AdventHealth Manchester

2019 COMMUNITY HEALTH NEEDS ASSESSMENT

Manchester Memorial Hospital d/b/a AdventHealth Manchester

Approved by the Hospital Board on: December 23, 2019

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Extending the Healing Ministry of Christ

AdventHealth

2019 Community Health Needs Assessment

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This report was prepared by David Watson, with contributions from members of the AdventHeath Manchester Community Health Needs Assessment Committee representing health leaders in our community and AdventHealth Manchester leaders.

A special thanks to Clay County Health Department, Local Government, Red Bird Mission, Emergency Personnel and Faith Based organizations for their expertise and support in the collection and analysis of the data.

We are especially grateful to all those who participated in our household surveys and key informant interviews. Their contributions made this report possible and lay the groundwork as we continue to fulfill our mission of *Extending the Healing*

1. EXECUTIVE SUMMARY

Goals

Manchester Memorial Hospital d/b/a AdventHealth Manchester will be referred to in this document as AdventHealth Manchester or "The Hospital." AdventHealth Manchester in Manchester, KY conducted a community health needs assessment in 2019. The goals of the assessment were to:

- Engage public health and community stakeholders including low-income, minority and other underserved populations
- Assess and understand the community's health issues and needs
- Understand the health behaviors, risk factors and social determinants that impact health
- Identify community resources and collaborate with community partners
- Publish the Community Health Needs Assessment
- Use assessment findings to develop and implement a 2020-2022 Community Health Plan based on AdventHealth Manchester's prioritized issues

Community Health Needs Assessment Committee

In order to ensure broad community input, AdventHealth Manchester created a Community Health Needs Assessment Committee (CHNAC) to help guide the Hospital through the assessment process. The CHNAC included representation from the Hospital, public health experts and the broad community. This included intentional representation from low-income, minority and other underserved populations.

The CHNAC met two times in 2018-2019. They reviewed the primary and secondary data, helped define the priority issues to be addressed by the Hospital, and helped develop the Community Health Plan to address the priority issues. *See Section 5 for a list of CHNAC members*.

Data

AdventHealth Manchester collected both primary and secondary data. The primary data included stakeholder interviews, community surveys (if applicable) and community meetings (if applicable)
Secondary data sources included internal Hospital utilization data (inpatient and emergency department). This utilization data showed the top reasons for visits to AdventHealth Manchester over the past year. In addition, we utilized publicly available data from state and nationally recognized data sources. *See Section 7 for a list of data sources.*

Primary and secondary data was then compiled and analyzed in order to identify the top 8-12 aggregate issues from the various sources of data.

Community Asset Inventory

The next step was a Community Asset Inventory. This inventory was designed to help AdventHealth Manchester and the CHNAC to:

- Understand existing community efforts to address the 8-12 identified issues from aggregate primary and secondary data.
- Prevent duplication of efforts as appropriate. *See Section 9 for the Asset Inventory.*

Selection Criteria

Using the data findings and the Community Asset Inventory, the CHNAC narrowed the list of 8-12 issues to five priority issues.

The CHNAC used a priority selection tool that uses clearly defined criteria to select the top issues to address. *See Section 10 for the Priority Selection Report.*

The priority selection criteria included:

A. Relevance: How important is this issue?
B. Impact: What will we achieve by addressing this issue?
C. Feasibility: Can we adequately address this issue?

Priority Issues to be Addressed

The priority issues to be addressed are:

1. Obesity/Overweight Population
    a. Reduce the percentage of the population that is overweight. In Clay County, 72% of population is overweight compared to the Kentucky average of 68%.
    b. Educate youth on health and lifestyle choices and nutrition.

2. Tobacco Usage
    a. Education on effects of smoking.
    b. Reduce the rate of tobacco usage. In Clay County, 39% percent of the population uses tobacco verses the % state average of 24%.

3. Behavioral Health (Drug/Substance Abuse)
    a. Offer emotional and social support of behavioral health problems in our community through individual and group therapies.
    b. Educate and implement healthy coping skills.

4. Diabetes
    a. Educate youth on healthy choices and nutrition.
    b. Host a community-involved class quarterly for demonstration and education given by Diabetes Educator.
5. Lack of Access
    a. Address the lack of availability of public transportation.
    b. Address the lack of handicap accessibility in homes.

See Section 11-12 for an explanation of priority issues which were chosen as well as those not chosen.

Approvals

On December 23, 2019, the AdventHealth Manchester Board approved the Community Health Needs Assessment findings, priority issues and final report. A link to the 2019 Community Health Needs Assessment was posted on the Hospital's website as well as https://www.adventhealth.com/community-health-needs-assessments prior to December 31, 2019.

Next Steps

The CHNAC will work with AdventHealth Manchester to develop a measurable 2020-2022 Community Health Plan to address the priority issues. The plan will be completed and posted on the Hospital's website prior to May 15, 2020.

2. ABOUT: ADVENTHEALTH MANCHESTER

Transition To AdventHealth

In January of 2019, every wholly-owned entity across our organization adopted the AdventHealth system brand. Our identity has been unified to represent the full continuum of care our system offers. Throughout this report, we will refer to our facility by AdventHealth Manchester. Any reference to our 2016 Community Health Needs Assessment in this document will utilize our new name for consistency.

AdventHealth Manchester is part of AdventHealth. With a sacred mission of Extending the Healing Ministry of Christ, AdventHealth is a connected system of care for every stage of life and health. More than 80,000 skilled and compassionate caregivers in physician practices, Hospitals, outpatient clinics, skilled nursing facilities, home health agencies and hospice centers provide individualized, wholistic care. A Christian mission, shared vision, common values and service standards focus on whole-person health, and commitment to making communities healthier.

About AdventHealth Manchester

AdventHealth Manchester in Clay County has provided care in Kentucky since 1917. Today, the Hospital serves more than 60,000 patients every year, while staying true to AdventHealth's community-focused, patient-centric model of care. Guided by the principles of CREATION Life — Choice, Rest, Environment, Activity, Trust, Interpersonal Relationships, Outlook, and Nutrition—staff go above and beyond to make every patient's stay feel like home. Available services include the following:

- Behavioral Care
- Cancer Care
- Heart and Vascular Care
- Home Care
- Imaging Services
- Infusion Care
- Emergency Care
- Lab Services
- Men's Care
- Mother and Baby Care
- Orthopedic Care
- Senior Care
- Sleep Care
- Sports and Rehab Care
- Surgical Care
- Women's Care

3. CHOOSING THE COMMUNITY

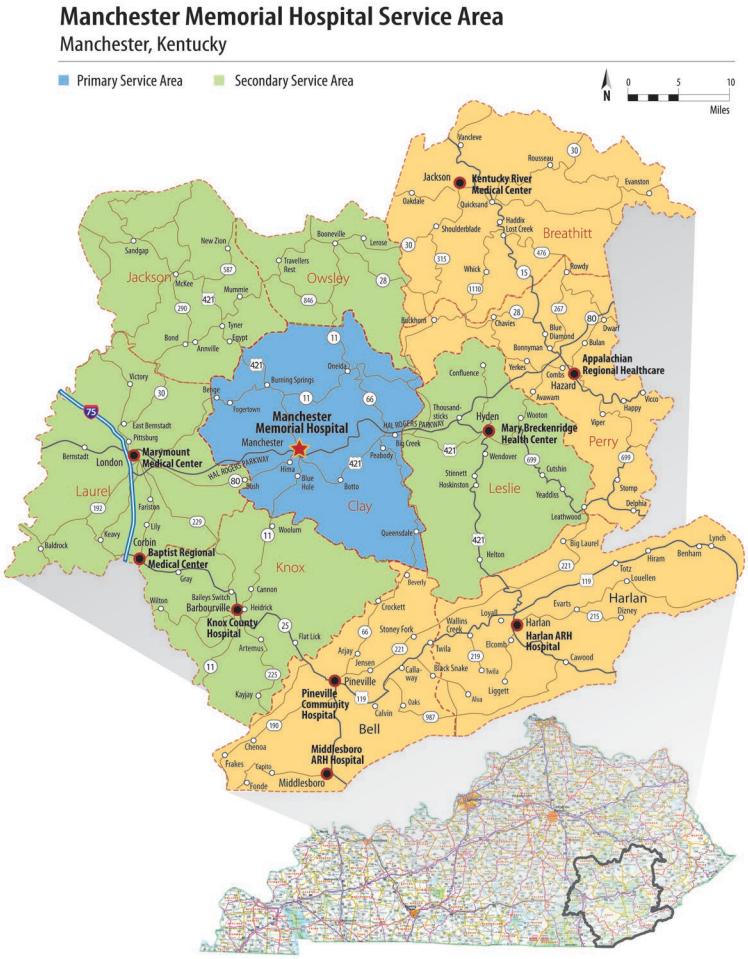
AdventHealth Manchester defined its community as its Primary Service Area (PSA) from which 75-80% of its patients come. This includes Clay, Leslie, Laurel, Knox, Jackson, Owsley, Breathitt and Perry and the zip codes: 40402,40434,40447,40481,40486,40488,40729,40734,40737,40740,40741,40743,40744,40771,40903,40906,40914,40915,40921,40923,40930,40932,40935,40941,40943,40944,40946,40949,40951,40953,40962,40962,40972,40981,40982,40983,40995,40997,41310,41314,41317,41339,41348,41351,41364,41366,41367,41385,41386,41390,41701,41702,41712,41713,41714,41719,41721,41722,41723,41727,41729,41731,41735,41736,41739,41745,41746,41749,41751,41754,41760,41762,41763,41773,41774 and 41778.

4. COMMUNITY DESCRIPTION AND DEMOGRAPHICS

In order to understand our community and the challenges faced, AdventHealth Manchester looked at both demographic information for the service area population, as well as available data on social determinants of health. According to the Center for Disease Control and Prevention, social determinants of health include conditions in the places where people live, learn, work and play, which affect a wide range of health risks and outcomes. A snapshot of community demographics and characteristics is included below. Secondary report data can be found in Appendix B.

A total of 139,707 people live in the 3267 square mile report area defined for this assessment according to the U.S. Census Bureau American Community Survey 2010-year estimates. The population density for this area, estimated at 42.7 persons per square mile, is less than the national average population density of 111.74 persons per square mile.

The map below represents the service area where 75-80% of AdventHealth Manchester's patients come from.



COMMUNITY DEMOGRAPHICS

Female 50.52%

Male 49.48%

AGE	0-4	5-17	18-24	25-34	35-44	45-54	55-64	65+
%	5.22%	14.43%	7.19%	11.02%	11.36%	12.51%	13.15%	25.12%

RACE	Caucasian	African-American	Asian	Native American / Alaska Native	Native Hawaiian /Pacific Islander	Other Race	Multiple Races
%	91.36%	4.43%	0.78%	0.22%	0.02%	1.83%	1.36%

ETHNICITY	Hispanic or Latino	Non-Hispanic
%	12.04%	26.4%

Source: US Census Bureau, American Community Survey. 2013-17.

