



COMMUNITY
HEALTH NEEDS

2019 ASSESSMENT

HEALTH IS WHERE WE LIVE, LEARN AND WORK



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FEEDBACK FROM PREVIOUS READING HOSPITAL CHNA REPORT

Reading Hospital welcomes questions and comments on its CHNAs through a link provided on its Community webpage under Community Health Needs Assessment under Contact Us ([click here](#)). The CHNA can be accessed online at ([click here](#)). No substantive comments were received through this site.



Reading Hospital and its surrounding communities truly are a great place to live, learn and work. Rooted in a strong Dutch culture amongst a beautiful landscape, our residents have access to a vibrant lifestyle. Our location offers something for everyone with access to covered bridges and eye-catching scenery to local family owned restaurants and electrical storefronts. Our population is growing in numbers as well as diversity, which has strengthened the depth and breadth of our community. There is a strong commitment to our residents with an expanded network of service providers to help meet the changing needs of our community.



ABOUT THIS REPORT

A Community Health Needs Assessment (CHNA) helps to gauge the health status of a community and guide development and implementation of strategies to create a healthier community, promotes collaboration among local agencies and provides data to evaluate outcomes and impact of efforts to improve the population health.

Facilitated by Strategy Solutions, Inc., the Reading Hospital CHNA follows best practices as outlined by the Association for Community Health Improvement, a division of the American Hospital Association and ensures compliance with Internal Revenue Service (IRS) guidelines. The process has taken into account input from those who represent the broad interests of the communities served by Reading Hospital including those with knowledge of public health, the medically underserved and populations with chronic disease.

The demographic data in this report is based on the

primary service area of Reading Hospital and the Tower Health region (where there are comparisons) based on zip code. The secondary data in this report is provided at the county level. The primary research includes stakeholder interviews, focus groups, key informant surveys and intercept surveys. Strategy Solutions, Inc. also utilized the services of Professional Research Consultants, Inc. to complete a population telephone survey (referred to as the Community Survey). This survey was conducted to provide a more in-depth analysis of Behavioral Risk Factors Surveillance System questions to gauge the health and needs of Reading Hospital's Primary Service Area.

On December 4, 2018, both Reading Hospital leadership and community members met to review the findings from the Reading Hospital assessment and to prioritize the identified needs. The strategies developed for addressing the findings in this document will be made publicly available in November 2019.



Figure 1: Report Service Area

For this assessment, the community is defined as the geography included on the map shown in Figure 1. The community encompasses the entire geography of Berks County, which represents the primary service area of Reading Hospital.

REPORT SERVICE AREA



READING HOSPITAL

At Reading Hospital, advancing your health and wellness is our mission. When you enter our facilities, you can expect the highest quality healthcare in the region, as well as access to cutting-edge technology and experienced, caring medical professionals.

More than 1,000 physicians and providers across 46 locations offer comprehensive care ranging from prevention, screenings and education to the latest clinical services and treatments. Our community health programs provide essential resources to residents of Berks County and surrounding areas. Whatever your healthcare needs, we are committed to meeting them.

READING HOSPITAL MISSION

The Mission of Reading Hospital is to provide compassionate, accessible, high quality, cost effective healthcare to the community; to promote health; to educate healthcare professionals; and to participate in appropriate clinical research.

READING HOSPITAL VISION

Reading Hospital will be an innovative, leading regional health system dedicated to advancing the health and transforming the lives of the people we serve through excellent clinical quality; accessible, patient-centered, caring service; and unmatched physician and employee commitment.



LETTER TO THE COMMUNITY

OUR MESSAGE TO THE RESIDENTS OF THE READING AREA

Reading Hospital is committed to meeting the health needs of our region and growing with our communities to provide access to high quality care, close to home. To achieve this goal, we must understand the community's evolving unmet health needs. To that end, Reading Hospital — in collaboration with all Tower Health hospitals and our local community partners — completed the 2019 Community Health Needs Assessment (CHNA), which identifies the region's health priorities and our collective path forward.

Hospitals are required to conduct a CHNA every three years to retain their nonprofit status. Reading Hospital is now the flagship hospital of Tower Health, that was formed in October 2017. At that time, the five newly acquired hospitals — which previously had been for-profit facilities — adopted the health priorities identified in Reading Hospital's 2016 CHNA. For this CHNA, the data was collected regionally and reported for our hospital service area only, where applicable.

Based on the results of this process, our health system, hospitals and community partners will work together to develop strategies to address each of the following regional health priorities:

- Obesity
 - Reduce the number of overweight/obese residents
- Mental Health
 - Increase access to and integration of mental health services
- Addiction
 - Increase coordination and availability of services to treat addiction
- Access to Care
 - Decrease barriers to access healthcare

William M. Jennings



resident & CEO

Reading Hospital



As a healthcare leader, Reading Hospital is committed to advancing health and wellness in all the communities we serve. Our work extends far beyond the walls of our hospitals and health system. Together with our community partners focused on the health needs in our communities, we are implementing life-changing programs and services.

My sincere thanks to the 3,404 citizens and stakeholder participants throughout all of the Reading Hospital communities who generously offered their time and valuable insights during the comprehensive CHNA process. I'd also like to recognize the time and talent of our hospital's advisory group, comprised of hospital staff and representatives from community organizations.

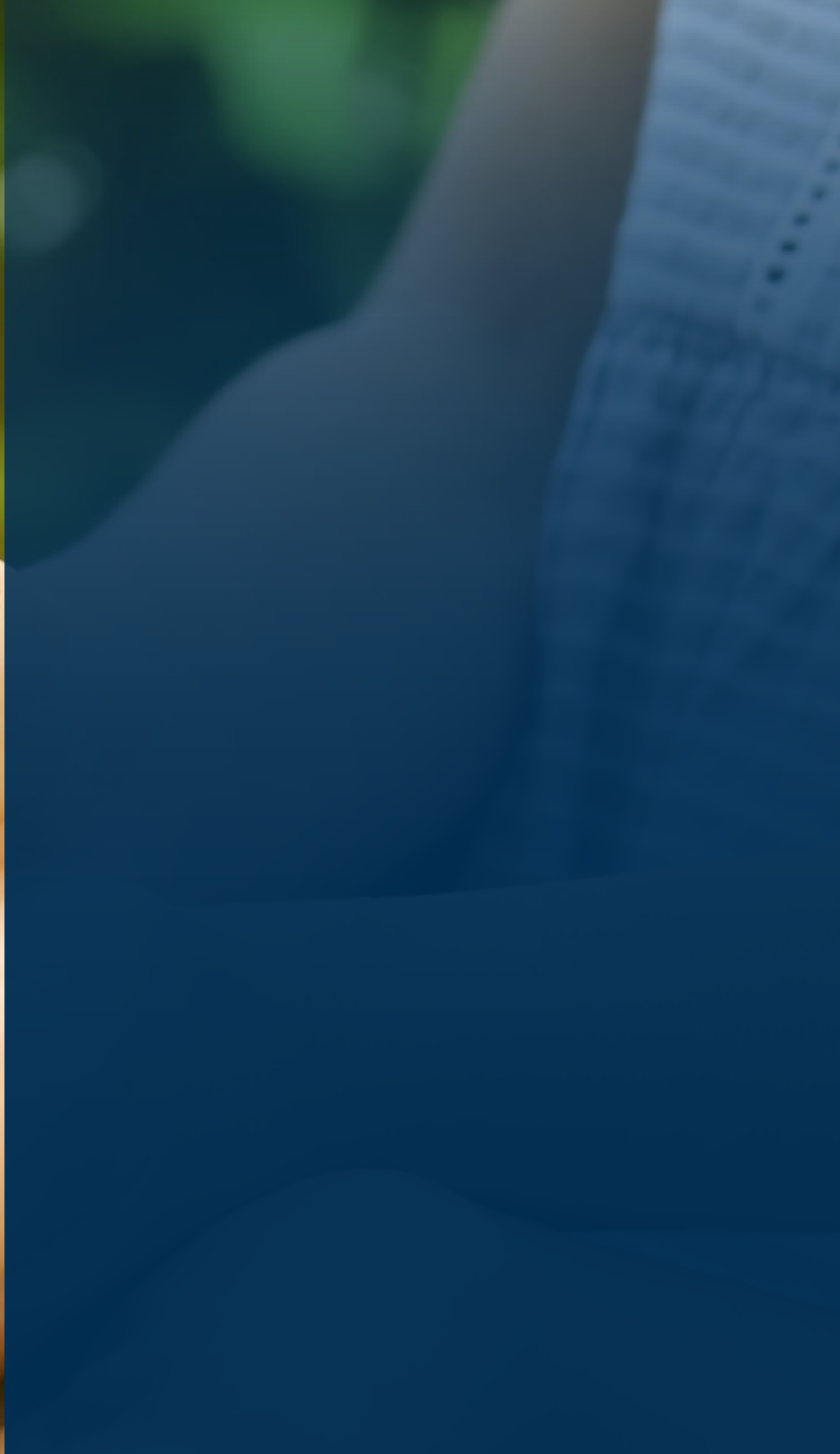
The most important aspect of the CHNA process is community partnership and engagement. Resident feedback pertaining to the health status of the community is integral to planning and executing interventions, programs and activities. Each of our community partners brings significant and unique expertise. We look forward to our continued work together to ensure that vulnerable individuals receive the care and services they need. We are much stronger together than we would be individually and the community benefits from our collaboration.

I am very grateful for your continued feedback, involvement and support. Together, we are Advancing Health and Transforming Lives across our region.

Sincerely,

A handwritten signature in black ink that reads "William M. Jennings". The signature is written in a cursive, flowing style.

William M. Jennings
President & Chief Executive Officer
Reading Hospital



HEALTH STARTS WHERE WE LIVE, LEARN AND WORK

I

n order to improve health and create a healthy community, we must not only focus on health status, we must also look at those factors that impact health.

The American Public Health Association (APHA) defines a healthy community as one “that:

- *Meets everyone’s basic needs such as safe, affordable and accessible food, water, housing, education, health care and places to play;*
- *Provides supportive levels of economic and social development through living wages, safe and healthy job opportunities, a thriving economy and healthy development of children and adolescents;*
- *Promotes quality and sustainability of the environment through tobacco and smoke-free spaces, clean air, soil and water, green and open spaces and sustainable energy use; and*
- *Places high value on positive social relationships through supportive and cohesive families and neighborhoods, honoring culture and tradition, robust social and civic engagement and violence prevention.”¹*

These factors that create a healthy community have a big impact on a person’s ability to make healthy choices and, ultimately, be healthy. If individuals and organizations work together to make changes, we can improve the quality of our lives.

When looking at Robert Wood Johnson Foundation’s Vulnerable Populations Portfolio, a person’s health is impacted by where and how we live, learn, work and play, and it is important that a community looks at the role that nonmedical factors play in where health starts— long before illness—in our homes, schools and jobs.

¹ http://www.apha.org/topics-and-issues/healthy-communities?gclid=CIL2qNfMhMwCFQ8vaQod_cYAag

Where We Live

In America, a person's health is influenced as much by the zip code they live in as the health insurance coverage they have. No environment is more influential on health than the home. By 'home,' we mean the type of housing, the safety of the neighborhood, a family's access to transportation, food security, the age of family members, culture, etc. Only solutions aimed at addressing environmental hazards, safety in the home and neighborhood, and basic needs such as housing, transportation and food will truly address health.



Where We Work

People work to make money, and use the money to buy shelter, food and clothing, and to stay healthy. Work is an essential means to an end. For the vast majority of Americans, employment is still the primary source of income, and therefore critical to their life and livelihood. One's type of employment often dictates their benefits and wages. Health status is directly related to having a living wage and health insurance.

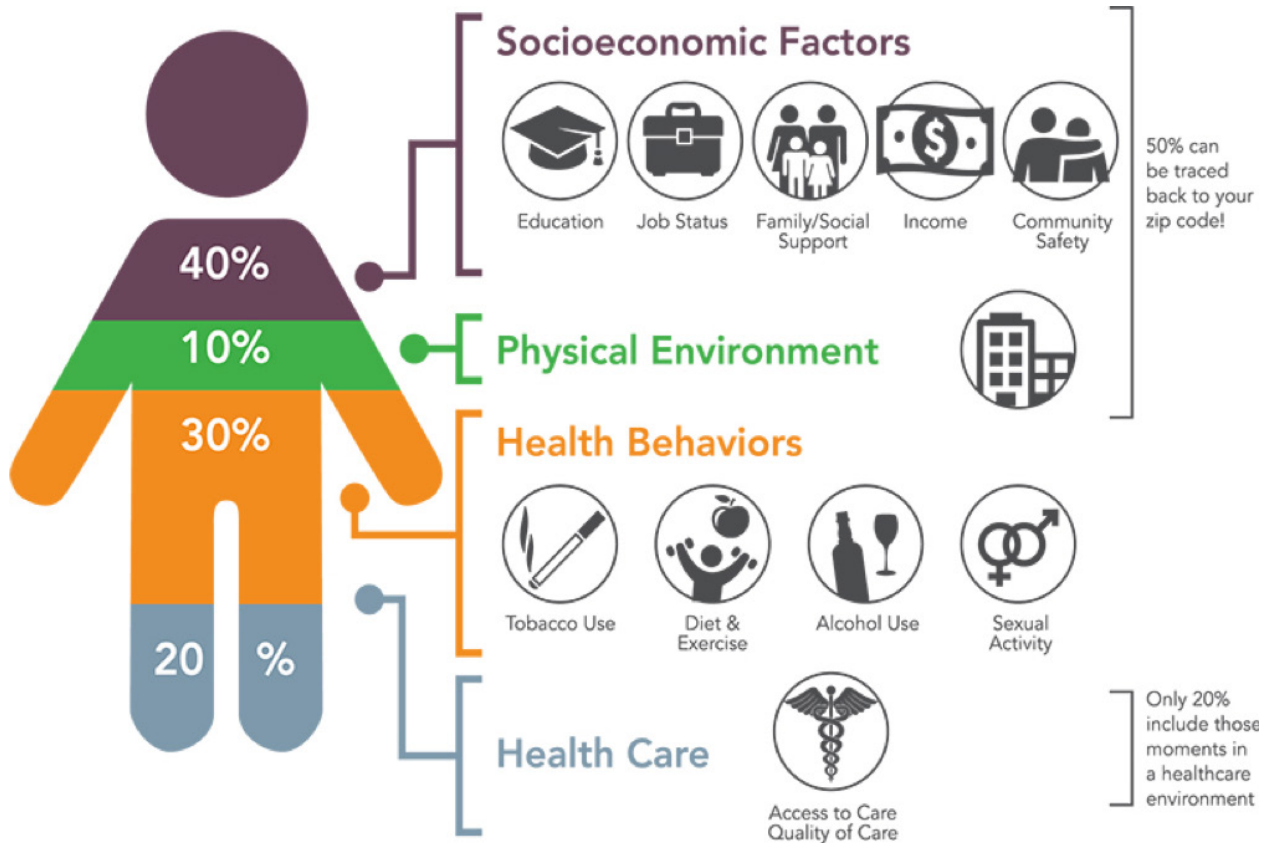


Where We Learn

We all know that better education leads to better career opportunities, but it also can lead to a longer and healthier life. If a person does not graduate from high school, they are likely to earn less money and struggle to make ends meet. They are also likely to work longer hours and maybe even two jobs just to feed their family and live in a compromised neighborhood without access to healthy food. They are not likely to be as healthy as a post-secondary educated professional. Education is also linked to health literacy which is a person's ability to obtain, process, and understand basic health information and services to make appropriate health decisions. Other factors that impact how people learn are their access to internet/broadband service and computers.



Figure 2: Factors that Influence Health



Source: Institute for Clinical Systems Improvement, Going Beyond Clinical Walls: Solving Complex Problems (October 2014)

WHAT GOES IN TO YOUR HEALTH

There are a variety of factors that influence the health of an individual, often referred to as Social Determinants of Health (SDOH). This report will explore all of them as they relate to the health in the service area. Social Determinants of Health (SDOH) are complex circumstances in which individuals are born and live that impact their health. They include intangible factors such as political, socioeconomic and cultural constructs, as well as place-based conditions including accessible healthcare and education systems, safe environmental conditions, well-designed neighborhoods and availability of healthful food. Figure 2, left, illustrates factors that influence health.

WHAT WE ACCOMPLISHED SINCE THE 2016 COMMUNITY HEALTH NEEDS ASSESSMENT



OVERWEIGHT AND OBESITY

PROBLEM: More than 200,000 residents are overweight or obese.

RESPONSE:

- Increased F.I.T.T. (Fun active healThy youTh) program from once per year to twice per year.
- Created Be Well Berks grant program to invest dollars into community organizations addressing and reducing obesity among residents.
- Implemented Zagster Bike Share program for hospital employees.



MENTAL HEALTH

PROBLEM: More than 175,000 residents suffer from anxiety or depressive disorders.

RESPONSE:

- Integrated mental health services with primary care by embedding licensed therapists into practices.
- Implemented MindKare® Kiosk aimed at reducing mental health stigma.
- Funded Whole Health Action Management Training.
- Funded Mental Health First Aid Training.
- Partnership with Acadia Healthcare, Inc. to jointly construct a 144-bed inpatient psychiatric facility to be opened in 2019.



ADDICTION

PROBLEM: Residents lack access to coordinated, community-based treatment.

RESPONSE:

- Received \$500k, multi-year grant from the Pennsylvania Department of Human Services and designated an Opioid Use Disorder Center of Excellence.
- Implemented a 24/7 Warm Handoff program.



ACCESS TO CARE

PROBLEM: Unmet social needs and lack of culturally competent care creates barriers.

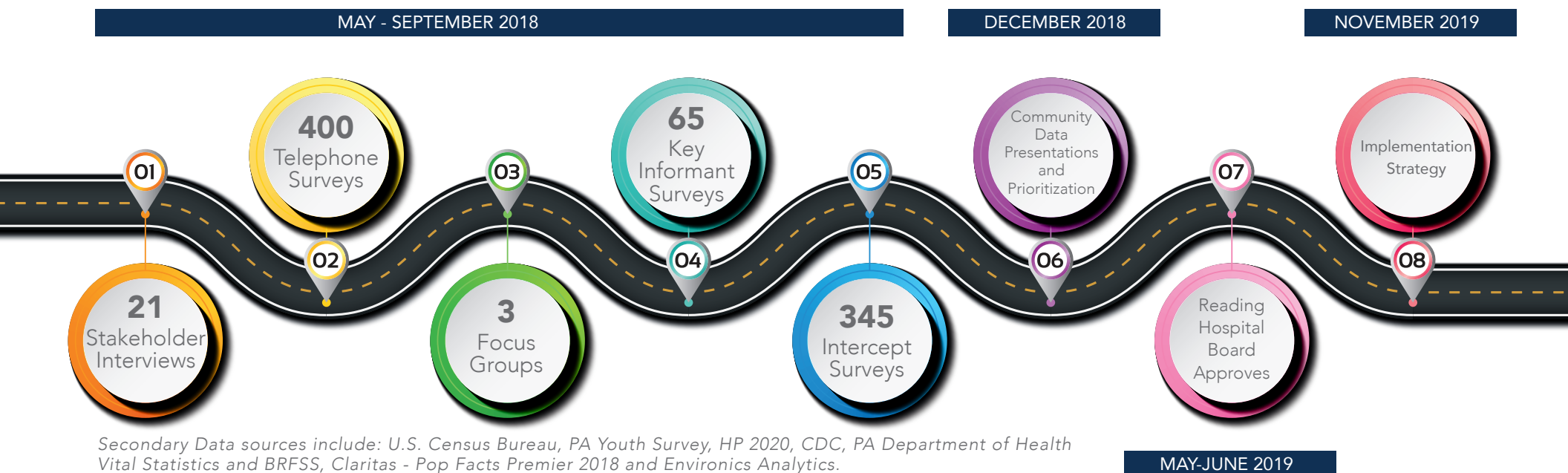
RESPONSE:

- Received \$4.5m grant from the Centers for Medicare & Medicaid Services to implement the Accountable Health Communities Model to identify and address unmet social needs within the Medicare and Medicaid patient populations.
- Street Medicine Program provided primary care to more than 800 homeless individuals in soup kitchens, homeless shelters and tent sites.
- Implemented Medical Legal Partnership Program.
- Designed and offered cultural competency training for staff.
- Provided workplace and virtual career exploration opportunities to middle, high school and college students.

HOW DID WE GET HERE

This assessment is intentionally designed to frame health status in the context of “factors that impact health.” Data from numerous qualitative and quantitative sources were used to validate the findings, using the data CHNA roadmap outlined in **Figure 3**.

Figure 3: 2019 CHNA Roadmap



Source: Source: Reading Hospital Primary and Secondary Data Collection, Strategy Solutions, Inc.

DATA LIMITATIONS

The primary and secondary data collected for this assessment includes several limitations. Much of the secondary data is from the County level and is not specific to the Hospital’s service area due to geographic limitations of currently available data. In addition, researchers were limited to the collection of the most recent publicly available data sources of which many are two (2) or more years old. All primary data is also qualitative and does not necessarily reflect a representative sample of the service area since it was collected through convenience sampling. The Pennsylvania Department of Health performs statistical analysis to determine indicators where a county is significantly different when compared to the state. Indicators where a county is significantly lower when compared to the state are noted on a chart with blue numbers, while those that are significantly higher are noted with red numbers. It is important to note that not all indicators that are significantly higher when compared to the state are negative (i.e. a higher percentage of mothers who breastfeed is positive for the county). The color coding simply reflects areas that of statistical significance and whether are not the county is significantly higher or lower when compared to the state. In this report rates are reported per 100,000 residents unless otherwise noted.

OVERVIEW OF COMMUNITY ENGAGEMENT AROUND THE FACTORS THAT IMPACT HEALTH

COMMUNITY ENGAGEMENT

As part of this needs assessment, during the months of May through September 2018, 400 telephone surveys, 65 key informant surveys and 345 intercept surveys were completed, along with 3 focus groups and 21 stakeholder interviews which were conducted with a wide range of residents, professionals and leaders in the Reading Hospital service area in order to understand the community needs and issues, as well as factors that impact health.

Figure 4, right, shows the representation of community organizations and/or stakeholders that Reading Hospital engaged.

Figure 4: Focus Group And Stakeholder Interview Representation



COMMON THEMES ON THE FACTORS THAT IMPACT HEALTH

The following **Figure 5** shows the summary of identified needs. These needs were determined by the frequency mentioned by primary data sources or through negative trends or significant differences in secondary data. Appendix C lists all identified needs.

Figure 5: Common Themes On The Factors That Impact Health



Figure 6 shows the top five community health needs by focus group type.

Figure 6: Top 5 Community Needs by Focus Group Type



Source: Source: Tower Health and Reading Hospital Focus Groups, Strategy Solutions, Inc., 2018

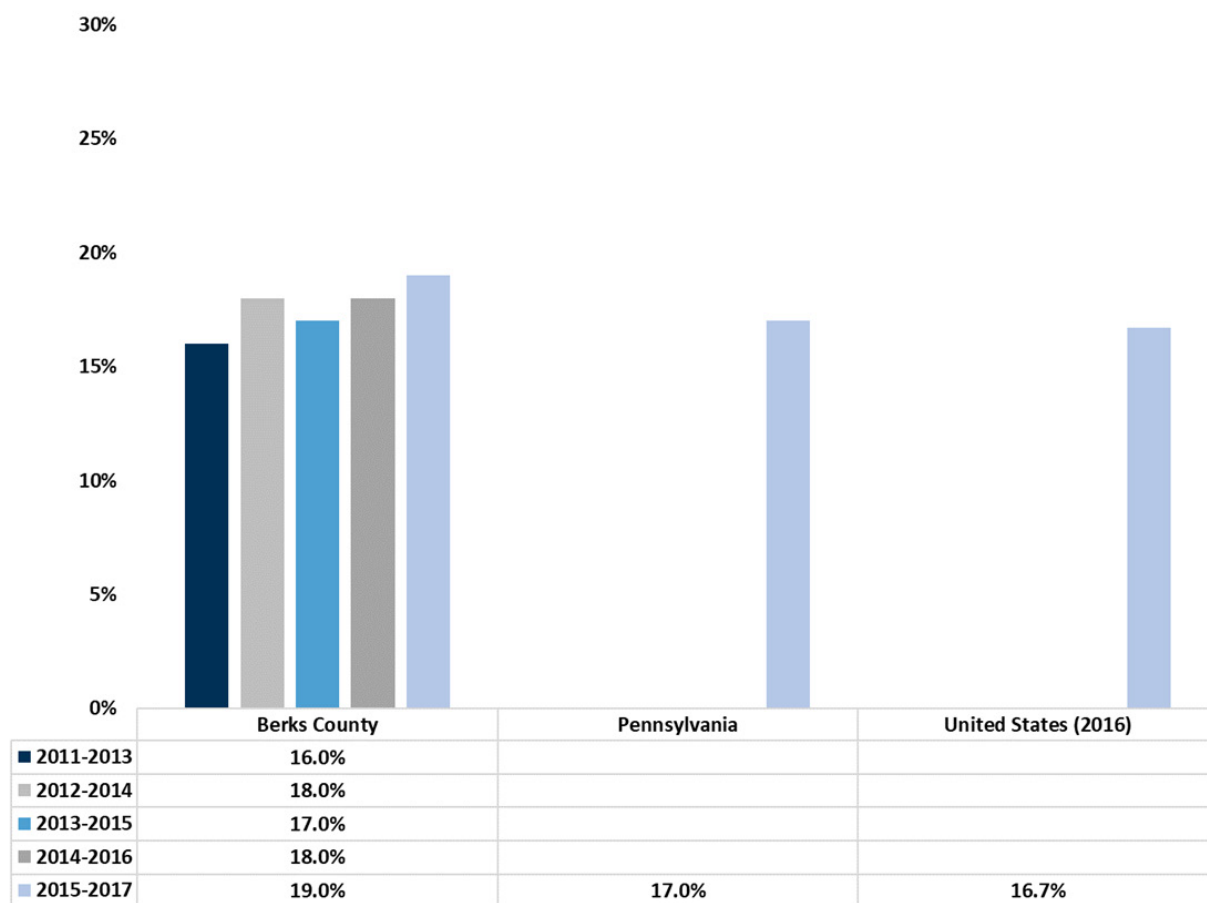
VISION FOR A HEALTHY COMMUNITY

According to focus group and stakeholder interview participants, as well as survey respondents, "a healthy community" is one where the focus is on health and wellness and where everyone has access to quality, affordable healthcare. A healthy Berks County would offer all residents access to a full continuum of physical and mental health services. There would be a focus on wellness and prevention which would result in increased healthy lifestyles and a decrease in obesity and other chronic conditions.

OVERALL HEALTH STATUS

Figure 7 illustrates the percentage of adults in Berks County who report their health as fair or poor. The percentage has increased in Berks County from 16.0% in 2011-2013 to 19.0% in 2015-2017. In 2015-2017 Berks County had a higher percentage of adults who report their personal health as fair or poor (19.0%) when compared to the state (17.0%) and nation (16.7%).

Figure 7: Personal Health, Fair or Poor



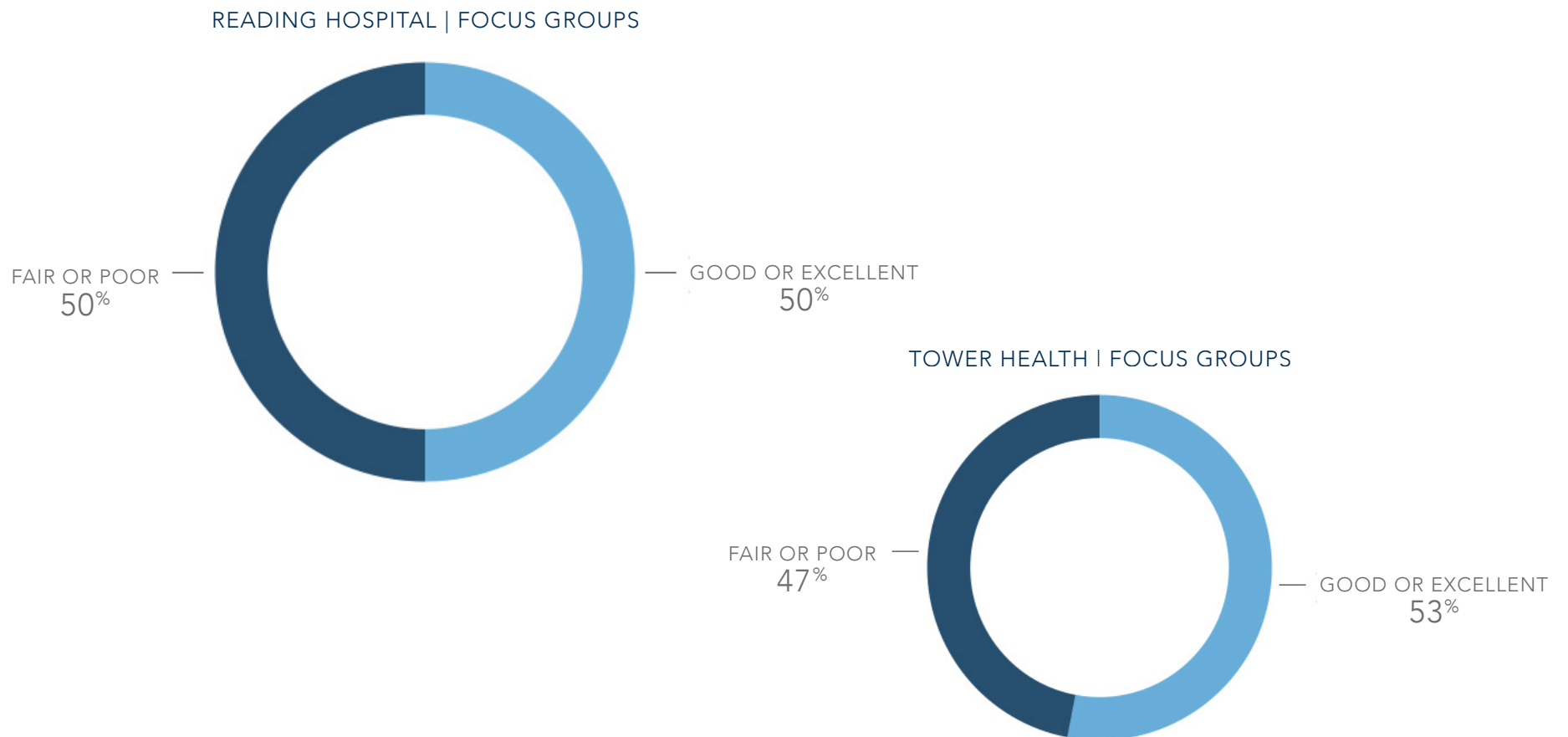
Source: Division of Health Informatics, Behavior Risk Factor Surveillance Survey, Pennsylvania Department of Health for Berks County, 2011-2017, Center for Disease Control



WHAT THE COMMUNITY IS SAYING

Half (50.0%) of focus group participants rated the overall health of the Reading Hospital community as fair or poor, which was slightly higher than the health status of the Tower Health overall community (47%). **Figure 8**, below, illustrates the overall health status of the community.

Figure 8: Overall, Health Status



Source: Tower Health and Reading Hospital Focus Groups, Strategy Solutions, Inc., 2018



HEALTH IS WHERE WE LIVE

Figure 9 shows that the population in Berks County is projected to increase over the next five years, with a projected increase of 0.7%.

Table 1 shows the marital status for residents in Berks County, the primary area served by Reading Hospital. One-third of the residents (33.3%) have never married, while 44.1% are currently married, 10.6% are divorced, 6.9% are widowed and 5.1% are separated.

Table 1: Demographic Snapshot: Marital Status

Marital Status	Berks County
Married	44.1%
Separated	5.1%
Divorced	10.6%
Widowed	6.9%
Never Married	33.3%

HOW GENDER IMPACTS HEALTH

Table 2 shows the population breakdown by gender in the service area. There are slightly more females (51.2%) in Berks County than males (48.8%).

Figure 9: Demographic Snapshot: Population



BERKS COUNTY
 Projected to increase from
 415,367 in 2018
 to
 418,148 in 2023

Table 2: Demographic Snapshot: Gender

Gender	Berks County
Male	48.8%
Female	51.2%

Table 3 shows the significant differences by gender from the Reading Hospital community survey. Males respondents were significantly more likely to rate their personal health as fair or poor, to go to the ER for routine healthcare and to need help reading health information compared to female respondents. Females are significantly more likely to understand health information when spoken and to have visited the dentist within the past year when compared to male respondents.

Table 3: Demographic Snapshot: Gender on Access to Healthcare

IMPACTS OF GENDER ON ACCESS TO HEALTHCARE			
	Male	Female	Overall
Personal health fair or poor	18.7%	13.4%	16.0%
Go to ER for routine healthcare	13.8%	1.3%	7.2%
Always need help reading health information	13.4%	0.0%	6.4%
Health information never spoken in a way easy to understand	7.9%	1.7%	4.7%
Dental visit within the past year	68.7%	77.4%	73.2%

**Note: On this table and throughout this CHNA the word overall is used to indicate the percentage for all respondents in the service area from the community survey.*

IMPACTS OF GENDER ON CHRONIC CONDITIONS

Table 4 illustrates significant differences based on gender from the community survey. Male respondents were significantly more likely to have Arthritis, Kidney Disease, Heart Disease, Stroke or High Blood Pressure compared to female respondents.

