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2016 COMMUNITY HEALTH NEEDS ASSESSMENT

University Hospitals' (UH) long-standing commitment to the community spans 150 years. This commitment has grown and evolved through significant thought and care in considering our community's most pressing health needs. One way we do this is by conducting a periodic, comprehensive Community Health Needs Assessment (CHNA) for each UH hospital facility. Through our CHNA, University Hospitals has identified the greatest health needs among each of our hospital's communities, enabling UH to ensure our resources are appropriately directed toward outreach, prevention, education and wellness opportunities where the greatest impact can be realized.

The following document is a detailed CHNA for University Hospitals Samaritan Medical Center (UH Samaritan Medical Center), which is a small, rural hospital in the heart of Ashland County. UH Samaritan Medical Center is a 55-bed acute-care facility offering a variety of services including emergency, imaging, ambulatory, surgical, birthing and women's, acute

medical and surgical services as well as University Hospitals Harrington Heart & Vascular Institute. It was fully integrated into the University Hospitals system in November 2015.

UH Samaritan Medical Center offers myriad programs and activities to address the surrounding community's health needs. These activities range from support groups and health screenings to a wide variety of community health and wellness education programs.

UH Samaritan Medical Center strives to meet the health needs of its community. Please read the document's introduction to better understand the health needs that have been identified.

Adopted by the UH Board of Directors September 21, 2016.

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INTRODUCTION TO REPORT

This report identifies and assesses community health needs in the areas served by UH Samaritan Medical Center in accordance with regulations promulgated by the Internal Revenue Service pursuant to the Patient Protection and Affordable Care Act (ACA), 2010. This CHNA was adopted by the UH Board of Directors on September 21, 2016.

This is the second UH Samaritan Medical Center community health needs assessment (CHNA) in response to federal government regulation.[1] The 2016 UH Samaritan Medical Center CHNA will serve as a foundation for developing an implementation strategy, required by the regulation, to address those needs that (a) the hospital determines it is able to meet in whole or in part; (b) are otherwise part of its mission; and (c) are not met (or are not adequately met) by other programs and services in the hospital's service area.

To assist with the assessment, UH Samaritan Medical Center retained The Center for Health Affairs. More information about The Center for Health Affairs is provided in Appendix A.

Objectives: CHNAs seek to identify priority health status and access issues for particular geographic areas and populations by focusing on the following questions:

- **Who** in the community is most vulnerable in terms of health status or access to care?

- **What** are the unique health status and/or access needs for these populations?

- **Where** do these people live in the community?

- **Why** are these problems present?

The question of how the hospital can best use its limited charitable resources to assist communities in need will be the subject of the hospital's implementation strategy. To answer these questions, this assessment considered multiple data sources, some primary (hospital discharge data) and some secondary (regarding demographics, health status indicators and measures of health care access).

UH Samaritan Medical Center's CHNA took into account input from persons and organizations representing the broad interests of the community through interviews with community leaders, including mental health care providers, homeless shelters, religious organizations, public health professionals, school leaders, and others, and focus groups of diabetes patients, seniors and a random sample of Ashland County residents. Particular focus was paid to ensure individuals interviewed represented medically underserved, low-income and minority populations as well as the public health sector. Each of these gave their individual and collective assessments of the strengths and limits of community health services and identified the gaps in health needs within the community.

This report addresses the following broad topics:

- Economic issues facing the hospital's primary and secondary market areas (e.g., poverty, unemployment);

- Community issues (e.g., environmental concerns and crime);

- Health status indicators (e.g., morbidity rates for various diseases and conditions, and mortality rates for leading causes of death);

- Health access indicators (e.g., uninsured rates, ambulatory care sensitive (ACS) discharges and use of emergency departments);

- Health disparities indicators; and

- Availability of health care facilities and resources.

Written Comments

Individuals are encouraged to submit written comments on this Community Health Needs Assessment (CHNA) to CommunityBenefit@UHhospitals.org.

[1]The Patient Protection and Affordable Care Act (Pub. L. 111-148) added section 501(r) to the Internal Revenue Code, which imposes new requirements on nonprofit hospitals in order to qualify for an exemption under Section 501(c)(3), and adding new reporting requirements for such hospitals under Section 6033(b) of the Internal Revenue Code.

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EXECUTIVE SUMMARY

UH Samaritan Medical Center by the Numbers

- Eight primary service area municipalities (all in Ashland County): Ashland, Jeromesville, Loudonville, Nova, Perrysville, Polk, Savannah and Sullivan

- Eight secondary service area municipalities: one in Wayne County (West Salem), two in Huron County (Greenwich and New London), five in Richland County (Bellville, Lucas, Shelby, Shiloh and Mansfield)

- Service area population, 2014: 126,022

- 68.19% of patient discharges were residents of its primary market area; 15.7% were residents of its secondary market area

- 18.5% of patient discharges were Medicaid patients; 56.7% were Medicare patients

- 23.5% of households have incomes <$25,000

- Population trends:
  - Proportionately, there was little change in Ashland County's demographic composition from 2010 to 2014.
  - Ashland County decreased in population size by 0.2% from 2010 to 2015.
  - Ashland County is growing older, on average.
  - Ashland County is majority White (97.0%), but the percentage of the population that is White decreased by 0.3% from 2010 to 2014. Only 0.7% of the population in Ashland County is Black or African-American, and 1.1% is of Hispanic/Latino descent.

- There exists a wide range of health status and access challenges across the community

This assessment focuses on the priority problems that impact the overall health of the community that surrounds UH Samaritan Medical Center. UH Samaritan Medical Center's primary service area is completely contained within Ashland County. Key findings are as follows.

Poverty and transportation barriers impact access (to health services, healthy food and other necessities) and thus contribute to poor health.

- Slightly more than 10% of all residents of Ashland County were living under the poverty line in 2013

- The unemployment rate in Ashland County in May 2016 was 4.4%, which was slightly lower than the national rate of 4.7%

- From 2010 to 2013, more residents in Ashland County gained private health insurance (increasing from 68.7% to 71.6%), Medicaid coverage (increasing from 11.2% to 11.3%) and/or Medicare coverage (increasing from 16.5% to 19.7%), with a resulting decrease in the uninsured rate (decreasing from 17.0% to 12.8%).

Ambulatory care sensitive (ACS) conditions are conditions for which "good outpatient care can potentially prevent the need for hospitalization or for which early intervention can prevent complications or more severe disease," according to the Agency for Healthcare Research and Quality. For UH Samaritan Medical Center, 29.9% of discharges were ACS discharges of residents within the primary and secondary market areas combined. This may signal lower availability or access to primary care within the total market area. The most common primary ACS diagnoses for UH Samaritan Medical Center's discharged patients were bacterial pneumonia, chronic obstructive pulmonary disease (COPD), and kidney/urinary infections. More than 27% of discharged patients in 2014 were diabetic, and more than 57% had hypertension.

Priority Health Needs

After careful analysis of both qualitative and quantitative data, UH Samaritan Medical Center identified three primary categories of health needs that impact the community served by the hospital as its priorities for the 2016 – 2018 period. These include (not listed in a specific order):

- Services for the elderly

- Access to specialists

- Addressing lifestyle modification

A fuller explanation of the selection process used to determine these priorities, as well as a listing of all identified needs, can be found in the Conclusions section of this report.

CHNA Collaboration

UH Samaritan Medical Center worked closely with The Center for Health Affairs, the leading advocate for Northeast Ohio hospitals, to complete the 2016 CHNA. The Center advocates on behalf of 36 hospitals in six counties. University Hospitals Health System, Inc. retained The Center for Health Affairs to assist in quantitative and qualitative data collection and analysis and to ensure the entire community served by the hospital was captured. More information about The Center for Health Affairs is provided in Appendix A.

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DESCRIPTION OF PROCESS AND METHODS

A. Definition of Market Area (Community Served by the Hospital)

UH Samaritan Medical Center is located in Ashland, Ohio, within Ashland County, a rural county that is located southwest of Cuyahoga County (Cleveland metro area) and northeast of Franklin County (Columbus metro area). Ashland County is comprised of cities, villages and townships. Its county seat is the city of Ashland, where UH Samaritan Medical Center is located. Its 2010 population was about 53,000.

In general, UH hospital market areas are determined using the following process:

1. Inpatient discharges are sorted for a hospital by all of the market area ZIP codes from which a hospital draws patients (ZIP codes that are tied to a post-office box are excluded).

2. From these market area ZIP codes, ZIP codes are sorted from the highest number of discharges to the lowest number of discharges for that hospital.

3. The primary market area is determined by the ZIP codes that constitute approximately 60% of total discharges for that hospital.

4. The secondary market area is determined by the ZIP codes that increase the percentage to approximately 80% of total discharges for that hospital.

5. The balance of ZIP codes that provide a total of 100% of the discharges for that hospital are put in the out of market area category.

Illustrated in Figure 1: UH Samaritan Medical Center Market Areas, UH Samaritan Medical Center's market area includes 16 municipalities (eight in its primary market area and eight in its secondary market area).

Shown in Table 1: UH Samaritan Medical Center: 2014 Hospital Discharges – Primary and Secondary Market Areas, in 2014, UH Samaritan Medical Center had 2,770 discharged patients. Of those, 1,889 were in the hospital's primary market (68.2%) and 15.7% were in the hospital's secondary market area. Population-wise, the hospital's primary market area contains 41.3% of the total market area's general population. The general population of the hospital's secondary market area is much larger (58.7% of the total market area's population) but is only 15.7% of the hospital's discharged population in 2014.

The City of Ashland was home to the large majority of discharged patients in 2014 (52.9%), although only 25.9% of the total market area's population lives in the city of Ashland.