DATA INDICATOR	DESCRIPTION	AdventHealth Manchester SERVICE AREA	Kentucky AVERAGE
Poverty[1]	% Population in Poverty (Below 100% FPL)	22.9%	18.81%
Unemployment Rate[2]	Unemployment Rate	8.8%	4.1%
Violent Crime[3]	Violent Crime Rate (Per 100,000 Pop.)	193.9	217.2
Population with No High School Diploma[1]	% Population Age 25+ with No High School Diploma	20.8%	15.36%
Insurance[4]	Uninsured Adults-% Without Medical Insurance	14.51%	7.1%
Insurance[4]	Uninsured Children-% Without Medical Insurance	5.13%	3.27%
Food Insecurity Rate[5]	Food Insecurity Rate	17.5%	16.8%
Population with Low Food Access[5]	% Population with Low Food Access	24.81%	18.03%
Use of Public Transportation[1]	% Population Using Public Transit for Commute to Work (Age 16+)	0.86%	1.1%
Alcohol Consumption[6]	Estimated Adults Drinking Excessively (Age-Adjusted Percentage)	13.3%	12.2%
Tobacco Usage[6]	% Population Smoking Cigarettes (Age-Adjusted)	27.6%	26.1%
Cancer Incidence – Lung[7]	Cancer Incidence Rate (Per 100,000 Pop)	85.1	93.5
Obesity[8]	% of Adults with BMI > 30.0 (Obese)	35.9%	34.1%

[1]US Census Bureau, American Community Survey. 2013-17. [2]US Department of Labor, Bureau of Labor Statistics. 2019 - August. [3] Federal Bureau of Investigation, FBI Uniform Crime Reports. Additional analysis by the National Archive of Criminal Justice Data. Accessed via the Inter-university Consortium for Political and Social Research. 2015-17. [4]US Census Bureau, Small Area Health Insurance Estimates. 2017. [5]Feeding America. 2017. [5]US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas. 2015. [6]Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health & Human Services, Health Indicators Warehouse. 2006-12. [7]State Cancer Profiles. 2011-15. [8]Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2016.

5. COMMUNITY HEALTH NEEDS ASSESSMENT COMMITTEE

A Community Health Needs Assessment Committee (CHNAC) was formed to help AdventHealth Manchester conduct a comprehensive assessment of the community. The committee included representation from the Hospital, public health officials and the broad community as well as representation from low-income, minority and other underserved populations. The committee met regularly throughout 2018-2019. Current CHNAC members include:

Community Members

Name	Title	Organization	Description of Services	Low-Income	Minority	Other Underserved Populations
Linda Smallwood	Clay County Jailer	Clay County Jail	Provides health care to inmates	x	x	x
Tammy Pennington	Health Educator	Clay County Health Department	Provides health care services to Clay County	x	x	x
John Smith	Pastor/Comp Care	Comp Care	Mental Health and Youth Activities	x	x	x
Mona Whitaker	Assistant Director of Daniel Boone Transport	Daniel Boone Transport	Provides transportation and heat assistance	x	x	x
Ethan Ledford	Volunteer Fire First Responder	Manchester Fire and Rescue	First Responder	x	x	x
Tracy Nolan	Community Outreach Director	Red Bird Mission	Community needs in Clay, Bell and Leslie counties	x	x	x
Johnny Johnson	Clay County Judge Executive	Clay County Fiscal Court	Fiscal county needs	x	x	x
James Ed Garrision	Mayor of Manchester	City of Manchester	Fiscal City needs	x	x	x

AdventHealth Manchester Members

The following AdventHealth Manchester team members provided leadership throughout the process:

- **David Watson,** Executive Director, Plant Services
- **Christina Couch**, Marketing and Wellness Lead, Marketing
- **Randy Craft**, Community Outreach Coordinator, Community
- **Arlene Baker**, Director of Case Management, Case Management
- **Keith Hensley**, Volunteer Chaplain, Chaplain/Plant Services
- **Chris Self**, CEO, Executive Leadership
- **Kendra Collins**, Nurse, Patient Care

6. PUBLIC HEALTH

Public health was represented throughout the Community Health Needs Assessment

Cumberland Valley Health Department representatives participated throughout the Community Health Needs Assessment process. Our electronic survey process was led by AdventHealth Manchester with the expertise of their health educator, Tammy Pennington. The following county employees provided leadership throughout the process:

- **Johnny Johnson,** Clay County Judge Executive, Clay County Fiscal Court
- **James Ed Garrison,** Mayor of Manchester, City of Manchester

7. PRIMARY AND SECONDARY DATA SOURCES

Primary Data:

a. **Community surveys**: An internet-based county health survey was implemented, which included questions about quality of life, community health concerns and social determinants of health. 276 community members completed the survey.
b. **Stakeholder surveys**: Stakeholder interviews were completed via a combination of electronic survey sent via email as well as hand delivered printed surveys. A total of nine community stakeholders provided input.

Secondary Data:

a. **Hospital Utilization Data**: Top 10 inpatient and Emergency Department diagnoses by payer was provided by the Hospital Finance Department for the year 2018. The report can be found in *Appendix C* of this report.

b. **The Engagement Network**: Additional secondary data was sourced from the Engagement Network. This is a national platform produced by the Center for Applied Research and Engagement Systems (CARES) at the University of Missouri. The Engagement Network hosts a national Map Room with 15,000+ data layers, a Community Health Needs Assessment reporting tool with 80+ health-related indicators and a hub network with 30+ partner organizations using CARES technology.

Data Sources:

a. US Census Bureau, Decennial Census, 2000-2010
b. US Census Bureau, American Community Survey, 2013-17
c. Feeding America, 2014
d. US Census Bureau, Small Area Health Insurance Estimates, 2016
e. Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, US Department of Health & Human Services, Health Indicators Warehouse, 2006-12
f. Centers for Disease Control and Prevention, National Vital Statistics System, US Department of Health & Human Services, Health Indicators Warehouse, 2006-12
g. US Department of Labor, Bureau of Labor Statistics, 2018 – August
h. Federal Bureau of Investigation, FBI Uniform Crime Reports, 2012-14
i. US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas, 2015
j. US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File, 2015
k. Dartmouth College Institute for Health Policy & Clinical Practice, Dartmouth Atlas of Health Care, 2015
l. US Department of Health & Human Services, Health Resources and Services Administration, Health Resources and Services Administration, April 2016
m. US Department of Health & Human Services, Center for Medicare & Medicaid Services, Provider of Services File, March 2018
n. Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2011-12
o. Centers for Disease Control and Prevention, National Vital Statistics System, Centers for Disease Control and Prevention, Wide-Ranging Online Data for Epidemiologic Research, 2007-10
p. Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 2015
q. State Cancer Profiles, 2011-15
r. State Cancer Profiles, 2009-13
s. Centers for Medicare and Medicaid Services, 2015
t. Centers for Disease Control and Prevention, National Vital Statistics System, US Department of Health & Human Services, Health Indicators Warehouse, 2006-12
u. Centers for Disease Control and Prevention, National Vital Statistics System, 2012-16
v. Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2006-10

8. COMMUNITY COLLABORATION

Healthy Clay Coalition: The Hospital is an active member of the Healthy Clay Coalition. Healthy Clay is a coalition of organizations and individuals working together to encourage healthy lifestyle choices by those living and working in Clay County through policy and community change. The Healthy Clay Coalition were represented on the CHNAC and provided input throughout the process.

Healthy Clay's 10-year vision is:
A community that recognized and builds on its assets to create an economically vital and healthy place where people want to live, work and visit; located within a cherished natural environment that provides many opportunities for active lifestyle choices; a community where an awareness of health and wellness is fully integrated into policies and activities in worksites, schools and (other) organizations; and a community that celebrates the success of individuals, families and organization who pursue healthy lives.

9. DATA SUMMARY

Primary and Secondary Data: High Level Findings

Once all primary and secondary data was collected, this was then analyzed and categorized into top 8-10 priorities per source of data. These results are listed by source in the tables below.

Top 8-10 Priorities determined from Community Interviews					
1	Obesity	5	Poverty/Livable wage	9	ED utilization
2	Mental health	6	Poor pregnancy outcomes	10	Dental
3	Access to care	7	Food insecurity		
4	Transportation	8	Chronic disease		

Top 8-10 Priorities determined from Community Surveys					
1	Obesity	5	Chronic disease	9	Transportation
2	Mental health	6	Poor pregnancy outcomes	10	Dental
3	Access to care	7	Food insecurity		
4	ED utilization	8	Poverty/Livable wage		

Top 8-10 Priorities determined from Hospital Emergency Department Data					
1	Chest Pain	5	Shortness of Breath	9	Obstructive Chronic Bronchitis
2	Acute Bronchitis	6	Altered Mental Status	10	Congestive Heart Failure
3	Abdominal Pain	7	Pneumonia		
4	Sprain of Neck	8	Other Malaise and Fatigue		

Top 8-10 Priorities determined from Hospital Inpatient Admission Data					
1	Obstructive Chronic Bronchitis	5	Acute and Chronic Respiratory	9	Single Live Born
2	Unspecified Septicemia	6	Urinary Tract Infection	10	Chest Pain
3	Pneumococcal Pneumonia	7	Acute Respiratory Failure		
4	Pneumonia	8	Acute Kidney Failure		

Top 8-10 Priorities determined from Secondary Data					
1	Poverty	5	Unemployment Rate	9	Population with no High School Diploma
2	Uninsured Adults	6	Population with Low Food Access	10	Use of Public Transportation
3	Alcohol Consumption	7	Tobacco Usage		
4	Obesity	8	Uninsured Children		

Primary and Secondary Data: Aggregate Community Health Needs

The committee than looked across primary and secondary sources of data in order to identify the top 8-10 aggregate needs shown below.

Aggregate Community Health Needs			
	Priority Issue	Age Group	Specific Geographic Area
1	Obesity	Children	Service Area
2	Tobacco	15-60	Service Area
3	Behavioral Health	All	Service Area
4	Diabetes	All	Service Area
5	Lack of access	All	Service Area
6	Poor pregnancy outcomes	All	Service Area
7	ED Utilization	All	Service Area
8	Chronic Diseases	All	Service Area
9	Food Insecurity	All	Service Area
10	Dental	All	Service Area

10. COMMUNITY ASSET INVENTORY

In order to help AdventHealth Manchester's CHNAC determine the community health priorities where they could make a meaningful difference, the Hospital conducted a Community Asset Inventory related to the top 10 identified community health needs. The inventory was designed to help the CHNAC narrow the 10 needs to three to five priority issues.

COMMUNITY ASSET INVENTORY		
Top Issues Defined by Primary/Secondary Data	**Current Community Programs**	**Current Hospital Programs**
Obesity	Health Department	Live It Up Program Summer Fitness
Tobacco	Health Department	Freedom from Smoking
Behavioral Health	Comp Care	Whole Person Care
Diabetes	Health Department	Diabetes Management Class one a quarter
Lack of Access	Daniel Boone Transit Cumberland Valley Health	CREATION Health Transportation Healthy Homes Global Missions
Poor Pregnancy Outcomes	Volunteers of America Clinic Grace Community Health	
ED Utilization	Health Department	
Chronic Diseases	Grace Community Health Red Bird Mission	
Food Insecurity	Cumberland Valley Health	Food Pantry @ AdventHealth Primary Care Clinic
Dental	Cumberland Valley Health Red Bird Mission	

11. PRIORITY SELECTION

The collection, analysis and aggregation of data was completed with the goal of identifying the priority issues in the AdventHealth Manchester community, which the Hospital could impact the most. To assist the CHNAC in identifying and prioritizing issues after review and discussion of the data, the CHNAC utilized the *Rating & Prioritizing Key Health Issues Worksheet* shown below. For each issue, the CHNAC rated the relevance of the issue, impact and feasibility using the following criteria. Survey data was considered and discussed along with the committee's day to day interaction with patients and the broader community.