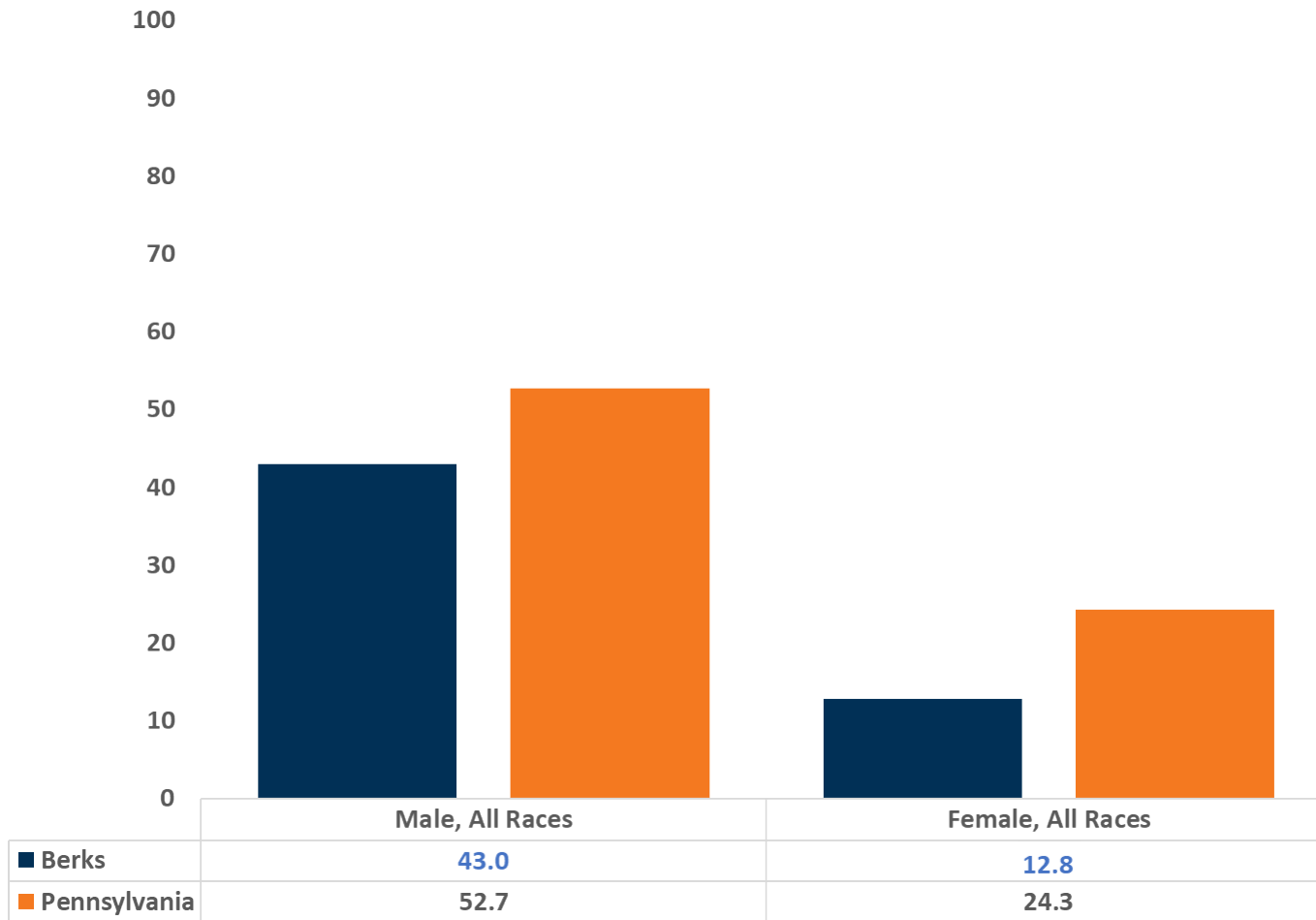
Table 4: Demographic Snapshot: Gender on Chronic Conditions

IMPACTS OF GENDER ON CHRONIC CONDITIONS			
	Male	Female	Overall
Arthritis/Rheumatism	34.5%	24.0%	29.1%
Kidney Disease	9.8%	2.8%	6.2%
Heart Disease	12.7%	1.7%	7.0%
Stroke	19.0%	2.2%	10.2%
High Blood Pressure	41.8%	30.6%	35.9%

IMPACTS OF GENDER ON BEHAVIORAL HEALTH

Figure 9 shows the significant differences by gender for residents in Berks County compared to the state for drug-induced mortality. The rate for both male and females in Berks County is significantly lower when compared to the state.

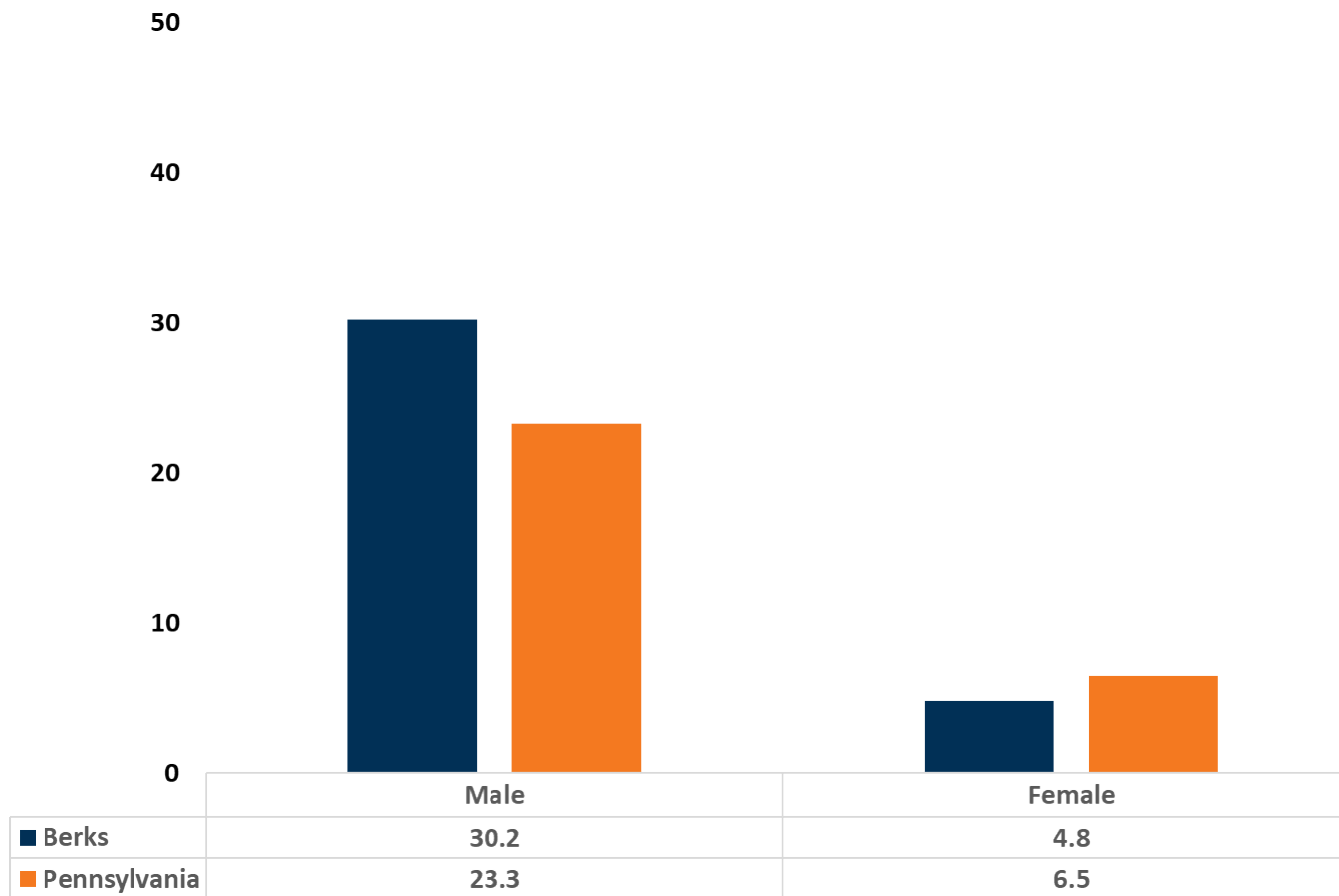
Figure 9: Drug-Induced Mortality



Source: Department of Health Informatics, Pennsylvania Department of Health for Berks County, 2011-2016

Figure 10 illustrates the suicide mortality rate by gender for Berks County compared to the state. Although not significant the suicide mortality rate for males in Berks County (30.2) is higher when compared to the state (23.3) and is much higher than females (4.8) in the county.

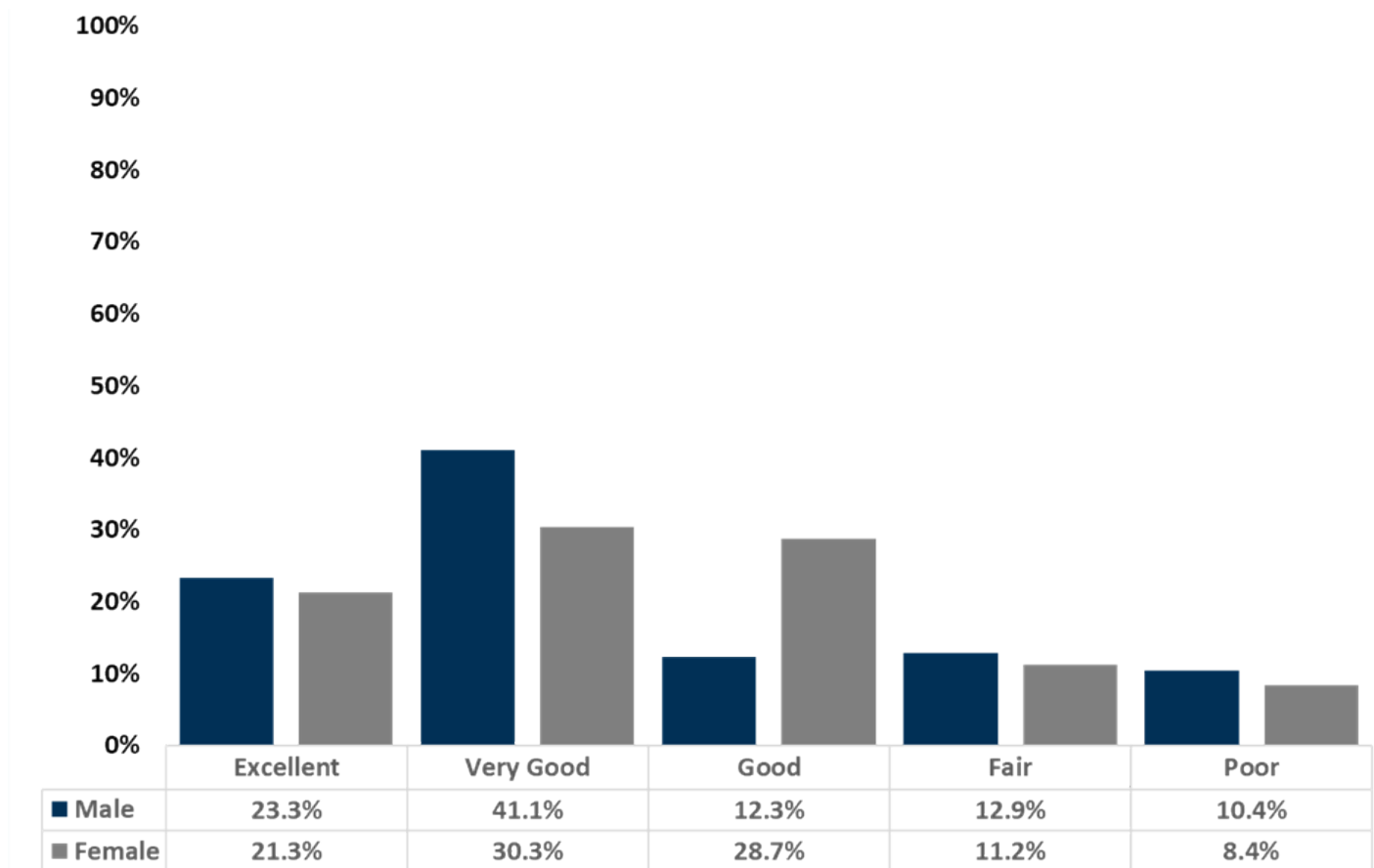
Figure 10: Suicide Mortality



Source: Department of Health Informatics, Pennsylvania Department of Health for Berks County, 2011-2016

Figure 11 illustrates responses to the community survey regarding personal mental health status. Male respondents were more likely to rate their mental health as fair or poor (23.3%) compared to female respondents (19.6%).

Figure 11: Personal Mental Health Rating

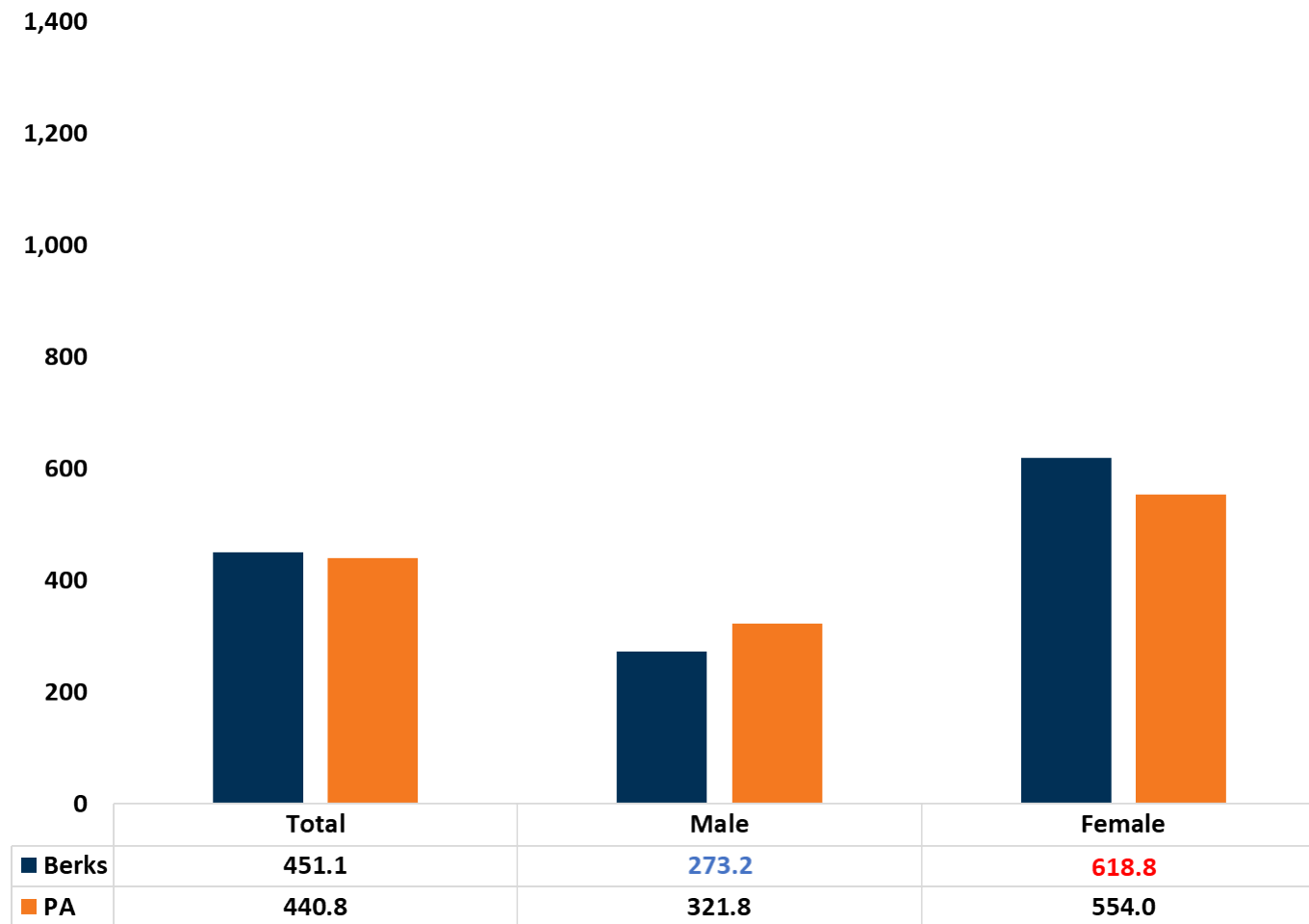


Source: 2018 Reading Hospital Community Survey, Professional Research Consultants

IMPACTS OF GENDER ON INFECTIOUS DISEASE

Figure 12 illustrates the significant differences by gender in Berks County when compared to the state for Chlamydia. Females in Berks County (618.8) had a significantly higher Chlamydia rate when compared to females in Pennsylvania (554.0). The Chlamydia rate for males in Berks County (273.2) was significantly lower when compared to the state (321.8).

Figure 12: Chlamydia Rate Per 100,000

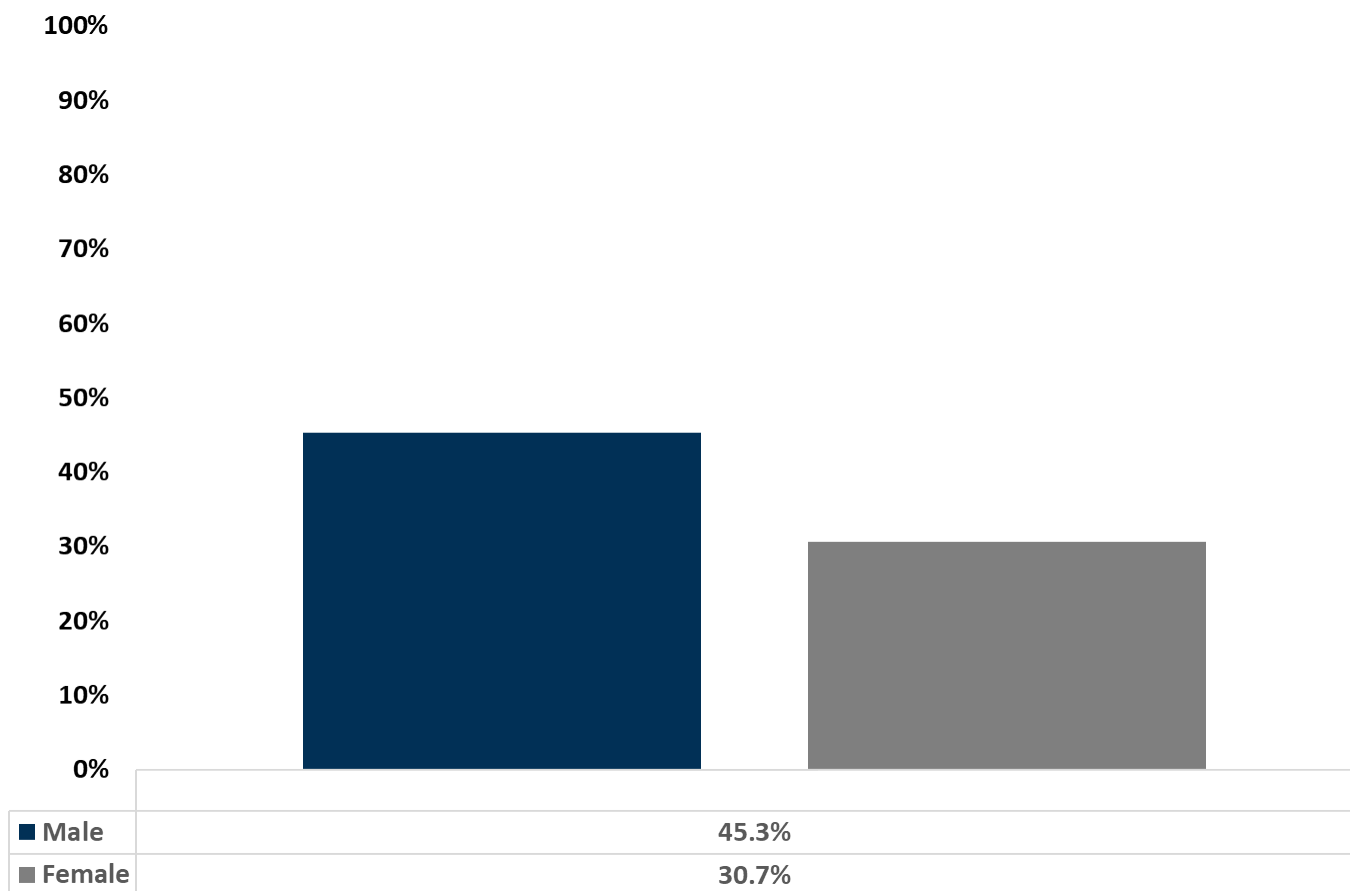


Source: Department of Health Informatics, Pennsylvania Department of Health for Berks County, 2011-2016

IMPACTS OF GENDER ON PHYSICAL ACTIVITY

Figure 13 shows the significant differences by gender from the community survey respondents who report they have participated in an activity to strengthen their muscles in the past month. Male respondents (45.3%) were significantly more likely to have participated in a strength training activity within the past month than female respondents (30.7%).

Figure 13: Participated in Activity to Strengthen Muscles, Past Month



HOW AGE IMPACTS HEALTH

Table 5 shows the population breakdown by age in Berks County, Reading Hospital's primary service area. The median age is 39.1 and is not projected to change much (39.6 in 2023).

Table 5: Demographic Snapshot: Age

Age	Berks County
Median Age	39.1
0 – 17 years	23.5%
18 – 34 years	21.7%
35 – 54 years	25.1%
55 – 64 years	13.1%
> 65 years	16.8%

Source: Claritas - Pop-Facts Premier 2018, Environics Analytica



IMPACTS OF AGE ON ACCESS TO CARE

Table 6 shows the significant differences by age for Berks County community survey respondents for indicators related to access, physical activity and mental health. Younger respondents age 18 to 39 were significantly more likely to go to the ER for routine healthcare. This age group was also significantly less likely to feel that health information was spoken in a way that is easy to understand. Respondents age 18 to 39 were significantly more likely to experience transportation and lack of convenient office hours as barriers to seeing a doctor and are least likely to have had an eye exam or visit a dentist.

Older respondents age 65 and over were significantly less likely to participate in physical activity on a monthly basis but were more likely to have had an eye exam or routine checkup.

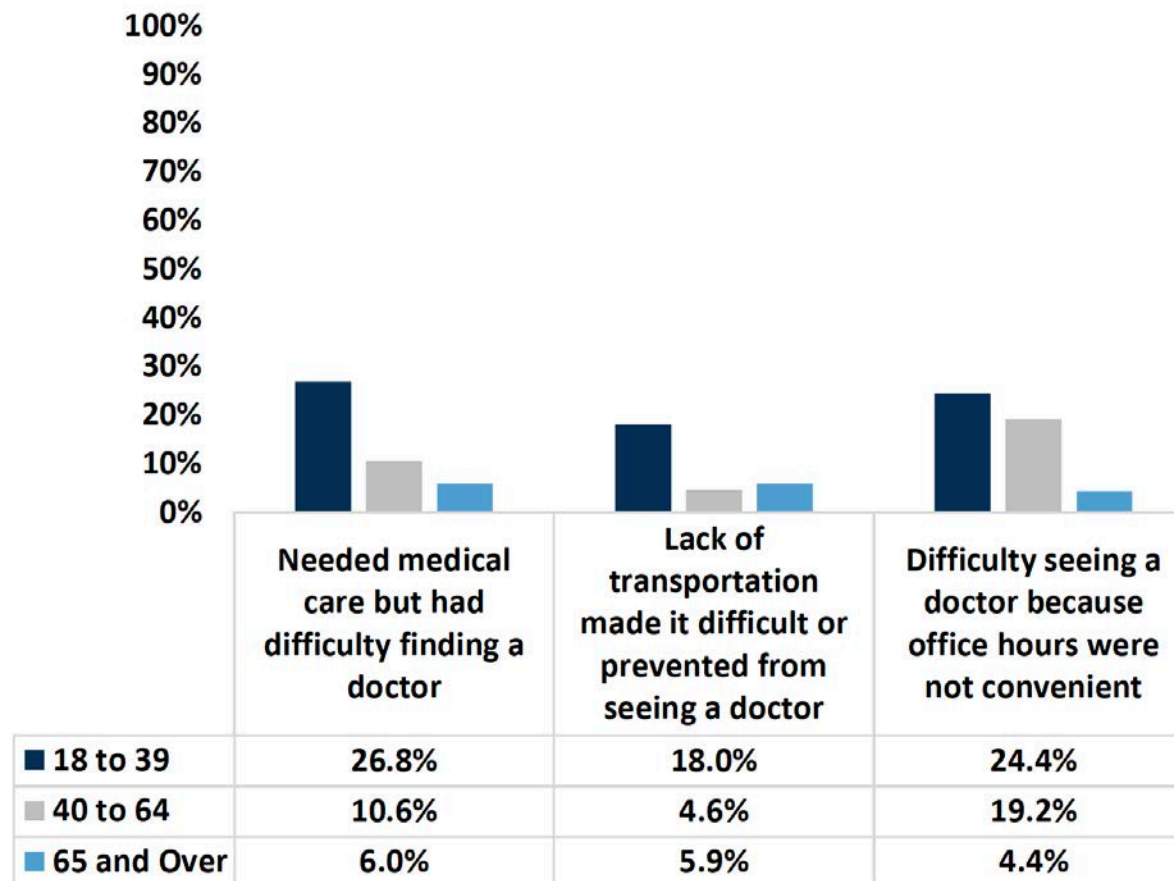
Middle age (40 to 64) respondents were significantly more likely to rate their personal health status as fair or poor, visit a dentist and to feel that health information was easy to understand.

Table 6: Access to Care

Access Indicators	18 to 39	40 to 64	65 and Over
Personal health rating, fair or poor	2.4%	24.0%	22.1%
Go to ER for routine healthcare	15.7%	3.8%	1.7%
Routine check-up, past year	75.8%	71.8%	94.1%
Dental insurance/coverage	81.0%	75.5%	41.2%
Need help reading health information	69.1%	47.0%	45.6%
Health information spoken in a way easy to understand	92.7%	97.4%	95.5%
Needed medical care but had difficulty finding a doctor	26.8%	10.6%	6.0%
Lack of transportation made it difficult or prevented from seeing a doctor	18.0%	4.6%	5.9%
Difficulty seeing a doctor because office hours were not convenient	24.4%	19.2%	4.4%
Visit a dentist/dental clinic, past year	56.6%	82.4%	82.1%
Gone to Emergency Room, past 12 months	25.4%	15.9%	29.4%
Eye exam where pupils were dilated, past two years	52.5%	67.1%	91.0%

Figure 14 illustrates barriers to care community survey respondents experience that were significantly different based on the age of the respondent. Community survey respondents age 18 to 39 were significantly more likely to experience barriers when accessing care compared to older respondents. These younger respondents were significantly more likely to have difficulty finding a doctor, accessing transportation or being unable to see a doctor because office hours were not convenient.

Figure 14: Barriers To Care



IMPACTS OF AGE ON CHRONIC CONDITIONS

Table 7 identifies chronic disease-related indicators from the community survey that are significantly impacted by age. Older residents age 65 and over were significantly more likely to have been told that they have all of the chronic conditions listed below with the exception of obesity. Respondents age 40 to 64 were significantly more likely to have ever been told they were obese compared to both their younger and older counterparts.

Table 7: How Age Impacts Health: Chronic Disease

HOW AGE IMPACTS HEALTH: CHRONIC DISEASE				
Ever Been Told That You Have:	18 to 39	40 to 64	65 and Over	Overall
Arthritis/rheumatism	9.8%	29.3%	64.2%	29.1%
COPD (Including bronchitis or emphysema)	6.5%	13.3%	22.4%	12.6%
Cancer	4.1%	6.0%	25.0%	9.1%
Skin cancer	5.9%	6.0%	14.9%	7.8%
Osteoporosis	2.4%	14.0%	21.9%	11.3%
Sciatica or chronic back pain	10.7%	26.0%	37.3%	22.7%
Obese	20.8%	41.7%	37.9%	33.3%
Diabetes	8.8%	20.6%	23.7%	16.9%
Pre-diabetes or borderline diabetes	7.1%	7.5%	18.5%	9.4%
High blood pressure	20.5%	37.7%	61.8%	36.4%
High cholesterol	15.8%	43.0%	59.7%	36.6%

Source: 2018 Reading Hospital Community Survey, Professional Research Consultants

IMPACTS OF AGE ON FOOD AND NUTRITION

Table 8 shows the significant differences by age for food and nutrition related items from the community survey. Respondents age 40 to 64 were significantly more likely to worry they would run out of food before they had money to buy more (24.0%), food purchased would not last and did not have the money to buy more (21.7%) or be food insecure (26.7%).

Table 8: How Age Impacts Health: Food and Nutrition

FOOD AND NUTRITION BY AGE				
	18 to 39	40 to 64	65 and Over	Overall
Worried food would run out before had money to buy more	16.5%	24.0%	8.8%	18.3%
Food purchased did not last and did not have money to buy more	12.2%	21.7%	7.2%	15.2%
Not food secure	17.9%	26.7%	10.1%	20.2%

Source: 2018 Reading Hospital Community Survey, Professional Research Consultants



IMPACTS OF AGE ON BEHAVIORAL HEALTH

Figure 15 illustrates the significant differences for personal mental health rating by age of community survey respondent. Community survey respondents age 18 to 39 (27.9%) were significantly more likely to rate their health as fair or poor when compared to older respondents.