As shown in Table 2: UH Samaritan Medical Center: 2014 Emergency Department Visits/Admissions by ZIP Code, more than half (54%) of the hospital's ED visits were from the city of Ashland, and a total of 69% were from the hospital's primary service area. A slightly larger share (17%) of ED visits came from outside of what the hospital considers their market area compared to visits from patients within its secondary market (13%).
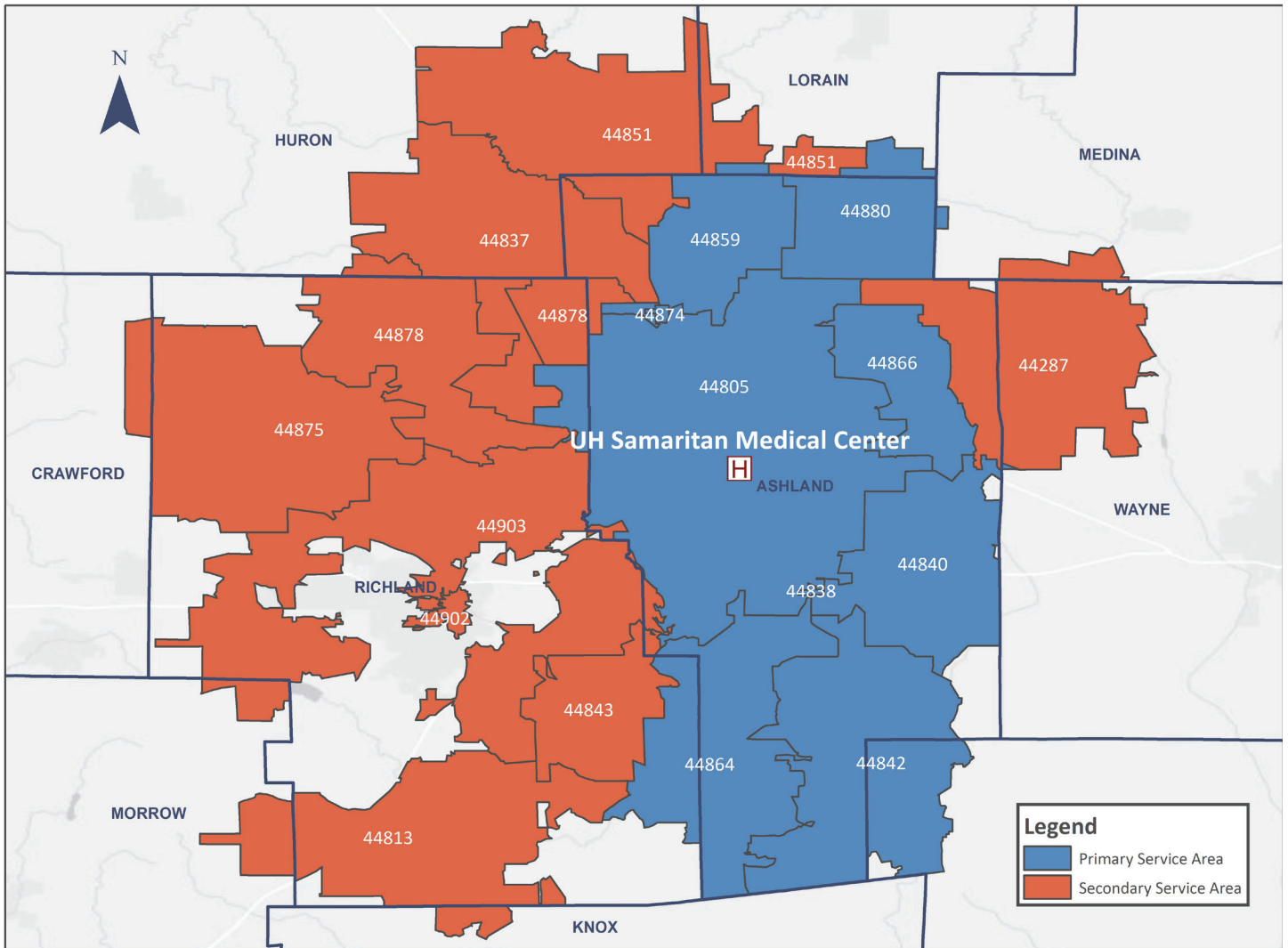
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FIGURE 1: UH SAMARITAN MEDICAL CENTER MARKET AREA

Prepared By: The Center for Health Affairs, June 2016

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TABLE 1: UH SAMARITAN MEDICAL CENTER: 2014 HOSPITAL DISCHARGES – PRIMARY AND SECONDARY MARKET AREAS

	Municipalities and ZIP Codes	Number/Percent of UH Samaritan Medical Center Discharges (2014)*		2014 Population	
Primary Market Area		**Number**	**Percent**	**Number**	**Percent**
	44805 Ashland	1,455	52.53%	32,347	25.7%
	44838 Ashland	10	0.36%	211	0.2%
	44840 Jeromesville	71	2.56%	3,366	2.7%
	44842 Loudonville	136	4.91%	5,308	4.2%
	44859 Nova	42	1.52%	1,454	1.2%
	44864 Perrysville	75	2.71%	3,517	2.8%
	44866 Polk	54	1.95%	2,337	1.9%
	44874 Savannah	9	0.32%	397	0.3%
	44880 Sullivan	37	1.34%	3,123	2.5%
Subtotal Primary Market		**1,889**	**68.19%**	**52,060**	**41.3%**
Secondary Market Area					
	44287 West Salem	46	1.66%	7,964	6.3%
	44813 Bellville	37	1.34%	7,633	6.1%
	44837 Greenwich	36	1.30%	4,402	3.5%
	44843 Lucas	24	0.87%	2,371	1.9%
	44851 New London	23	0.83%	4,985	4.0%
	44875 Shelby	50	1.81%	13,668	10.8%
	44878 Shiloh	34	1.23%	2,873	2.3%
	44902 Mansfield	15	0.54%	5,132	4.1%
	44903 Mansfield	170	6.14%	24,934	19.8%
Subtotal Secondary Market		**435**	**15.70%**	**73,962**	**58.7%**
Market Total		**2,324**	**83.90%**	**126,022**	**100.0%**
Out of Market Area		**446**	**16.10%**	**-**	
Total		**2,770**	**100%**	**-**	**-**

*Ohio Hospital Association hospital discharge data, 2014.
**Source: U.S. Census, American Community Survey, 2010 Decennial projection to 2014.

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TABLE 2: UH SAMARITAN MEDICAL CENTER: 2014 EMERGENCY DEPARTMENT VISITS/ADMISSIONS BY ZIP CODE

ZIP Codes	City	Cases	Market	Percent of Cases
44805	Ashland	12,926	Primary	54%
44842	Loudonville	1,165	Primary	5%
44864	Perrysville	614	Primary	3%
44840	Jeromesville	543	Primary	2%
44866	Polk	483	Primary	2%
44859	Nova	369	Primary	2%
44880	Sullivan	311	Primary	1%
44874	Savannah	70	Primary	0%
44838	Ashland	67	Primary	0%
UH Samaritan Medical Center Primary Total		**16,548**		**69%**
44903	Mansfield	1,233	Secondary	5%
44837	Greenwich	423	Secondary	2%
44287	West Salem	407	Secondary	2%
44902	Mansfield	259	Secondary	1%
44851	New London	242	Secondary	1%
44843	Lucas	202	Secondary	1%
44878	Shiloh	150	Secondary	1%
44875	Shelby	141	Secondary	1%
44813	Bellville	137	Secondary	1%
UH Samaritan Medical Center Secondary Total		**3,194**		**13%**
Non-UH Samaritan Medical Center Market		**4,185**	**Out of Market**	**17%**
Grand Total		**23,927**		**100%**

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B. Introduction to Data Analysis

This report analyzed both primary and secondary data to draw conclusions regarding the priority health needs of the population within the UH Samaritan Medical Center community.

Primary Data

There were two main sources of primary data:

A. Hospital Discharge Data

• Discharge data from the Ohio Hospital Association were used to describe hospital admission patterns for UH Samaritan Medical Center from 2011 to 2014.

B. Qualitative Data

• Interviews were conducted with 13 community leaders from mental health care providers, homeless shelters, religious organizations, public health professionals, school leaders and other social service agencies.

• Three focus groups were conducted by The Center for Health Affairs with diabetic patients, seniors and a random pull of residents in Ashland County.

Qualitative Data Analysis Summary

Community Leader Interviews

UH Samaritan Medical Center, in collaboration with The Center for Health Affairs, developed a list of 26 health care, government and social service leaders throughout Ashland County. From that comprehensive list, a total of 13 telephone interviews were completed from May 16, 2016, to June 9, 2016. All interviewees were told the purpose of the interviews and assured confidentiality. A list of the questions asked can be found in the Appendix.

Community leaders from the organizations listed below were interviewed:

ACCESS (Ashland Church Community Emergency
  Shelter Services)
Appleseed Community Mental Health Center
Ashland County Board of Developmental Disabilities
Ashland County-City Health Department
Ashland County Mental Health and Recovery Board
Ashland University
Brethren Care Village
Catholic Charities of Ashland County
Hillsdale Schools
Loudonville-Perrysville Schools
Mapleton Schools
Northeast Ohio Division of The Salvation Army Ashland Corps
United Way of Ashland County

Each of these organizations represents medically underserved, low-income or minority populations in the UH Samaritan Medical Center service area.

The top three concerns affecting health identified by those interviewed are the opiate drug crisis, a lack of access to care and poverty. As with many other areas of the state, the opioid epidemic has become a significant issue for the county, and it ripples outward, creating numerous other challenges, ranging from incidence of Hepatitis C to insufficient foster care. Leaders also reported a lack of availability of addiction treatment services in the county.

Residents of the county can have difficulties accessing care for a variety of reasons: There are very few primary care physicians and mental health care providers in the county; residents may not be able to find a physician who accepts Medicaid; and those who lack reliable transportation may not be able to physically get to medical care providers.