Rating & Prioritizing Key Health Issues

The top 10 issues identified from the CHNAC data review of household data, key informant survey responses, and the top inpatient and ED admissions data were reviewed and discussed again alongside the Community Asset Inventory to identify the top priorities.

The below criteria were utilized to rate each issue with a scoring of 1= lowest priority, to 4= highest priority:

Relevance How important is this issue?	**Impact** What will we achieve by addressing this issue?	**Feasibility** Can we adequately address this issue?
• Size of problem (e.g. % population) • Severity of problem (e.g. Cost to treat, lives lost) • Urgency to solve problem; community concern • Linked to other important issues	• Availability of solutions/proven strategies • Builds on or enhances current work • Significant consequences of not addressing issue now	• Availability of resources (staff, community partners, time, money) to address issue • Political capacity/will • Community/social acceptability • Appropriate socio-culturally • Can identify easy, short-term wins

RESULTS: RATING & PRIORITIZING KEY HEALTH ISSUES EXERCISE							
Health Issue	**Relevance**		**Impact**		**Feasibility**		**Total Score**
Obesity	3	+	2	+	3	=	8
Behavioral Health	3	+	2	+	3	=	8
Diabetes	3	+	2	+	3	=	8
Tobacco	3	+	3	+	2	=	8
Lack of Access	2	+	2	+	2	=	6
Poor Pregnancy Outcomes	2	+	2	+	1	=	5
ED Utilization	1	+	1	+	1	=	3
Chronic Diseases	2	+	2	+	1	=	5
Food Insecurity	2	+	2	+	2	=	6
Dental	1	+	1	+	1	=	3

RATIONALE FOR COMMUNITY ISSUES THE HOSPITAL WILL ADDRESS			
Priority Issue	**Relevance**	**Impact**	**Feasibility**
Obesity	35.9% of adults in PSA are Obese (BMI>30) 34% of adults in service area are overweight 30.9% of adults in PSA are physically inactive	Reducing Obese/overweight population will directly affect chronic disease	Cumberland Valley Health Department
Tobacco	27.9% of adults in PSA smoke cigarettes Mortality rate for Lung Disease is 68.38 per 100,000 for PSA, which is higher than state avg. of 64.65		Cumberland Valley Health Department
Behavioral Health	18.5% of Medicare population in PSA diagnosed with depression Designated Professional Shortage Area for Mental Health Care Facilities 23.7% adults report lack of social or emotional support compared to state avg. 19.7%		
Diabetes	12.1% of PSA diagnosed with diabetes		*Cumberland Valley Health Department*
Lack of Access	25% of PSA lack consistent source of primary care compared to state avg of 19.18%		Partner with EMS, Health Department, Case Management

RATIONALE FOR COMMUNITY ISSUES THE HOSPITAL WILL NOT ADDRESS			
Priority Issue	**Relevance**	**Impact**	**Feasibility**
Poor Pregnancy Outcomes	Lack of available data on pregnancy outcomes for the area		Volunteers of America Clinic Grace Community Health
ED Utilization		Higher cost for healthcare	
Chronic Disease	49.82% Adults with High Cholesterol in PSA	Higher cost for healthcare if not managed	Grace Community Health Red Bird Mission
Food Insecurity	24.81% of population in PSA has low food access		Existing Food Pantry at AdventHealth Primary Care Clinic
Dental	Designated Health Professional Shortage Area for Dental Health		Red Bird Mission

12. PRIORITY ISSUES TO BE ADDRESSED

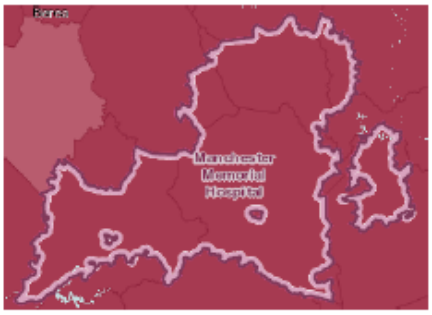
Issue 1: Obesity

Obesity is a complex health issue to address. According to the Center for Disease Control, obesity can be the result of a combination of causes and factors including health behaviors and genetics. Left untreated, obesity can increase risk for reduced quality of life and poor mental health, as well as contribute to many of the leading causes of death such as heart disease, stroke and some types of cancer.

AdventHealth Manchester recognizes the importance of reducing the risk for poor health through prevention. In the Hospital's primary service area 35.9% of adults are Obese (BMI > 30) while 34% of adults are overweight. In addition, 30.9% of adults aged 20 and older self-report no leisure time for activity, which is a determinant of future health. Reducing the incidence of obesity/overweight population will help to prevent and treat several issues identified during the CHNA process.

35.9%

of adults aged 20 and older self-report that they have a Body Mass Index (BMI) greater than 30.0 (obese) in the report area.

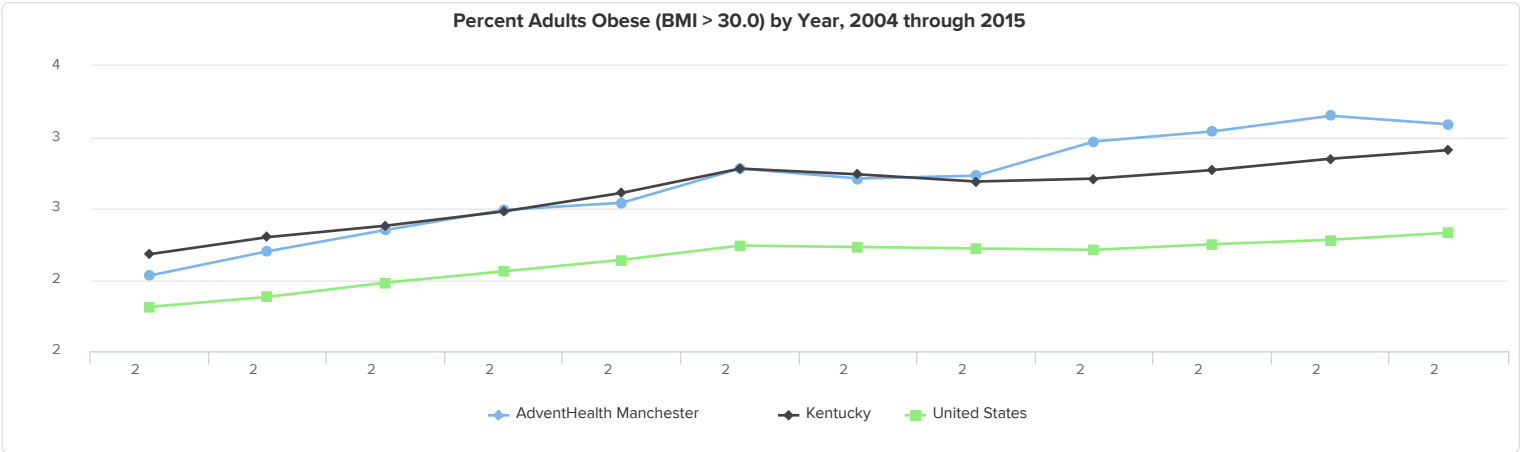


View larger map

Obese (BMI >= 30), Adults Age 20+, Percent by County, CDC NCCDPHP 2015

- Over 34.0%
- 30.1 - 34.0%
- 26.1 - 30.0%
- Under 26.1%
- No Data or Data Suppressed
- Manchester Memorial Hospital

Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2016.



Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2016.

Issue 2: Tobacco

Smoking leads to disease and is harmful to nearly every organ in the body according to the Center for Disease Control. Smoking related illnesses are among leading causes of death in the United States including cancer, heart disease, stroke, lung diseases, diabetes and chronic obstructive pulmonary disease (COPD), which includes emphysema and chronic bronchitis. In addition, smoking can increase risk for eye diseases, immunodeficiency and rheumatoid arthritis. It is estimated that 25.8% of adults age 18 or older in the Hospital PSA self-report smoking cigarettes some days or every day.

25.8 %

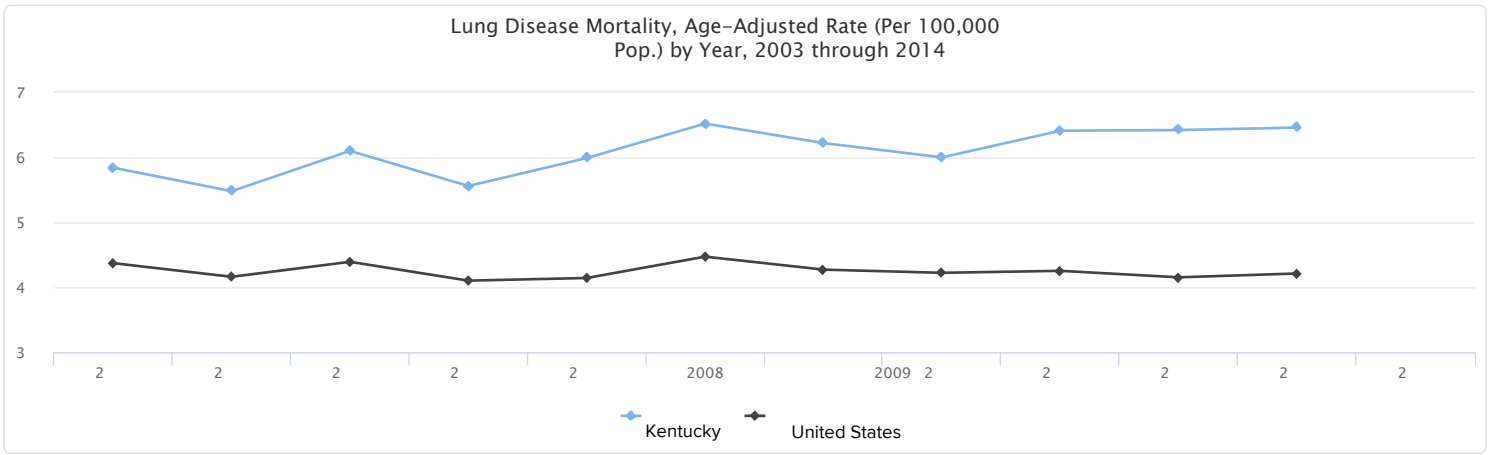
of adults age 18 or older self-report smoking cigarettes some days or every day.

Current Smokers, Adult, Percent of Adults Age 18+ by County, BRFSS 2006-12

- Over 26.0%
- 22.1%-26.0%
- 18.1%-22.0%
- Under 18.1%
- No Data or Data Suppressed
- AdventHealth Manchester

Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health & Human Services, Health Indicators Warehouse. 2006-12.

The state of Kentucky has a consistently higher than country average for deaths related to lung disease. Concerted efforts to reduce tobacco use will help to reduce risk and incidence of lung disease.