Figure 15: Personal Mental Health Rating

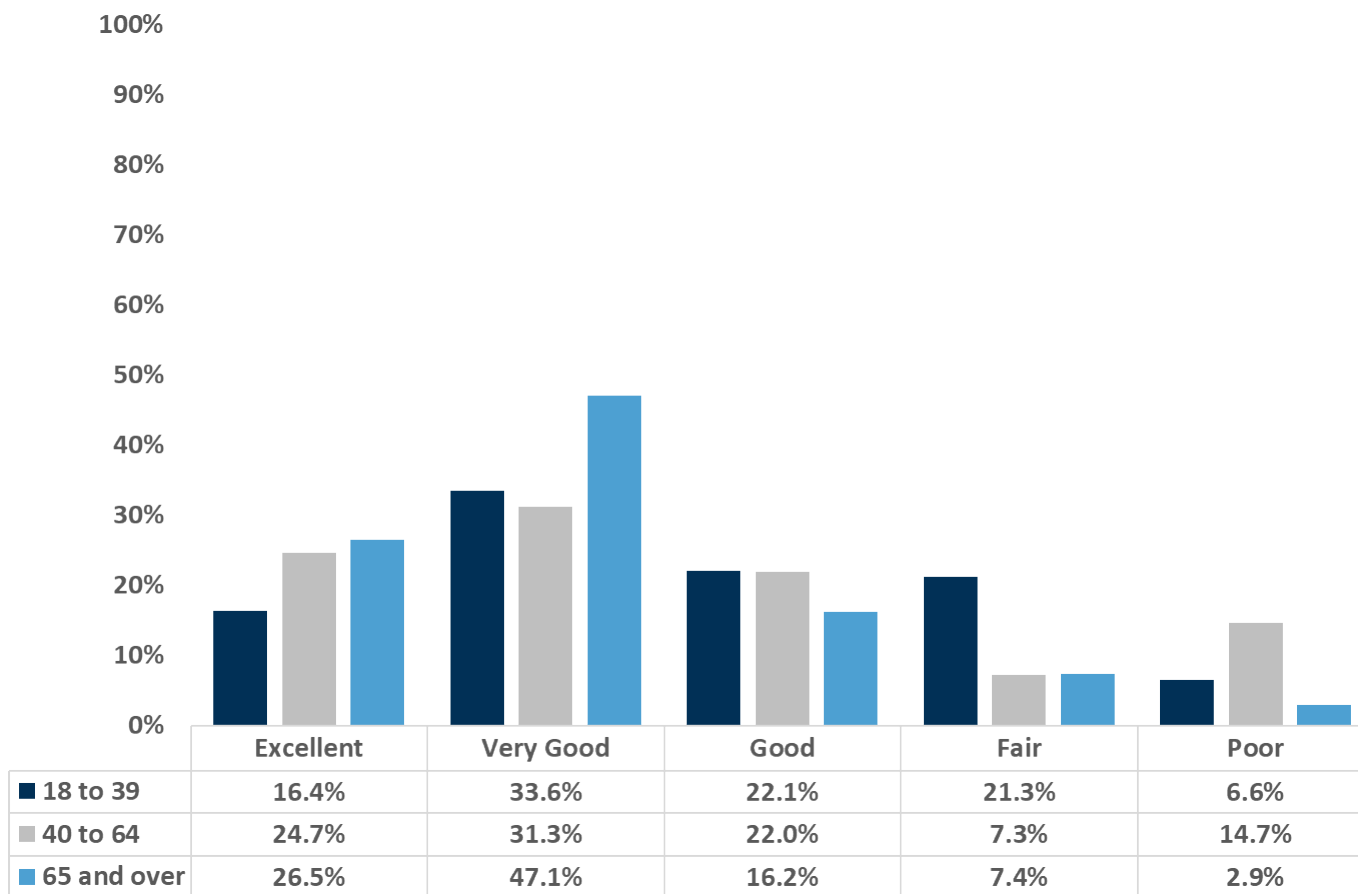
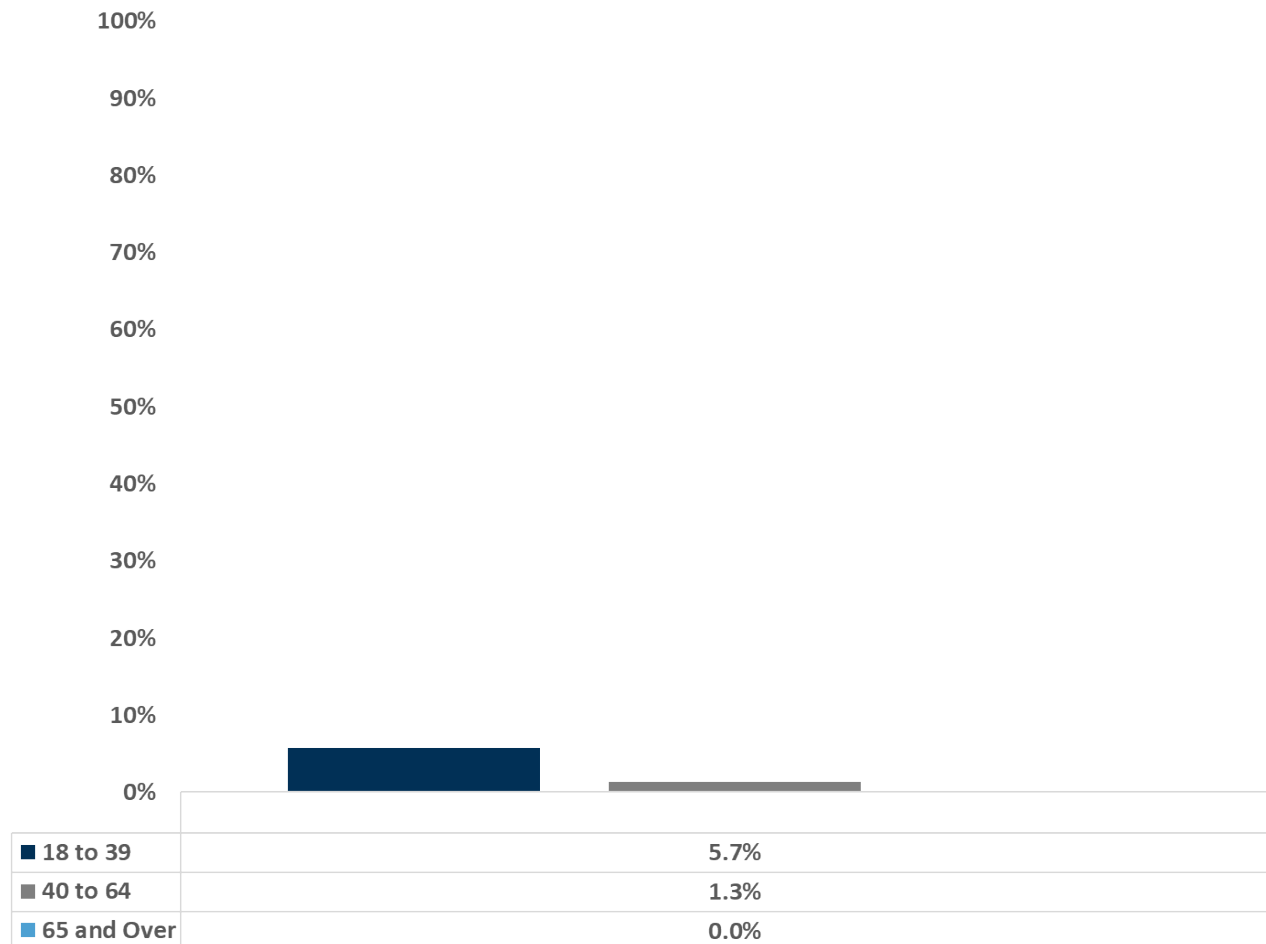


Figure 16 shows the significant differences by age for community survey respondents who report having used an illegal drug or taken prescription medication not prescribed to them. Survey respondents age 18 to 39 (5.7%) were significantly more likely to have used an illegal drug or prescription medication that was not prescribed to them when compared to older respondents.

Figure 16: Used Illegal Drug or Taken Prescription Medication Not Prescribed to Individual

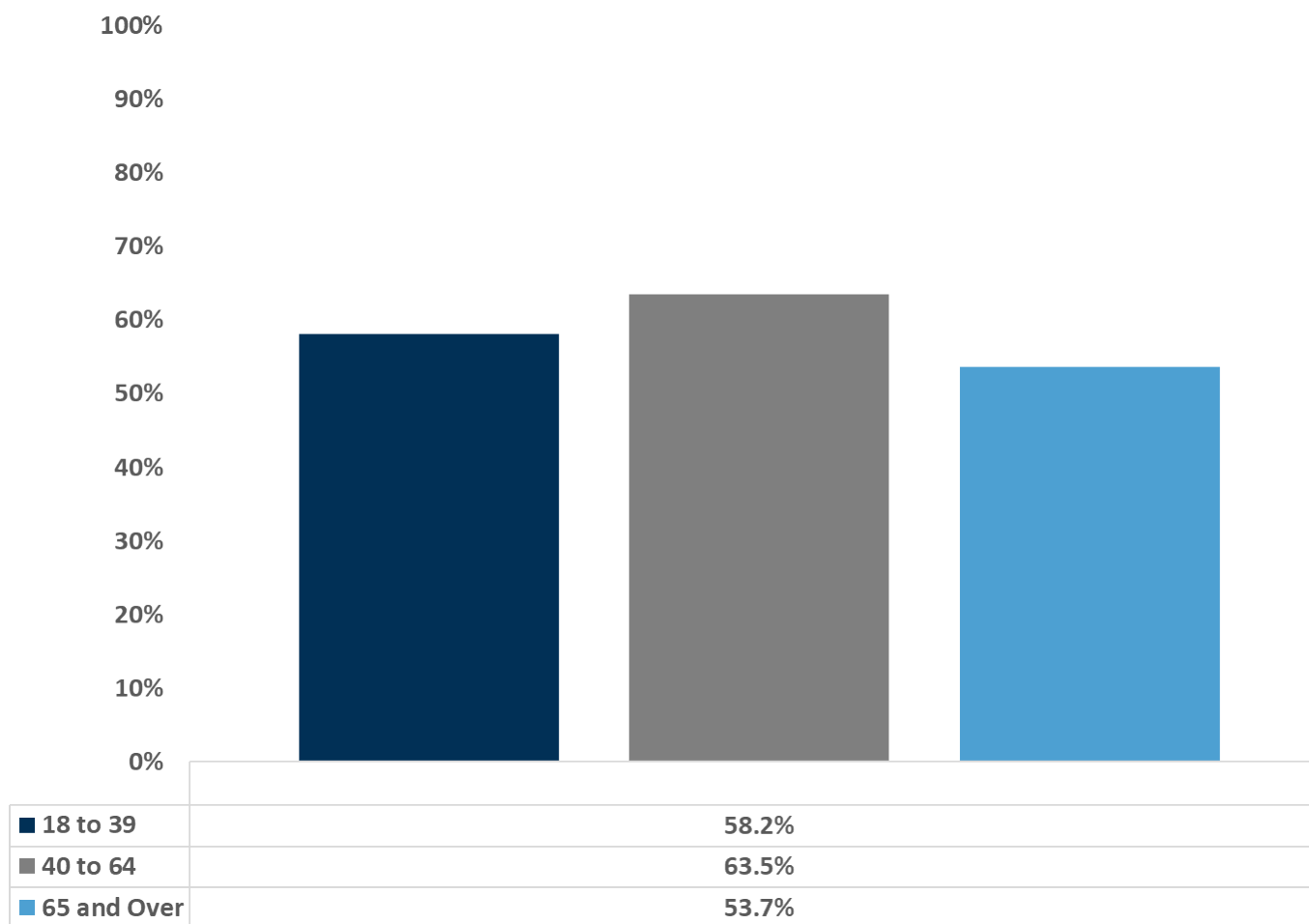


Source: Reading Hospital Community Survey, Professional Research Consultants, 2018

IMPACTS OF AGE ON PHYSICAL ACTIVITY

Figure 17 shows the significant differences for community survey respondents who have participated in physical activity over the past month by age of respondent. Older respondents (age 65 and over) were significantly less likely to have participated in physical activity when compared to younger respondents.

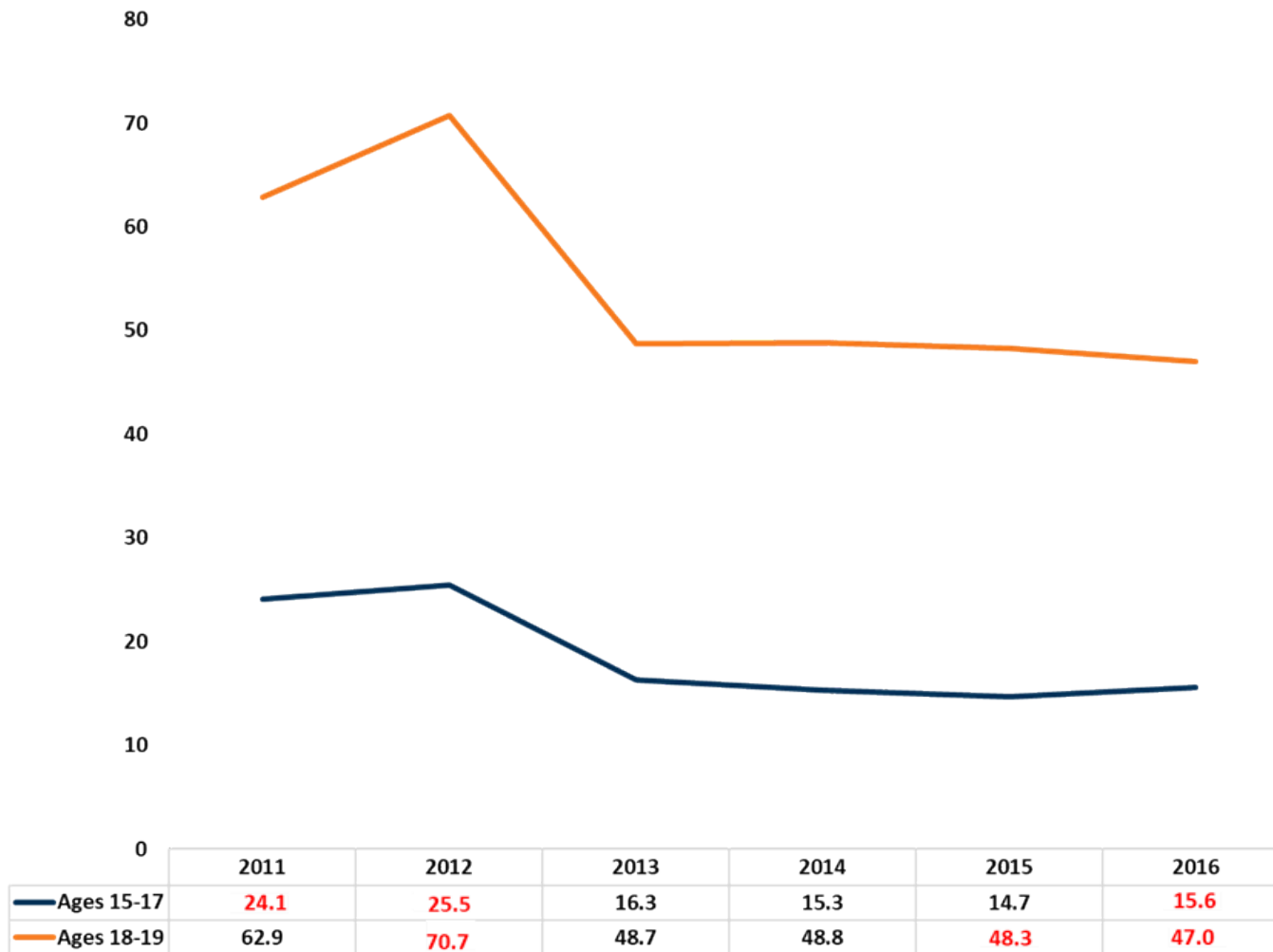
Figure 17: Participated in Physical Activity, Past Month



IMPACTS OF AGE ON MATERNAL AND CHILD HEALTH

Figure 18 illustrates the teen pregnancy rate per 1,000 in Berks County between 2011 and 2016. While decreasing for teens both Ages 15-17 and Ages 18-19, the rates are still significantly higher than the state rate (15.6, 47.0 respectively).

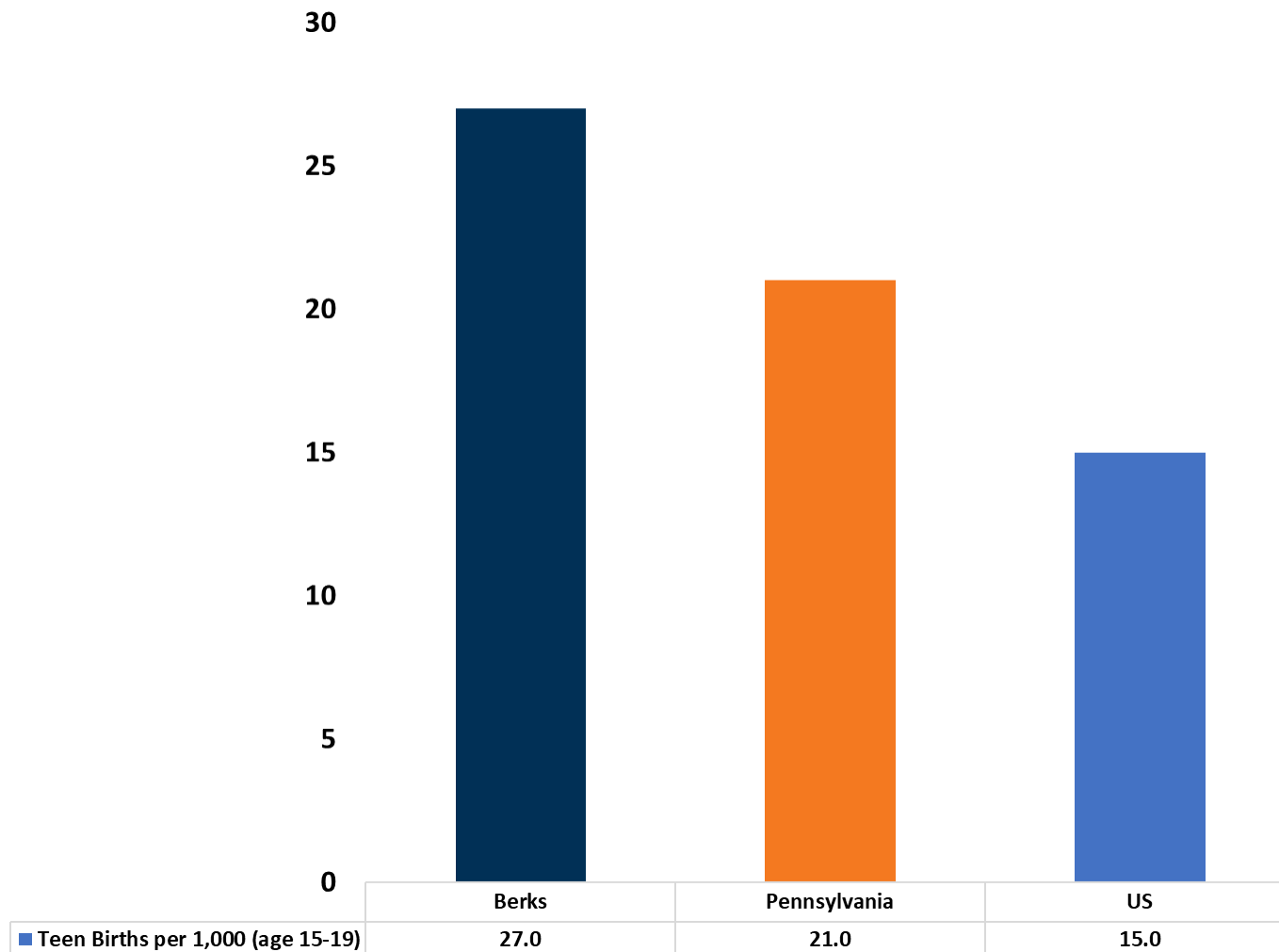
Figure 18: Teen Pregnancy Rate Per 1,000, Berks County



Source: Department of Health Informatics, Pennsylvania Department of Health for Berks County, 2011-2016.

Figure 19 below outlines the teen birth rate per 1,000 births for ages 15-19. The rate in Berks County (27.0) is higher than both the state (21.0) and the U.S. (15.0).

Figure 19: Teen Births Per 1,000 Age 15-19



Source: County Health Rankings and Roadmaps for Berks County, 2018

HOW BEING A CHILD IMPACTS HEALTH

Childhood is an important period in a young person's life. Children need safe housing, food, medical, proper educational stimulation and nurturing relationships for healthy development. The first years of life build the foundation for future cognitive, emotional and behavioral skill development. Strong relationships with caregivers and stable, safe environment play a pivotal role in building a strong foundation for later growth and learning.

As of 2017, there were 83.1 million Millennials in the United States (those born between 1982 and 2000), according to the U.S. Census Bureau. Just like the Baby Boom generation before it, this cohort of young people carries influence. In the healthcare space, Millennials are prompting greater emphasis on technology, faster delivery of care, telemedicine adoption, a fee-for-outcome model and a shift toward consumer-oriented service.²

Table 9 outlines the youth-related data from the County Health Rankings for the Reading Hospital Primary Service Area. In 2018, about one in five children (19.9%) in Berks County are living in poverty, which has decreased from 22.0% in 2014. The percentage of youth living in single parent homes has remained relatively stable over the last five years, with a slight increase observed between 2017 (35.6%) and 2018 (36.7%). The percentage of students graduating high school in 2018 (83.9%) decreased from 2014 (84.7%), although not consistently. Disconnected youth (individuals age 16-19 who are neither working nor in school) remained steady at 12.3% for 2017 and 2018.

Table 9: How Being a Child Impacts Health: Youth-Related Indicators

COUNTY HEALTH RANKINGS YOUTH-RELATED INDICATORS					
County Health Rankings	Youth-Related Indicators				
Berks County	2014	2015	2016	2017	2018
High school graduation rates	84.7%	83.5%	84.6%	83.9%	83.9%
Children living in poverty	22.0%	21.2%	21.4%	19.9%	19.9%
Children living in single parent homes	35.7%	35.4%	35.6%	35.6%	36.7%
Disconnected youth	**	**	**	12.3%	12.3%

Source: County Health Rankings and Roadmaps, 2018.

**New indicator and unavailable for prior years

² JT Ripton, Five ways Millennials are changing the healthcare industry. Becker's Hospital Review. March 1, 2017.

Table 10 outlines the Pennsylvania Youth Survey Data for the Reading Hospital Primary Service Area. Youth in Berks County are slightly more likely to have used alcohol, marijuana and prescription narcotics in their lifetimes than the state. While the percentages of students who report using substances has fluctuated over the years data is reported, overall usage has declined when looking at 2013 to 2017, with the exception vaping nicotine, marijuana or hash oil and other substances (which has increased over the two years data is available).

Table 10: Youth Survey Data

PENNSYLVANIA YOUTH SURVEY DATA, 2017					
PAYS DATA	BERKS COUNTY			Trend	PA
SUBSTANCE USE AND RISKY BEHAVIORS	2013	2015	2017	+/-	2017
Alcohol lifetime use	48.9%	47.0%	44.5%	-	43.3%
Marijuana lifetime use	20.8%	19.3%	19.2%	-	17.7%
% drove after drinking	2.6%	2.1%	2.0%	-	2.2%
% drove after marijuana use	3.8%	3.7%	2.6%	-	3.5%
Prescription narcotics lifetime use	8.0%	6.5%	5.3%	-	5.1%
Vaping/E-Cigarettes (30-day Use)	ND	16.6%	14.6%	-	16.3%
Vaping – just flavoring (past year)	ND	68.9%	66.5%	-	67.3%
Vaping – nicotine (past year)	ND	15.2%	17.9%	+	29.4%
Vaping – marijuana or hash oil (past year)	ND	8.9%	11.5%	+	12.6%
Vaping – other substance (past year)	ND	1.0%	1.7%	+	1.3%

Source: Pennsylvania Youth Survey for Berks County, 2017

ND = No data available

WHAT THE COMMUNITY IS SAYING



Key Informant survey respondents were asked to identify underserved populations in the community, seniors/aging/elderly were identified as underserved by 46.0% of the respondents.

Very few (8.1%) identified Black/African Americans as an underserved population. One in five respondents (21.6%) identified young adults as an underserved population and 18.9% identified children/youth.



HOW RACE IMPACTS HEALTH

Table 11 shows the demographic breakdown of residents in Berks County. While the highest percentage of residents in the county are Caucasian (72.9%), more than one in four residents (28.7%) are Hispanic/Latino.

Table 11: Demographic Snapshot: Race/Ethnicity

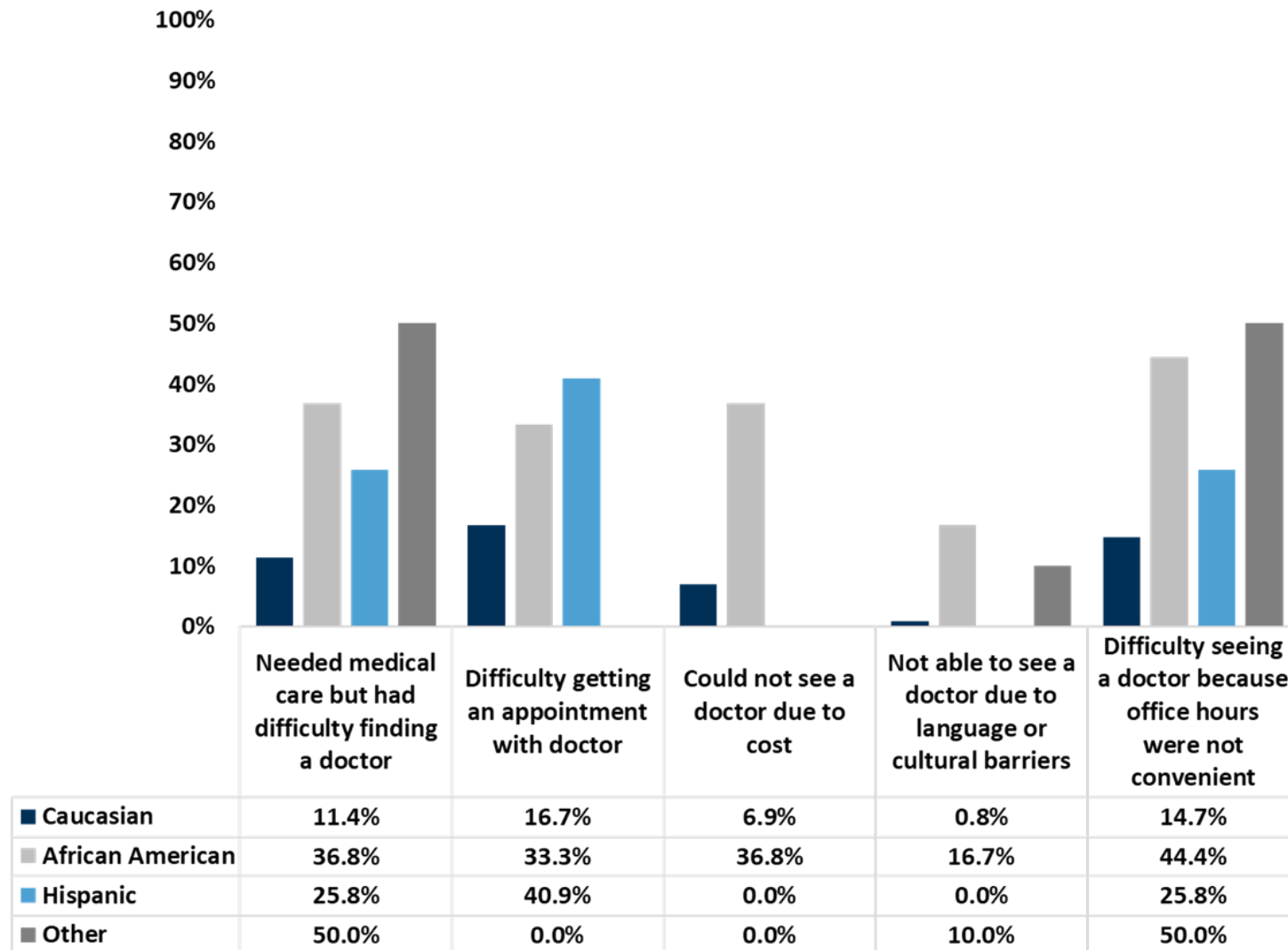
Race/Ethnicity	Berks County
Caucasian	72.9%
Hispanic/Latino	28.7%
African American/Black	6.9%
Asian	1.9%

Source: Claritas - Pop-Facts Premier 2018, Environics Analytics

IMPACTS OF RACE/ETHNICITY ON ACCESS TO CARE

Figure 20 illustrates barriers to care that community survey respondents report having experienced. This chart shows those access indicators that are significantly different based on the race/ethnicity of the respondent. Survey respondents had the option to classify themselves as "other race" indicating that they did not identify with one of the response options. Those respondents who selected "other race" were significantly more likely to have experienced difficulty finding a doctor when needed or being unable to see a doctor when needed due to the office hours. Hispanic respondents were significantly more likely to have difficulty getting an appointment with a doctor. African American respondents were significantly more likely to be unable to see a doctor due to cost or language/cultural barriers.

Figure 20: Barriers To Care



*There were no responses from any Asian or African American Respondents to these questions

IMPACTS OF RACE/ETHNICITY ON CHRONIC CONDITIONS

Table 12 below outlines chronic diseases by ethnicity that are significantly different when compared to the state. The numbers in red are significantly higher than the state while those numbers in blue are significantly lower than the state. Berks County White residents (245.2) have a significantly higher cardiovascular disease mortality rate compared to the state rate (218.2), while Black residents (224.6) have a significantly lower rate for the same indicator compared to the state (299.9).

Table 12: Race/Ethnicity Impact Health: Chronic Disease

CHRONIC DISEASES BY RACE/ETHNICITY, PER 100,000, BERKS COUNTY		
Indicator	Berks	Pennsylvania
Cardiovascular disease mortality, White	245.2	218.2
Cardiovascular disease mortality, Black	224.6	299.9
Cardiovascular disease mortality, Hispanic	170.0	148.9
Heart disease mortality, White	178.5	170.3
Heart disease mortality, Black	187.5	229.4
Heart disease mortality, Hispanic	103.1	111.2

Source: Department of Health Informatics, Pennsylvania Department of Health for Berks County, 2015 and 2016
Hypertension: Centers for Disease Control and Prevention, 2015 – Interactive Atlas of Heart Disease and Stroke Tables



IMPACTS OF RACE/ETHNICITY ON BEHAVIORAL HEALTH

Figure 21 shows the significant differences from community survey respondents by race/ethnicity for their personal mental health rating. Hispanic respondents were significantly more likely to rate their mental health as fair or poor (52.2%) compared to other respondents.

Figure 21: Personal Mental Health Rating

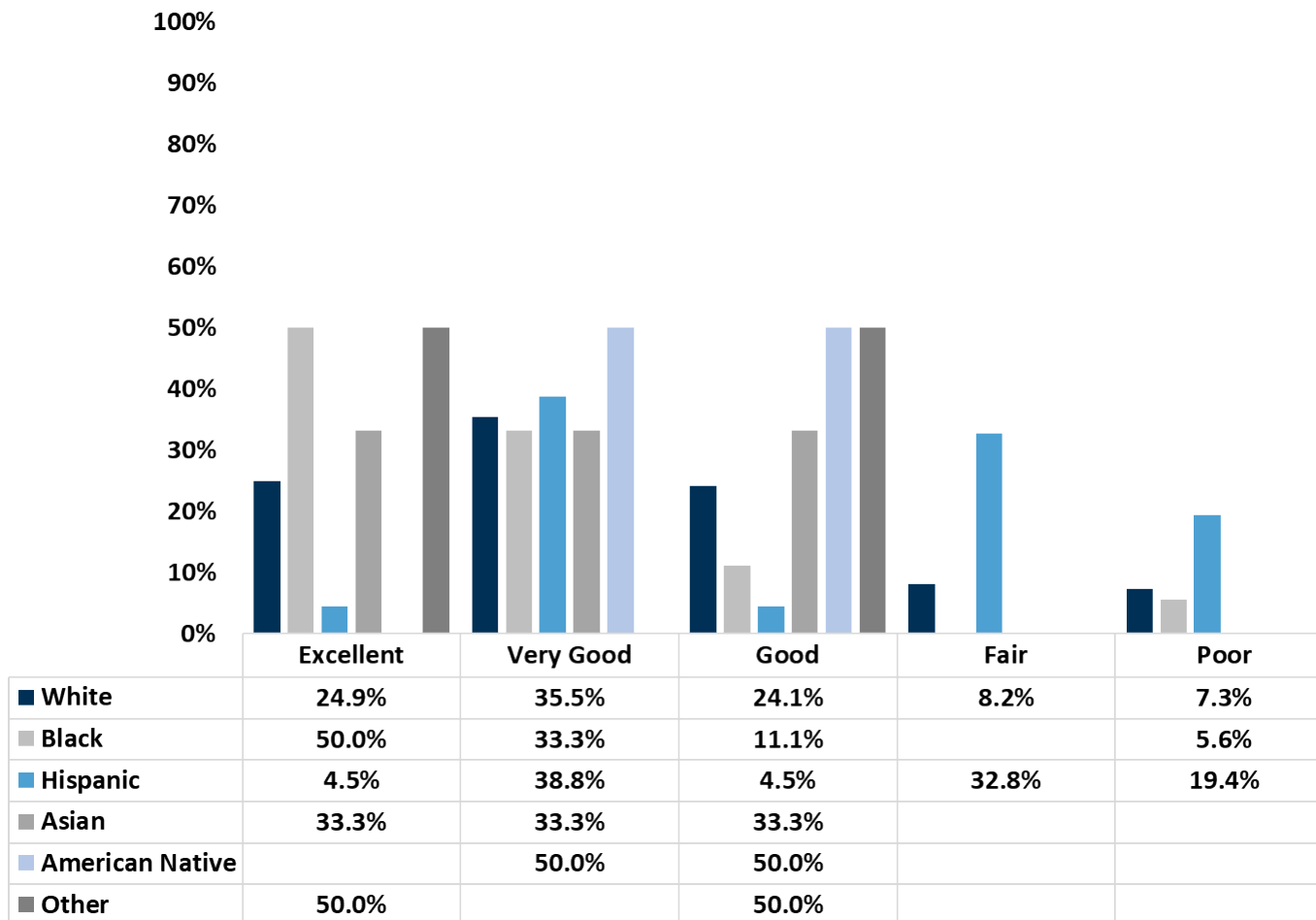
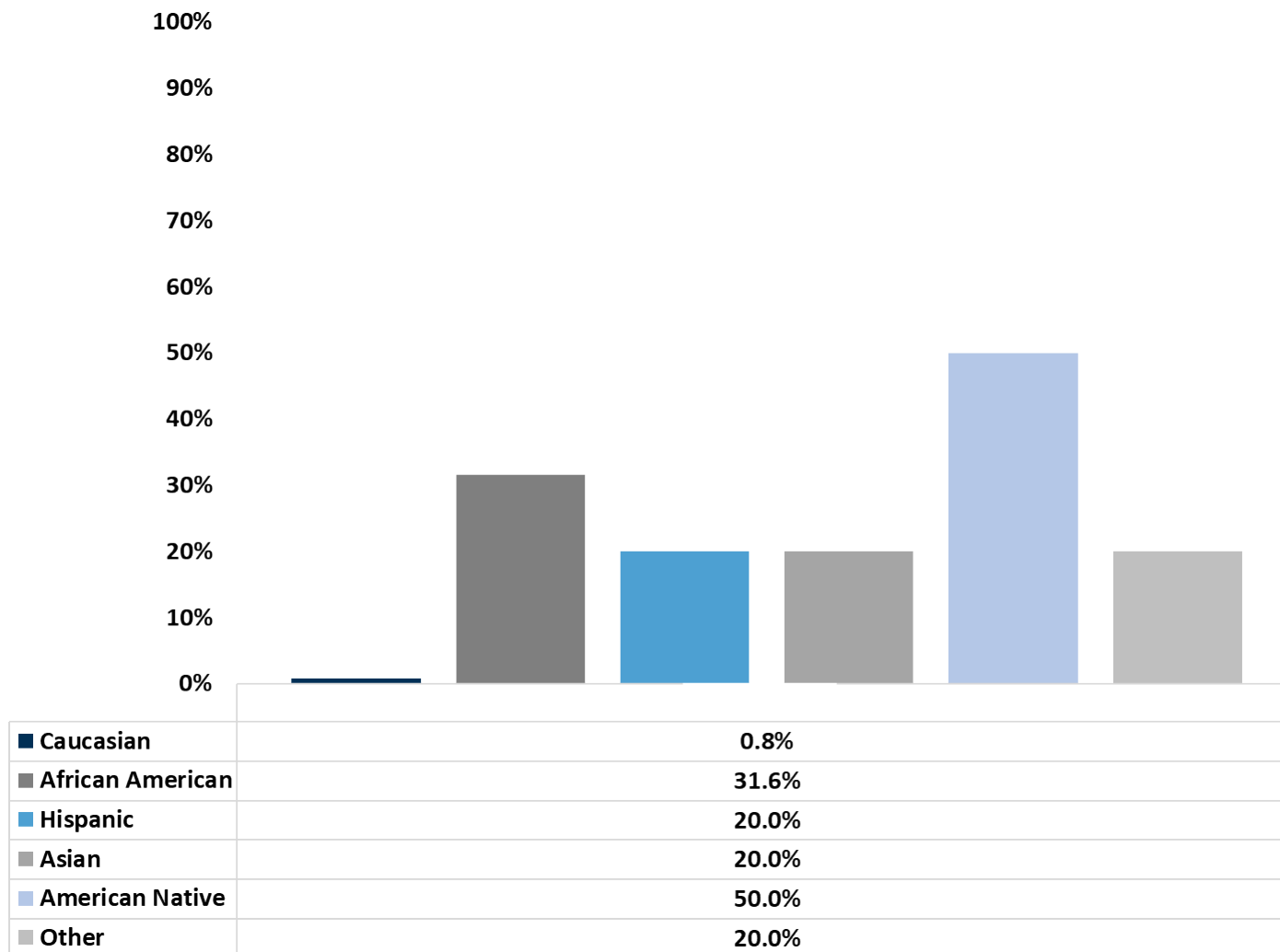


Figure 22 illustrates the responses from the community survey by race/ethnicity for those who report having used an illegal drug or prescription medication not prescribed to them. American Native respondents (50.0%) were significantly more likely to have used an illegal drug or taken a prescription not prescribed to them compared to other respondents.