Community leaders frequently referenced a loss of higher-wage manufacturing jobs in the county and a shift to lower-wage service and retail jobs, the resulting poverty, and the ripple effects that creates. Ashland County residents often have difficulty accessing affordable child care and transportation, challenges also frequently referenced by community leaders. There was consensus across school districts that a significant number of children are requiring food assistance.

Other concerns included domestic violence and child abuse; childhood obesity; and, among the elderly, isolation and the limitations of a fixed income. Ashland County is also home to a sizable Amish population. Among these families, who typically lack health insurance, community leaders have observed a lack of preventive care for both children and adults, including a lack of prenatal care. Low vaccination rates are a concern for this population.

Respondents provided several recommendations that may help to improve the health and quality of life in the community. These included:

• Providing education to Ashland County residents on health issues/conditions

• Linking patients in need with other resources or assistance

• Expanding primary care, mental health care and urgent care resources in the county

• Partnering with community organizations on specific programs

In addition to the community leader interviews, three focus groups of residents of Ashland County were completed. One of the focus groups included participants in ongoing

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chronic disease information and support groups sponsored by the hospital (diabetes). The second focus group was of randomly selected adult residents of the county. A third focus group was of senior citizens in the county. A total of 32 individuals participated in a focus group, and all groups were conducted in June 2016.

Focus Group Findings

1. **First and foremost, residents are eager for any information that can help them understand what to do in order to be healthier.** It was equally clear that they saw both UH Samaritan Medical Center and the physician/nurse practitioner community as the authorities on health information in the county. In sum, they viewed those medical institutions and clinicians as being responsible for more than just providing care – they are also viewed as being responsible for educating the community on how to be healthier and how to find the right medical care.

2. There was not a large request for more primary care providers, despite many reporting that they have had to change their primary care provider due to retirements or deaths. Interestingly, despite their impression that there were enough primary care physicians, many reported lengthy wait times to see their physician and/or an inability to find a new physician when one is lost. There was, however, consensus that **there is a need for more specialists**. All of those in the diabetic group required specialized care. Instead of being cared for by endocrinologists, most managed their diabetes via their "general practice" providers. Group participants noted that many specialists "come from Cleveland" or "come from Columbus" once a month in order to see patients in their county.

3. Residents generally accept that they would need to go to a hospital in one of the nearby cities (Cleveland or, less commonly, Columbus) for certain medical needs. While they are not happy about the lack of a "full service" hospital in their immediate area, they were not terribly inconvenienced by the need to be hospitalized in Cleveland or Columbus for certain conditions.

4. Most did not feel that Ashland County was a particularly unhealthy place. The opportunities to exercise and the level of safety (lack of crime) were generally positive. Many did feel that "low-cost, but healthy" food was very difficult to find in the county. Most felt they would eat higher quality foods if they could afford to.

5. **The biggest "complaint" about health care was, by far, the cost.** Many reported that their annual deductibles were impossible for the household to manage and some had forgone treatment and/or medication because of the costs.

6. A bright spot was the level of services for the elderly. The local senior center was well-known as a strong resource for seniors and a "place to go."

Secondary Data

There were several sources of secondary data:

- U.S. Census, 2010 Decennial Census, American Community Survey (projections to 2013) (Demographic data; Poverty data)

- U.S. Bureau of Labor Statistics, 2016 (Unemployment data)

- U.S. Health Resources and Services Administration (HRSA) (medically underserved areas and populations and food deserts)

- Health status and access indicators available from:

  – County Health Rankings & Roadmaps; Robert Wood Johnson Foundation Program, 2016

  – Ohio Department of Health, 2014

  – U.S. Centers for Disease Control and Prevention, CHSI Information for Improving Community Health, Community Health Status Indicators Project, 2015

  – Ashland County Community Health Assessment Report, Spring 2015

Information Gaps

To the best of The Center for Health Affairs' knowledge, no information gaps have affected UH Samaritan Medical Center's ability to reach reasonable conclusions regarding community health needs.

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C. Demographic Characteristics of UH Samaritan Medical Center's Market Area

As illustrated in Figure 2: Ashland County Population Trends, the county's total population decreased by just 0.2% from 2010 to 2015, indicating a stable population over the six-year time period. The majority of the population (97.0%) is White, as indicated in Table 3: Demographic Trends in Ashland County: By Gender, Age and Race. Ashland County almost completely lacks any racial diversity – only 0.7% of the population is Black or African-American and 1.1% is of Hispanic/Latino descent. The composition of the population is stable regarding race and ethnicity; however, it is changing slightly with regard to age. From 2010 to 2014, the population ages 45 to 64 grew by 0.5% and ages 65 and older grew by 0.7%. The population ages 0 to 19 decreased by 0.6% and ages 20 to 44 decreased by 0.7%.

An analysis of the 2014 projections of 2010 U.S. Census data shows that there are very few people living in Ashland County who face language barriers due to limited English proficiency. Among those who reported they speak English less than "very well," the largest number were German speakers – about 1,000 people or 2% of the county's population. Another 1.4% spoke other West Germanic languages. It is likely that many, if not all, of these are members of the Amish population residing in the county.

Table 4: Economic Trends in Ashland County: Income and Poverty shows the number of households in Ashland County increased by 1.5% from 2010 to 2013. During that time, the median household income increased 5.5%, while the mean household income has remained stable, despite the larger number of retirees who tend to bring the mean down. The largest change among income categories was in the $50,000 to $74,999 range, which grew by 4.2%. The percentage of the population with the very lowest incomes, less than $10,000, decreased by 2.6%.

These data confirm that the county has regained some of the ground lost during the recession. According to the 2015 Ashland County Community Health Assessment Report, there was a $5,000 reduction in median household between 2008 and 2010. A gradual recovery, boosted by a significant increase from 2012 to 2013, resulted in the median income for the county nearly reaching that of the state, after having been significantly lower since 2009.

These sentiments were also heard in a separate set of focus groups that were conducted in March and May of 2015 as part of the Ashland County Community Health Assessment Report, published in 2015.

Few Ashland County residents receive cash public assistance, although the proportion increased a bit, from 2.5% in 2010 to 3.1% in 2013. There was a more significant increase, however, in the proportion of people who receive food stamp/SNAP benefits. This increased by 3.5% during that time period, to 12.3% in 2013. The size of cash public assistance decreased by 34.1% during that time period. Additionally, 0.1% more Ashland residents gained Medicaid coverage (from 11.2% to 11.3%).

None of the focus group participants expressed concerns about the health status of the county's poor population. However, overwhelmingly they were aware of food distribution centers for low-income people, and one community leader reported that thousands of individuals each month make use of the food pantry and weekly dinner sponsored by that leader's organization. School leaders reported approximately 40% of students receive free or reduced-price lunch. This is confirmed by the findings of the 2015 Ashland County Community Health Assessment Report, which found that from 2003 to 2014, the percentage of children in the county receiving free or reduced-price lunch very closely mirrored the statewide percentage. That report also found that children in the county had a 1 in 4 chance of living in a household experiencing food insecurity. Yet, in 2014, approximately 110 in 1,000 Ashland County residents participated in the Supplemental Nutrition Assistance Program (SNAP), which is lower than the state participation rate of 160 in 1,000.

As the Ashland County population aged, its proportion of households with Social Security increased by 2.1% and those with retirement income increased by 3.8% from 2010 to 2013. The mean Social Security income remained flat, increasing by just 0.9%, but the mean retirement income increased 28% during that time period.

Table 5: Most Economically Vulnerable Ashland County Residents shows a population that is making progress against poverty. The proportion of Ashland County families living below the poverty line declined by 3.1% from 13.6% in 2010 to 10.5% in 2013. The number of families living in poverty with children under 18 decreased by 5.4%, and those with children under age 5 had a 10.9% reduction in poverty rates from more than one-third to fewer than one-quarter.

There were declines in almost every measure of people living in poverty, with one notable exception. The proportion of single mothers with only young children – those under age 5 – who live in poverty increased by 14.8%. Two-thirds of these families live in poverty. This points to a finding of the interviews of community leaders, who reported that affordable child care is a problem in Ashland County, making it difficult for single moms to work and earn enough income to be above the poverty line.

During that time period there was also an increase in the proportion of people with health insurance. In 2013,

87.2% of Ashland County residents had health insurance, a 4.2% increase from 2010. From 2010 to 2013, 2.9% more people gained private health insurance, 0.1% more people gained Medicaid coverage and 3.2% more people gained Medicare coverage in Ashland County.

While more county residents are insured, community leaders were guarded in their evaluation of this circumstance. There was significant skepticism regarding whether those with private health insurance could afford the out-of-pocket costs associated with care. Leaders also reported difficulties faced by Medicaid patients in finding physicians who accept their insurance.

While county residents are making progress against poverty, a significant proportion (13.4%) of Ashland County residents live below the poverty line and community leaders reported significant challenges for this economically vulnerable population. Transportation was mentioned numerous times as being problematic for those who cannot afford to own a vehicle. With much of the county being rural and people having to travel to access health care and other services, the lack of available transit is prohibitive.

Multiple interviewees also reported that for the most vulnerable, services are not designed or delivered in ways that best meet their needs. In addition to problems with transportation, service hours often do not work with their schedules and the language used in communication can be too complex or intimidating. Several interviewees also reported a lack of awareness or sufficient information about the services, resources and supports that are available.

Finally, the unemployment rate in Ashland County was the 52nd highest rate in Ohio and was 4.4% in May 2016.