Source: Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. 2013-17

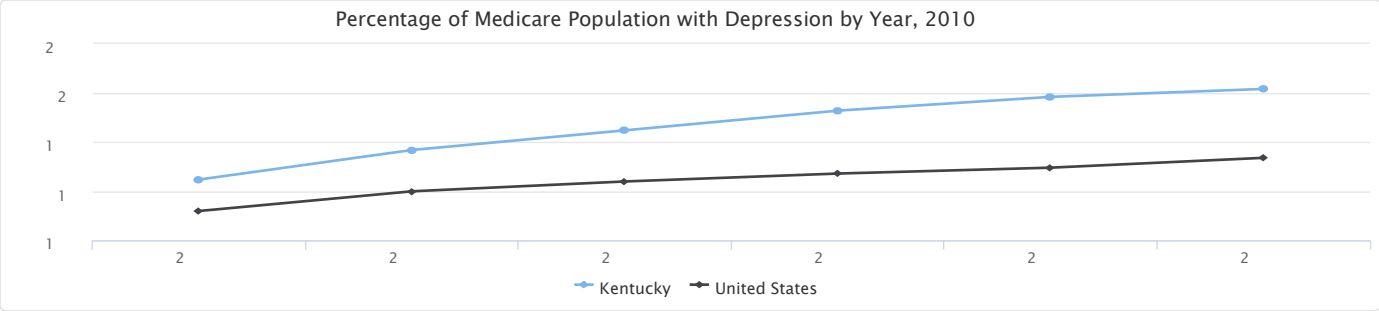
Issue 3: Behavioral Health (Drug/Substance Abuse)

Behavioral health focuses on promoting well-being by preventing or intervening in mental illnesses such as depression or anxiety, as well as an aim of preventing or intervening in substance abuse or other addictions.

Mental health was identified as a priority issue in community surveys and interviews. Mental/Behavioral Health conditions were also identified as an area of high frequency in the Hospital Emergency Department data, as well as in secondary data on alcohol consumption.

AdventHealth Manchester recognizes the importance as a health provider to help address this multi-faceted issue. The Hospital's primary service area has been designated as a Health Professional Shortage Area for Mental Health Care Facilities, with seven identified in the primary service area compared to the state average of 68. Lack of access to the proper treatment contributes to the incidence of drug and substance abuse in the area.

There has been a steady increase in the percentage of Medicare population with depression in Kentucky between 2010 and 2015 as shown below.



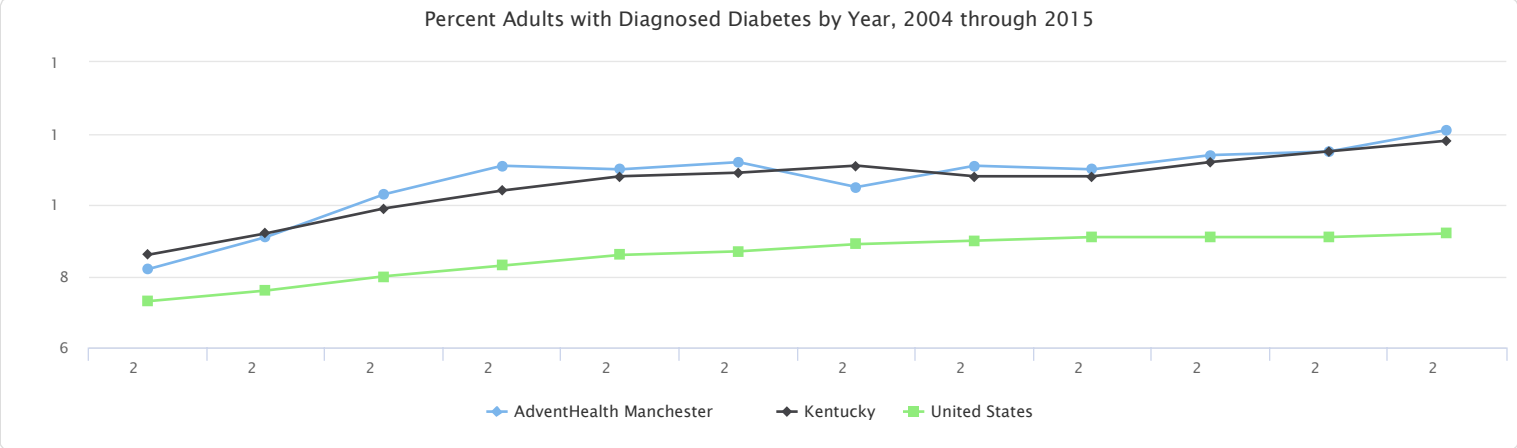
Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health & Human Services, Health Indicators Warehouse. 2006-12

Lack of social or emotional support in the Hospital PSA is 23.7% compared to 19.7% for the state. This is based on adults who self-report they receive insufficient social and emotional support all or most of the time. This type of support is critical for navigating the challenges of daily life as well as for good mental health.

The estimated number of adults drinking excessively (more than two drinks per day on average for men and one drink per day on average for women) is slightly higher than the state average at 13.3%. This behavior is a determinant of future health and may present as significant health issues such as cirrhosis, cancers and untreated mental and behavioral health needs.

Issue 4: Diabetes

Chronic Disease was highlighted by community members as a high area of concern. Secondary data identified diabetes as an increasing problem in the AdventHealth Manchester PSA. This prevalent problem may indicate an unhealthy lifestyle and puts individuals at risk for further health issues. Trends in the Manchester PSA demonstrate a steady increase in percent of Adults with Diagnosed Diabetes from 2004 to 2015 as well as a higher prevalence than the United States.



Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2016.

Issue 5: Lack of Access

Majority of Clay County residents lack access to clean water, proper nutrition and proper living conditions or access to handicap accessibility. Efforts have been made to address these as AdventHealth Manchester recognizes this lack of access directly affects the health of the community and ability to not only survive but thrive.

The average population living below 100% of the Federal poverty level in the Hospital PSA is 22.9% compared to 18.81% for the State. The PSA also has a higher than state average percentage of adults in children who are uninsured at 14.51% and 5.13% Respectively. One in four residents of the PSA lack a consistent source of primary care compared to the state average of 19.18%.

13. PRIORITY ISSUES THAT WILL NOT BE ADDRESSED

a. Poor Pregnancy Outcomes: Poor pregnancy outcomes were cited both in community interviews and stakeholder surveys as an area of concern. The asset inventory identified multiple community initiatives already working to address this issue. The CHNAC decided not to recommend this as a priority to avoid duplication of services.
b. ED Utilization: While not addressing ED utilization directly, the CHNAC felt that focusing on increasing access to care, this may re-route those who currently utilize the ED for preventative and primary care to a more appropriate setting of care
c. Chronic Diseases: After reviewing the data, it was decided that the Hospital would focus on diabetes, which also effects onset and complications for various chronic diseases. The Hospital also felt that focusing on access to care would have a positive effect on management and prevention of chronic disease.
d. Food Insecurity: Although not one of the top issues selected, AdventHealth Manchester will continue to address this issue through the food pantry, which is available through their AdventHealth Primary Care Clinic.
e. Dental: The Hospital recognizes the importance of dental health for community members. The inventory process identified community efforts, which already exist to address this important issue. The CHNAC agreed that it was best not to recommend this priority to avoid duplication of services.

14. NEXT STEPS

The CHNAC will work with AdventHealth Manchester and other community partners to develop a measurable Community Health Plan for 2020-2022 to address the priority issues. For each priority, specific goals will be developed including measurable outcomes, intervention strategies and the resources necessary for successful implementation.

Evidence based strategies will be reviewed to determine the most impactful and effective interventions. For each goal, a review of policies that can support or deter progress will be completed with consideration of opportunities to make an impact. The plan will be reviewed quarterly with an annual assessment of progress. A presentation of progress on the plan will also be presented to the Hospital board annually.

A link to the Community Health Plan will be posted on AdventHealth.com prior to May 15, 2020.

15. WRITTEN COMMENTS REGARDING 2016 NEEDS ASSESSMENT

We posted a link to the most recently conducted 2016 CHNA and most recently adopted 2017-2019 Community Health Plan (Implementation Strategy) on our Hospital website as well as AdventHealth.com prior to May 15, 2017 and have not received any written comments.

16. REVIEW OF STRATEGIES UNDERTAKEN IN THE 2017 COMMUNITY HEALTH PLAN

AdventHealth Manchester conducts an annual evaluation of the progress made from the implementation strategies from the Community Health Plan. The evaluation is reported to the IRS in Form 990. The following is a summary of progress made on our 2017-2019 plan.

Priority #1: Obesity

2016 Description of the Issue: The Washington Post published an article in 2010 titled, "Unhealthy Manchester," labeling Manchester, in Clay County, as one of the unhealthiest places in the nation. While the statistics found in that article have been called into question (52 percent obesity rate in Clay County), our current statistics show that 33 percent of adults in Clay County are obese. With growing community concern and a Healthy People 2020 national goal of 30 percent for obesity, we see this as a large concern. There have been several groups working to combat this issue, but they have funding issues. We hope to help alleviate this problem, as well as provide some additional ongoing programs. This issue was highlighted by the CHNAC and has to be addressed, as reducing the number of people that are overweight would, in turn, reduce a number of a myriad of other health disparities.

2019 Update: AdventHealth Manchester is moving forward with our Live It Up and Mission in Motion initiatives. These two programs are touching lives in our county and surrounding communities. The Live It Up program is a very energetic program that goes directly into the schools teaching CREATION Health principals with a concentration on Nutrition and Choices. In 2018-2019, 1,159 kids received this program and we will continue offering this in 2020. Mission in Motion is a mobile screening facility that allows AdventHealth Manchester the flexibility to travel throughout the region and provide free health screenings to the community. In 2018, 207 people who do not have the means to receive this service were able to receive screenings.

AdventHealth Manchester has been chosen as an AdventHealth Global Mission site for the years 2019–2024. This distinction will route volunteer groups from within the AdventHealth Organization to Manchester, KY to complete mission trips. This opportunity will allow us to adopt new strategies for the upcoming years.

Priority #2: Tobacco Usage

2016 Description of the Issue: 25.8 percent of the population aged 18 and above smoke. The age-adjusted rate for lung and bronchus cancer deaths per 100,000 population was 27.6% for Clay County compared to 26.1% for Kentucky. A lack of education and support are strong contributing factors to the high smoking population.

2019 Update: AdventHealth Manchester partners with Freedom from Smoking a subsidiary of the American Lung Association to continue our Smoking Cessation classes. The Hospital offered four eight-week classes last year. Forty smokers took part in the classes, with 85 percent successfully quitting smoking with the support of this class along with the nicotine patches and other education material that is provided from the classes.

Priority #3: Behavioral Health (Drug/Substance Abuse)

2016 Description of the Issue: 22.5 percent adults aged 18 and older self-report that they receive insufficient social and emotional support all or most of the time. With this data and having an overview of the problems existing in the community, the CHNAC felt that this lack of social support was leading a large majority of the youth to indulge in wrongful practices like tobacco, drug and substance abuse.

2019 Update: AdventHealth Manchester is very excited about the work we have done in the area of behavioral health. Many people in our community lack the emotional or social supported needed to overcome the effects of

anxiety and other behavioral health problems. Our Whole Person Recovery Clinic, along with our behavioral health department, introduces group therapy and other services to meet psychological needs.