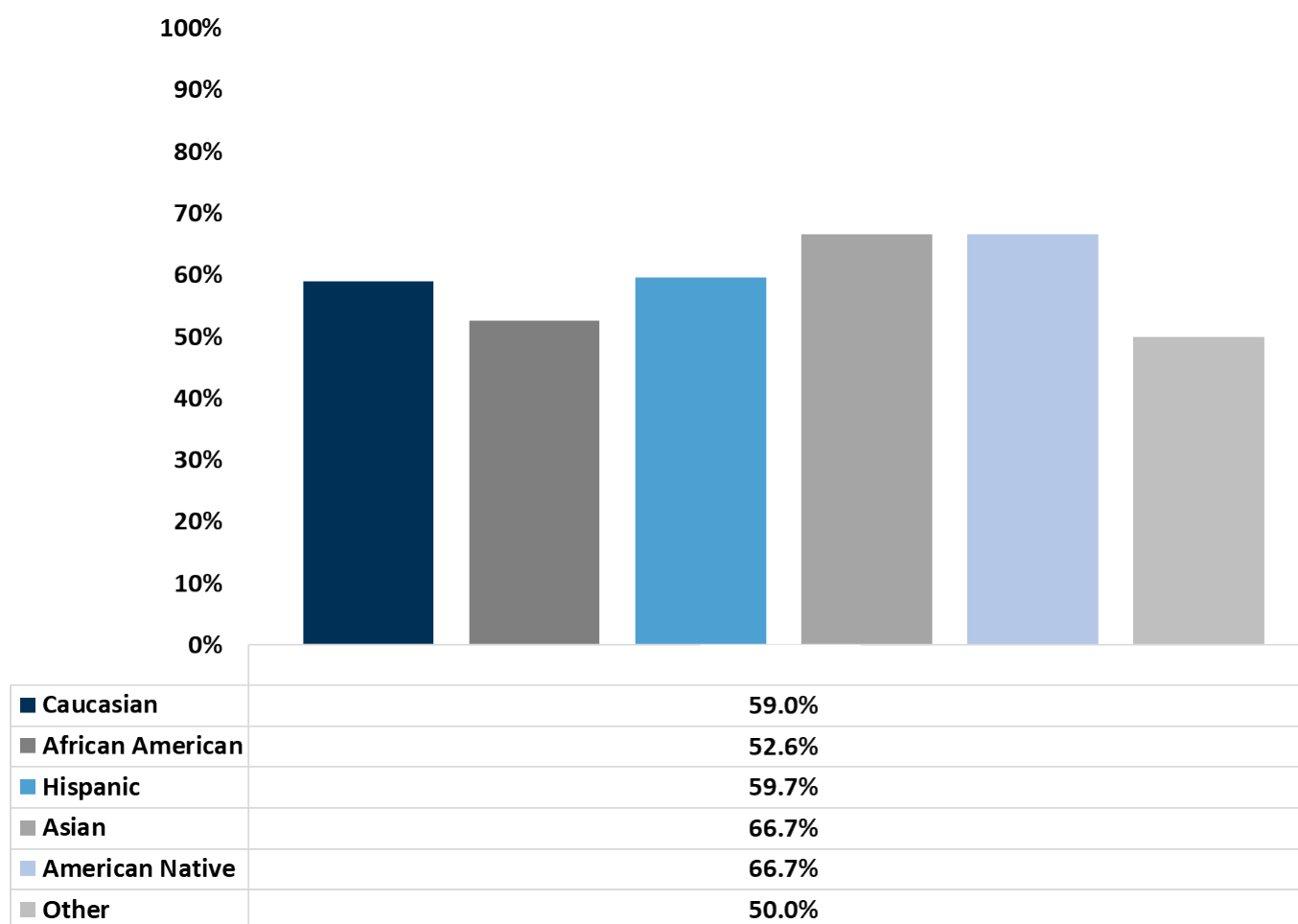
Figure 22: Used Illegal Drug or Taken Prescription Medication Not Prescribed to Individual



IMPACTS OF RACE/ETHNICITY ON PHYSICAL ACTIVITY

Figure 23 shows the percentage of respondents to the community survey who have participated in an activity to strengthen their muscles in the past month by race/ethnicity. Asian and American Native respondents were significantly more likely to have participated in an activity to strengthen their muscles compared to other respondents.

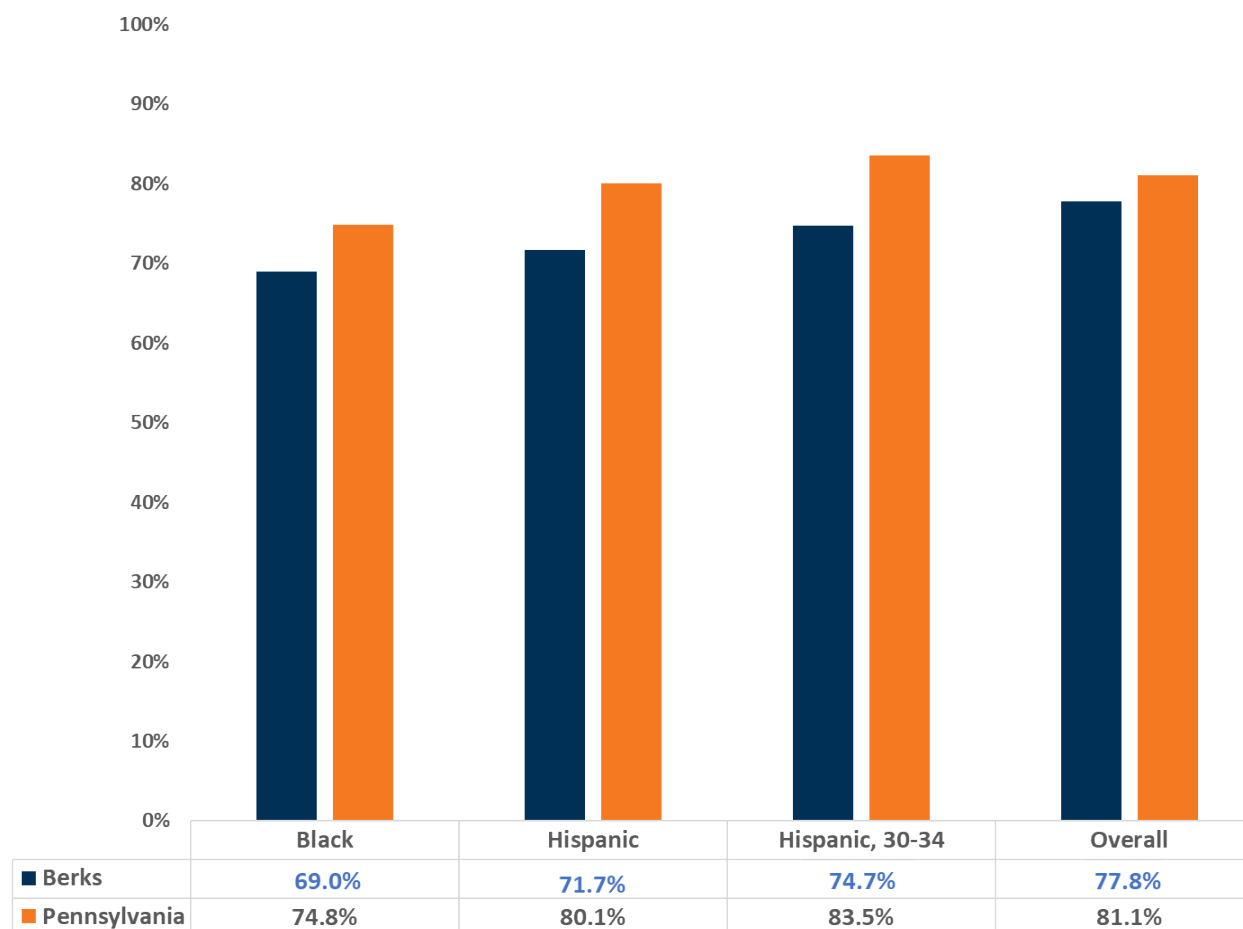
Figure 23: Participated in Activity to Strengthen Muscles, Past Month



IMPACTS OF RACE/ETHNICITY ON MATERNAL AND CHILD HEALTH

Figure 24 illustrates significant differences by race for mothers who breastfeed. Compared to the state (74.8% black, 80.1% hispanic), significantly fewer mothers who are black (69.0%) or hispanic (71.7%) report breastfeeding. When looking specifically at hispanic women ages 30-34 (74.7%), the percentage of mothers breastfeeding is also significantly lower when compared to the state (83.5%). Although not a racial disparity it is important to note that overall in Berks County the percentage of mothers who breastfeed (77.8%) is significantly lower when compared to the state (81.1%).

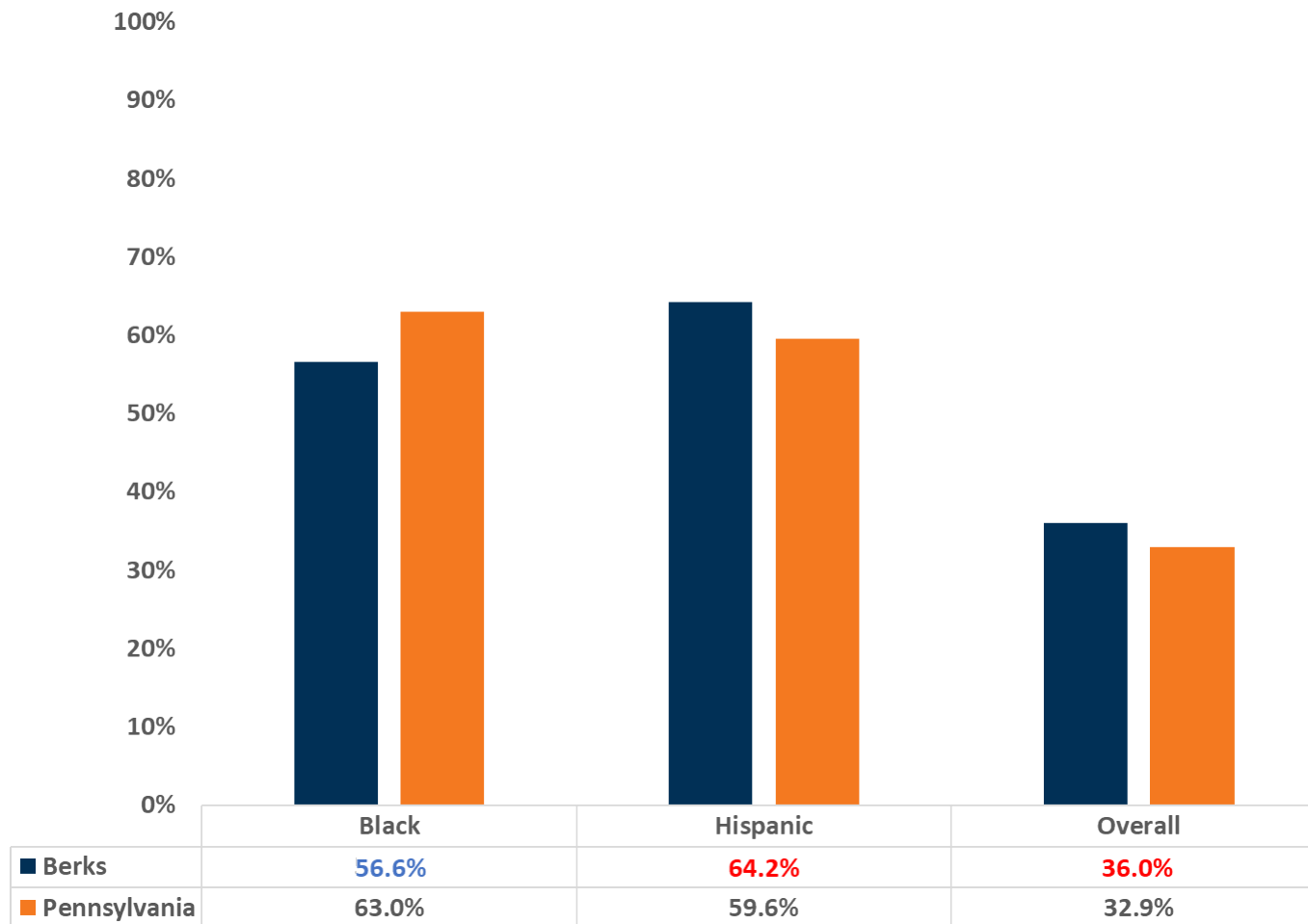
Figure 24: Breastfeeding by Race



Source: Department of Health Informatics, Pennsylvania Department of Health for Berks County, 2011-2016.

Figure 25 illustrates significant differences by race/ethnicity for mothers who report medicaid assistance. A significantly lower percentage of black mothers (56.6%) report using Medicaid Assistance when compared to the state (63.0%), while the percentage for hispanic mothers (64.2%) was significantly higher than the state (59.6%). Overall, for Berks County a significantly higher percentage of mothers (36.0%) report Medicaid Assistance when compared to the state (32.9%).

Figure 25: Mothers Reporting Medicaid Assistance

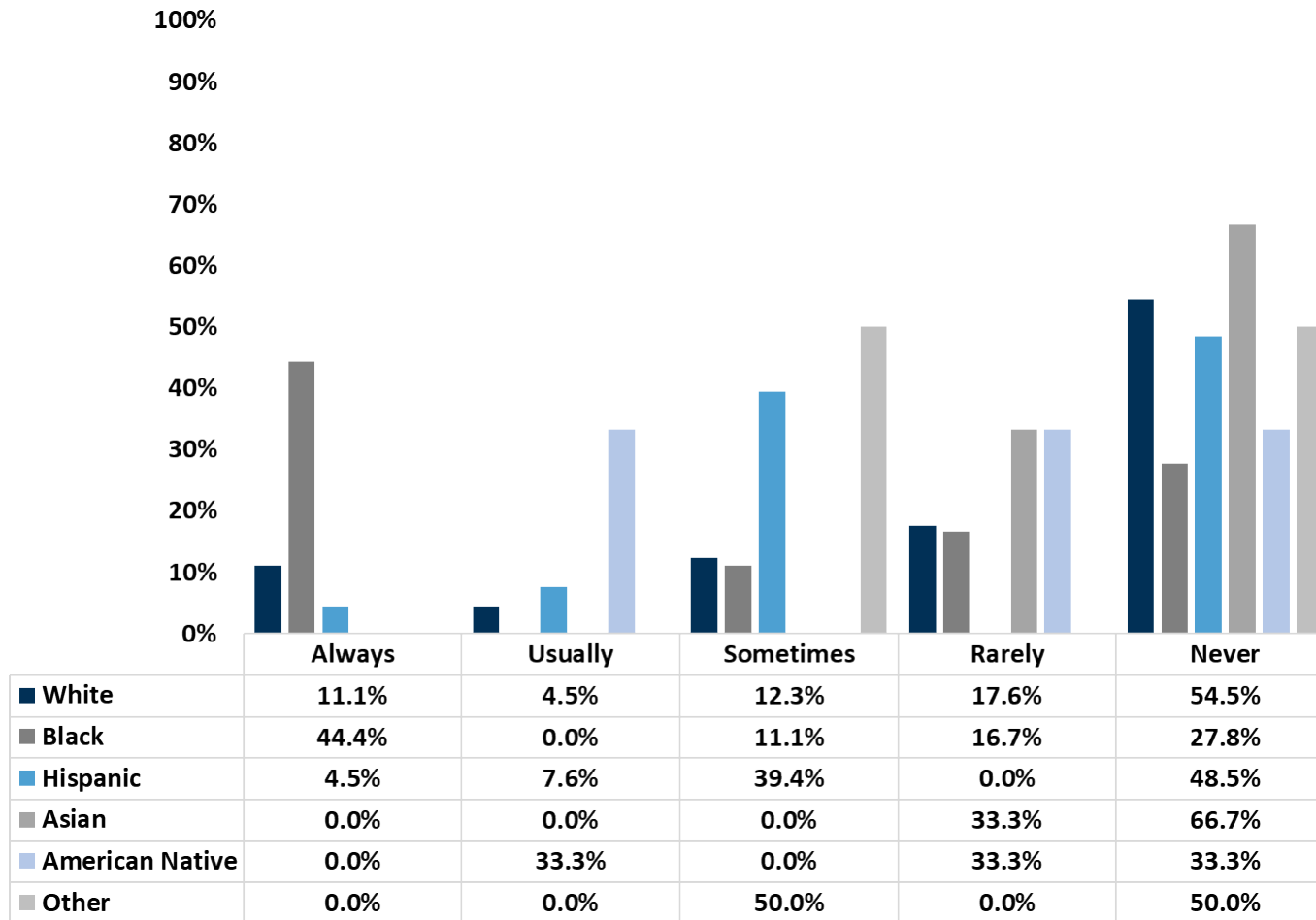


Source: Department of Health Informatics, Pennsylvania Department of Health for Berks County, 2011-2016.

IMPACTS OF RACE/ETHNICITY ON HOUSING

Figure 26 illustrates the percentage of community survey respondents, by race/ethnicity, who have worried about having enough money for housing. Black respondents were significantly more likely to worry about having enough money for housing than other respondents.

Figure26: Worried About Having Enough Money for Housing

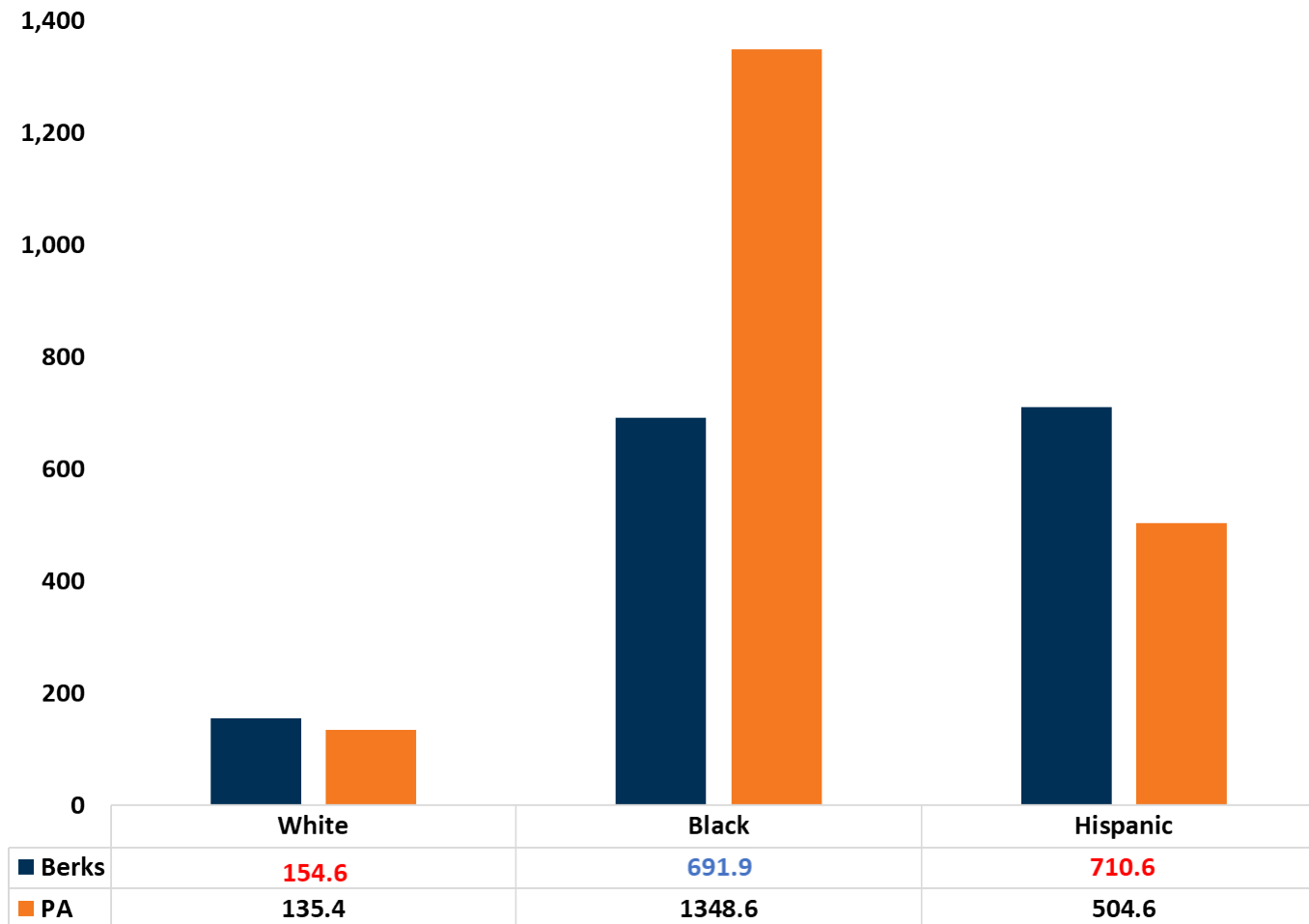


Source: Reading Hospital Community Survey, Professional Research Consultants, 2018

IMPACTS OF RACE/ETHNICITY ON INFECTIOUS DISEASE

Figure 27 shows the significant differences based on race/ethnicity when Berks County is compared to the state. The figure illustrates the chlamydia rate per 100,000 for the county and state based on select race/ethnicity indicators. The chlamydia rate in Berks County is significantly higher for White (154.6) and Hispanic (710.6) residents when compared to the state (135.4, 504.6 respectively). The chlamydia rate for Black residents is significantly lower in Berks County (691.9) when compared to the state (1348.6).

Figure 27: Chlamydia Rate, Per 100,000



Source: Reading Hospital Community Survey, Professional Research Consultants, 2018



WHAT THE COMMUNITY IS SAYING



Key Informant survey respondents were asked to identify underserved populations in the community. The Hispanic/Latino population was identified as underserved by 43.2% of the respondents. Very few (8.1%) identified Black/African Americans as an underserved population.

HOW TRANSPORTATION IMPACTS HEALTH

People need transportation to access health services, to earn a living, to get to school and be part of a community.

Table 13 shows that on average, Berks County residents own 1.9 vehicles. Most (80.1%) drive alone to work, while just under one in ten residents (9.6%) carpool to work. Very few Berks County residents use public transportation, walk, bike or work from home.

Table 13: Demographic Snapshot: Transportation/Commuter Information

	Berks County
Average Number of Vehicles	1.9
Transportation to Work	
Drive Alone	80.1%
Carpool	9.6%
Public Transportation	1.4%
Walk	3.5%
Bicycle	0.4%
Work at Home	3.6%

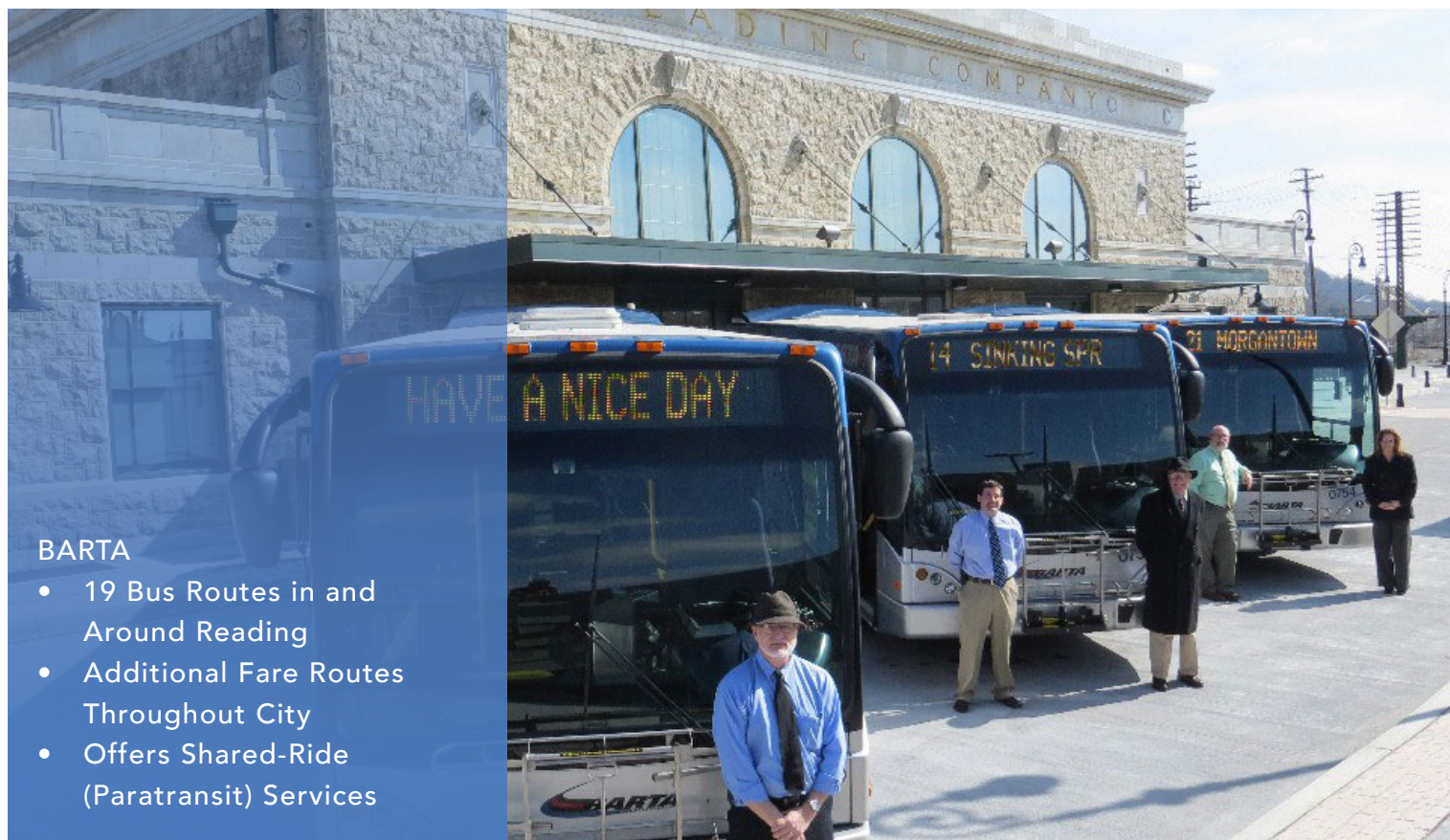
Source: Claritas - Pop-Facts Premier 2018, Environics Analytics



Figure 28 illustrates the public transportation system information that is available on the Internet regarding transportation available in Berks County for residents to utilize for medical appointments, shopping, entertainment, exercise, etc.

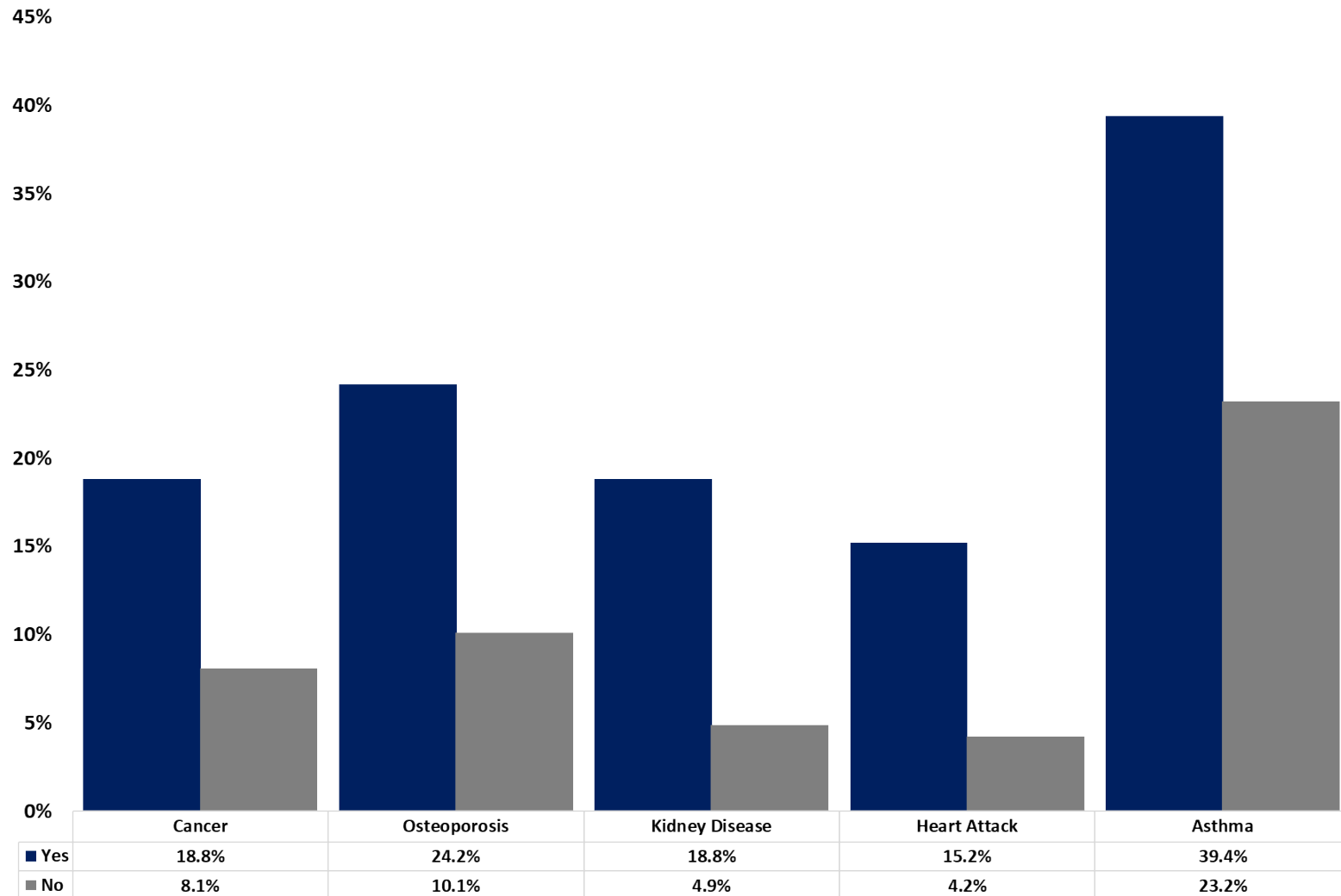
While other transportation options may be available for people who are aware of them, the information about the options may not be readily accessible.

Figure 28: Public Transportation Systems Available In Berks County



From the Reading Hospital Community Survey, **Figure 29** illustrates the chronic diseases experienced by the residents who indicated that they have had a transportation barrier for medical care in the past 12 months. Respondents who experience transportation barriers were significantly more likely than other residents to have cancer, osteoporosis, kidney disease, heart attack or asthma.