FIGURE 2: ASHLAND COUNTY POPULATION TRENDS
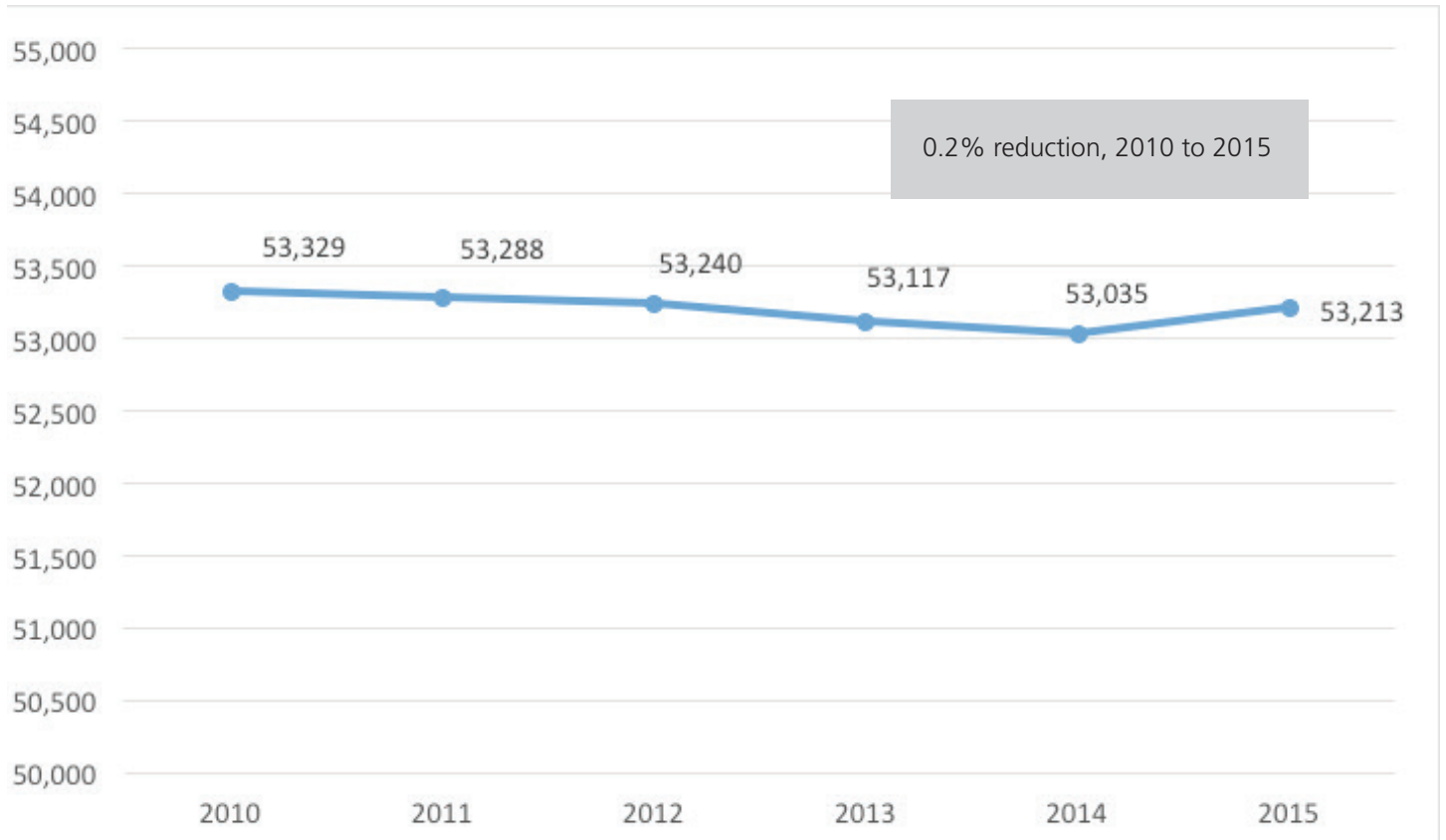
Source: U.S. Census, Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2015.

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TABLE 3: DEMOGRAPHIC TRENDS IN ASHLAND COUNTY: BY GENDER, AGE AND RACE

	Ashland County		
	2010	2014	Percent Change
Total Population	53,329	53,035	-0.6%
By Gender			
Males	48.8%	48.9%	+0.1%
Females	51.2%	51.1%	-0.1%
By Age Group			
0 – 19	27.4%	26.8%	-0.6%
18 – 44	30.3%	29.6%	-0.7%
45 – 64	26.6%	27.1%	+0.5%
65+	15.8%	16.5%	+0.7%
By Race			
White	97.3%	97.0%	-0.3%
Black or African-American	0.6%	0.7%	+0.1%
American Indian and Alaska Native	0.3%	0.1%	-0.2%
Asian	0.7%	0.6%	-0.1%
Native Hawaiian and Other Pacific Islander	0.1%	0.0%	-0.1%
Some other race	0.3%	0.4%	+0.1%

Source: U.S. Decennial Census, American Community survey projections to 2014.

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TABLE 4: ECONOMIC TRENDS IN ASHLAND COUNTY: INCOME AND POVERTY

	Ashland County		
	2010	2013*	Percent Change
Total Households	**20,083**	**20,382**	**+1.5%**
Less than $10,000	7.7%	5.1%	-2.6%
$10,000 to $14,999	4.9%	5.8%	+0.9%
$15,000 to $24,999	12.2%	12.6%	+0.4%
$25,000 to $34,999	13.7%	12.0%	-1.7%
$35,000 to $49,999	17.6%	18.7%	+1.1%
$50,000 to $74,999	18.7%	22.9%	+4.2%
$75,000 to $99,999	12.8%	12.7%	-0.1%
$100,000 to $149,999	8.7%	7.2%	-1.5%
$150,000 to $199,999	2.3%	1.7%	-0.6%
$200,000 or more	1.4%	1.3%	-0.1%
Median household income (dollars)	**$44,810**	**$47,266**	**+5.5%**
Mean household income (dollars)	**$56,601**	**$56,637**	**+0.1%**
Percent of households with Social Security	31.6%	33.7%	+2.1%
Mean Social Security income (dollars)	$16,940	$17,087	+0.9%
Percent with retirement income	21.4%	25.2%	+3.8%
Mean retirement income (dollars)	$18,402	$23,546	+28.0%
Percent with Supplemental Security Income	3.3%	3.5%	+0.2%
Mean Supplemental Security Income (dollars)	$8,020	$8,899	+11.0%
Percent with cash public assistance income	2.5%	3.1%	+0.6%
Mean cash public assistance income (dollars)	$3,451	$2,274	-34.1%
With Food Stamp/SNAP benefits in the past 12 months	8.8%	12.3%	+3.5%

Source: U.S. Decennial Census, American Community survey projections to 2013.
*2014 estimates are not currently available for Ashland County.

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TABLE 5: MOST ECONOMICALLY VULNERABLE ASHLAND COUNTY RESIDENTS

	Ashland County		
	2010	**2013***	**Percent Change**
Percent of families under the poverty line	13.6%	10.5%	-3.1%
Percent of households with related children under 18 years under the poverty line	23.5%	18.1%	-5.4%
Percent of households with related children under 5 years (no older children) under the poverty line	34.6%	23.7%	-10.9%
Percent of married couple families under the poverty line	8.6%	5.4%	-3.2%
Percent of married couple families with related children under 18 years under the poverty line	15.6%	8.5%	-7.1%
Percent of families with female householder, no husband present, under the poverty line	39.3%	35.0%	-4.3%
Percent of families with female householder, no husband present, with related children under 18 years, under the poverty line	47.6%	45.7%	-1.9%
Percent of families with female householder, no husband present, with related children under 5 years (no older children), under the poverty line	52.0%	66.8%	14.8%
Percent of all people in county under the poverty line:	18.7%	13.4%	-5.3%
Of those under 18 years	33.1%	21.8%	-11.3%
Of those with related children under 18 years	32.7%	21.7%	-11.0%
Of those with related children under 5 years	36.2%	23.6%	-12.6%
Of those with related children 5 to 17 years	31.5%	21.1%	-10.4%
Living under the poverty line, by age:			
Of those 18 years and over	14.0%	10.9%	-3.1%
18 to 64 years	15.9%	12.1%	-3.8%
65 years and over	6.6%	6.4%	-0.2%
Percent with health insurance coverage	83.0%	87.2%	+4.2%
Percent with private health insurance	68.7%	71.6%	+2.9%
Percent with Medicaid coverage	11.2%	11.3%	+0.1%
Percent with Medicare coverage	16.5%	19.7%	+3.2%
Percent no health insurance coverage	17.0%	12.8%	-4.2%

Source: U.S. Decennial Census, American Community survey projections to 2013.
*2014 estimates are not currently available for Ashland County.

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D. UH Samaritan Medical Center Patients Served

Table 6: UH Samaritan Medical Center and Ashland County Residents, Inpatients, 2011 – 2014 illustrates patient discharges for all Ashland County residents. It compares patients discharged from UH Samaritan Medical Center with other Ashland County residents discharged from other hospitals. From 2011 to 2014, the number of inpatients at UH Samaritan Medical Center increased by 4.6%. This is compared to a 0.6% decline in inpatients who reside in Ashland County but were admitted to other hospitals in the state. There was a slight increase of 1.6% of the number of Ashland County inpatients in any Ohio hospital. This is in contrast to what is occurring in most other hospitals in the UH system, which are generally experiencing declines in hospital admissions.

Table 7: UH Samaritan Medical Center and Ashland County Residents, Inpatients, Payer by ZIP Code, 2014 shows that more than half of the hospital's 2014 discharges were Ashland residents (1,465 of 2,770). In the hospital's primary market, 54.6% of discharges were covered by Medicare, either traditional or managed care, and in the hospital's secondary market, 39.3% of discharges were Medicare. On the other hand, 34.2% of discharges in the secondary market were covered by private health insurance, compared to 23.6% in the primary market. There is less differentiation among Medicaid discharges, however, with 17.7% of discharges in the primary market and 17.5% in the secondary market being covered by Medicaid.

The highest concentration of Medicare discharges was in Savannah (88.9% across both traditional and managed care), while the highest concentration of Medicaid discharges was in Sullivan (32.4% across traditional and managed care). New London had the highest proportion of commercial insurance discharges (56.5%).