In 2018, recovery opportunities were offered to 427 patients and we currently have a wait list of 318. The center along with skilled licensed clinical social workers are providing free education and literature to help combat the enormous opioid crisis in our community. We are striving to educate the community about the way we address addiction by providing a safe Christ like environment.

Priority #4 Diabetes

2016 Description of the Issue: Of the Clay County population, 12.1 percent are diagnosed as having Diabetes. The National percentage is 9.11 percent (with the state being 10.79 percent). While the health department provides education through support groups, their attendance is low and we see many patients in our Hospital with high glucose levels and our staff finds that, many times, these patients do not know the best practices for treating their diabetes (diet, activity, etc.). It is also a goal of our Hospital to reduce high glucose rates during patient stays, recognizing that the practice needs to continue after patients are discharged.

2019 Update: We have recently hired a new diabetic educator and have scheduled four classes for they year, completing two of those already. Our Diabetic Educator along with our Dietician, plan snacks, educational demonstrations and visuals to educate and expose community members on the importance of diabetic care.

Priority #5: Lack of Access

2016 Description of the Issue: The majority of Clay County residents lack access to clean water, proper nutrition and proper living conditions or access to handicap accessibility.

2019 Update: AdventHealth selected Manchester, KY as one of the locations of focus for their Global Mission Initiative (GMI). Global Mission Initiative (GMI) has increased the Hospital's reach into the community allowing the completion of a second water kiosk in southeastern Clay County. The first water kiosk constructed in the southern part of the county has now supplied over 20,000 gallons of fresh water to that community.

GMI has also enabled the Hospital to improve homes for 11 residents throughout the county. These improvements aimed to increase access for those with accessibility challenges, and to repair and prepare homes for winter. Three separate mission teams-built ramps, porches, extended doorways, replaced broken windows, painted, along with additional repairs as needed. GMI has enabled both kiosk development and home remodeling to impact a larger number of residents. More than 700 volunteer hours were dedicated to these projects, as well as Breaking Bread, which provides dinner every Monday to community members in need. The Hospital continues to provide CREATION Health programming to middle school aged kids which consists of a wholistic approach to health based on the principles of Choice, Rest, Environment, Activity, Trust, Interpersonal Relationships, Outlook and Nutrition.

APPENDIX A:
PRIMARY DATA SURVEY
& PRIMARY DATA RESULTS

AdventHealth Community Survey

Audience: All

Please take a few minutes to fill out this survey to help AdventHealth Manchester, KY identify and understand our current community health and how our organization can help provide resources needed to create a healthier community.

DEMOGRAPHIC INFORMATION		
Zip Code		
Languages Spoken	☐ English ☐ Spanish	☐ Creole ☐ Other:
Current Benefits Received	☐ Free/Reduced Lunch ☐ Medicaid ☐ Housing Assistance ☐ WIC	☐ SNAP ☐ Medicare ☐ Childcare Assistance ☐ Other:
Household Size		
Household Annual Income	☐ Less than $25,000 ☐ $25,000-$34,999 ☐ $35,000-$49,999 ☐ $50,000-$74,999	☐ $75,000-$99,999 ☐ $100,000-$149,999 ☐ $150,000-$199,000 ☐ $200,000 or more
Health Insurance Status	☐ Insured ☐ Uninsured	☐ Partially Insured
Employment Status	☐ Full-Time ☐ Part-Time ☐ Multiple Jobs	☐ Unemployed ☐ Full time-student
Marital Status	☐ Single (never married) ☐ Married ☐ Separated	☐ Divorced ☐ Widowed
Gender	☐ Female	☐ Male
Highest Education Level	☐ Some High School ☐ High School Graduate ☐ Some College ☐ Associate Degree	☐ Bachelor's Degree ☐ Graduate Degree ☐ Other:
Age	☐ 18-24 years ☐ 25-34 years ☐ 35-44 years	☐ 45-54 years ☐ 55-64 years ☐ 65 years or older
Ethnicity	☐ Hispanic	☐ Non-Hispanic
Race	☐ White ☐ African-American ☐ American Indian/Alaska Native ☐ Native Hawaiian/Other Pacific Islander	☐ Asian ☐ Multiple Races ☐ Other

SOCIAL DETERMINANT QUESTIONS

Questions 1-11 will help AdventHealth understand what challenges are faced beyond the Hospital walls. Please indicate your answer by checking the correct box for each statement. ☑

Within the past 12 months we worried whether our food would run out before we got money to buy more.	☐ Yes	☐ No	
Within the past 12 months the food we bought just didn't last and we didn't have money to get more.	☐ Yes	☐ No	
Are you worried or concerned that in the next 2 months you may not have stable housing that you own, rent, or stay in as part of a household?	☐ Yes	☐ No	
In the past 12 months has your utility company shut off your service for not paying your bills?	☐ Yes	☐ No	
In the past 12 months, was there a time you needed to see a doctor but could not because of cost?	☐ Yes	☐ No	
In the past 12 months, have you ever had to go without health care because you didn't have a way to get there?	☐ No	☐ No	
Are you afraid you might be hurt in your apartment building or house?	☐ No	☐ No	
Do problems getting child care make it difficult for you to work or study?	☐ No	☐ No ☐ N/A	
For questions 9-11, please check the box which reflects your experience the most.	1= Hardly ever	2= Some of the time	3= Often
How often do you feel that you lack companionship?	☐ 1	☐ 2	☐ 3
How often do you feel left out?	☐ 1	☐ 2	☐ 3
How often do you feel isolated from others?	☐ 1	☐ 2	☐ 3

COMMUNITY SURVEY RESULTS

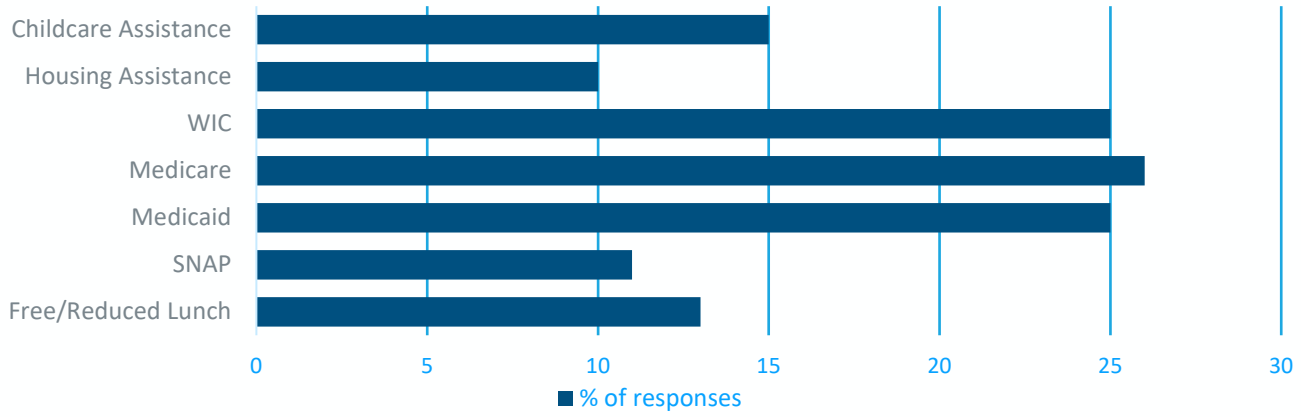
Community surveys were completed in collaboration with our CHNAC and community partners. Surveys were administered by email. The aggregate results are shown below.

- 276 Online surveys

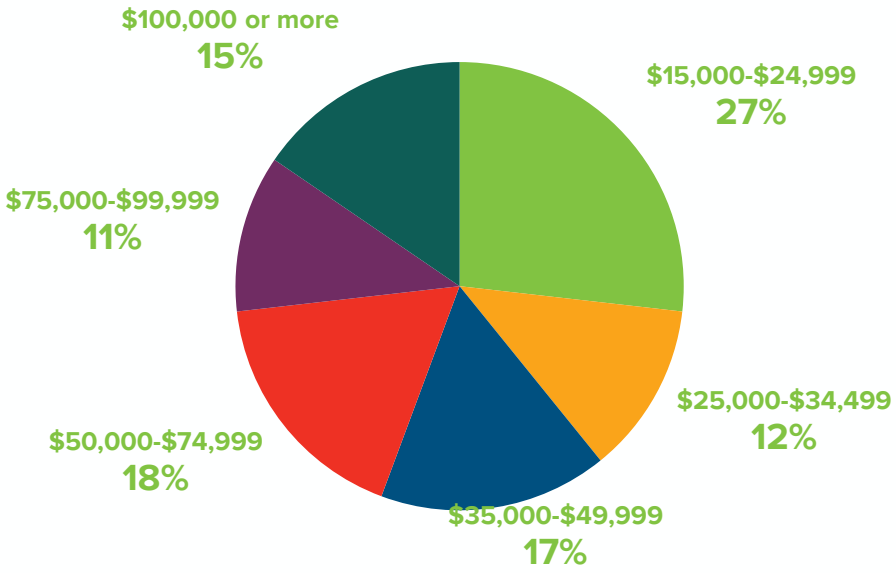
SURVEY QUESTION	SURVEY RESULTS	
Demographic Questions		
Zip Code	40771, 40962, 40741, 41714, 40729, 37762, 40962, 41714, 40972, 40962, 40402	
Languages Spoken at Home	100% English	0% Spanish 0% Other
Current Benefits Received	10% Free/Reduced Lunch 17% SNAP 5% Medicaid 20% Medicare	15% Housing Assistance 15% Childcare Assistance 20% WIC 5% Other
Household Size	Average 4 Adults:	Average 2 Children:
Employment Status	65% Full-Time 6% Part-Time 2% Multiple Jobs	26% Unemployed 1% Full-time student
Marital Status	10% Single (never married) 69% Married 3% Separated	12% Divorced 6% Widowed
Gender	75% Female	25% Male
Highest Education Level	50% Some High School 40% High School Graduate 5% Some College 10% Associate Degree	3% Bachelor's Degree 10% Graduate Degree 5% Other Advanced Degree beyond Master's
Age	30% 18-24 Years 10% 25-34 Years 5% 45-54 Years	10% 55-64 Years 20% 65 Years or older
Ethnicity	1% Hispanic	99% Non-Hispanic
Race	97% White 1% African-American 0% Asian 0% American Indian/Alaska Native	.0% Native Hawaiian/Other Pacific Islander .1% Multiple Race .0% Other
Social Determinant Questions		
Within the past 12 months we worried whether our food would run out before we got money to buy more.	17% Yes	83% No
Within the past 12 months the food we bought just didn't last and we didn't have money to get more.	15% Yes	85% No

Are you worried or concerned that in the next 2 months you may not have stable housing that you own, rent, or stay in as part of a household?	9% Yes	91% No
In the past 12 months has your utility company shut off your service for not paying your bills?	6% Yes	94% No
In the past 12 months, was there a time you needed to see a doctor but could not because of cost?	19% Yes	81% No
In the past 12 months, have you ever had to go without health care because you didn't have a way to get there?	7% Yes	93% No
Are you afraid you might be hurt in your apartment building or house?	3% Yes	97% No
Do problems getting child care make it difficult for you to work or study?	17% Yes	93% No % N/A
How often do you feel that you lack companionship?	74% Hardly ever 19% Some of the time 8% Often	
How often do you feel left out?	68% Hardly ever 25% Some of the time 18% Often	
How often do you feel isolated from others?	66% Hardly ever 25% Some of the time % Often	