Figure 29: Transportation Impact On Health Status, Berks County



Source: Reading Hospital Community Survey, Professional Research Consultants, 2018



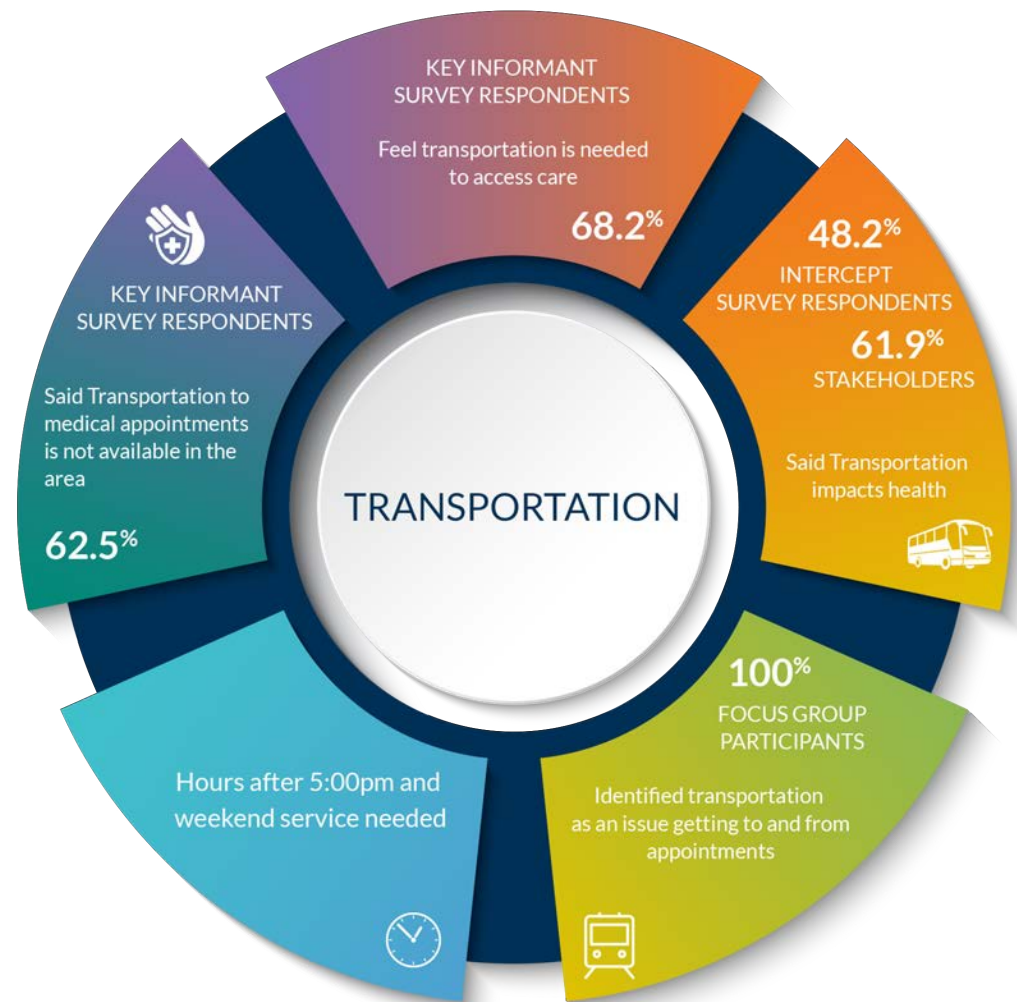
WHAT THE COMMUNITY IS SAYING

Figure 30 illustrates what was heard through survey respondents, focus group participants and stakeholder interviews regarding transportation and the needs of community members. All of the focus group participants said that transportation is an issue getting to and from appointments. Almost two-thirds (62.5%) of key informant survey respondents indicated that transportation to medical appointments is not available in the area. Just under half (48.2%) of intercept survey respondents said transportation impacts health.

Figure 30: Primary Data Sources – Transportation

Issues mentioned by focus group participants, intercept survey and key informant survey respondents and stakeholders related to a lack of transportation include:

- Better access to transportation is needed
- Lack of evening and weekend transportation options
- Transportation options are limited and time intensive
- Hours spent accessing transportation in order to get to an appointment
- Affordable transportation
- Cannot access grocery stores that sell fresh produce or exercise areas as no transportation
- Inability to navigate the transportation system
- Lack of transportation outside of the area to access specialty care
- Need for more senior transportation
- Needed transportation outside of cities; more rural area transportation



HOW FOOD IMPACTS HEALTH

Food acts as medicine to prevent, maintain and treat disease. The food we eat provides information and materials to our bodies that they need to function properly. If we do not get the right information, our metabolic processes suffer and our health declines. If we get too much food, or food that gives our bodies the wrong instructions, we can become overweight, undernourished and at risk for the development of diseases and conditions, such as arthritis, diabetes and heart disease.

Table 14 indicates that in the Reading Hospital Primary Service Area, the percentage of the population that is food insecure declined slightly over the past three years (11.3% in 2016 to 9.4% in 2018). However, the percentage of the population with limited access to healthy foods has increased (2.9% in 2016 to 3.5% in 2018) as has the percentage of children receiving free and reduced-price lunches (37.8% in 2016 to 51.0% in 2018).

Table 14: County Health Rankings: Nutrition Indicators

NUTRITION INDICATORS FROM COUNTY HEALTH RANKINGS			
	BERKS COUNTY		
NUTRITION INDICATORS	2016	2017	2018
Food Insecurity	11.3%	10.3%	9.4%
Limited Access to Healthy Foods*	2.9%	2.9%	3.5%
Free or Reduced Lunch	37.8%	49.3%	51.0%

Source: County Health Rankings and Roadmaps for Berks County, 2018

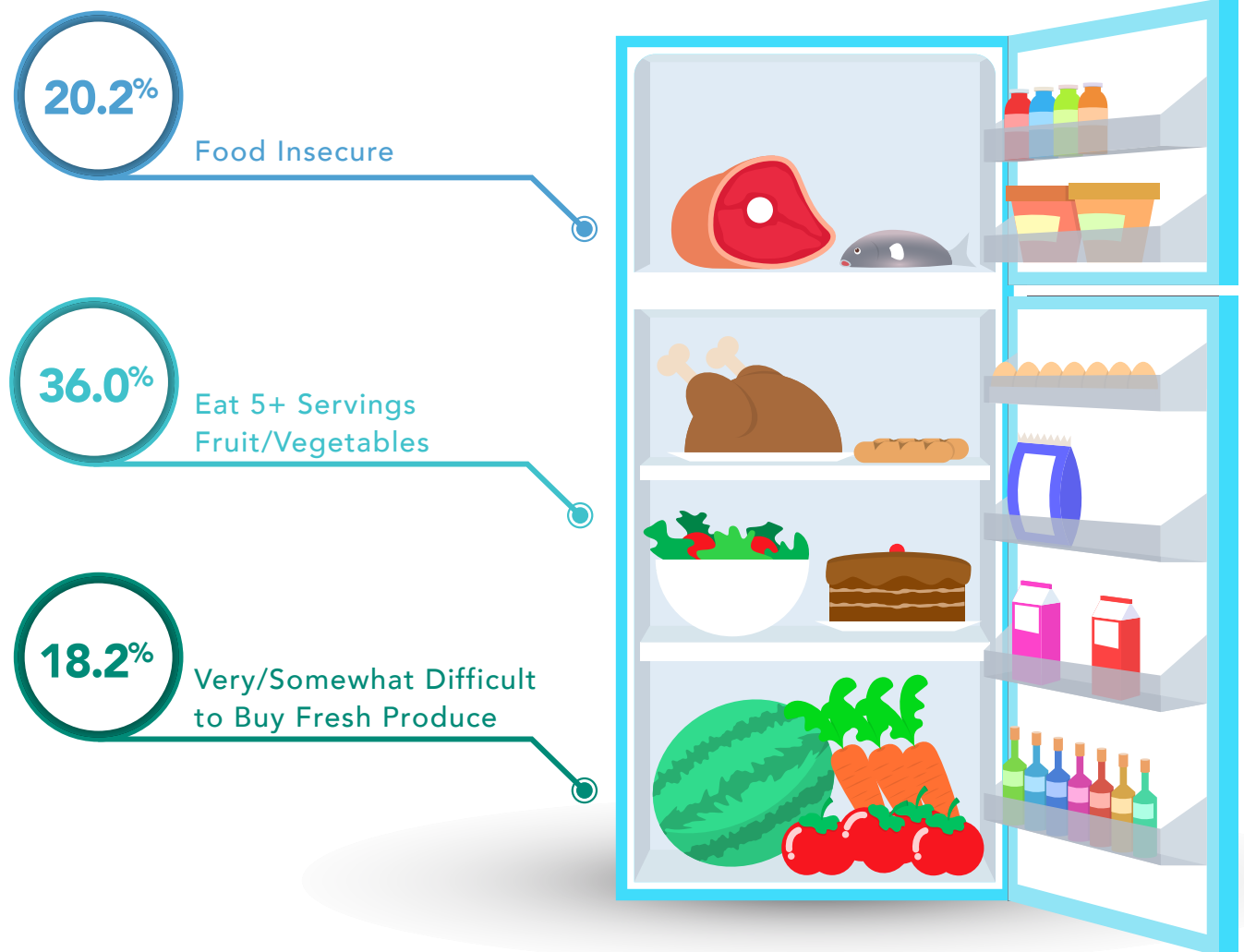
**Limited Access to Healthy Foods is the percentage of the population that is low income and does not live close to a grocery store. Living close to a grocery store is defined differently in rural and nonrural areas; in rural areas, it means living less than ten miles from a grocery store; in nonrural areas, less than one 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.*



WHAT THE COMMUNITY IS SAYING

Figure 31 illustrates the percentage of Berks County residents who participated in the community survey and their responses to food-related questions. One in five (20.2%) respondents were food insecure, while 18.2% find it very or somewhat difficult to buy fresh produce. Just over one-third of survey respondents (36.0%) report eating five or more servings of fruit and/or vegetables daily.

Figure 31: Community Food And Nutrition



Just over half of intercept survey respondents indicated that poor nutrition (54.6%) or access to healthy food (52.0%) has the highest impact on ones health.

Focus group participants discussed the lack of grocery stores in the city, noting people shop at corner markets which often do not carry healthy foods and fresh produce. They added that residents are unable to access, as well as afford, healthy food and that many are food insecure.

Stakeholders also discussed the lack of ability for residents to access fresh, affordable healthy food. Many suggested the need for nutrition education and healthy cooking demonstrations.



HOW HOUSING IMPACTS HEALTH

Table 15 shows housing demographics for the residents in Berks County. Most residents (71.7%) own their own home and reside in a single-family home (79.0%).

Table 15: Demographic Snapshot: Housing

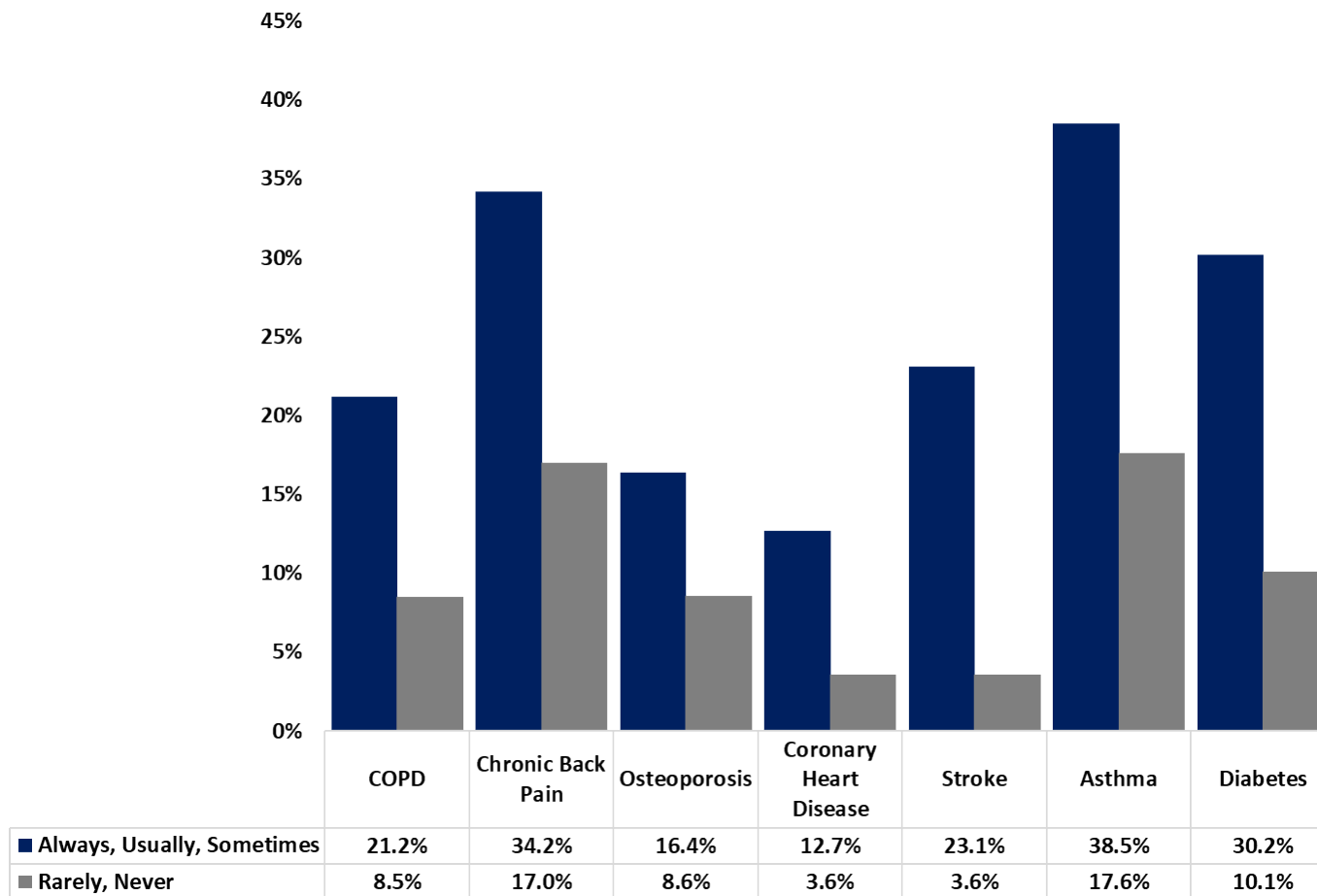
	Berks County
Home Ownership	
Own	71.7%
Rent	28.3%
Residential Type	
Single Family	79.0%
Multi-Family	17.8%
Mobile Home/Trailer	3.2%

Source: Claritas - Pop-Facts Premier 2018, Environics Analytics

Living on the street or in homeless shelters exacerbates existing health problems and causes new ones. Chronic diseases – such as hypertension, asthma, diabetes, mental health problems and other ongoing conditions – are difficult to manage under stressful circumstances and may worsen. Acute problems such as infections, injuries and pneumonia are difficult to heal when there is no place to rest and recuperate. Living on the street or in shelters also brings the risk of communicable disease (such as STDs or TB) and violence (physical, sexual and mental) because of crowded living conditions and the lack of privacy or security. Medications to manage health conditions are often stolen, lost or compromised due to rain, heat or other factors.

Stable housing also decreases the risk associated with further disease and violence. In many ways, housing itself can be considered a form of healthcare because it prevents new conditions from developing and existing conditions from worsening.³ **Figure 32** illustrates the impact of housing on chronic disease in the Reading Hospital Primary Service Area. Those with housing insecurity are significantly more likely to have COPD, chronic back pain, osteoporosis, coronary heart disease, stroke, asthma and diabetes.

Figure 32: Housing Insecurity Impact On Health



Source: Reading Hospital Community Survey, Professional Research Consultants, 2018

³ National Health Care for the Homeless Council. What is the relationship between health, housing and homelessness? 2019

HOMELESSNESS

According to the Point in Time Homelessness Survey conducted in January 2019, there were a total of 452 homeless individuals in Berks County compared to 403 homeless individuals in 2018. This is outlined in **Table 16**. Not all counties report data by type of shelter or by household.

Table 16: Homelessness, January 2019

HOMELESS POINT IN TIME SURVEY, JANUARY 2019										
	HOUSEHOLDS					INDIVIDUALS				
	Emergency	Transitional	Unsheltered	Safe Haven	Total	Emergency	Transitional	Unsheltered	Safe Haven	Total
Berks County 2018	23	28	0	0	51	237	155	11	0	403
Berks County 2019	27	19	0	0	46	305	137	11	0	452

Source: Individual County Continuum of Care Homeless Statistics, 2019



WHAT THE COMMUNITY IS SAYING

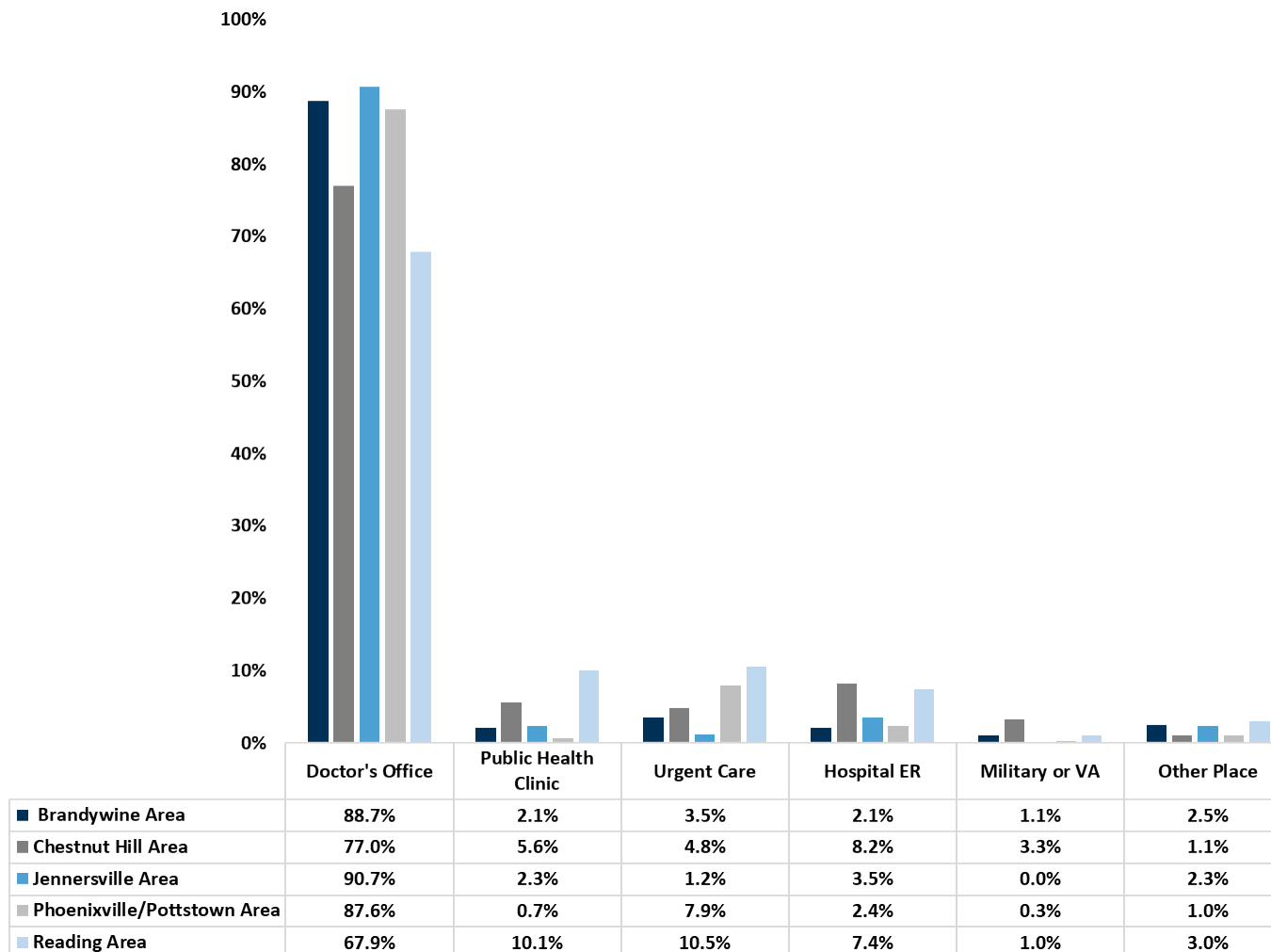
Over half (56.3%) of intercept survey respondents indicated that affordable and quality housing has the highest impact on ones health. Homeless individuals were the most frequently (83.8%) identified underserved population by key informants.



HOW WHERE ONE LIVES IMPACTS HEALTH

Figure 33 illustrates the significant differences by hospital from the community survey in terms of where respondents typically go for health care. Respondents in the Reading Hospital Area were significantly more likely to go to a Public Health Clinic for care and/or advice about their health compared to respondents from other areas.

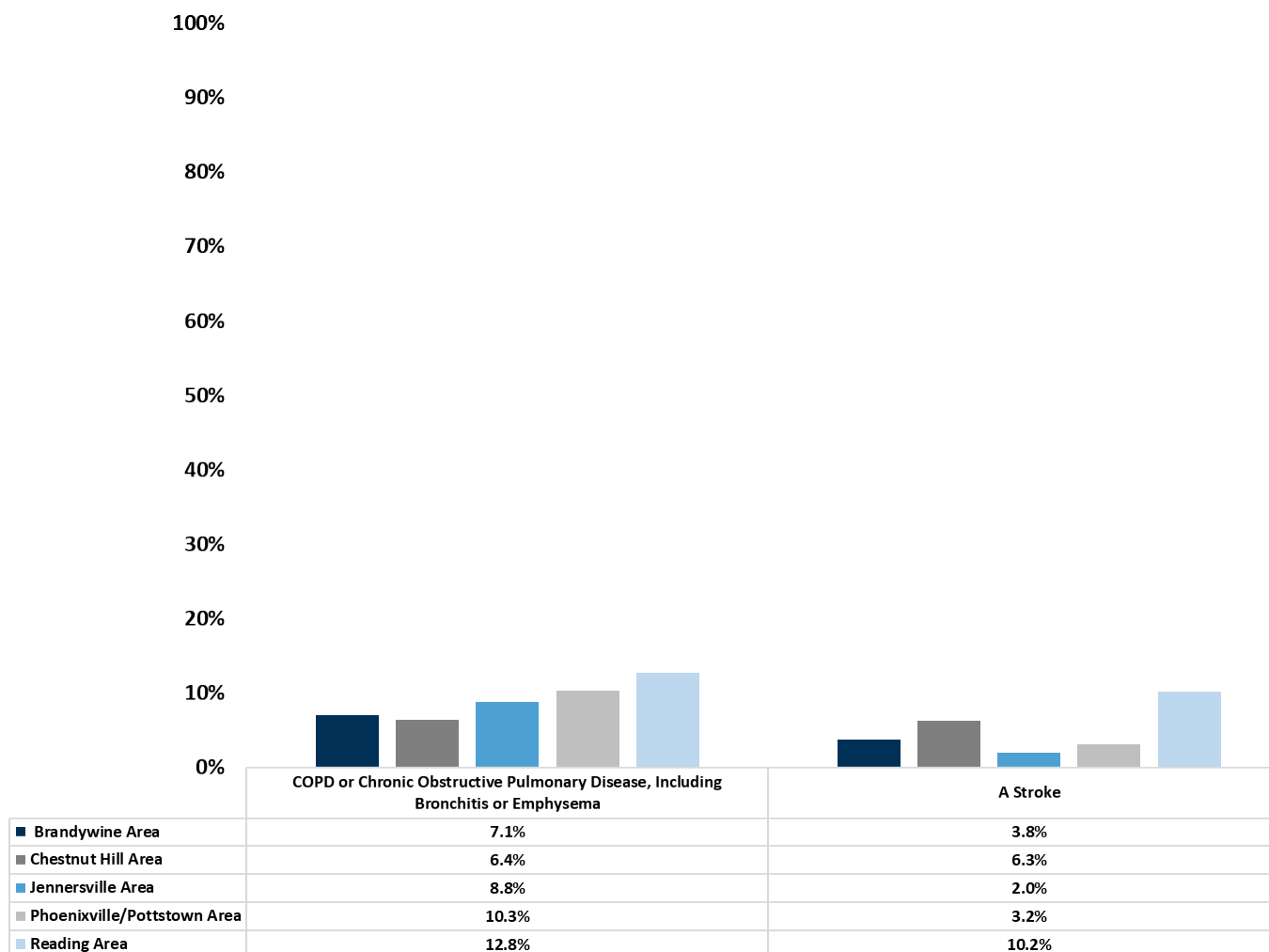
Figure 33: Where Residents Go For Care



Source: Reading Hospital Community Survey, Professional Research Corporation, 2018

Figure 34 illustrates the significant differences by hospital from the community survey in terms of where respondents who have ever been told they have a chronic condition reside. Respondents in the Reading Area were significantly more likely to have ever been told they have COPD or a stroke compared to respondents in other areas.

Figure 34: Health Conditions



HOW ENVIRONMENT IMPACTS HEALTH

Table 17 shows the daily average air-pollution particulate matter score as well as the presence of drinking water violations in 2018. Berks County had a higher average daily air pollution particulate matter score (11.3) when compared to the state (10.4). Berks County also had the presence of a water violation.

Table 17: Air and Water Quality

	Air pollution - particulate matter	Drinking water violations
	Average Daily PM2.5	Presence of violation
Berks County	11.3	Yes
Pennsylvania	10.4	N/A

Source: County Health Rankings, 2018



HEALTH IS WHERE WE LEARN

Education plays a role in the health and well-being of a population. Dropping out of school is associated with multiple social and health problems. Individuals with less education are more likely to experience a number of health risks, such as:

- Obesity
- Substance abuse
- Intentional and unintentional injuries

Higher levels of education are associated with:

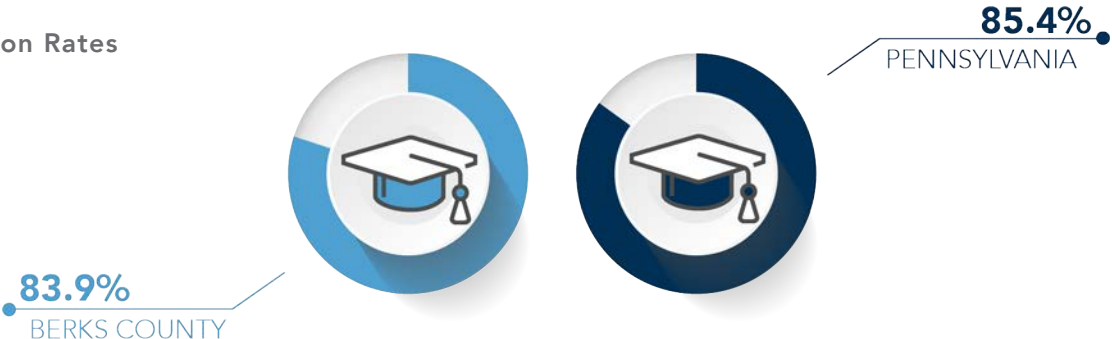
- A longer life
- Increased likelihood of obtaining or understanding basic health information and services to make appropriate healthcare decisions

HOW EDUCATION IMPACTS HEALTH

Low education levels can be barriers to health. This is seen in those residents who have less than a high school education. These individuals are significantly more likely to report their health as fair or poor, to struggle with food, housing and access to health care.

As **Figure 35** illustrates, Berks County high school graduation rates are lower than the state overall.

Figure 35: Demographic Snapshot: High School Graduation Rates



Source: County Health Rankings and Roadmaps for Berks County, 2018

Generally, the higher the education level, the lower the percentage of the population that lives in poverty. In Berks County, the poverty level by educational attainment is shown in **Figure 36** Almost a quarter (22.1%) of those with less than high school education live in poverty. Only 4.1% of those who have some college or a college degree live in poverty.

Figure 36: Percent Of Population (Age 25+) Below Poverty Level With Less Than A High School Education



HOW EDUCATION IMPACTS ACCESS TO CARE

Figure 37 shows significant differences for overall health and preventative care based on highest level of educational attainment from the community survey respondents who reside in Berks County. Those with a high school diploma or less were significantly more likely to report their overall health as fair or poor compared to respondents with higher levels of educational attainment. College graduates were significantly less likely to have received a routine health check up in the past year compared to other respondents. Those with less than a high school education were significantly less likely to have had an eye exam in the past two years, a dental exam in the past year, a flu shot or pap test in the past three years.

Figure 37: Access To Preventative Care

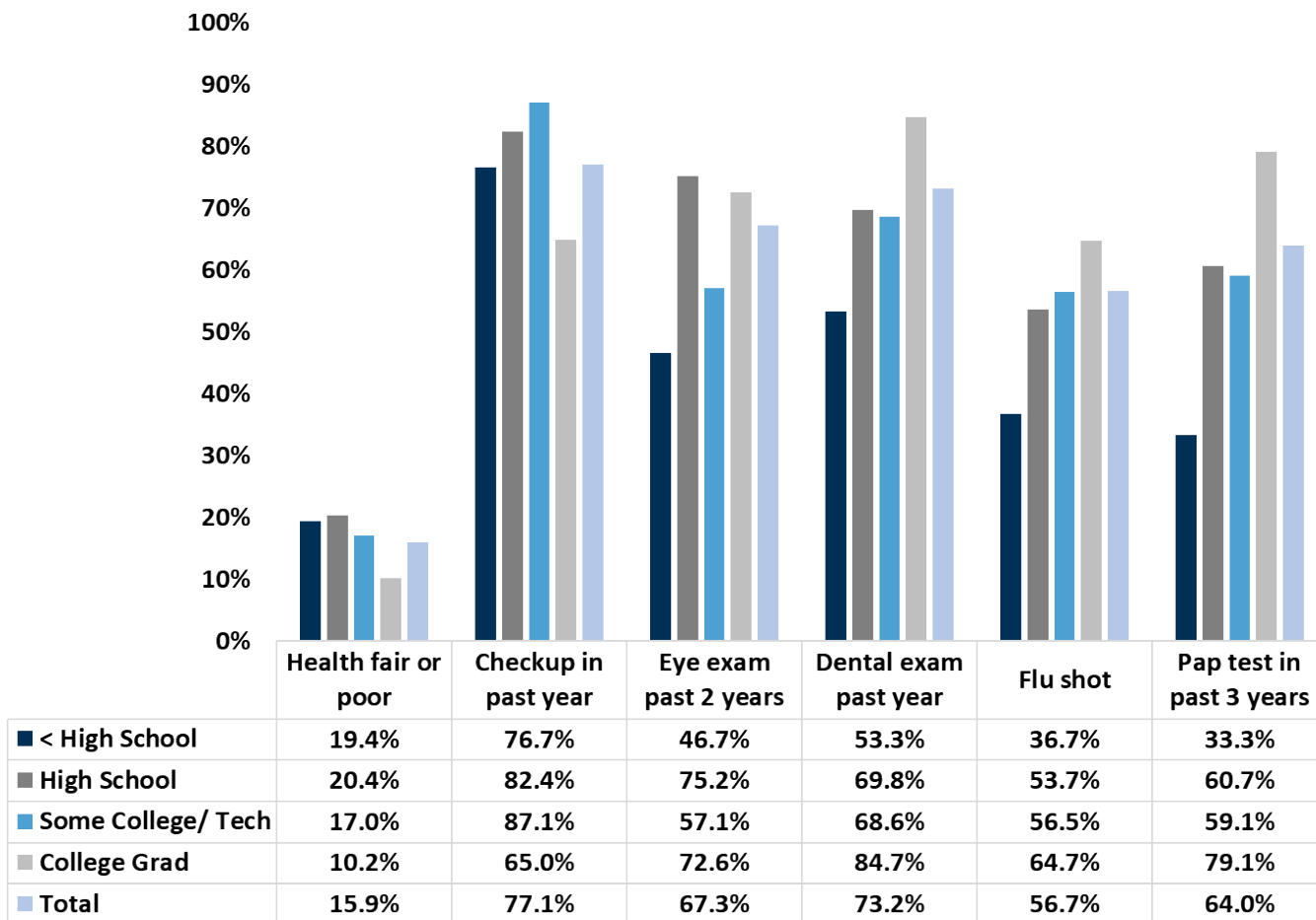
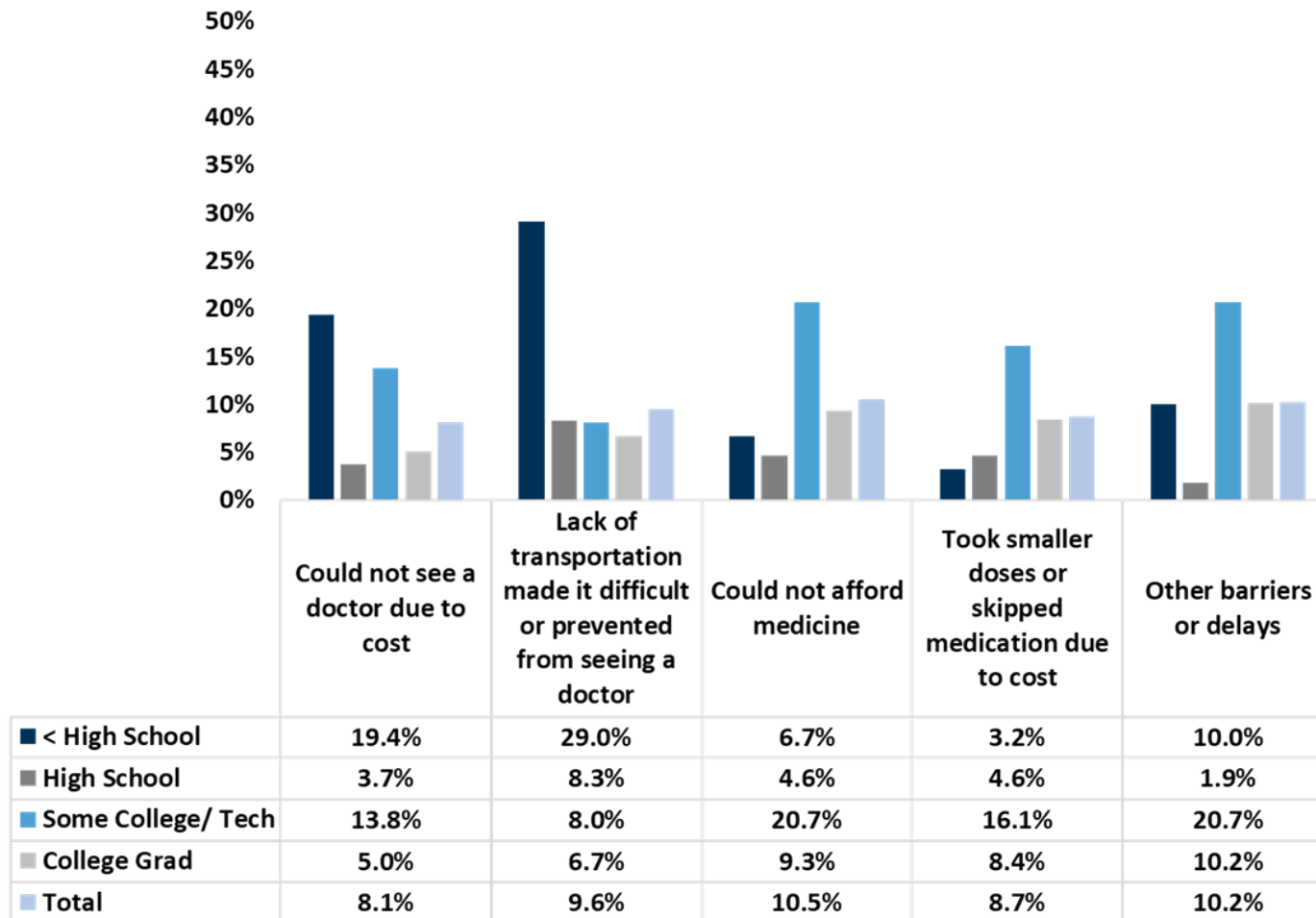


Figure 38 shows significant differences in terms of barriers community survey respondents in Berks County experience based on their educational attainment. Survey respondents with less than a high school education were significantly more likely to not see a doctor due to cost or lack of transportation when compared to other respondents. Those with some college or technical education were significantly more likely to be unable to afford prescriptions or had taken smaller doses due to cost compared to other respondents.