Table 8: Age Groups, 2014 Discharges, UH Samaritan Medical Center shows both the number and proportion of discharged patients grouped by age. UH Samaritan Medical Center provides maternity services, hence roughly 28% of its inpatients each year are either newborns or their mothers. The hospital does not treat pediatric patients. Of the remaining patients (mothers of newborns and otherwise), about one in five are aged 45 or younger. Another 18% are aged 46 – 65, and the largest age cohort is that over age 65 (45%).

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TABLE 6: UH SAMARITAN MEDICAL CENTER AND ASHLAND COUNTY RESIDENTS, INPATIENTS, 2011 – 2014

	2011	2012	2013	2014	Percent Difference, 2011 – 2014
Inpatient: UH Samaritan Medical Center, Ashland County Residents	1,811	1,801	1,940	1,895	+4.6%
Inpatient: Residents of Ashland County, Inpatient in Other Ohio Hospitals	2,878	2,759	2,651	2,860	-0.6%
Total Inpatient: Ashland County Residents, Any Ohio Hospital	4,865	4,768	4,781	4,942	+1.6%

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TABLE 7: UH SAMARITAN MEDICAL CENTER AND ASHLAND COUNTY RESIDENTS, INPATIENTS, PAYER BY ZIP CODE, 2014

		Number of Inpatients	Medicare (traditional/ fee-for-service)	Medicare Managed Care	Medicaid (traditional)	Medicaid Managed Care	Commercial Insurance	Other	
Ashland	44805	1,455	37.7%	19.0%	1.3%	17.2%	21.4%	3.4%	100.0%
Ashland	44838	10	20.0%	40.0%	0%	10.0%	30.0%	0%	100.0%
Jeromesville	44840	71	29.6%	18.3%	1.4%	5.6%	36.6%	8.5%	100.0%
Loudonville	44842	136	37.5%	16.2%	2.2%	8.8%	29.4%	5.9%	100.0%
Nova	44859	42	23.8%	7.1%	7.1%	7.1%	42.9%	11.9%	100.0%
Perrysville	44864	75	34.7%	5.3%	2.7%	21.3%	33.3%	2.7%	100.0%
Polk	44866	54	27.8%	14.8%	1.9%	14.8%	31.5%	9.3%	100.0%
Savannah	44874	9	22.2%	66.7%	0%	0%	11.1%	0%	100.0%
Sullivan	44880	37	40.5%	16.2%	13.5%	18.9%	10.8%	0%	100.0%
	Total Primary Market	1,889	36.5%	18.1%	1.8%	15.9%	23.6%	4.0%	100.0%
West Salem	44287	46	26.1%	15.2%	0%	4.3%	39.1%	15.2%	100.0%
Greenwich	44837	36	25.0%	5.6%	0%	25.0%	25.0%	19.4%	100.0%
New London	44851	23	21.7%	4.3%	0%	17.4%	56.5%	0%	100.0%
Bellville	44813	37	40.5%	13.5%	2.7%	5.4%	29.7%	8.1%	100.0%
Lucas	44843	24	29.2%	12.5%	4.2%	20.8%	33.3%	0%	100.0%
Shelby	44875	50	26.0%	18.0%	4.0%	12.0%	40%	0%	100.0%
Shiloh	44878	34	23.5%	2.9%	0%	11.8%	20.6%	41.2%	100.0%
Mansfield	44902	15	20%	6.7%	6.7%	33.3%	33.3%	0%	100.0%
Mansfield	44903	170	31.2%	10.0%	2.4%	17.6%	34.1%	4.7%	100.0%
	Total Secondary Market	435	28.7%	10.6%	2.1%	15.4%	34.2%	9.0%	100.0%
	Total Other Markets	446	28.9%	11.6%	1.8%	20.4%	32.3%	5.0%	100.0%
	Total 2014 Inpatients	2,770*							

Not all communities considered to be within UH Samaritan Medical Center's secondary service area had discharged patients in the hospital in 2014.

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TABLE 8: AGE GROUPS, 2014 DISCHARGES,
UH SAMARITAN MEDICAL CENTER

	# of Inpatients	% of Total
Newborns	399	14.4%
25 and younger	210	7.6%
26 – 35	245	8.8%
36 – 45	122	4.4%
46 – 55	195	7.0%
56 – 65	349	12.6%
66 – 75	498	18.0%
76+	752	27.1%
Total	**2,770**	**100%**

E. Ambulatory Care Sensitive Discharges

Using discharge data from UH Samaritan Medical Center, which includes the reason for patient admission into the hospital, "ambulatory care sensitive discharges" can be identified. Ambulatory care sensitive (ACS) conditions are conditions for which "good outpatient care can potentially prevent the need for hospitalization or for which early intervention can prevent complications or more severe disease," according to the Agency for Healthcare Research and Quality. The incidence of ambulatory care sensitive discharges has been used as an index of adequate primary care in a market area. The diagnostic categories (and associated ICD-9-CM codes) can be found in the Appendix.

Table 9: Prevalence of ACS Conditions, Adults (Non-Maternity), 2014, Inpatients (All Hospitals) displays the number of adult discharges for all hospitals for residents of the specified counties in 2014 and the percent that were ACS cases. This includes primary diagnosis cases only. The incidence of ACS discharges is similar across all counties, although at 12.9%, it is highest in Ashland County, suggesting that county has a more significant lack of primary care.

By far, diabetes is the mostly commonly diagnosed ACS condition in Ashland County (4.3%). In fact, diabetes was the most commonly diagnosed ACS condition across all counties, although rates were somewhat lower, to varying degrees, than in Ashland County.

This finding is consistent with the results of the diabetic focus group, which reported an almost complete lack of access for diabetics to endocrinologists. None of the focus group participants was being treated by an endocrinologist, but rather all were being treated by general practitioners and all expressed a desire for increased support services and information.

After diabetes, hypertension is the next most common ACS condition across all six counties, with rates ranging from 1.2% to 2.1%.

When all patients in Ashland and neighboring counties are considered, between 8.8% and 12.9% of discharges are associated with an ACS condition as a primary diagnosis; this relatively low number of ACS cases among all county residents suggests that primary care within the county is not lacking. However, as shown in Table 10: UH Samaritan Medical Center Discharges, which examines UH Samaritan Medical Center's discharge data from 2014, 29.9% of that hospital's patient discharges are associated with an ACS condition as a primary diagnosis. The higher proportion of ACS cases that were discharges from UH Samaritan Medical Center is an indication that more serious conditions (which tend to not be ACS conditions) are treated in the major medical centers in the nearby metro centers (Cleveland, Akron or Columbus). We heard numerous descriptions of travel to out-of-county hospitals for the more serious conditions during our focus groups.

Further evaluation of primary and secondary diagnosis information can shed light on how public health or preventive care initiatives could impact the overall health of area residents. The most common primary diagnoses were bacterial pneumonia (7.1%) and chronic obstructive pulmonary disease (COPD) (6.1%). Another 13.0% of patients had COPD as a secondary diagnosis. This correlates with the above-average smoking rates noted above.

For 2.6% of patients, diabetes was their primary diagnosis, but another 24.2% had diabetes as a secondary diagnosis.

Congestive heart failure (CHF) accounted for 3.2% of primary diagnosis discharges, but 14.4% of patients had CHF as a secondary diagnosis. Hypertension was another common secondary diagnosis (56.6%), although much less common as a primary diagnosis (0.4%).

Dehydration is another notable secondary diagnosis, occurring in 10% of discharges.

There are some differences in ACS conditions based on a patient's gender: 32% of males and 23% of females have an ACS as a primary diagnosis. Males are also more likely to have an ACS as a secondary diagnosis (82% versus 64%). Males were more likely than females to have any ACS diagnosis of COPD (24% versus 16%), congestive heart failure (20% versus 15%) or diabetes (29% versus 22%). Females were more likely to have an ACS diagnosis of asthma (14% versus 5%).

Table 11: Adults, Non-Maternity, ACS Cases by Payer shows that Medicaid managed care (50.8%) and self-pay patients (47.5%) had, by far, the greatest percentage of ACS conditions. Medicare managed care (21.3%) and commercially insured patients (25.1%) had the lowest percentage of ACS conditions.

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TABLE 9: PREVALENCE OF ACS CONDITIONS, ADULTS (NON-MATERNITY), 2014, INPATIENTS (ALL HOSPITALS)

	Ashland County	Erie County	Huron County	Lorain County	Medina County	Wayne County
No ACS Condition	87.1%	89.8%	89.4%	89.5%	91.2%	90.4%
Primary Diagnosis Is ACS Condition	12.9%	10.2%	10.6%	10.5%	8.8%	9.6%
Diabetes	4.3%	2.0%	3.0%	2.8%	2.1%	2.2%
Hypertension	2.0%	1.8%	1.5%	2.1%	1.5%	1.2%
Kidney/Urinary Infections	1.3%	1.3%	1.2%	1.0%	0.9%	1.0%
Congestive Heart Failure (CHF)	0.9%	0.7%	0.5%	0.3%	0.4%	0.5%
Chronic Obstructive Pulmonary Disease (COPD)	0.8%	0.5%	0.5%	0.5%	0.5%	0.6%
Cellulitis	0.7%	0.8%	0.9%	0.7%	0.6%	0.8%
Severe ENT Infections	0.7%	0.8%	0.9%	1.0%	0.9%	0.7%
Bacterial Pneumonia	0.4%	0.3%	0.4%	0.3%	0.3%	0.4%
Asthma	0.4%	0.4%	0.2%	0.4%	0.4%	0.3%
Dental Conditions	0.3%	0.4%	0.5%	0.4%	0.3%	0.7%
Gastroenteritis	0.3%	0.1%	0.2%	0.2%	0.1%	0.2%
Epilepsy	0.2%	0.2%	0.2%	0.2%	0.2%	0.3%
Iron Deficiency Anemia	0.2%	0.4%	0.1%	0.2%	0.3%	0.3%
Convulsions	0.1%	0.1%	0.2%	0.1%	0.1%	0.1%
Dehydration/Volume Depletion	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Angina	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%