CURRENT BENEFITS RECEIVED



HOUSEHOLD ANNUAL INCOME



HEALTH INSURANCE STATUS

Insured	Partially-Insured	Uninsured
85%	6%	14 %

EMPLOYMENT STATUS

Full-Time (65%)
Part-Time (16%)
Multiple Jobs (2%)
Unemployed (67%)
Full-time Student (1%)

MARITAL STATUS

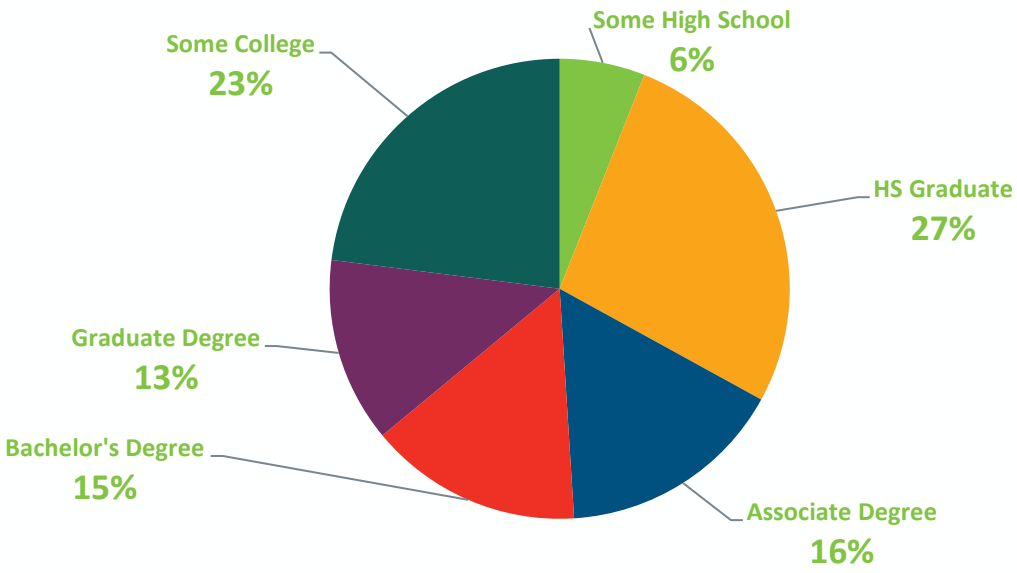
Single (never married) (10%)
Married (69%)
Separated (3%)
Divorced (12%)
Widowed (6%)

GENDER

Female 75%

Male 25%

EDUCATION



STAKEHOLDER INTERVIEW QUESTIONS:

STAKEHOLDER INTERVIEW QUESTIONS

1. How would you rate the following?

	Excellent	Good	Fair	Poor	Very Poor
Overall community health status				8	
Your personal health status		8			
Community understanding of health risks				8	
Your own understanding of health risks		8			
Community quality of life					8
Your quality of life		8			

2. What do you see as the GREATEST HEALTH PROBLEMS/CONDITIONS in our community? (Select 3)

- ☐ Asthma-children
- ☒ Cancer
- ☒ Diabetes
- ☒ Heart disease
- ☐ High blood pressure/cholesterol
- ☐ Immunizations-children
- ☐ Immunizations-adults
- ☒ Mental health disorders
- ☐ Respiratory disease-adults
- ☐ Teen pregnancy rates/low birth-weight babies
- ☒ Other: Lack of Access

3. Which HEALTH BEHAVIORS/RISK factors are the most common in our community? (Select 3)

- ☒ Aging population
- ☐ Firearms in homes
- ☒ Lack of exercise
- ☐ Lack of family/religious support systems
- ☒ Obesity
- ☒ Poor nutrition
- ☐ Risky sexual behavior
- ☐ Seatbelt use
- ☐ Smoking
- ☐ Substance misuse-alcohol
- ☒ Substance misuse-drugs
- ☐ Other:

4. Which COMMUNITY CONDITIONS most impact the health of people in our community? (Select 3)

- ☐ Access to dental care
- ☒ Air & water quality
- ☒ Inadequate transportation
- ☐ Lack of health insurance/affordable care
- ☒ Low-income families/poverty
- ☐ Unemployment

☐ Crime/violence ☐ Lack of grocery stores/access to healthy food ☐ Other:
☐ Homelessness ☐ Low education levels/literacy

5. Who in our community promotes good health?	
6. What are one or two things that they do that are effective?	
7. If you were in charge of promoting good health, what would you do first?	
8. Who else should we talk to?	

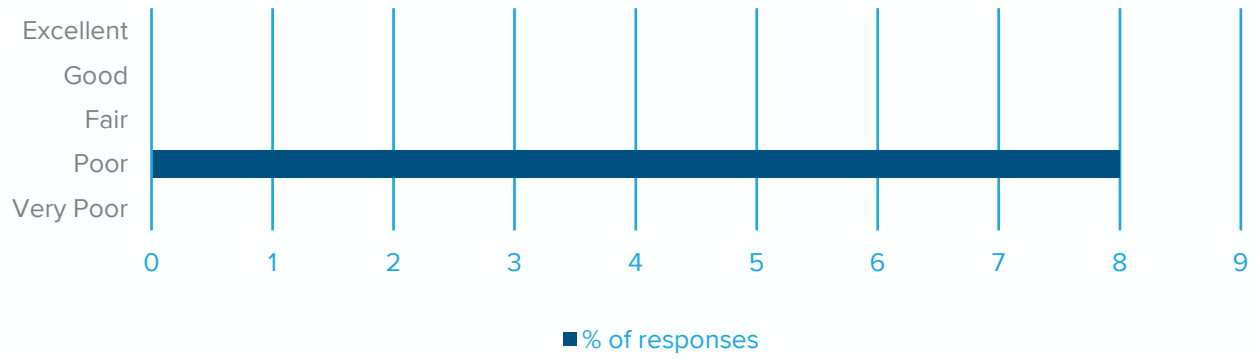
STAKEHOLDER INTERVIEW RESULTS

Stakeholder interviews were completed in collaboration with our CHNAC and community partners. Surveys were administered in person as well as online. The aggregate results are shown below.