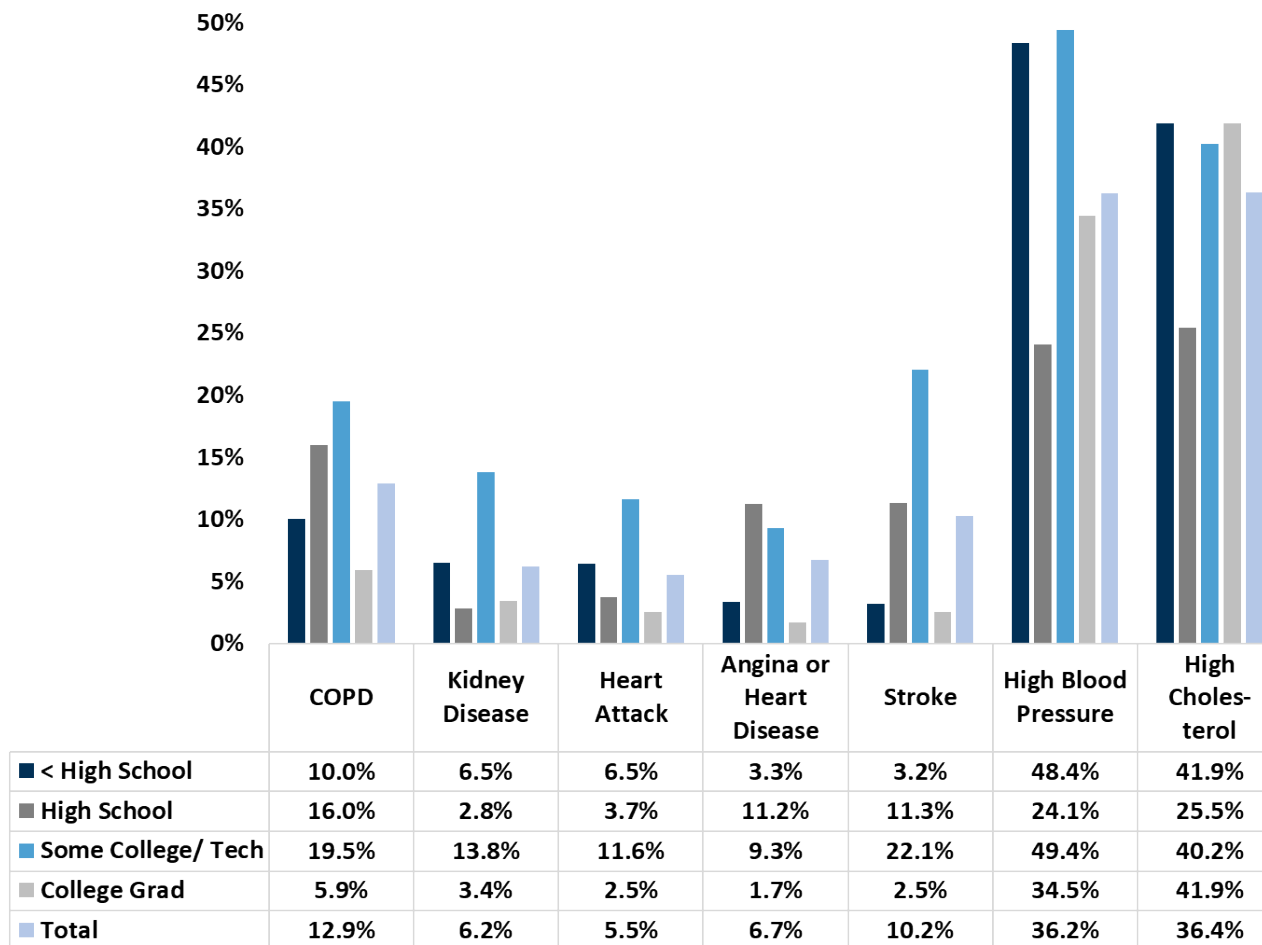
Figure 38: Barriers To Care



HOW EDUCATION IMPACTS CHRONIC CONDITIONS

Figure 39 illustrates the percentage of community survey respondents who experience the following chronic conditions that were significantly different based on educational attainment. Respondents from Berks County with some college or technical school were significantly more likely to have ever been told they have COPD, kidney disease, had a heart attack, stroke or high blood pressure compared to other respondents. Those with a high school diploma or equivalent were significantly more likely to have been told they have heart disease compared to others. Those with either less than a high school education or college graduates were significantly more likely to have ever been told they have high cholesterol when compared to other respondents.

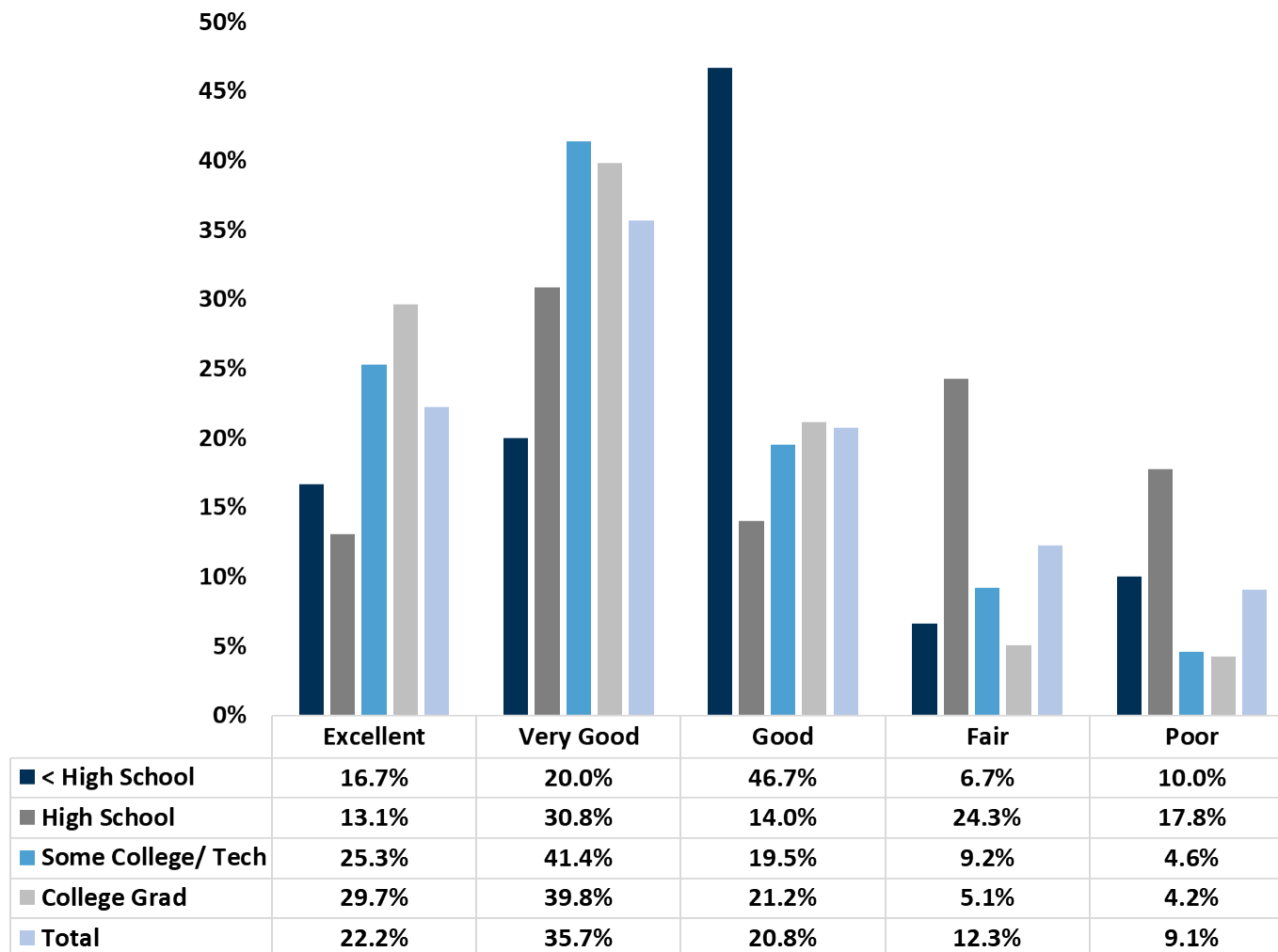
Figure 39: Chronic Conditions



HOW EDUCATION IMPACTS BEHAVIORAL HEALTH

Figure 40 illustrates the community survey respondents in Berks County by education for how they rated their own personal mental health status. Those with a high school diploma or equivalent were significantly more likely to rate their mental health as fair or poor compared to other respondents.

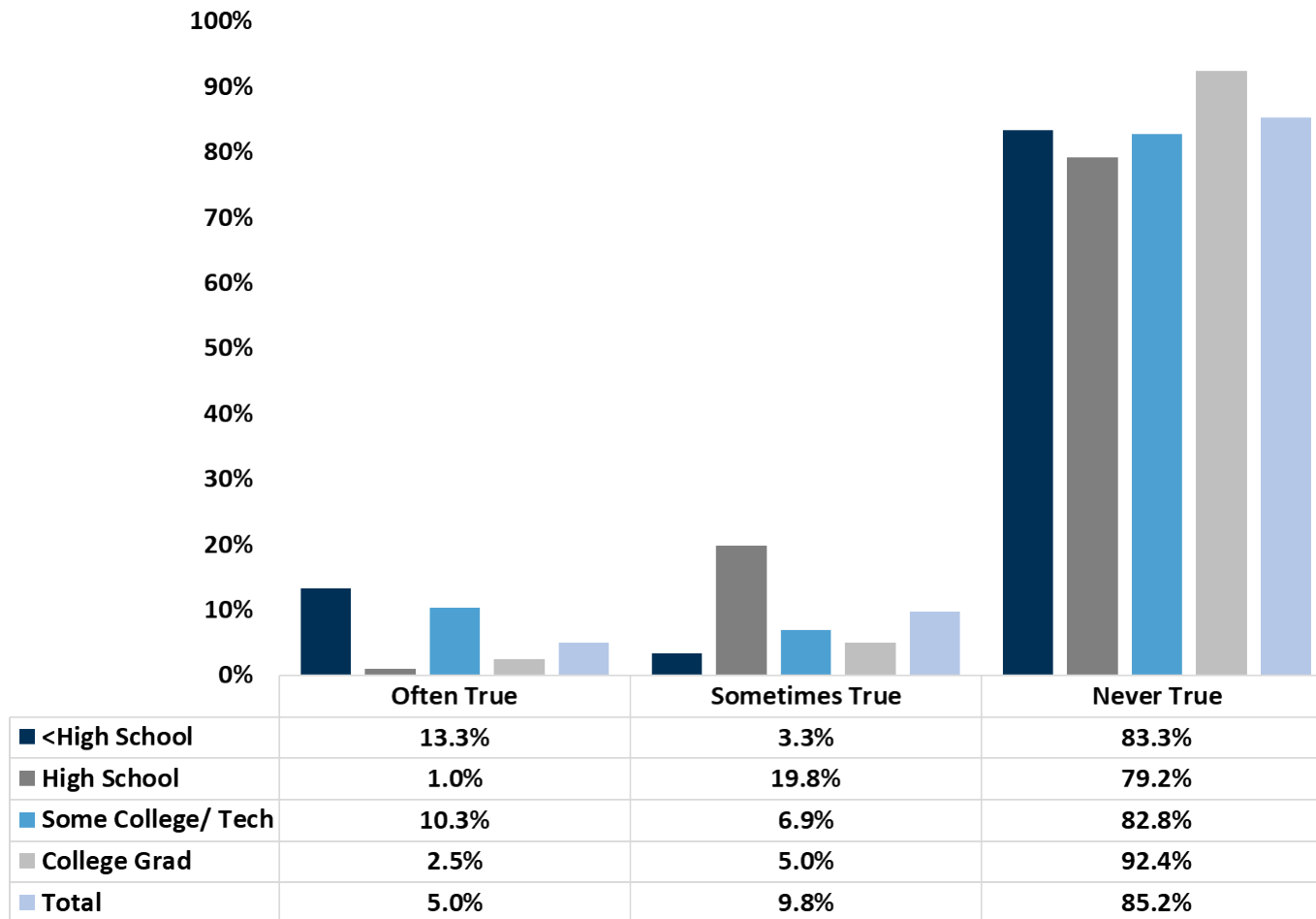
Figure 40: Personal Mental Health Status



HOW EDUCATION IMPACTS FOOD AND NUTRITION

Figure 41 shows the percentage of community survey respondents in Berks County who report that food did not last and they did not have money to buy more by educational attainment. Those with a high school diploma or equivalent were significantly more likely to have run out of food and been unable to purchase more than other respondents.

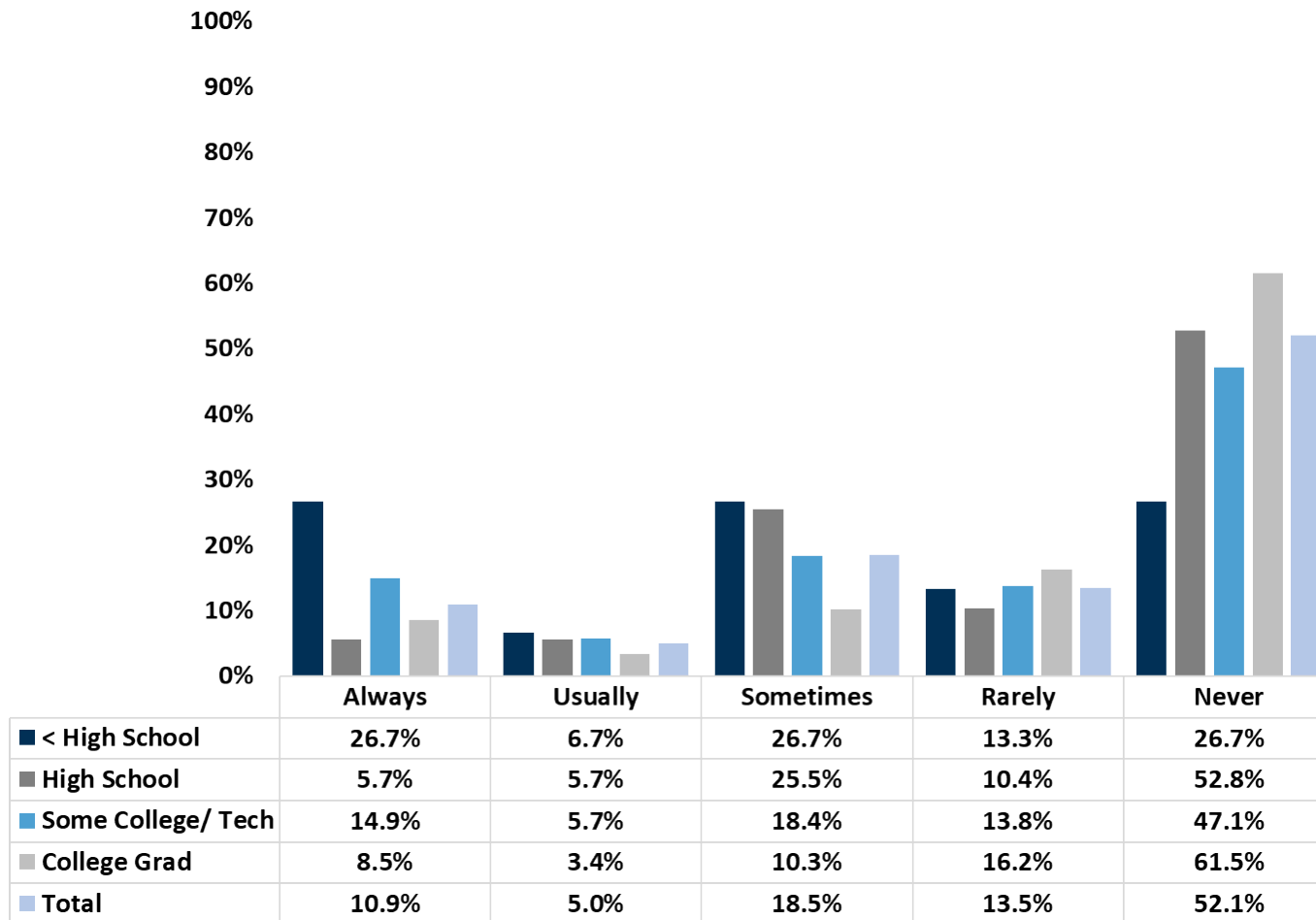
Figure 41: Food Did Not Last And No Money To Buy More



HOW EDUCATION IMPACTS HOUSING

Figure 42 illustrates the percentage of community survey respondents in Berks County who report worrying about having enough money for housing. Those with less than a high school education were significantly more likely to worry about not having enough money for housing compared to respondents with higher levels of educational attainment.

Figure 42: Worried About Having Enough Money For Housing



Source: Reading Hospital Community Survey, Professional Research Consultants, 2018

HOW EARLY CARE AND EDUCATION IMPACTS HEALTH

Early education is an important period in a child's life. Children need safe housing, food, medical care, proper educational stimulation and nurturing relationships for healthy development. The first years of life build the foundation for future cognitive, emotional and behavioral skill development. Strong relationships with caregivers and stable, safe environments play a pivotal role in building a strong foundation for later growth and learning.

EARLY INTERVENTION

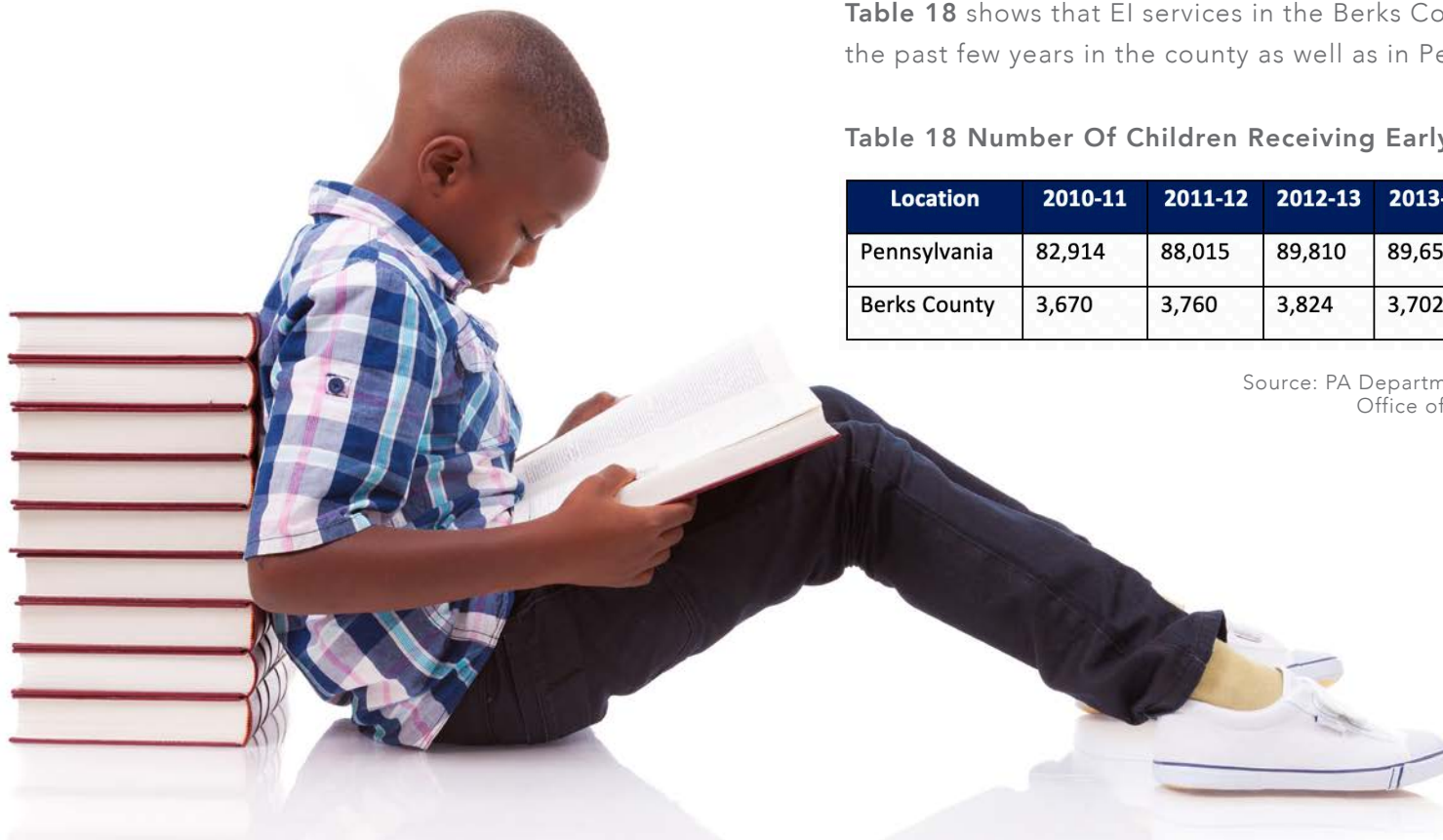
Early Intervention (EI) provides individualized services and supports to families of children birth to school age who have developmental delays or disabilities. Supports and services differ depending on the child's and family's needs and focus on enhancing the child's physical (including vision and hearing), cognitive, communication, social, emotional and adaptive development while providing parent education and support as needed.

Table 18 shows that EI services in the Berks County have been increasing over the past few years in the county as well as in Pennsylvania.

Table 18 Number Of Children Receiving Early Intervention Services

Location	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Pennsylvania	82,914	88,015	89,810	89,654	89,166	90,690	94,306
Berks County	3,670	3,760	3,824	3,702	3,771	3,810	3,891

Source: PA Departments of Education and Human Services,
Office of Child Development and Early Learning



EARLY CHILDHOOD: EARLY CARE AND EDUCATION

Keystone STARS is Pennsylvania's Quality Rating and Improvement System (QRIS). A QRIS is a continuous quality improvement systemic approach to assess, improve, and communicate the level of quality in early and school-age care and education programs. Keystone STARS is a program of Pennsylvania's Office of Child Development and Early Learning (OCDEL).

Keystone STARS is a responsive system to improve, support, and recognize the continuous quality improvement efforts of early learning programs in Pennsylvania. The system is guided by three core principles:

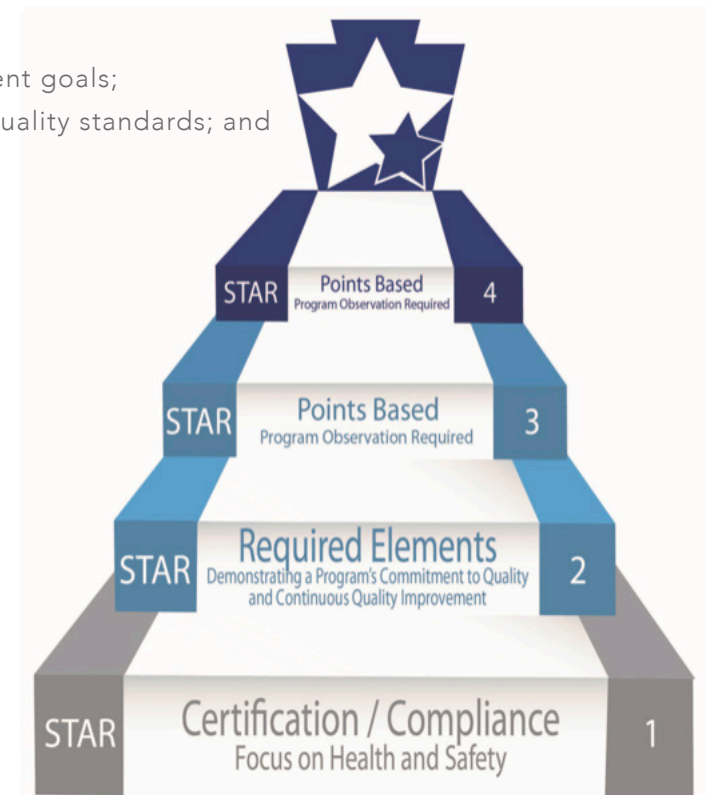
- A whole child approach to education is essential to meeting the holistic and individual needs of each and every child and family.
- Knowledgeable and responsive early care and education professionals are essential to the development of children and the support of families.
- Building and sustaining ongoing positive relationships among children, families, early care and education professionals and community stakeholders is essential for the growth and development of every child.

Keystone STARS has four primary goals:

- To improve the quality of early care and education;
- To support early care and education providers in meeting their quality improvement goals;
- To recognize programs for continuous quality improvement and meeting higher quality standards; and
- To provide families a way to choose a quality early care and education program.

Figure 43 illustrates the different star levels.

Figure 43: Keystone Star Levels



As outlined in **Table 19** below, the percentage of child care providers in the Keystone Stars program has increased in recent years. As of September 2018, only a small percentage of providers in Berks County and the state overall are not participating, with the county comparable to the state.

Table 19: Regulated Child Care: Total Providers And Keystone Stars Participation

Program Type		Data Type	Jun-12	Jun-13	Jun-14	Jun-15	Jun-16	Jun-17	Sep-18
Pennsylvania	Providers in STARS	Number	4,459	4,491	3,895	3,883	3,792	3,860	6,983
		Percent	51.8%	53.6%	47.6%	48.5%	49.20	51.4%	95.1%
	Providers Not in STARS	Number	4,141	3,889	4,283	4,128	3,916	3,646	362
		Percent	48.2%	46.4%	52.4%	51.5%	50.8%	48.6%	4.9%
Berks County	Providers in STARS	Number	144	171	144	157	146	150	247
		Percent	48.6%	60.4%	52.9%	56.1%	52.7%	56.4%	96.1%
	Providers Not in STARS	Number	152	112	128	123	131	116	10
		Percent	51.4%	39.6%	47.1%	43.9%	47.3%	43.6%	3.9%

Source: Pennsylvania Departments of Education and Human Services, Office of Child Development and Early Learning

According to the Office of Child Development and Early Learning nearly 205,000 children under age 5 need subsidized child care so their parents can reliably participate in the workforce and financially support their families. Child care provides not only peace of mind to working parents but an opportunity for young children to develop, grow and learn. Research indicates that access to high quality child care increases the likelihood that children enter school ready to success and their parents remain employed.

Table 20 shows the number and percent of children under the age of 5 in Berks County and Pennsylvania who are eligible, enrolled and unserved by a child care subsidy. In Berks County there are over 6,000 children not being served by a child care subsidy who are eligible, which accounts for 80.9% of eligible children. The percentage in Berks County not being served is higher when compared to Pennsylvania.

Table 20: Child Care Subsidy - Eligibility and enrollment of children under 5 years

Location	Under Age 5	Data Type	Oct-17
Pennsylvania	Eligible	Number	204,850
		Percent	NA
	Enrolled	Number	59,730
		Percent	29.2%
	Unserved	Number	145,120
		Percent	70.8%
Berks County	Eligible	Number	8,010
		Percent	NA
	Enrolled	Number	1,529
		Percent	19.10%
	Unserved	Number	6,481
		Percent	80.9%

Source: Pennsylvania Departments of Education and Human Services, Office of Child Development and Early Learning

Table 21 shows the percentage of children receiving subsidized childcare in Keystone STARS 3 or 4 facilities. While the percentage in Berks County has been increasing, fewer children are receiving subsidized care in a Keystone STARS 3 or 4 facility when compared to children across the state.

Table 21: Children Receiving Subsidized Child Care in Keystone STARS 3 or 4 Facilities

Location	June 2013	June 2014	June 2015	June 2016	June 2017
Pennsylvania	23.5%	23.7%	22.9%	23.0%	32.2%
Berks County	16.4%	15.7%	15.7%	18.3%	31.8%

Source: Pennsylvania Departments of Education and Human Services, Office of Child Development and Early Learning

According to the Office of Child Development and Early Learning in Table X below high-quality pre-k includes the distinct counts of PA Pre-K Counts, Head Start Supplemental Assistance Program and Keystone STARS 3 and 4 enrollments; Head Start; school district pre-k; accredited or PDE licensed nursery school; providers accredited by an accreditation recognized by the Pennsylvania Office of Child Development and Early Learning. Publicly funded, high-quality pre-k includes the distinct count of PA Pre-K Counts, Head Start Supplemental Assistance Program and Child Care Works enrollments in Keystone STARS 3 and 4; Head Start; and school district pre-k.



Table 22 shows the number and percent of children (ages 3-4) with access to high-quality Pre-K programs. The percentage of children in the county with access to high-quality pre-k has been increasing while those in publicly funded high-quality pre-k has fluctuated. Slightly fewer children age 3-4 in Berks County have access to high-quality pre-k when compared to the state.

Table 22: Children (Ages 3-4) With Access to High Quality Pre-K

Location	Type	Data Type	2013	2014	2015	2017
Pennsylvania	High-quality pre-k	Number	87,966	92,471	94,043	106,707
		Percent of all children ages 3-4	29.6%	31.1%	31.7%	36.2%
	Publicly funded, high-quality pre-k	Number	52,933	56,206	55,242	68,972
		Percent of all children ages 3-4	17.8%	18.9%	18.6%	23.4%

Location	Type	Data Type	2013	2014	2015	2017
Berks (Urban-Mix)	High-quality pre-k	Number	2,276	2,360	2,548	NA
		Percent of all children ages 3-4	21.8%	22.6%	24.4%	NA
	Publicly funded, high-quality pre-k	Number	1,386	1,570	1,509	1,859
		Percent of all children ages 3-4	13.3%	15.0%	14.4%	18.2%

Source: Pennsylvania Departments of Education and Human Services, Office of Child Development and Early Learning

Table 23 shows the number and percent of children ages 3-4 that were below 300% poverty with access to publicly funded, high-quality pre-k programs. The percentage of children in Berks County has been increasing and in 2017 remains lower than the state.

Table 23: Children (Ages 3-4) Below 300% Poverty With Access to Publicly Funded High Quality Pre-K

Location	Type	Data Type	2013	2014	2015	2017
Pennsylvania	Publicly funded, high-quality pre-k	Number	52,933	56,206	55,242	68,972
	Publicly funded, high-quality pre-k	Percent of children < 300% poverty	29.6%	31.1%	31.4%	39.4%

Location	Type	Data Type	2013	2014	2015	2017
Berks (Urban-Mix)	Publicly funded, high-quality pre-k	Number	1,386	1,570	1,509	1,859
	Publicly funded, high-quality pre-k	Percent of children < 300% poverty	20.7%	23.4%	23.8%	28.3%

Source: Pennsylvania Departments of Education and Human Services, Office of Child Development and Early Learning



HEADSTART

Head Start is the national commitment to give every low-income child, regardless of circumstances at birth, an opportunity to succeed in school and in life. In the 50 years since its inception, Head Start has improved the lives of more than 32 million children and their families. In addition to life and school preparedness, Head Start is also the nation's laboratory for early learning innovation. It offers a unique whole child/whole family program design coupled with a delivery system that includes local programs, national standards, monitoring, professional development, and family engagement. The commonwealth, through the Head Start Supplemental, creates new slots to supplement the resources provided through this federal program and to further reduce the unmet need felt in rural, suburban, and urban communities.