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TABLE 10: UH SAMARITAN MEDICAL CENTER DISCHARGES

	Primary Diagnosis	Secondary Diagnosis(es)
No ACS Condition Present	70.1%	-
ACS Condition as Primary Diagnosis	29.9%	-
Bacterial Pneumonia	7.1%	3.0%
Chronic Obstructive Pulmonary Disease (COPD)	6.1%	13.0%
Kidney/Urinary Infections	4.0%	4.3%
Congestive Heart Failure (CHF)	3.2%	14.4%
Diabetes	2.6%	24.2%
Cellulitis	2.6%	0.8%
Dehydration/Volume Depletion	1.3%	10.0%
Gastroenteritis	0.6%	0.9%
Asthma	0.4%	6.1%
Hypertension	0.4%	56.6%
Iron Deficiency Anemia	0.3%	2.5%
Epilepsy	0.1%	1.8%
Severe ENT Infections	0.1%	1.0%
Pelvic Inflammatory Disease	0.1%	0.3%
Convulsions	0%	0.2%
Angina	0%	0.2%
Hypoglycemia	0%	0.3%
Nutritional Deficiencies	0%	0.1%
Dental Conditions	0%	0.1%
	100.0%	

TABLE 11: ADULTS, NON-MATERNITY, ACS CASES BY PAYER

	Traditional Medicare	Medicare Managed Care	Traditional Medicaid	Medicaid Managed Care	Commercial	Self-Pay	Bureau of Workers' Comp	Other
No ACS Condition	67.8%	78.7%	70.0%	49.2%	74.9%	52.5%	100.0%	72.7%
Bacterial Pneumonia	8.5%	4.8%	10.0%	15.7%	4.6%	9.8%	0%	18.2%
Chronic Obstructive Pulmonary Disease (COPD)	7.1%	4.5%	0%	6.2%	4.5%	14.5%	0%	9.1%
Kidney/Urinary Infections	5.7%	3.3%	0%	0%	1.7%	3.3%	0%	0%
Congestive Heart Failure (CHF)	4.4%	4.4%	15.0%	0%	0.8%	1.6%	0%	0%
Diabetes	1.6%	0.8%	0%	9.5%	5.6%	8.0%	0%	0%
Cellulitis	1.8%	1.2%	5.0%	11.4%	3.8%	4.9%	0%	0%
Dehydration/Volume Depletion	1.4%	0.8%	0%	1.6%	1.6%	1.6%	0%	0%
Gastroenteritis	0.5%	0.3%	0%	1.6%	0.8%	1.7%	0%	0%
Asthma	0.3%	0.6%	0%	1.6%	1.3%	0%	0%	0%
Hypertension	0.3%	0.3%	0%	3.2%	0%	1.8%	0%	0%
Iron Deficiency Anemia	0.4%	0.3%	0%	0%	0.4%	0%	0%	0%
Epilepsy	0.1%	0%	0%	0%	0%	0%	0%	0%
Severe ENT Infections	0.1%	0%	0%	0%	0%	0%	0%	0%
Pelvic Inflammatory Disease	0%	0%	0%	0%	0.4%	0%	0%	0%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Number of Discharges	944	440	51	459	739	95	2	40

UH Samaritan Medical Center Discharges

This section again examines UH Samaritan Medical Center's discharge data (for non-maternity case adults), but here we look at all discharges (not just those with ACS diagnoses); these data provide primary and secondary diagnosis information for each patient discharged in 2014. This evaluation seeks to identify particular diagnoses or diagnostic categories that can shed light on how public health or preventive care initiatives could impact the overall health of market area residents via preventing disease states that lead to a high number of hospitalizations. Table 12: UH Samaritan Medical Center, Primary and Secondary Diagnosis of Adults (Non-Maternity Cases, Age 16+) Primary Market, Discharged in 2014 shows the percentage of discharges based on the major diagnostic category of adult patients' primary and then secondary diagnoses. There are over 17,000 different medical diagnostic codes. For specific diagnoses, only those that were relatively common are shown.

In 2014, the most common diagnostic category was circulatory system diseases (24.0% of primary diagnoses). Topping the list of specific primary diagnoses in that category was heart failure (5.0%). Hypertension was extremely common (57.4%) as a secondary diagnosis, and thus is associated with many other health issues that trigger hospitalization, but is almost never a primary diagnosis.

In 2014, the second most common primary diagnostic category was diseases of the genitourinary system (18.3%) and then respiratory system (15.2%), the third. In particular, renal failure (2.2%), pneumonia (3.7%), chronic bronchitis (3.6%) and other lung diseases (3.4%) were very common primary diagnoses in that category. Many of the lung diseases are associated with tobacco use.

While endocrine and metabolic disorders were rarely primary diagnoses (5.9%), they were very common secondary diagnoses, especially diabetes (25.0%) and lipoid metabolism diseases (28.6%). And, finally, while few discharged patients in 2014 had a mental illness as a primary diagnosis (2.2%), mental illnesses were fairly common secondary diagnoses, especially nondependent drug abuse (6.9%).

	Primary Diagnosis	Secondary Diagnosis
Diseases of the Circulatory System	**24.0%**	
Most common specific diagnoses in category:		
Heart Failure	5.0%	0.3%
Cardiac Dysrhythmia	4.3%	0.6%
Acute Myocardial Infarction	1.8%	0.1%
Cerebral Artery Occlusion	1.2%	0%
Hypertension	0.4%	57.4%
Diseases of the Genitourinary System	**18.3%**	
Most common specific diagnoses in category:		
Acute Renal Failure	2.2%	0.1%
Intestinal Obstruction	1.7%	0.2%
Urinary Tract Disorder	1.6%	0.1%
Diverticula of Intestine	1.7%	0.0%
Disease of Pancreas	1.0%	0.1%
Cholelithiasis (Gallstones)	1.1%	0.1%
Diseases of the Respiratory System	**15.2%**	
Most common specific diagnoses in category:		
Pneumonia (General)	3.7%	0.2%
Chronic Bronchitis	3.6%	0.1%
Other Lung Diseases	3.4%	0.3%
Diseases of the Musculoskeletal System and Connective Tissue	**13.2%**	
Most common specific diagnoses in category:		
Osteoarthrosis	3.2%	0.1%
Injury/Poisoning	**8.1%**	
Infectious and Parasitic Diseases	**7.0%**	
Most common specific diagnoses in category:		
Septicemia	4.6%	1.4%
Candidiasis	0.1%	1.9%
Bacterial Infection in Other Disease	0.0%	8.7%
Endocrine, Nutritional and Metabolic Diseases and Immunity Disorders	**5.9%**	
Most common specific diagnoses in category:		
Diseases of Lipoid Metabolism (Cholesterol)	0.0%	28.6%
Obesity/Hyperalimentation	0.0%	4.2%
Acquired Hypothyroidism	0.0%	14.1%
Disease of Mineral Metabolism	0.1%	4.9%
Gout	0.1%	1.9%
Fluid/Electrolyte Disease	2.0%	13.5%
Diabetes Mellitus	2.6%	25.0%

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	Primary Diagnosis	Secondary Diagnosis
Neoplasms – Malignant	**3.9%**	
Skin Diseases	**3.0%**	
Mental Health	**2.2%**	
Most common specific diagnoses in category:		
Organic Psychoses Condition	0.2%	2.0%
Affective Psychoses	0.0%	1.4%
Neurotic Disorders	0.0%	4.6%
Nondependent Drug Abuse	0.0%	6.9%
Diseases of the Central Nervous System	**1.5%**	
Diseases of the Blood and Blood-Forming Organs	**0.9%**	
Most common specific diagnoses in category:		
Iron Deficiency Anemias	0.2%	1.6%
Anemia NEC/NOS	0.5%	5.7%
Neoplasms – Benign	**0.8%**	
Diseases of the Sense Organs	**0.3%**	

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F. Ashland County Health Rankings and Mortality and Morbidity

Ashland County, Health Rankings

The Robert Wood Johnson Foundation produces an annual report that ranks counties in Ohio based on two major indices of population health: health outcomes (length and quality of life) and health factors (health behaviors, clinical care, social/environmental factors and physical environment). A rank of "1" is the best; "88" is the worst in the state of Ohio.

TABLE 13: ASHLAND COUNTY HEALTH RANKINGS

	Ashland County, 2016	Subcomponents
Health Outcomes	21 of 88 counties	Length of Life: 14 of 88 counties Quality of Life: 36 of 88 counties
Health Factors	25 of 88 counties	Clinical Care: 19 of 88 counties Health Behaviors: 26 of 88 counties Social and Economic Factors: 25 of 88 counties Physical Environment: 80 of 88 counties

Source: County Health Rankings & Roadmaps; Robert Wood Johnson Foundation Program, 2016.

Table 13: Ashland County Health Rankings identifies Ashland County's rank. On the whole, Ashland County ranks well compared to other counties on both health outcomes (21 of 88) and health factors (25 of 88). With respect to health outcomes, Ashland County ranks very high in terms of length of life (14 of 88) and also does well in quality of life (36 of 88). Regarding health factors, Ashland County does well in terms of clinical care (19 or 88), health behaviors (26 of 88), and social and economic factors (25 of 88). It ranks poorly only for physical environment (80 of 88). The measures that comprise physical environment are air pollution-particulate matter, drinking water violations, severe housing problems, driving alone to work, and having a long commute and driving alone.

The focus groups provided little insight regarding the low ranking for physical environment – no discussion of pollution, for example. In terms of clinical care, Ashland County focus group participants complained that (1) there

is little access to specialists, with diabetics claiming there are zero endocrinologists and it is difficult to find a primary care physician to monitor diabetes skillfully; and (2) the hospital is utilized for more minor health issues and patients who are very sick must go to Columbus or Cleveland for care.