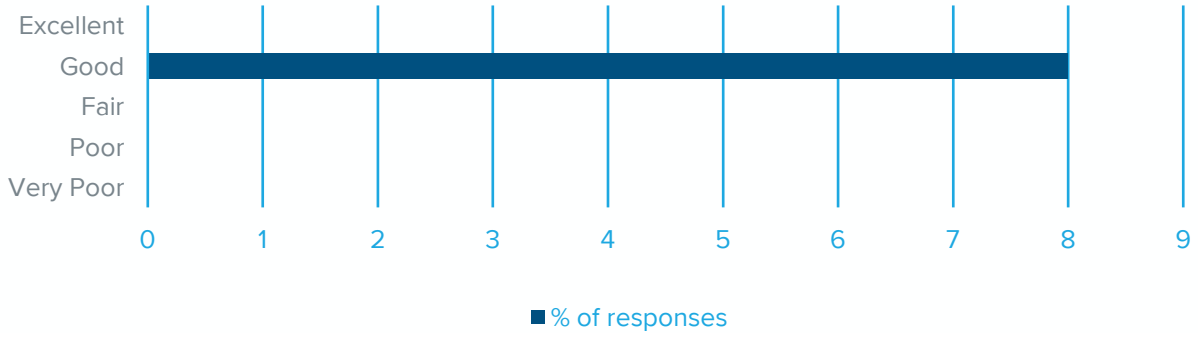
- 9 Stakeholder interviews

1. How would you rate the following:

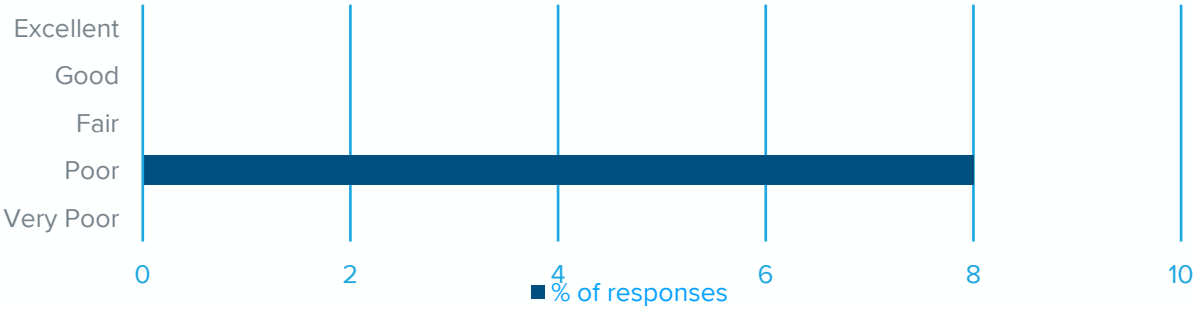
Overall Community Health Status



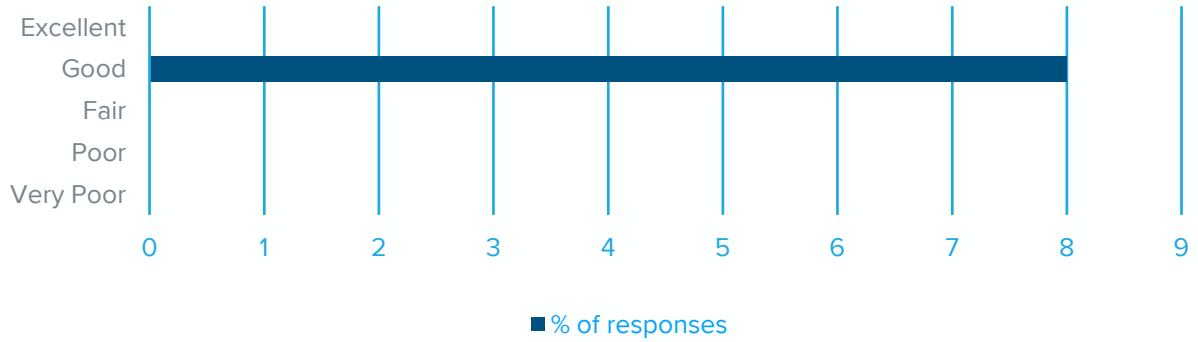
Your Personal Health Status



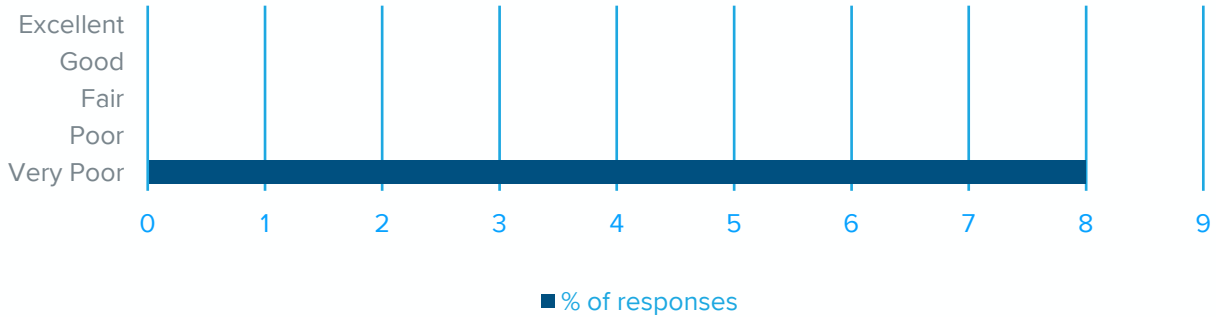
Community Understanding of Health Risks



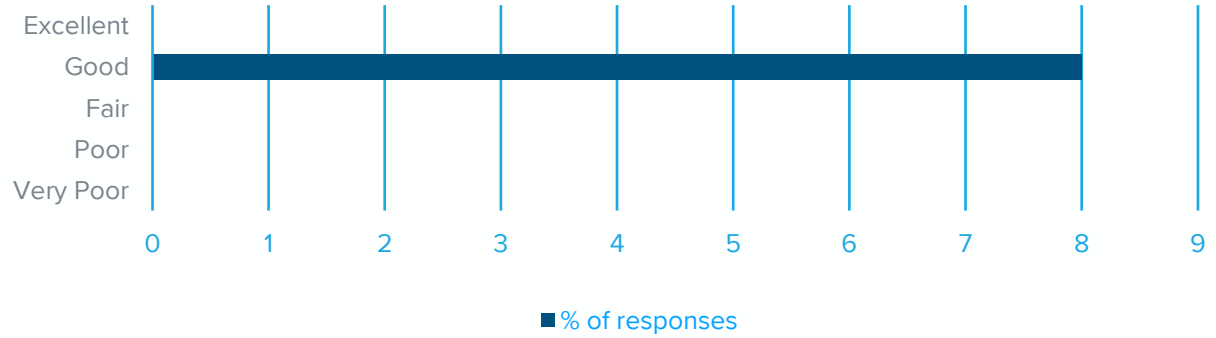
Your Own Understanding of Health Risks



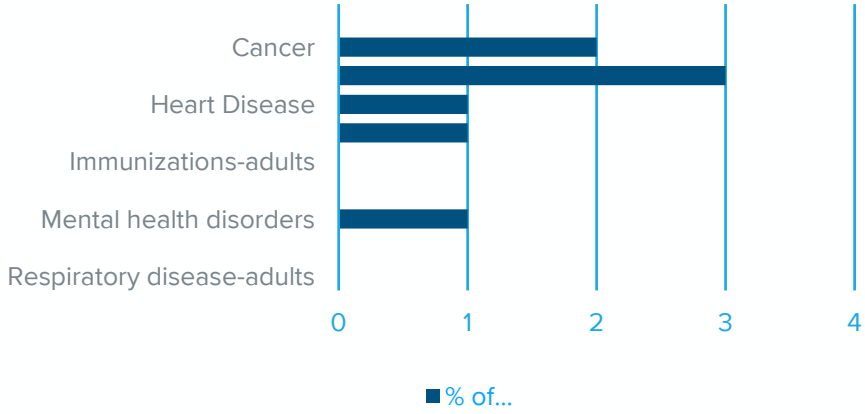
Community Quality of Life



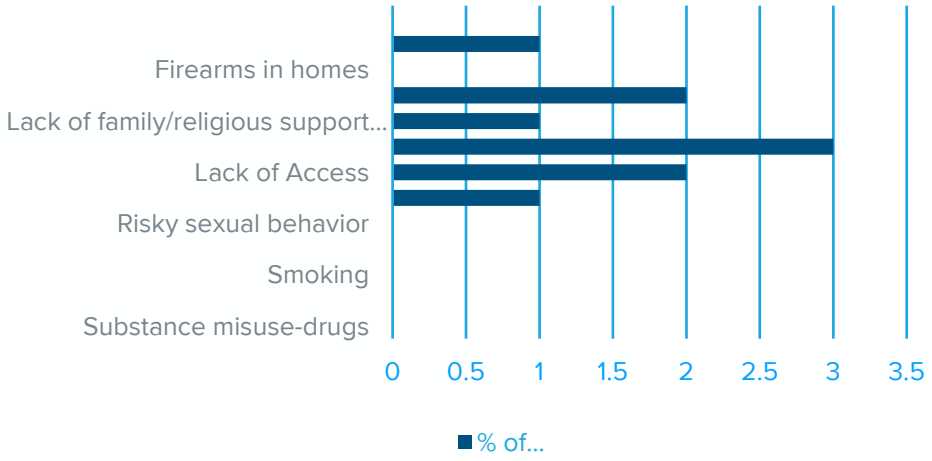
Your Quality of Life



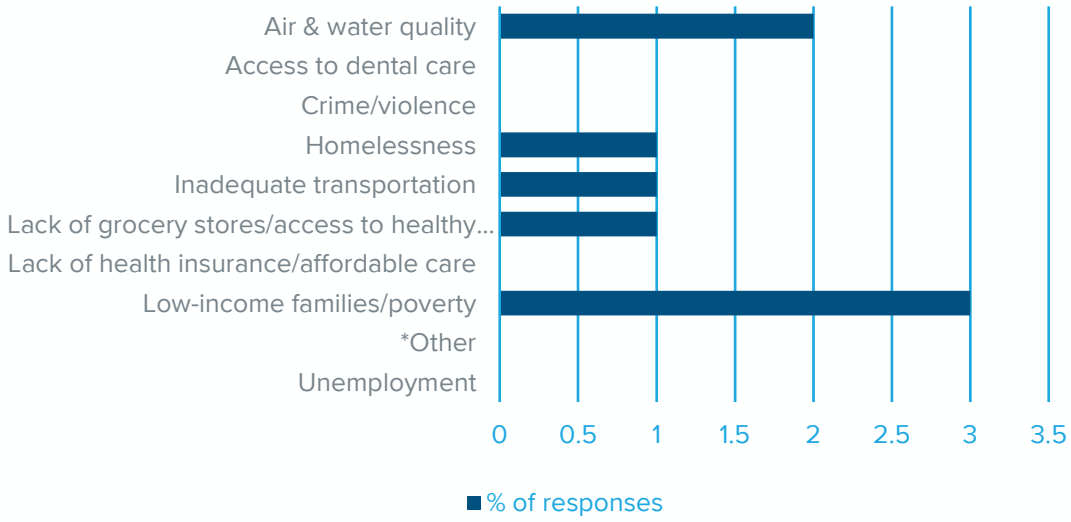
2. What do you see as the GREATEST HEALTH PROBLEMS/CONDITIONS in our community? (Select 3)



3. Which HEALTH BEHAVIORS/RISK FACTORS are the most common in our community? (Select 3)



4. Which COMMUNITY CONDITIONS most impact the health of people in our community? (Select 3)



5. Who in our community promotes good health?

6. What are one or two things that they do that are effective?

7. If you were in charge of promoting good health, what would you do first?

8. Who else should we talk to?

APPENDIX B:
SECONDARY DATA REPORT

AdventHealth Manchester
Needs Assessment Report - Quick Facts

Location
Central Texas Medical Center (CTMC) (Service Area)

Demographics

Data Indicator	Indicator Variable	Location Summary	State Average
Population Age 65+	Total Population	139,77	4411.989
	Population Age 65+	35,096	653.00
	Percent Population Age 65+	25.12%	14.8%
Population Age 0-18	Total Population	139,707	4,411,989
	Population Age 0-17	27,452	1,014,190
	Percent Population Age 0-17	19.65%	22.99%
Population Age 18-64	Total Population	139,707	4,411,989
	Population Age 18-64	77,159	2744,799
	Percent Population Age 18-64	55.23%	62.21%
Total Population	Total Population	139,707	4411,989
	Total Land Area (Square Miles)	1687	39,485.23
	Population Density (Per Square Mile)	82.8	111.74
Change in Total Population	Total Population, 2000 Census	129,632	4,041,768
	Total Population, 2010 Census	140,408	4,339,367
	Total Population Change, 2000-2010	10,776	297,599
	Percent Population Change, 2000-2010	8.31%	7.36%
Female Population	Total Population	139,707	4,411,989
	Female Population	70,580	2,239,244
	Percent Female Population	50.52%	50.75%
Hispanic Population	Total Population	366,191	26,956,435

	Non-Hispanic Population	219,228	16,543,285
	Percent Population Non-Hispanic	59.87%	61.37%
	Hispanic or Latino Population	146,963	10,413,150
	Percent Population Hispanic or Latino	40.13%	38.63%
Male Population	Total Population	139,707	4,411,989
	Male Population	69,127	2,172,745
	Percent Male Population	49.48%	49.25%

Social & Economic Factors

Data Indicator	Indicator Variable	Location Summary	State Average
Violent Crime	Total Population	133,966	4,353,205
	Violent Crimes	259	9,453
	Violent Crime Rate (Per 100,000 Pop.)	**193.9**	217.2
Population with No High School Diploma	Total Population Age 25+	102,205	2,970,073
	Population Age 25+ with No High School Diploma	21,252	456,180
	Percent Population Age 25+ with No High School Diploma	**20.8%**	15.36%
Poverty - Population Below 100% FPL	Total Population	135,938.43	4,275,202
	Population in Poverty	31,191.38	804.139
	Percent Population in Poverty	**22%**	18.81%
Insurance - Uninsured Adults	Total Population Age 18 - 64	75,431	2,646,149
	Population with Medical Insurance	64,485	2,458,323
	Percent Population with Medical Insurance	85.5%	92.9%
	Population Without Medical Insurance	10,947	187,826
	Percent Population Without Medical Insurance	**14.51%**	7.1%
Insurance - Uninsured Children	Total Population Under Age 19	28,607	1,037,054
	Population with Medical Insurance	27,138	1,003,130
	Percent Population with Medical Insurance	94.9%	96.73%
	Population Without Medical Insurance	1,469	33,924
	Percent Population Without Medical Insurance	**5.13%**	3.27%

Income - Per Capita Income	Total Population	139,707	4,411,989
	Total Income ($)	2,861,014,822.00	109,424,560,100
	Per Capita Income ($)	**20,479.00**	24,801
Unemployment Rate	Labor Force	48,292	2,056,845
	Number Employed	44,064	1,972,506
	Number Unemployed	4,228	84,339
	Unemployment Rate	**8.8%**	4.1%
Lack of Social or Emotional Support	Total Population Age 18+	111,204	3,294,652
	Estimated Population Without Adequate Social / Emotional Support	25,507	649,046
	Crude Percentage	22.9%	19.7%
	Age-Adjusted Percentage	**23.7%**	19.7%
Teen Births	Female Population Age 15 - 19	12,943	914,438
	Births to Mothers Age 15 - 19	478	50,294
	Teen Birth Rate (Per 1,000 Population)	**36.97**	55
Food Insecurity Rate	Total Population	140,123	4,413,457
	Food Insecure Population, Total	24,556	743,310
	Food Insecurity Rate	**17.5%**	16.8%
Poverty - Children Below 100% FPL	Total Population	135,938	4,275.202
	Population Under Age 18	26,974	991.800
	Population Under Age 18 in Poverty	8,834	255,223
	Percent Population Under Age 18 in Poverty	**32.75%**	25.73%