As illustrated in **Table 24**, the number of children enrolled in Head Start programs has fluctuated over the past few years in Berks County, with a slight increase in most recent years.

Table 24: Children Enrolled in Head Start Program, Berks County

Location	Program	2011 - 12	2012 - 13	2013 - 14	2014 - 15	2015 - 16	2016 - 17
Berks	Total	640	640	750	745	669	690
	Early Head Start	0	0	0	0	29	32
	Head Start - Federal	610	610	720	715	610	610
	Head Start - State	30	30	30	30	30	48

Source: Pennsylvania Departments of Education and Human Services, Office of Child Development and Early Learning



WHAT THE COMMUNITY IS SAYING

Lack of child care was not considered to be a significant barrier impacting access to health care by key informants. Approximately half (49.9%) of intercept survey respondents identified education as having the highest impact on one's health, while 45.8% identified the lack of childcare as having the greatest impact.



HEALTH IS WHERE WE WORK

HOW EMPLOYMENT IMPACTS HEALTH

A person who is unemployed or working a low wage or undesirable job is more at risk for health problems than those employees who are working full time. This may be partially a health selection effect, but it is also to a large extent cause and effect. There is strong evidence that unemployment is linked to early death, poorer general and mental health and psychological distress, higher use of medications and medical services as well as hospitalizations.

Figure 44 shows the unemployment rate in Berks County, Pennsylvania and the nation for April 2019. Unemployment in Berks County was comparable to both the state and nation.

Figure 44: Demographic Snapshot: Unemployment Rate

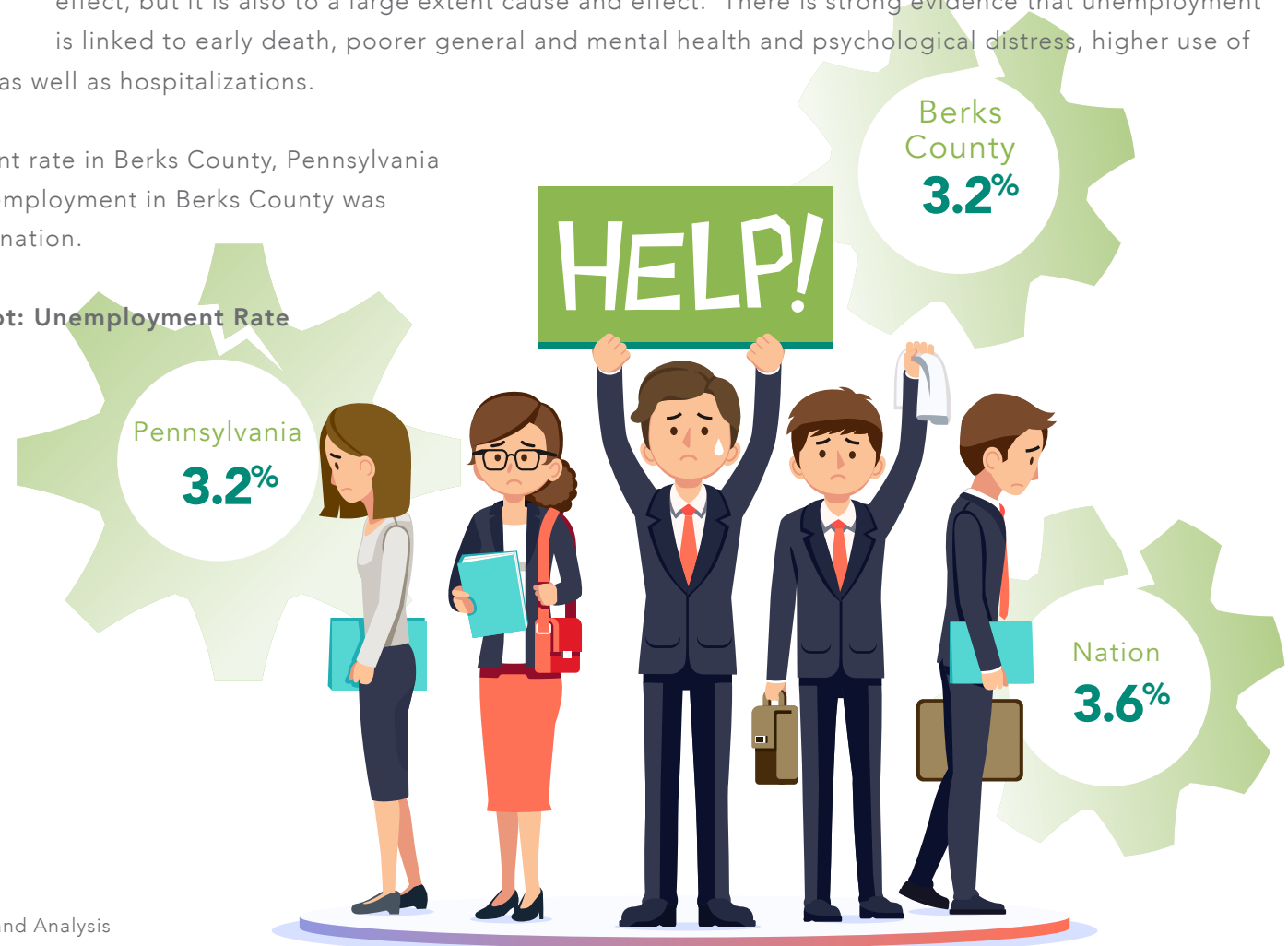


Table 25 shows employment for Berks County. Approximately one-third (34.3%) of residents age 16 and older are not in the labor force, while 60.4% are currently employed. Of those employed, just over half (55.4%) are employed in a white collar occupation.

Table 25: Demographic Snapshot: Employment

	Berks County
Employment Status	
Civilian Employed	60.4%
Civilian Unemployed	5.3%
In Armed Forces	0.0%
Not in Labor Force	34.3%
Occupational Classification	
White Collar	55.4%
Blue Collar	28.0%
Service and Farming	16.5%

Source: Claritas - Pop-Facts Premier 2018, Environics Analytics





WHAT THE COMMUNITY IS SAYING

Half of the intercept survey respondents (50.0%) identified underemployment/unemployment as having the highest impact on one's health.

HOW INCOME IMPACTS HEALTH

As outlined in **Table 26**, the average and median household income levels for the Reading Hospital Primary Service Area is slightly lower than the state and nation. The number of families living in poverty for Reading Hospital Primary Service Area (12.0%) is higher than the state (9.2%) and nation (11.0%).

Table 26: Demographics Snapshot: Income

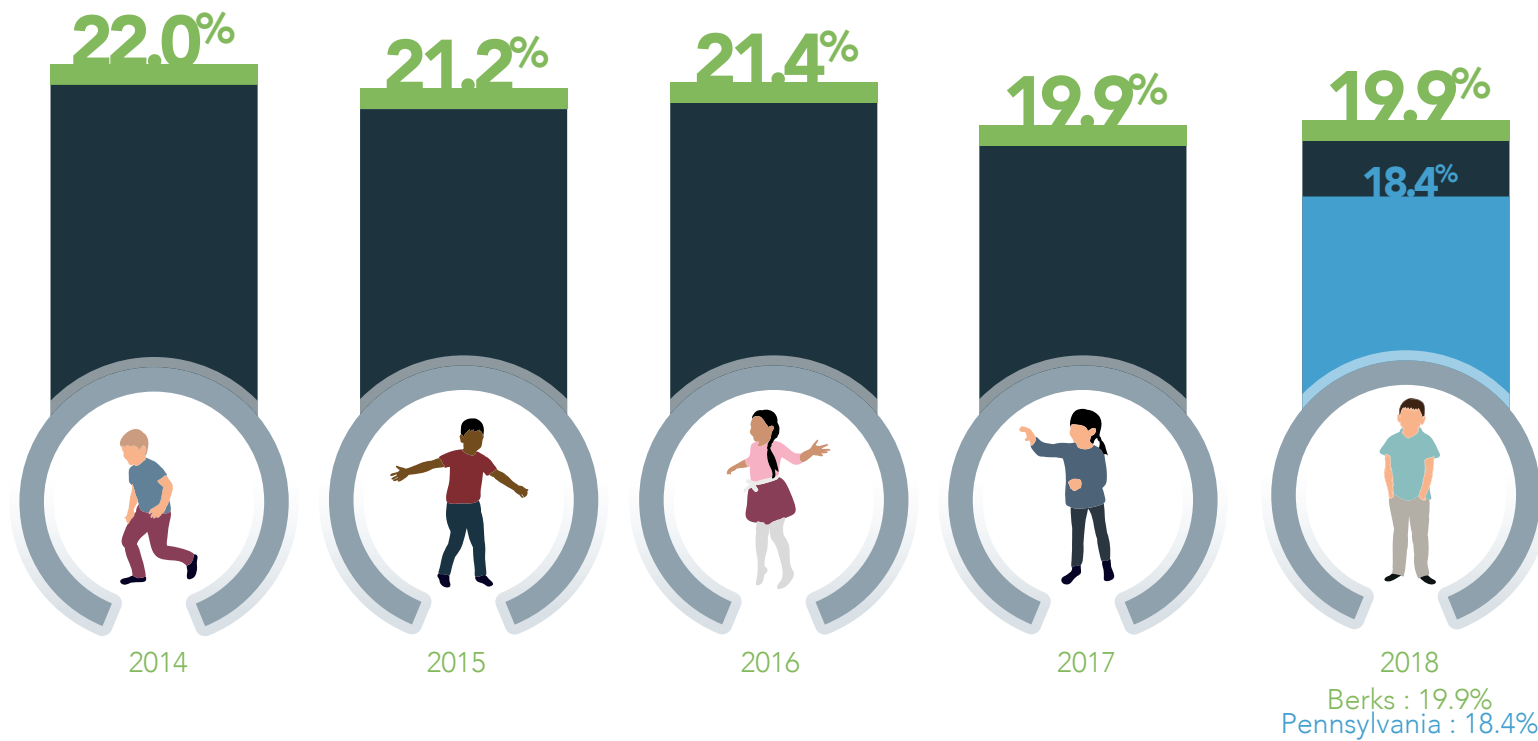
	Reading Hospital	PA	US
Average household Income	\$77,353	\$83,779	\$86,278
Median Household Income	\$57,342	\$60,149	\$60,133
Families Living in Poverty	12.0%	9.2%	11.0%

Source: Claritas - Pop-Facts Premier 2018, Environics Analytics



Figure 45 shows the percentage of children in Berks County living in poverty. While this percentage has fluctuated, in 2018 (19.9%) a slightly higher percentage of children in Berks County were living in poverty when compared to the state (18.4%).

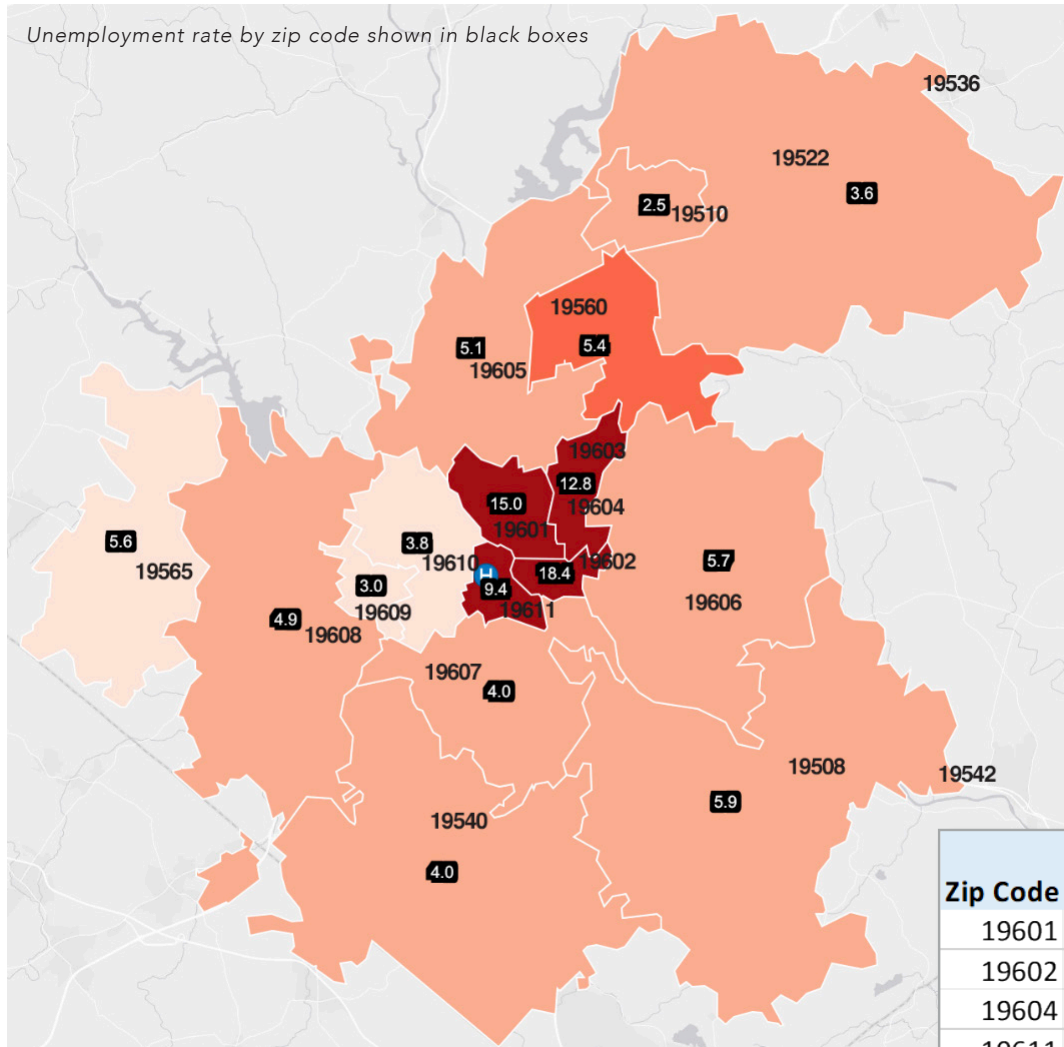
Figure 45: Children Living in Poverty



Source: County Health Rankings and Roadmaps, 2018

Figure 46 illustrates poverty levels by zip code throughout the service area. The City of Reading has the highest levels of people living in poverty compared to the rest of Berks County. Zip codes in the Primary Service Area with poverty rates over 20% are noted.

Figure 46: Poverty Levels By Zip Code



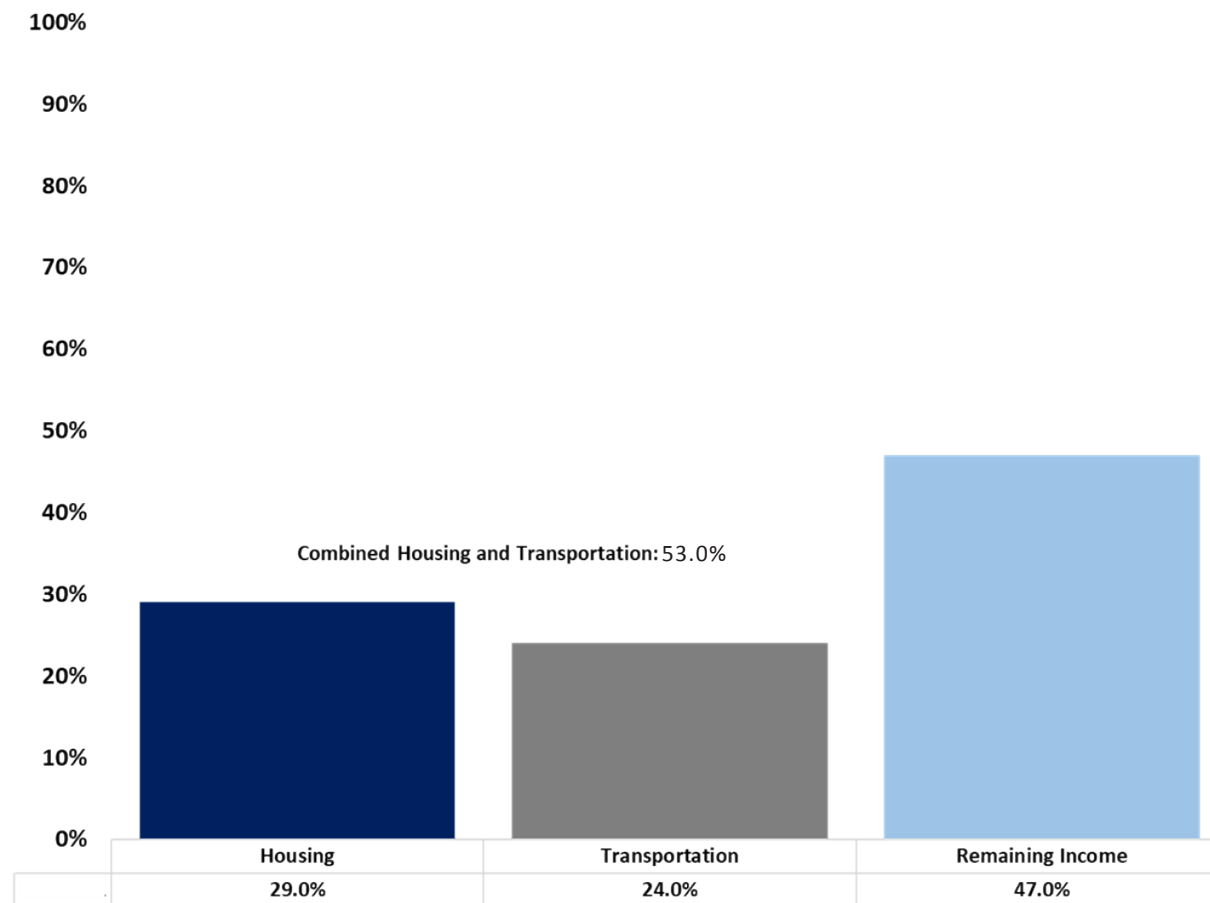
Poverty Rate as of 11/15/18:
 Source: 2012 - 2016 American Community Survey
 Unemployment Rate as of 11/15/18:
 Source: U.S. Census Bureau, Census 2010 Summary File 1

Zip Code	City	Households	Households in Poverty	Poverty Rate	Unemployment
19601	Reading	11512	4512	39.2%	15.0%
19602	Reading	6108	2324	38.0%	18.4%
19604	Reading	7987	2510	31.4%	12.8%
19611	Reading	3938	993	25.2%	9.4%

Source: Claritas - Pop-Facts Premier 2018, Environics Analytics

Figure 47 illustrates the housing and transit burden for Berks County. Combined housing and transit is considered a burden when it is at 45.0% or greater of one's household income. Berks County at 53.0% is at a level considered to be a burden.

Figure 47: Housing and Transit Burden

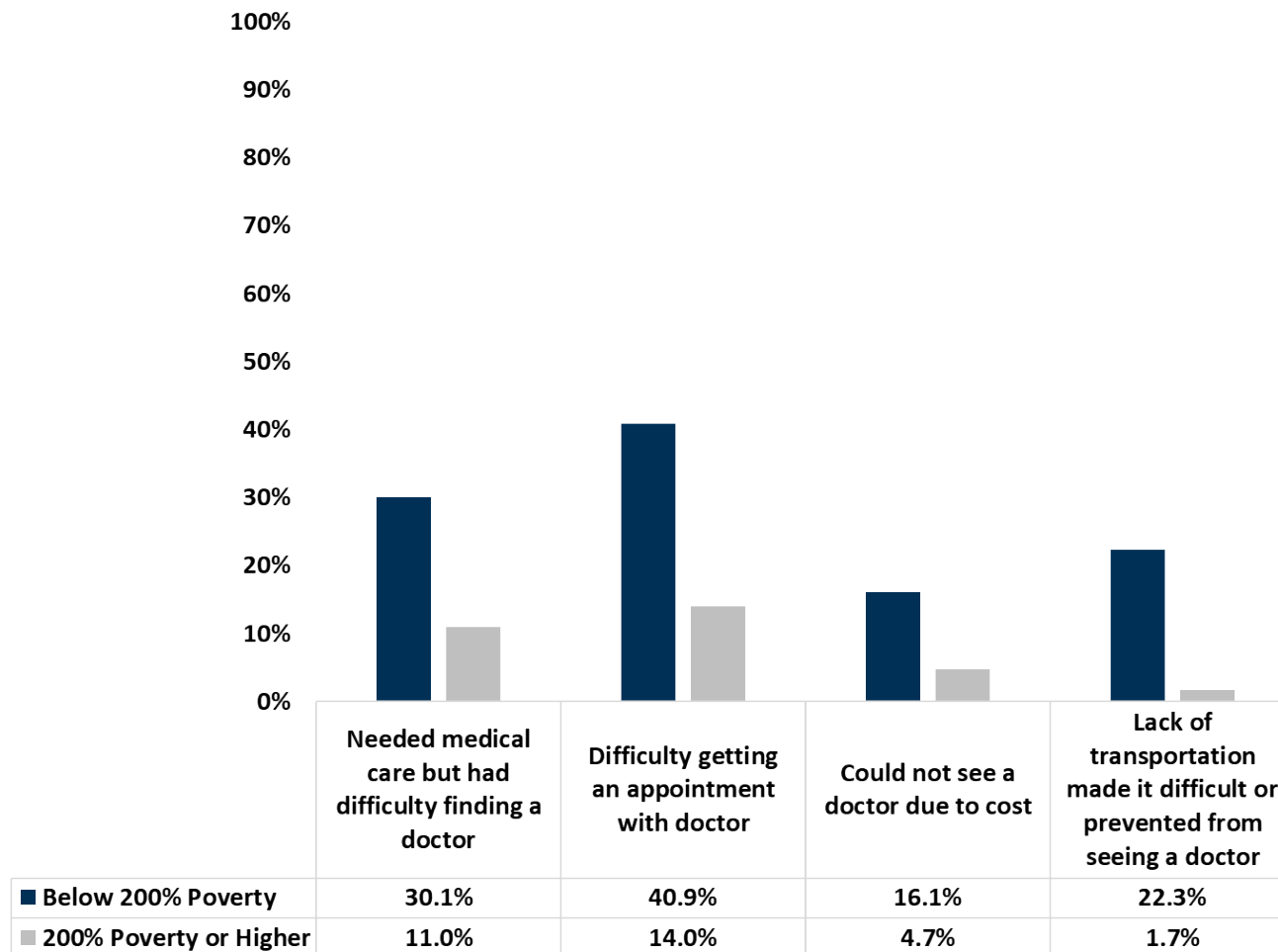


Source: The Center for Neighborhood Technology, Housing and Transportation (H&T®) Affordability Index

HOW INCOME IMPACTS ACCESS TO CARE

Figure 48 shows the responses from the community survey who reside in Reading Hospital’s service area where significant differences by poverty exist that impact access to care. Respondents living below 200% poverty were significantly more likely to have had difficulty finding a doctor or getting an appointment with a doctor, as well as to have cost and transportation be barriers to accessing needed care compared to other respondents.

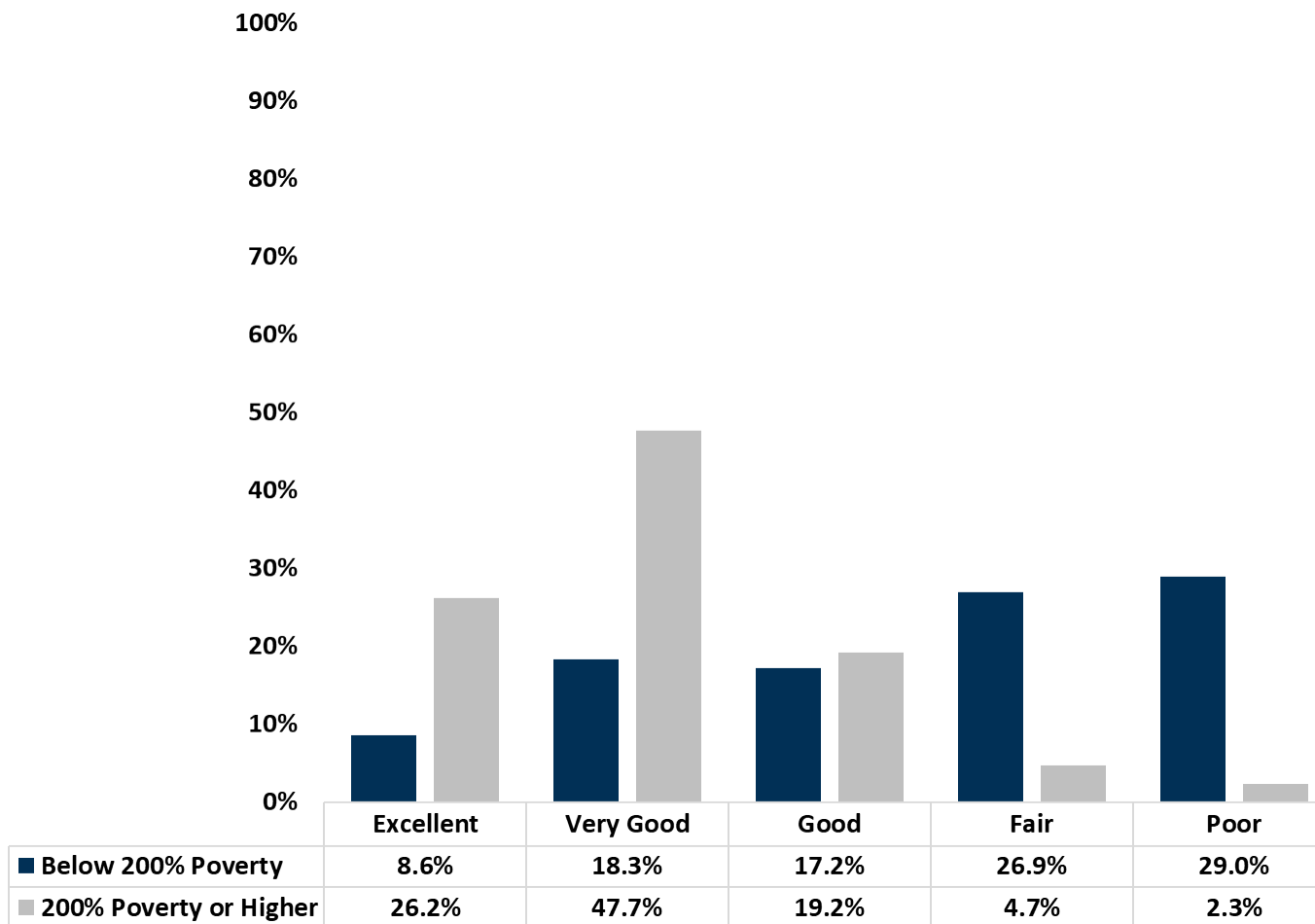
Figure 48: Barriers to Care



HOW INCOME IMPACTS BEHAVIORAL HEALTH

Figure 49 shows the community survey respondents personal mental health rating by poverty level. Community survey respondents in the Reading Hospital service area that are living below 200% were significantly more likely to report their personal mental health as fair or poor (55.9%) compared to respondents not living in poverty (7.0%).

Figure 49: Personal Mental Health Rating

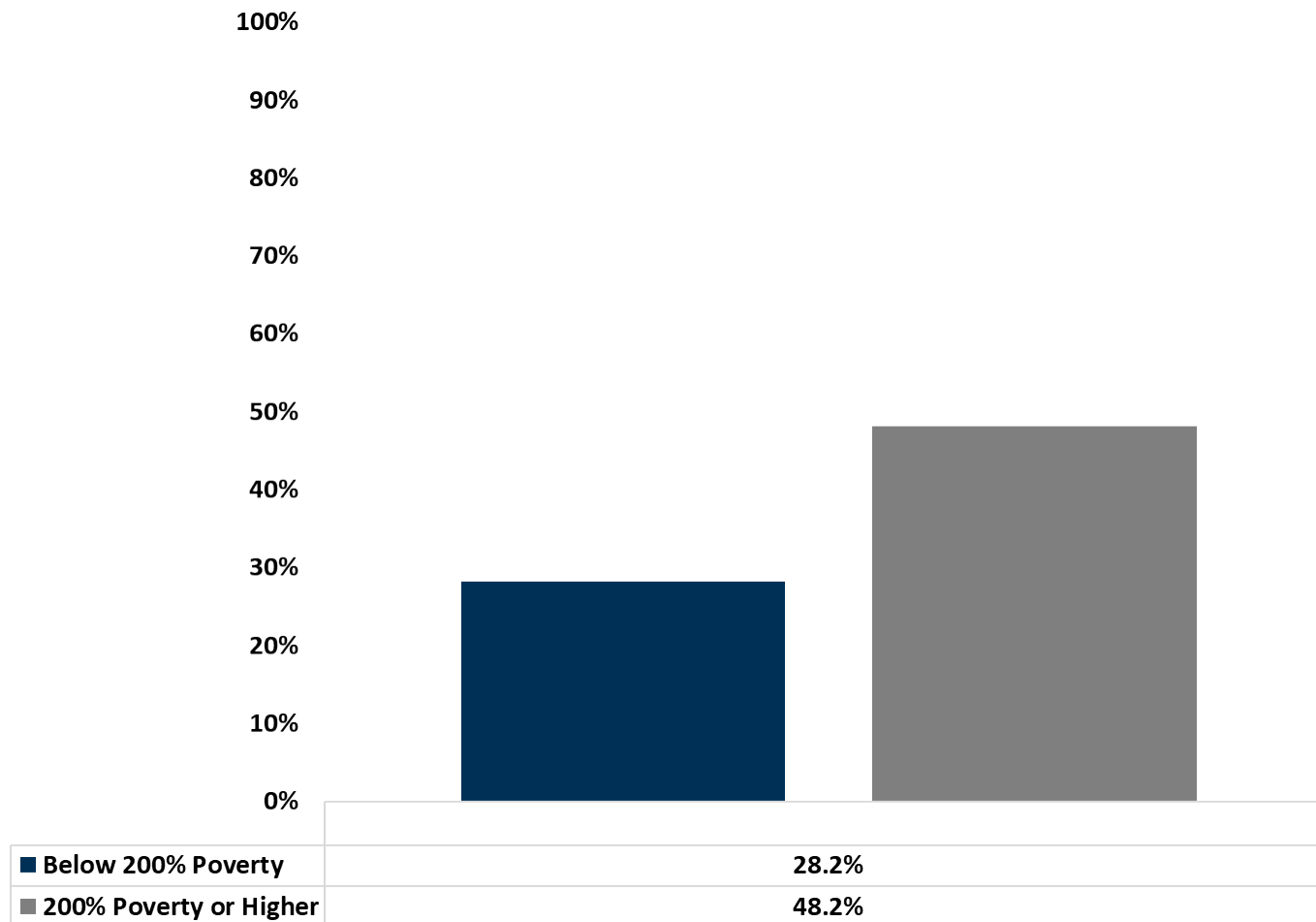


Source: Reading Hospital Community Survey 2018, Professional Research Consultants

HOW INCOME IMPACTS PHYSICAL ACTIVITY

Figure 50 shows the community survey respondents who have participated in an activity to strengthen their muscles in the past month by poverty level. Community survey respondents in the Reading Hospital service area that are living below 200% were significantly less likely to report their having participated in a strengthen activity (28.2%) compared to respondents not living in poverty (48.2%).

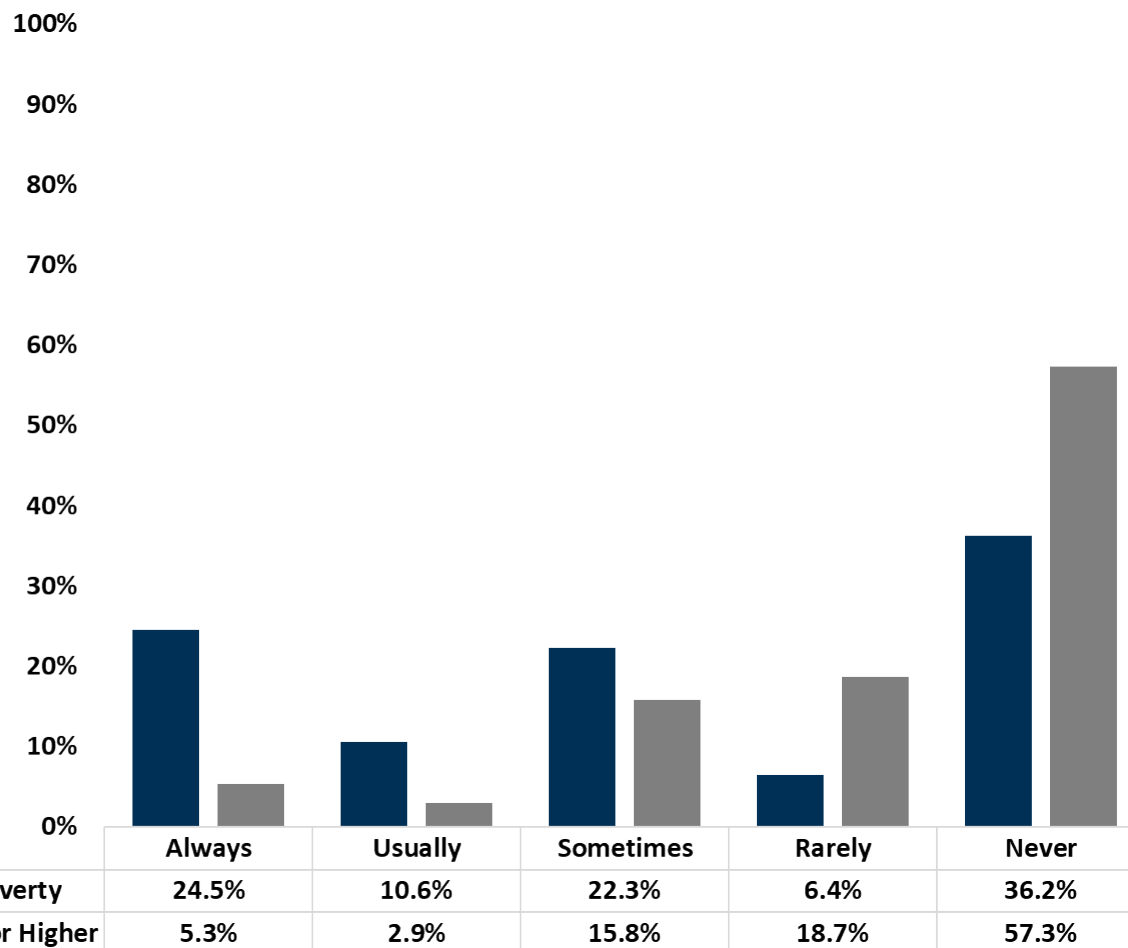
Figure 50: Participated in Activity to Strengthen Muscles, Past Month



HOW INCOME IMPACTS HOUSING

Figure 51 shows the community survey respondents who have worried about having enough money for housing by poverty level. Community survey respondents in the Reading Hospital service area that are living below 200% were significantly more likely to worry about having enough money for housing (63.8%) compared to respondents not living in poverty (42.7%).