Community leaders also described limited access to primary care and little-to-no access to specialty care in the county. Many specialty services are completely unavailable. These sentiments were also heard in a separate set of focus groups that were conducted in March and May of 2015 as part of the Ashland County Community Health Assessment Report, published in 2015. This report also specifically pointed out dental care as being either not available or too expensive. The Centers for Disease Control and Prevention Community Health Status Indicators suggest that access to primary care in Ashland County is on par with (neither better nor worse than) peer counties. However, that data is from 2011, and community leaders reported a recent loss of primary care physicians in the county.

Morbidity and Mortality

To better identify areas of greatest need within Ashland County, health rankings were further explored through data available from the Centers for Disease Control and Prevention (CDC, U.S. Department of Health and Human Services), which identified several areas in which Ashland County compares unfavorably to its peer counties, which are those that closely match Ashland in terms of demographic and physical factors. As noted in Table 14: Most Prevalent Causes of Death or Impaired Health – Adults, these are:

- Coronary heart disease deaths
- Alzheimer's disease deaths
- Diabetes deaths

TABLE 14: MOST PREVALENT CAUSES OF DEATH OR IMPAIRED HEALTH – ADULTS

	Ashland County	Centers for Disease Control and Prevention's Comparison to Peer Counties
	Annual, per 100,000 Adults	
Cancer Deaths	184.8	
Coronary Heart Disease Deaths	145.2	Rate is higher than average
Violent Crime (homicide, rape, assault)	63.2	
Alzheimer's Disease Deaths	44.9	Rate is higher than average
Stroke Deaths	41.4	
Accidental Deaths (including motor vehicle)	39.6	
Motor Vehicle Deaths	14.4	
Diabetes Deaths	31.5	Rate is higher than average
Kidney Disease Deaths	10.3	

Source: U.S. Centers for Disease Control and Prevention, 2005 – 2011.

The unfavorable comparison found here regarding diabetes is consistent with focus group results. Participants complained of significant difficulty in getting clear information from the medical community regarding their disease. Further data from the CDC, shown in Table 15: Most Prevalent Morbidity – Adults and Youth, indicate that 27.9% of county residents are obese, which is linked with diabetes. According to community leader interviews, childhood obesity and diabetes were the most frequently cited child health concerns.

Focus group participants referenced two items that could play a role in heart disease deaths. They felt there were longer-than-normal delays in accessing ambulances, although this is likely a result of the county being rural as opposed to a reflection on quality of care for cardiac patients. Heart disease deaths could also be linked to a lack of primary care physicians. Another possible factor in heart disease deaths is the smoking rate in the county. At 24.7%, this rate is higher than average, according to the CDC's comparison to peer counties.

Regarding Alzheimer's disease deaths, there are facilities within the county that provide Alzheimer's care and draw in patients from outside of the county, which could contribute to the higher-than-average rate.

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	Percent Morbidity	Centers for Disease Control's Comparison to Peer Counties
Obesity	27.9%	
Smokers	24.7%	Rate is higher than average
Older adult depression	11.5%	
Older adult asthma	3.5%	
Alzheimer's disease	9.1% (among older adults)	
Births to women 15 to 19 (per 1,000)	22.9	
Pre-term births	9.8%	

Source: U.S. Centers for Disease Control and Prevention, 2005 – 2011.

Among the most prevalent health conditions for adults and youth was depression in older adults, with an incidence of 11.5%. Both the focus groups and the interviews with community leaders revealed a lack of mental and behavioral health care resources in the county in general, not just for older adults. Focus group participants stressed that the mental health facilities are sufficient for dealing with mild problems but are less well-equipped for treating severe illness. Many of the community leaders interviewed agreed that there is insufficient access to mental and behavioral health care in the county. Resources exist but there can be long waits for patients seeking care.
There is also a lack of addiction treatment services in the county, according to community leaders. During these interviews, the most frequently mentioned problem facing Ashland County was the opioid drug epidemic. Numerous community leaders cited it – along with related problems, such as Hepatitis C, which can be spread through intravenous drug use – as their biggest health-related concern.

As noted in Table 14, cancer is the most prevalent cause of death in Ashland County, at a rate of 184.8 deaths per 100,000 adults. Figure 3: Annual Cancer Incidences, Ashland County Versus Ohio and U.S. indicates that the annual incidence of cancer varies greatly by cancer type, with breast cancer the most common, at 125.7 cases per 100,000 women. Rates of lung cancer and cancers of the colon and rectum in Ashland County generally follow state and national trends. However, at 87.7 per 100,000 men, prostate cancer incidence is significantly lower in Ashland County compared to Ohio or the U.S.

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FIGURE 3: ANNUAL CANCERS INCIDENCES, ASHLAND COUNTY VERSUS OHIO AND U.S. PER 100,000 POPULATION*
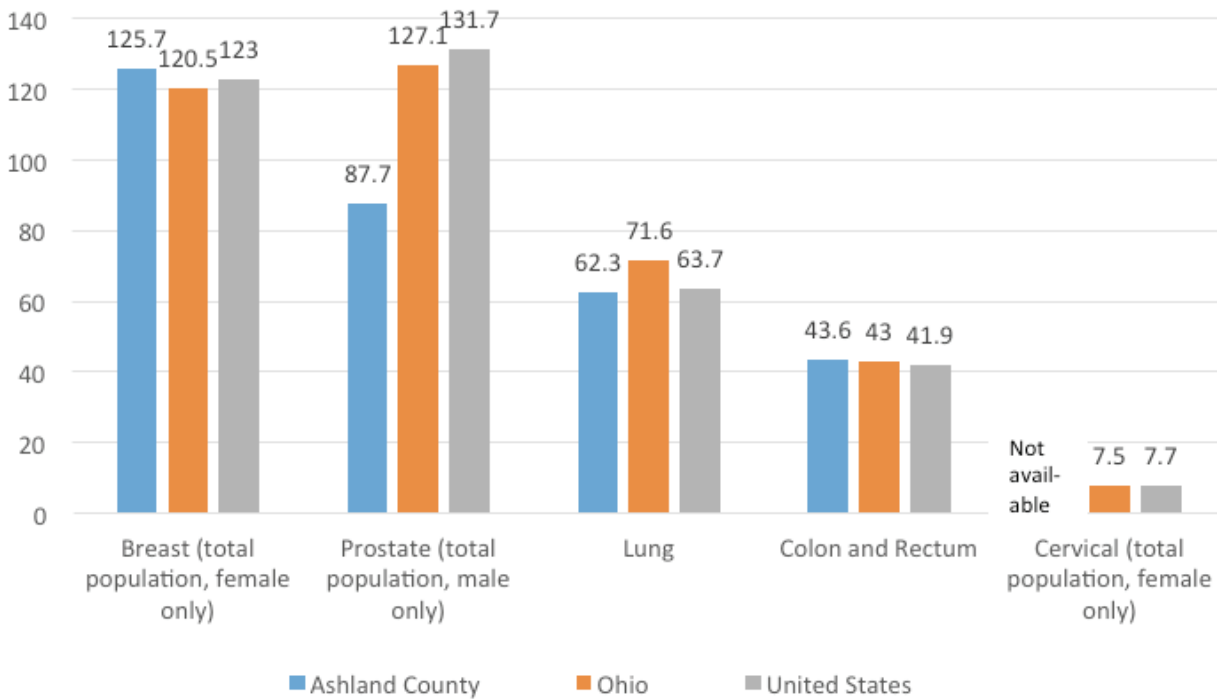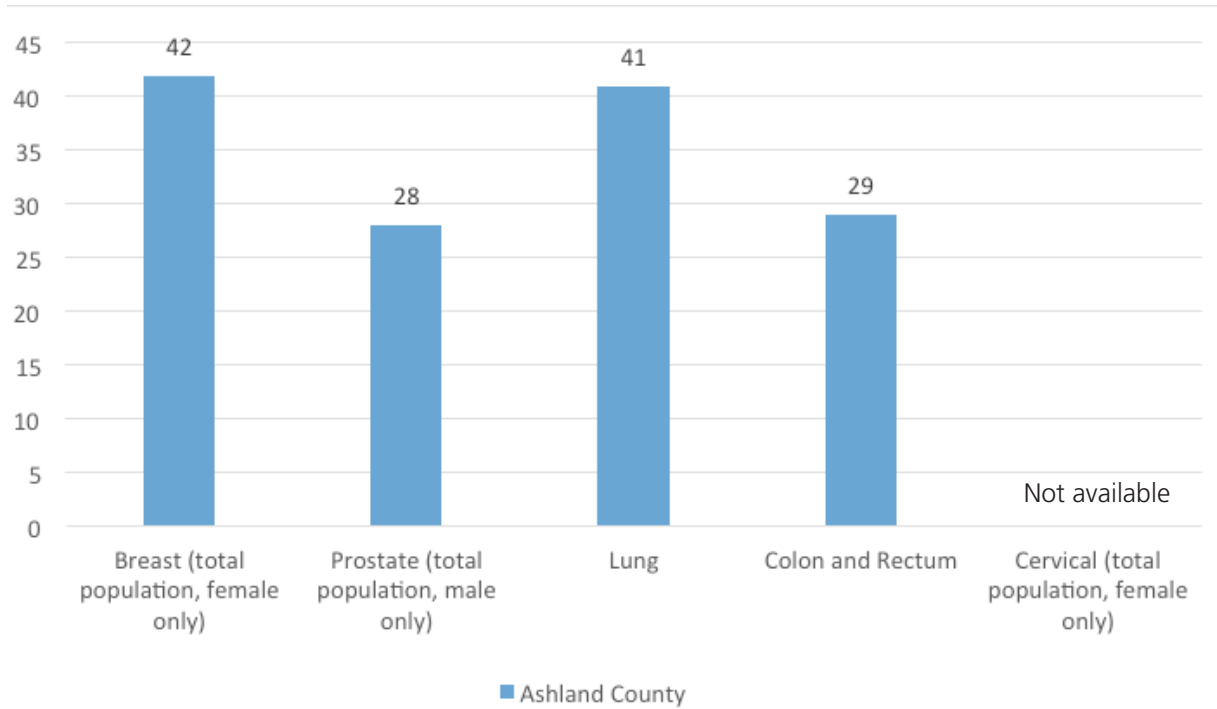

FIGURE 4: AVERAGE NEW CASES PER YEAR, ASHLAND COUNTY

Data Source: National Institutes of Health, National Cancer Institute, Surveillance, Epidemiology, and End Results Program. State Cancer Profiles. Source geography: County.

