed to move here
- Our protection in community sheriff dept. needs to do more
- People don't care like they used to
- Population decline
- Reduced population
- Retaining young families and providing the services they need like childcare/ daycare as well as livable wages or long-term care
- The decline in young families
- Work for young people so more would move back to Ashley

Delivery of Healthcare

12. What PREVENTS community residents from receiving healthcare? "Other" responses:

- Can't always get an appointment provider gone a lot
- Have go – tests more test, was told nothing is wrong, wanted more tests

17. What specific healthcare services, if any, do you think should be added locally?

- A doctor would be nice but not practical
- A local doctor
- A medical and surgical doctor
- Assisted living facilities, home health services
- Assisted living; more activities at the nursing home
- Cardiologist and dermatologist
- Dental
- Dentist
- Home health
- I receive what I need right now
- Mental health services on site
- More women's health and children services
- OB, home health/ hospice that is hospital run, not from an hour away
- OB/GYN
- Orthopedic, cardiologist
- Resident surgery MD
- Senior aging dementia personal care private options

27. Overall, please share concerns and suggestions to improve the delivery of local healthcare.

- Advertise services; once a month weekend or evening hours
- Cost of healthcare and cost of insurance, availability of non-traditional hours for appointments
- Get a full-time MD that lives in Ashley
- Good nurses and other hospital employees

- I am so thankful for AMC and many services and quality of care it provides; it has saved out family a lot of travel to Bismarck or other places when we are needing healthcare services; thank you for your work!
- It is good what we have for a smaller town our size; facilities are good and care providers are knowledgeable
- Need a hospital foundation to better coordinate and execute fundraising opportunities for improvements to the facilities, both infrastructure and equipment
- Need a resident family doctor who is very committed to the people's health – can do most surgeries when needed
- Need dentist and MD
- Need more activities at the nursing home; need to get the work load at clinic to increase one of the providers seems to do most of the work; can't always get an appointment
- The community of Ashley is going to have to be willing to dig into their pockets
- The lack of home healthcare services and assisted living options causes undue hardship and cost on the Ashley senior community
- We need to attract and hire more permanent workers to be full-time in order to not have to depend on travelers and pay the expense incurred working through their agencies
- Would really like to see a gym and fitness center in Ashley