Physical Environment

Data Indicator	Indicator Variable	Location Summary	State Average
Use of Public Transportation	Total Population Employed Age 16+	44,968	1,886,629
	Population Using Public Transit for Commute to Work	388	20,408
	Percent Population Using Public Transit for Commute to Work	**0.86%**	1.1%

Population with Low Food Access	Total Population	140,407	4,339,367
	Population with Low Food Access	34,829	782,548
	Percent Population with Low Food Access	**24.81%**	18.03%

Clinical Care

Data Indicator	Indicator Variable	Location Summary	State Average
Access to Dentists	Total Population, 2015	381,910	27,469,114
	Dentists, 2015	150	14,857
	Dentists, Rate per 100,000 Pop.	**39.3**	54.1
Cancer Screening - Sigmoidoscopy or Colonoscopy	Total Population Age 50+	49,594	1,096,496
	Estimated Population Ever Screened for Colon Cancer	31,075	702,854
	Crude Percentage	62.7%	64.1%
	Age-Adjusted Percentage	**51.7%**	61.4%
Cancer Screening - Mammogram	Total Medicare Enrollees	19,497	429,871
	Female Medicare Enrollees Age 67-69	1,672	42,505
	Female Medicare Enrollees with Mammogram in Past 2 Years	936	25,372
	Percent Female Medicare Enrollees with Mammogram in Past 2 Year	**56%**	59.7%
Cancer Screening - Pap Test	Female Population Age 18+	102,067	2,950,550
	Estimated Number with Regular Pap Test	65,115	2,239,467
	Crude Percentage	66.2%	75.9%
	Age-Adjusted Percentage	**67.5%**	76.9%
Facilities Designated as Health Professional Shortage Areas	Primary Care Facilities	9	75
	Mental Health Care Facilities	7	68
	Dental Health Care Facilities	8	70
	Total HPSA Facility Designations	24	213
Lack of Prenatal Care	Total Births	No Data	231,078
	Mothers Starting Prenatal Care in First Semester	No Data	161,563
	Mothers with Late or No Prenatal Care	No Data	61,123
	Prenatal Care Not Reported	No Data	8,392
	Percentage Mothers with Late or No Prenatal Care	**No Data**	26.5%

Federally Qualified Health Centers	Total Population	No Data	4,339.367
	Number of Federally Qualified Health Centers	11	205
	Rate of Federally Qualified Health Centers per 100,000 Population	**37.59**	4.72
Lack of a Consistent Source of Primary Care	Survey Population (Adults Age 18+)	115,543	3,311,523
	Total Adults Without Any Regular Doctor	28,885	635,011
	Percent Adults Without Any Regular Doctor	**25%**	19.18%
Preventable Hospital Events	Total Medicare Part A Enrollees	14,937	340,140
	Ambulatory Care Sensitive Condition Hospital Discharges	9.319	26,041
	Ambulatory Care Sensitive Condition Discharge Rate	**64.2**	76.6

Health Behaviors

Data Indicator	Indicator Variable	Location Summary	State Average
Alcohol Consumption	Total Population Age 18+	111,204	3,294,652
	Estimated Adults Drinking Excessively	9,485	388,769
	Estimated Adults Drinking Excessively (Crude Percentage)	10.7%	11.8%
	Estimated Adults Drinking Excessively (Age-Adjusted Percentage)	**13.3%**	12.2%
Physical Inactivity	Total Population Age 20+	109,600	3,298,521
	Population with no Leisure Time Physical Activity	35,955	905,001
	Percent Population with no Leisure Time Physical Activity	**30.9%**	26.4%
Tobacco Usage - Current Smokers	Total Population Age 18+	111,204.46	3,294,652
	Total Adults Regularly Smoking Cigarettes	28,732.34	843,431
	Percent Population Smoking Cigarettes (Crude)	25.8%	25.6%
	Percent Population Smoking Cigarettes (Age-Adjusted)	**27.6%**	26.1%

Health Outcomes

Data Indicator	Indicator Variable	Location Summary	State Average
Mortality - Lung Disease	Total Population	140,253	4,410,427
	Average Annual Deaths, 2007-2011	163	3,264
	Crude Death Rate (Per 100,000 Pop.)	115.92	74

	Age-Adjusted Death Rate (Per 100,000 Pop.)	**38.38**	64.65
Mortality - Unintentional Injury	Total Population	140,253	4,410,247
	Average Annual Deaths, 2010-2014	101	2,806
	Crude Death Rate (Per 100,000 Pop.)	71.82	63.63
	Age-Adjusted Death Rate (Per 100,000 Pop.)	**66.85**	62.59
Mortality - Heart Disease	Total Population	140,253	4,410,247
	Average Annual Deaths, 2010-2014	453	10,121
	Crude Death Rate (Per 100,000 Pop.)	322.69	229.48
	Age-Adjusted Death Rate (Per 100,000 Pop.)	**204.67**	202.51
High Blood Pressure (Adult)	Total Population (Age 18+)	111,204	3,294,652
	Total Adults with High Blood Pressure	36,994	1,070,762
	Percent Adults with High Blood Pressure	**33.27%**	32.5%
Cancer Incidence - Lung	Estimated Total Population	23,336	519,465
	New Cases (Annual Average)	198	4,857
	Cancer Incidence Rate (Per 100,000 Pop.)	**85.1**	93.5
Mortality - Premature Death	Total Population	140,408	12,805,100
	Total Premature Death, 2014-2016	805	71,283
	Total Years of Potential Life Lost,2014-2016 Average	14,014	1,358,684
	Years of Potential Life Lost, Rate per 100,000 Population	**9,981**	10,610
Cancer Incidence - Prostate	Estimated Total Population (Male)	10,523	249,632
	New Cases (Annual Average)	88	2,716
	Cancer Incidence Rate (Per 100,000 Pop.)	**84.4**	108.8
Cancer Incidence - Breast	Estimated Total Population (Female)	10,376	269,680
	New Cases (Annual Average)	113	3,371
	Cancer Incidence Rate (Per 100,000 Pop.)	**109.2**	125
	Estimated Total Population (Female)	**3,585**	226,436
Cancer Incidence - Cervix	New Cases (Annual Average)	4	197
	Cancer Incidence Rate (Per 100,000 Pop.)	**11.5**	8.7
Cancer Incidence -	Estimated Total Population	22,197	506,262

Colon and Rectum	New Cases (Annual Average)	92	2,506
	Cancer Incidence Rate (Per 100,000 Pop.)	**41.9**	49.5
Obesity	Total Population Age 20+	109,593	3,298,508
	Adults with BMI > 30.0 (Obese)	38,449	1,127,164
	Percent Adults with BMI > 30.0 (Obese)	**35.9%**	34.1%
Overweight	Survey Population (Adults Age 18+)	113,009	3,128,385
	Total Adults Overweight	38,395	1,123,704
	Percent Adults Overweight	**34%**	35.9%
Diabetes (Adult)	Total Population Age 20+	109,554	3,299,853
	Population with Diagnosed Diabetes	16,849	430,988
	Population with Diagnosed Diabetes, Age-Adjusted Rate	**12.1%**	11.77%
Poor General Health	Total Population Age 18+	111,204	3,294,652
	Estimated Population with Poor or Fair Health	30,982	724,823
	Crude Percentage	27.9%	22%
	Age-Adjusted Percentage	**26.5%**	21.1%
Mortality - Suicide	Total Population	140,253	4,410,247
	Average Annual Deaths, 2010-2014	26	737
	Crude Death Rate (Per 100,000 Pop.)	19.82	16.71
	Age-Adjusted Death Rate (Per 100,000 Pop.)	**18.64**	16.32
Mortality - Homicide	Total Population	140,253	4,410,247
	Average Annual Deaths, 2010-2014	9	239
	Crude Death Rate (Per 100,000 Pop.)	7.15	5.41
	Age-Adjusted Death Rate (Per 100,000 Pop.)	**6.98**	5.58
Mortality - Cancer	Total Population	140,253	4,410,247
	Average Annual Deaths, 2010-2014	429	10,207
	Crude Death Rate (Per 100,000 Pop.)	305.93	231.44
	Age-Adjusted Death Rate (Per 100,000 Pop.)	**197.09**	197.8
Mortality - Stroke	Total Population	140,253	4,410,247
	Average Annual Deaths, 2010-2014	84	2,044

	Crude Death Rate (Per 100,000 Pop.)	59.76	46.35
	Age-Adjusted Death Rate (Per 100,000 Pop.)	**35.71**	41.77
High Cholesterol (Adult)	Survey Population (Adults Age 18+)	94,853	2,556,032
	Total Adults with High Cholesterol	47,255	1,055,799
	Percent Adults with High Cholesterol	**49.82%**	41.31%
Heart Disease (Adult)	Survey Population (Adults Age 18+)	115,284	3,286,020
	Total Adults with Heart Disease	12,350	194,665
	Percent Adults with Heart Disease	**10.7%**	5.9%
Depression (Medicare Population)	Total Medicare Fee-for-Service Beneficiaries	25,784	604,212
	Beneficiaries with Depression	4,771	121,854
	Percent with Depression	**18.5%**	20.2%
Poor Dental Health	Total Population (Age 18+)	8,172	285,390
	Total Adults with Poor Dental Health	54	1,9987
	Percent Adults with Poor Dental Health	**6.7%**	7%
Infant Mortality	Total Births	21,301	400,946
	Total Infant Deaths	2,011	36,486
	Infant Mortality Rate (Per 1,000 Births)	**9.44%**	9.1%
Low Birth Weight	Total Live Births	116,519	3,308,269
	Low Weight Births (Under 2500g)	16,548	513,969
	Low Weight Births, Percent of Total	**14.2%**	15.5%
Asthma Prevalence	Survey Population (Adults Age 18+)		
	Total Adults with Asthma		
	Percent Adults with Asthma		

https://ahs.engagementnetwork.org, 1/9/2019

APPENDIX C: HOSPITAL UTILIZATION & EMERGENCY ROOM DATA

Below are the top 10 diagnoses for AdventHealth Manchester in 2018.

Emergency Department

1. Chest Pain, Unspecified
2. Acute Bronchitis
3. Abdominal Pain, Unspecified Site
4. Sprain of Neck
5. Shortness of Breath
6. Altered Mental Status
7.Pneumonia, Organism Unspecified
8. Other Malaise and Fatigue
9. Obstructive Chronic Bronchitis with Acute Exacerbation
10. Congestive Heart Failure

Inpatient Admissions

1. Obstructive Chronic Bronchitis with Acute Exacerbation
2. Unspecified Septicemia
3. Pneumococcal Pneumonia (Streptococcus Pneumoniae Pneumonia)
4. Pneumonia, Organism Unspecified
5. Acute and Chronic Respiratory Failure
6. Urinary Tract Infection, Site not specified
7. Acute Respiratory Failure
8. Acute Kidney Failure, Unspecified
9. Single Live born, born in Hospital, delivered without mention of cesarean section
10. Chest Pain, unspecified