Figure 51: Worried About Having Enough Money for Housing



Source: Reading Hospital Community Survey 2018, Professional Research Consultants



WHAT THE COMMUNITY IS SAYING

Intercept survey respondents rated income as the second highest factor impacting ones health (64.0%). Key informant survey respondents identified low-income/poor residents (75.7%) among the top underserved populations.



ACTIVITY MAKES **FOR A HEALTHIER YOU**

HOW ACTIVITY IMPACTS HEALTH

Obesity can be greatly reduced through regular aerobic exercise and physical activity. Recreation activities, such as running, brisk walking, swimming and bicycling are excellent for elevating the heart rate and lowering the incidence of heart disease, obesity and type 2 diabetes if done regularly.

Figure 52 shows that Berks County had a significantly higher percentage of overweight residents and a slightly higher percentage of obese residents when compared to the state.

Figure 52: Overweight/Obesity BRFSS Indicator, 2015-2017

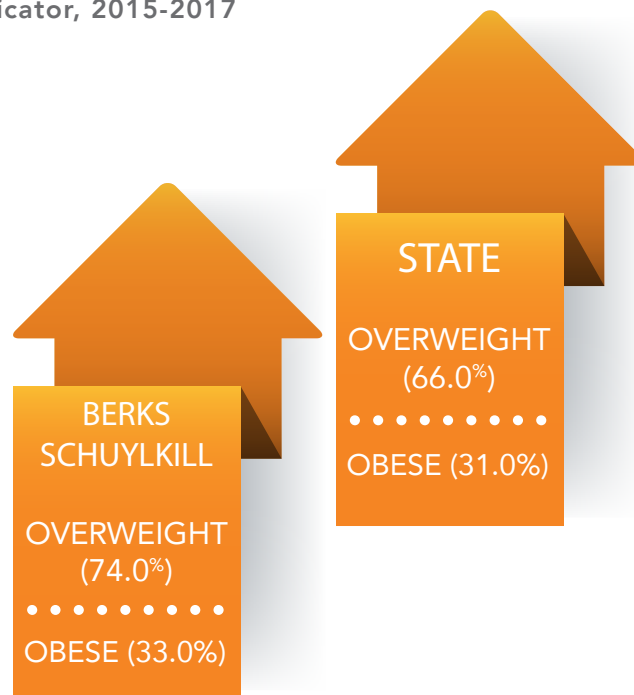


Figure X Source: Division of Health Informatics, Behavioral Risk Factor Surveillance System Data, Pennsylvania Department of Health for Berks County, 2015-2017

Figure X Source: County Health Rankings and Roadmaps for Berks County, 2018



WHAT THE COMMUNITY IS SAYING

Just under half of the community survey respondents (44.4%) had difficulty accessing safe and affordable places to exercise, and 17.0% report that they do not participate in physical activity or exercise. Approximately half of the intercept survey respondents identified obesity (59.4%) and poor nutrition (54.6%) as having the greatest impact on the health of an individual.

Focus group participants talked about the need for wellness programs, while stakeholders talked about the need for more recreation opportunities in the community and wellness programs in the workplace.

Figure 53 outlines the percentage of the residents of the Reading Hospital Primary Service Area who are physically inactive versus having access to exercise opportunities. Berks County has a higher percentage than the state of physical inactivity, even though the access to exercise is comparable to the state.

Figure 53: Percent of Population Who Have Access To Exercise Opportunities Versus Those Physically Inactive

RESIDENTS PHYSICALLY INACTIVE



BERKS COUNTY

24.9%

PENNSYLVANIA

24.0%

BERKS COUNTY

67.8%

PENNSYLVANIA

67.8%



ACCESS TO EXERCISE OPPORTUNITIES



HOW ACCESS IMPACTS HEALTH

A

According to Disparities in Access to Health Care⁴ there are eight main reasons why there are differences in health access:

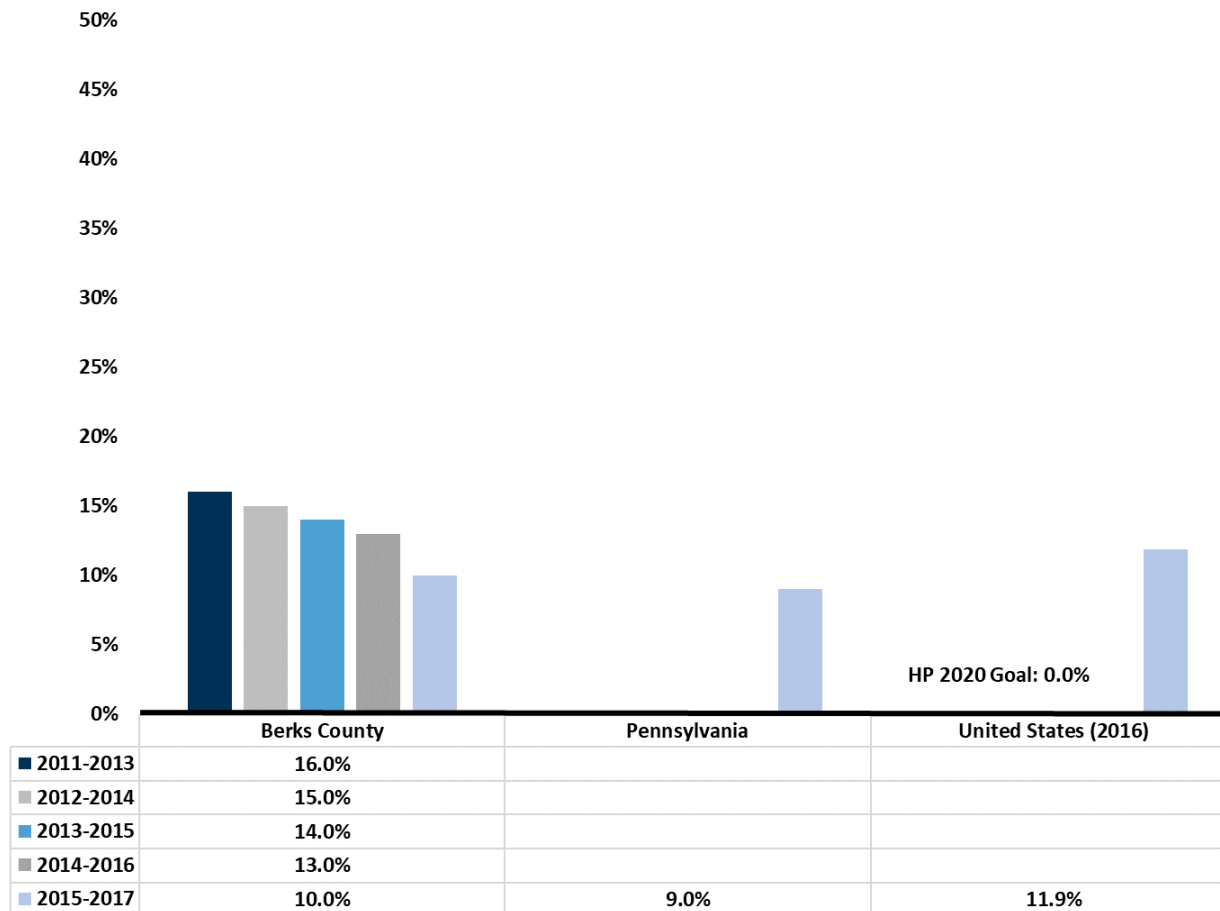
- 1. Lack of health insurance** – Several racial, ethnic, socioeconomic and other minority groups lack adequate health insurance compared with the majority population. These individuals are more likely to delay healthcare and to go without the necessary healthcare or medication they should have been prescribed.
- 2. Lack of financial resources** – Lack of available finance is a barrier to healthcare for many Americans but access to healthcare is reduced most among minority populations. Racial and ethnic minorities are often given a health insurance plan that limits the amount of services available to them as well as the number of providers they can use.
- 3. Irregular source of care** – Compared to white individuals, ethnic or racial minorities are less likely to be able to visit the same doctor on a regular basis and tend to rely more on clinics and emergency rooms. Without a regular healthcare source, people have more difficulty obtaining their prescriptions and attending necessary appointments.
- 4. Legal obstacles** – Low-income immigrant groups are more likely to experience legal barriers. For example, insurance coverage through Medicaid is not available to immigrants who have been resident in the U.S for less than five years.
- 5. Structural barriers** – Examples of structural barriers include lack of transport to healthcare providers, inability to obtain convenient appointment times and lengthy waiting room times. All of these factors reduce the likelihood of a person successfully making and keeping their healthcare appointment.
- 6. Lack of healthcare providers** – In areas where minority populations are concentrated such as inner cities and rural areas, the number of health practitioners and diagnostic facilities is often inadequate.
- 7. Language barriers** – Poor English language skills can make it difficult for people to understand basic information about health conditions or when they should visit their doctor.
- 8. Age** – Older patients are often living on a fixed income and cannot afford to pay for their healthcare. Older people are also more likely to experience transport problems or suffer from a lack of mobility, factors that can impact their access to healthcare. With 15% of the older adults in the U.S not having access to the internet, these individuals are also less likely to benefit from the valuable health information that can now be found on the internet.

⁴ <https://www.news-medical.net/health/disparities-in-access-to-health-care.aspx>

HEALTH INSURANCE

Figure 54 shows the percentage of adults ages 18-64 who do not have health insurance in Berks County, Pennsylvania and the United States. The percentage of adults without health insurance has been decreasing in Berks County and in 2015-2017 (10.0%) was comparable to both the state (9.0%) and nation (11.9%), although, remains above the Healthy People 2020 Goal that all individuals will have health insurance.

Figure 54: No Health Insurance (Ages 18-64)

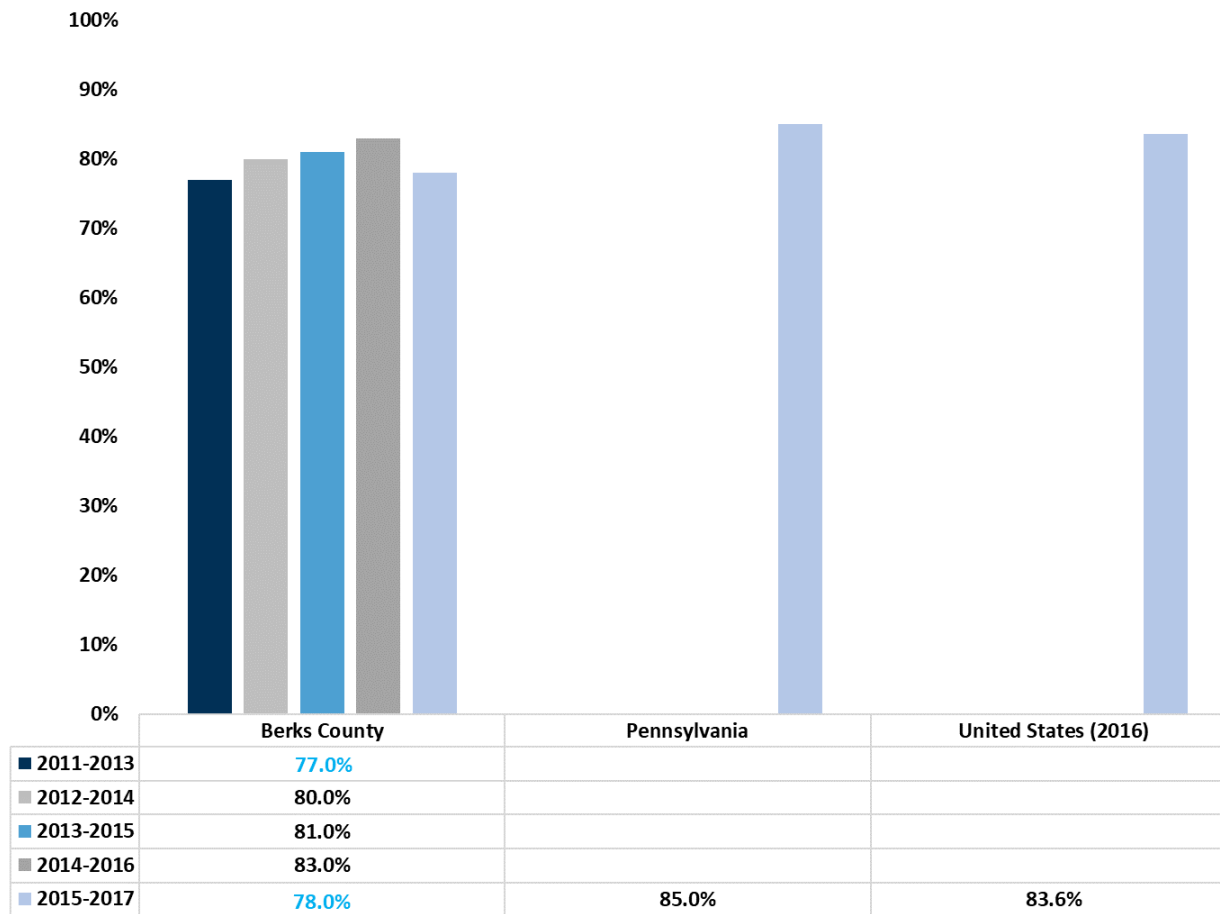


Source: Division of Health Informatics, Behavior Risk Factor Surveillance Survey, Pennsylvania Department of Health for Berks County, 2011-2017, Healthy People 2020, Center for Disease Control

ROUTINE CARE

Figure 55 shows the percentage of adults who have had a routine checkup in the past 2 years. While the rates have fluctuated slightly in Berks County, in 2015-2017 (78.0%) significantly fewer residents have had a routine check up in the past 2 years when compared to the state (85.0%). The percentage in the county is also lower when compared to the nation (83.6%).

Figure 55: Routine Check Up, Past 2 Years

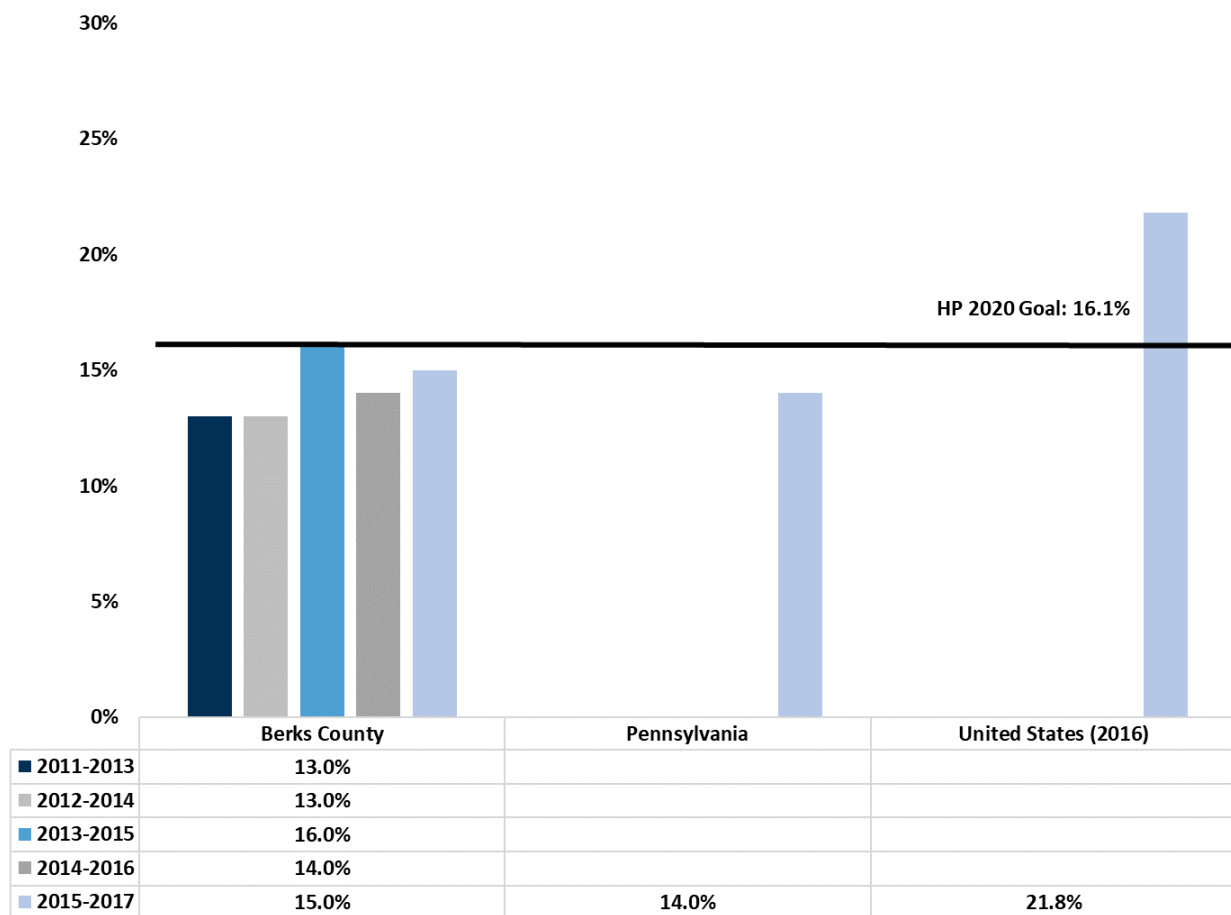


Source: Division of Health Informatics, Behavior Risk Factor Surveillance Survey, Pennsylvania Department of Health for Berks County, 2011-2017, Center for Disease Control

PERSONAL CARE PROVIDER

Figure 56 shows the percentage of adults who have reported that they do not have a personal care provider. The percentage of adults who report they do not have a personal care provider has fluctuated in Berks County and in 2015-2017 (15.0%) was comparable to the state (14.0%) but below the nation (21.8%) and Healthy People 2020 Goal (16.1%).

Figure 56: No Personal Care Provider

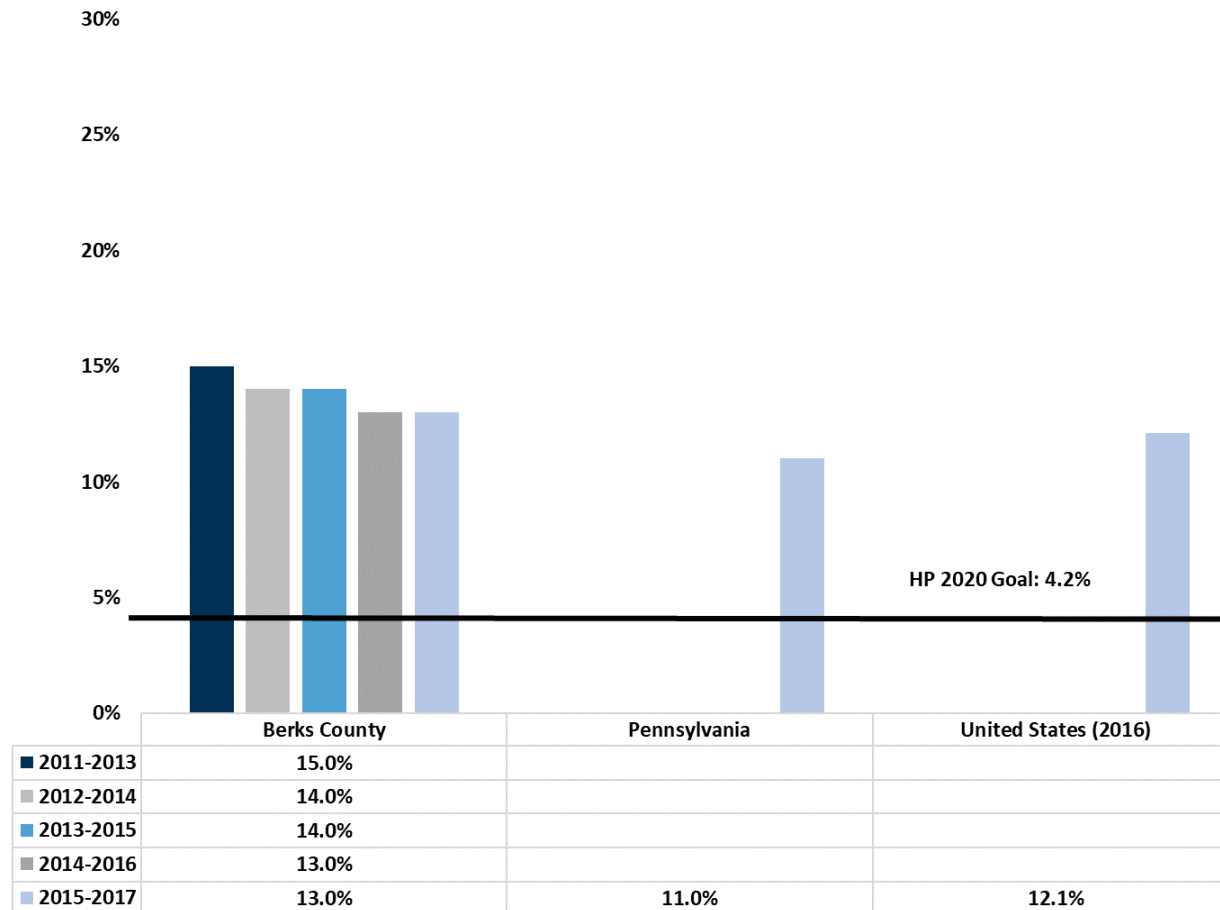


Source: Division of Health Informatics, Behavior Risk Factor Surveillance Survey, Pennsylvania Department of Health for Berks County, 2011-2017, Healthy People 2020, Center for Disease Control

COULD NOT SEE A DOCTOR DUE TO COST

Figure 57 shows the percentage of respondents who needed to see a doctor within the past year but could not due to cost. While the percentage of adults in Berks County who did not see a doctor due to cost has decreased since 2011-2013, in 2015-2017 (13.0%) it remained above the state (11.0%) and was comparable to the nation (12.1%) The county, state and nation were well above the Healthy People 2020 Goal of 4.2%.

Figure 57: Needed to See a Doctor But Could Not Due to Cost, Past Year



Source: Division of Health Informatics, Behavior Risk Factor Surveillance Survey, Pennsylvania Department of Health for Berks County, 2011-2017, Center for Disease Control



WHAT THE COMMUNITY IS SAYING

Figure 58 illustrates access to care based on the community survey for respondents who live in Berks County. Very few respondents (70.7%) have dental insurance, while most have health insurance. One in five respondents have had difficulty getting an appointment to see a doctor (21.6%) or been unable to see a doctor due to inconvenient office hours (18.5%).

Figure 58: Access to Care

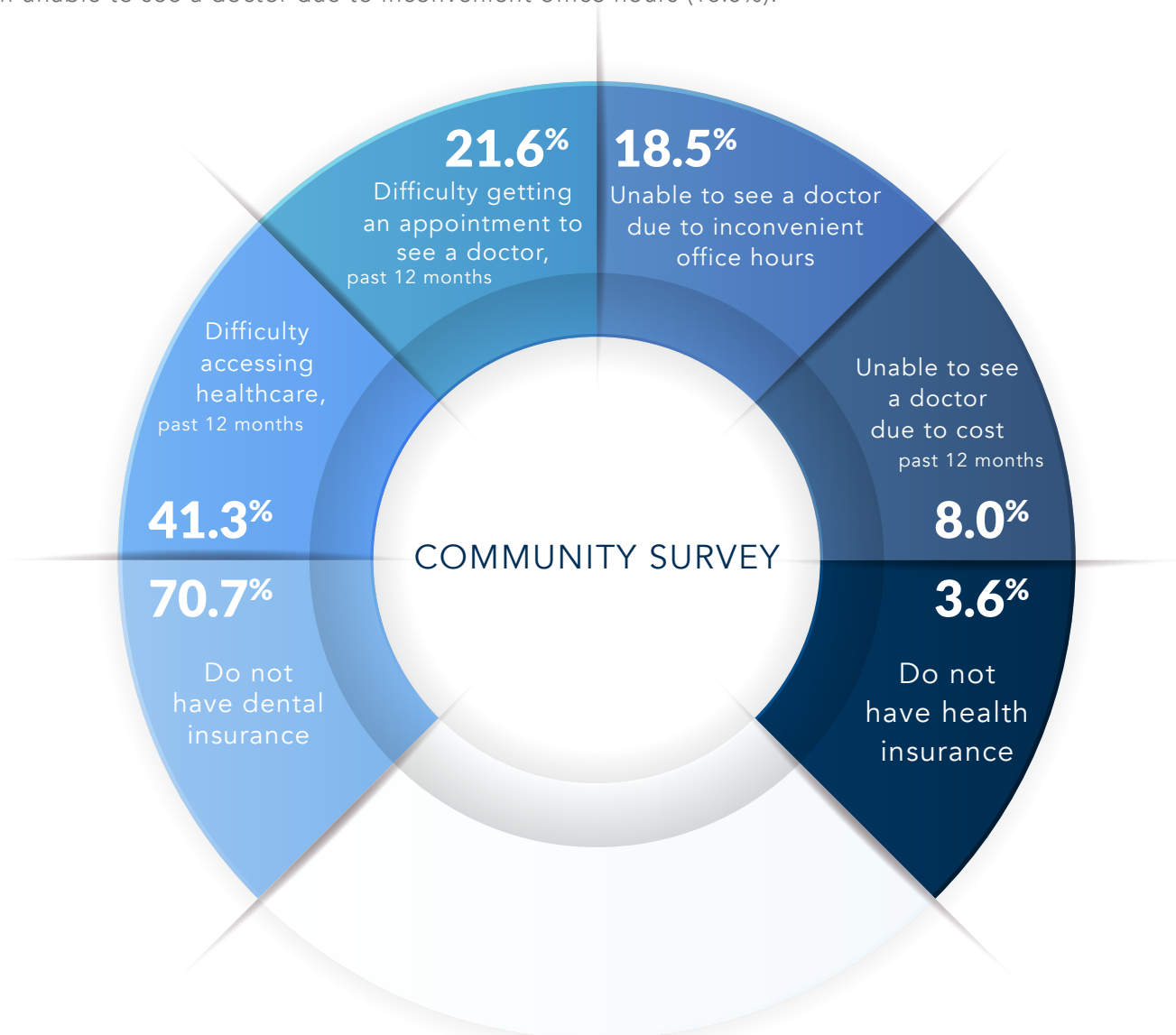
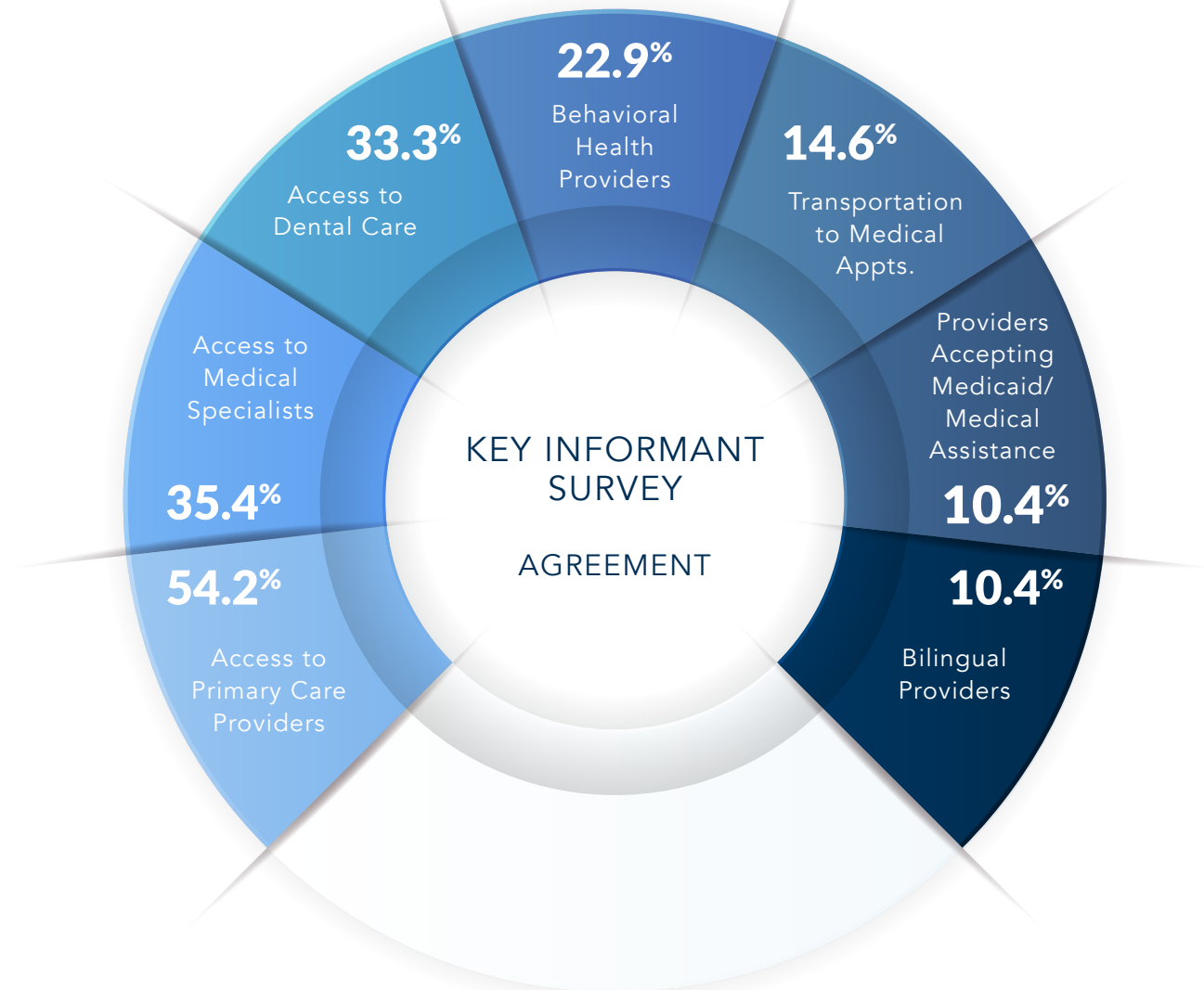


Figure 59 shows the percentage of key informant survey respondents who agree that access to various healthcare and related services are available in the community. Just over half (54.2%) agree that residents can access a primary care provider when needed. One third of the respondents agree residents can access specialists (35.4%) or dental care (33.3%) when needed. Just over one in five key informants (22.9%) agree that residents can access behavioral health providers when needed. Only one in ten respondents agree that there are a sufficient number of providers accepting Medicaid or Medical Assistance (10.4%) or that there are a sufficient number of bilingual providers (10.4%).

Figure 59: Access to Care, Agreement





WHAT THE COMMUNITY IS SAYING

Over half (57.3%) of intercept survey respondents identified access to health care as having the highest impact on the health of an individual. The most frequently identified socioeconomic factor identified by intercept survey respondents was the cost of health care (69.1%).

Stakeholder interview participants talked about the challenges residents experience accessing care due to cost, lack of transportation and cultural or language barriers. Focus group participants also noted the cost of care and transportation as barriers to accessing needed care. They also highlighted the difficulties of navigating the health care system and noted that people often experience long wait times to access needed services.

WHERE DO WE GO FROM HERE

Readings Hospital, along with internal and external stakeholders, will begin to develop goals and strategies (known as the Implementation Strategy) to address the findings of the 2019 Community Health Needs Assessment.

The CHNA documented what and where the need is, along with who is most affected. The Implementation Strategy will address how to solve those needs.

Common themes and issues rose to the top as the assessment was being conducted. Key community health needs include: Access to Behavioral Health Services, Access to Health Services, Improving Socioeconomic Factors (Social Determinants of Health) and Chronic Disease (Management and Prevention).

The Implementation Strategy will be completed and available to the public by November 2019.





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Reading Hospital

TOWER HEALTH

Advancing Health. Transforming Lives.