In terms of the average number of new cancer cases per year, breast and lung are similar, at 42 and 41, respectively, as are prostate and colon/rectum, at 28 and 29, respectively, as shown in Figure 4: Average New Cases per Year, Ashland County.

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G. Infant Mortality

TABLE 16: INFANT MORTALITY TRENDS, 2007 TO 2014, U.S., ASHLAND COUNTY AND SURROUNDING COUNTIES, PER 1,000 BIRTHS*

Geography	Race	Rate Infant Mortality							
		'07	'08	'09	'10	'11	'12	'13	'14
United States Overall	Total	6.75	6.61	6.39	6.15	6.07	5.98	6.0	**
	White	5.64	5.55	5.3	5.2	5.12	5.09	5.1	**
	Black	13.24	12.74	12.64	11.63	11.51	11.19	11.2	**
Ohio Overall	Total	7.71	7.7	7.67	7.68	7.87	7.57	7.4	6.8
	White	6.34	6	6.4	6.42	6.41	6.37	6.0	5.3
	Black	14.79	16.23	14.23	15.47	15.96	13.93	13.8	14.3
Ashland County	Total	0	12.42	6.43	3.06	1.74	3.16	4.7	3.3
	White	0	12.58	6.56	3.14	1.78	3.21	**	**
	Black	0	0	0	0	0	0	**	**
Holmes County	Total	5.17	6.08	5.93	9.89	6.29	6.19	7.7	5.2
	White	5.17	6.10	5.96	9.96	6.37	6.23	**	**
	Black	No data	0.00	0.00	0.00	0.00	0.00	**	**
Huron County	Total	5.78	4.58	6.5	4.04	8.61	5.53	6.7	8.1
	White	5.9	4.67	6.68	4.42	9.16	5.94	**	**
	Black	0	0	0	0	0	0	**	**
Knox County	Total	9.26	4.11	2.65	10.77	17.54	10.38	4.2	7.1
	White	9.49	4.15	2.68	10.93	17.80	10.70	**	**
	Black	0	0	0	0	0	0	**	**
Lorain County	Total	8.37	6.84	7.31	8.31	5.2	6.26	5.1	6.1
	White	7.5	4.2	4.52	6.32	3.64	6.39	**	**
	Black	14.99	24.14	24.79	25.58	18.96	9.8	**	**
Medina County	Total	3.06	5.31	1.08	0.57	3.39	6.4	5.2	4.8
	White	3.18	5.49	1.12	0.6	2.96	6.74	**	**
	Black	0	0	0	0	29.41	0	**	**
Richland County	Total	9.24	3.90	9.08	10.96	10.16	4.18	2.8	5.9
	White	7.66	4.40	8.87	10.84	10.66	3.97	**	**
	Black	23.53	0.00	12.20	14.29	7.52	6.67	**	**
Wayne County	Total	7.51	5.60	8.92	5.59	1.95	5.96	4.9	4.5
	White	7.05	5.09	8.52	5.80	2.01	6.17	**	**
	Black	35.71	37.04	41.67	0.00	0.00	0.00	**	**

*Source: Ohio Department of Health.
**Data not currently available

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This indicator reports the rate of deaths to infants less than one year of age per 1,000 births. This indicator is relevant because high rates of infant mortality indicate the existence of broader issues pertaining to access to care and maternal and child health.

Because infant mortality is measured in deaths per 1,000 births, the low number of births in Ashland County – fewer than 1,000 per year – make it difficult to compare infant mortality rates, both from year to year in the county as well as with other counties with similarly low birth rates. With such low birth rates, even very small changes in actual numbers will create large variances in the rates. However, the data in Figure 5: Infant Mortality Trends, 2007 to 2014, U.S., Ohio and Ashland County, per 1,000 Births show that infant mortality rates in Ashland County generally have been lower than rates for the state of Ohio as well as for the U.S.

FIGURE 5: INFANT MORTALITY TRENDS, 2007 TO 2012, U.S., OHIO AND ASHLAND COUNTY, PER 1,000 BIRTHS
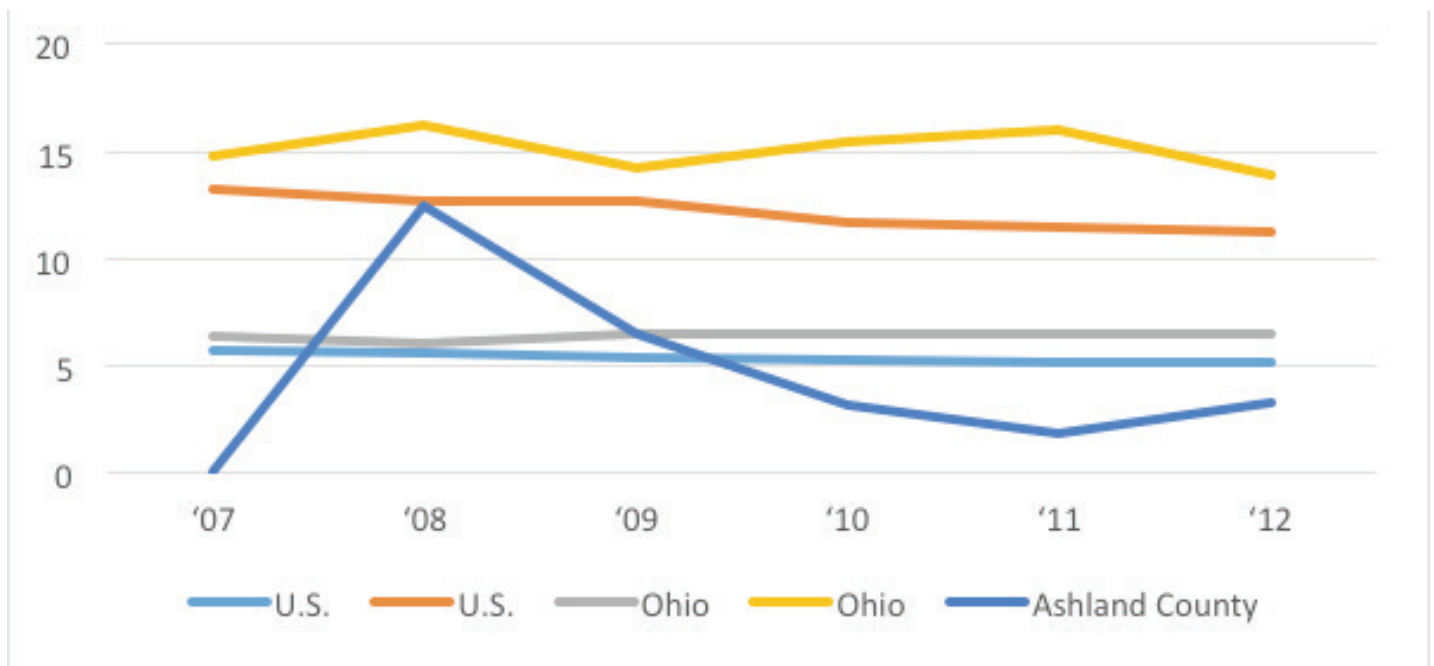
The 2015 Ashland County Community Health Assessment Report included relevant findings pertaining to prenatal care. Prior to 2006, going back to at least 1990, well more than 70% of Ashland County women received prenatal care during the first trimester of pregnancy, according to that report. However, there was a sharp drop from 2005 to 2006, and levels have stayed lower since that year. In 2014, 63.2% had this type of care during their first three months of pregnancy. Yet, this decrease in early prenatal care has not resulted in an increase in problems typically associated with a lack of early care, such as premature births, low birth weight and infant mortality.

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H. Vulnerable Populations

Medically Underserved Areas, Federally Qualified Health Centers and Food Deserts

Medically underserved areas/populations (MUAs/MUPs) are areas or populations designated by the U.S. Department of Health and Human Services' Health Resources and Services Administration (HRSA) as having insufficient primary care providers, a high infant mortality rate, high poverty or a high elderly population. Currently there are six MUAs/MUPs identified within UH Samaritan Medical Center's market area.

Federally Qualified Health Centers (FQHCs) are community-based organizations that provide comprehensive primary care and preventive care, including health, oral, and mental health/substance abuse services to persons of all ages, regardless of their ability to pay or health insurance status. There are two FQHCs in UH Samaritan Medical Center's service area.

In addition, pinpointing food desert locations in a hospital's service area can help to identify areas with insufficient access to healthy and affordable food. According to the U.S. Department of Agriculture, food deserts are defined as "urban neighborhoods and rural towns without ready access to fresh, healthy and affordable food." Rather than having grocery stores in these communities, there may be no food access or limited access to healthy, affordable food options. The Food Desert Locator, created by the U.S. Department of Agriculture's Economic Research Service, is a web-based mapping tool that pinpoints food desert locations in the U.S.

The map in Figure 6: Medically Underserved Areas/ Populations, FQHCs and Food Deserts: UH Samaritan Medical Center overlays medically underserved areas and food deserts to determine areas that may have the highest need for services. To provide further context, the map also pinpoints the location of FQHCs and FQHC lookalikes.

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FIGURE 6: MEDICALLY UNDERSERVED AREAS/POPULATIONS, FQHCS AND FOOD DESERTS: UH SAMARITAN MEDICAL CENTER

Prepared By: The Center for Health Affairs, June 2016

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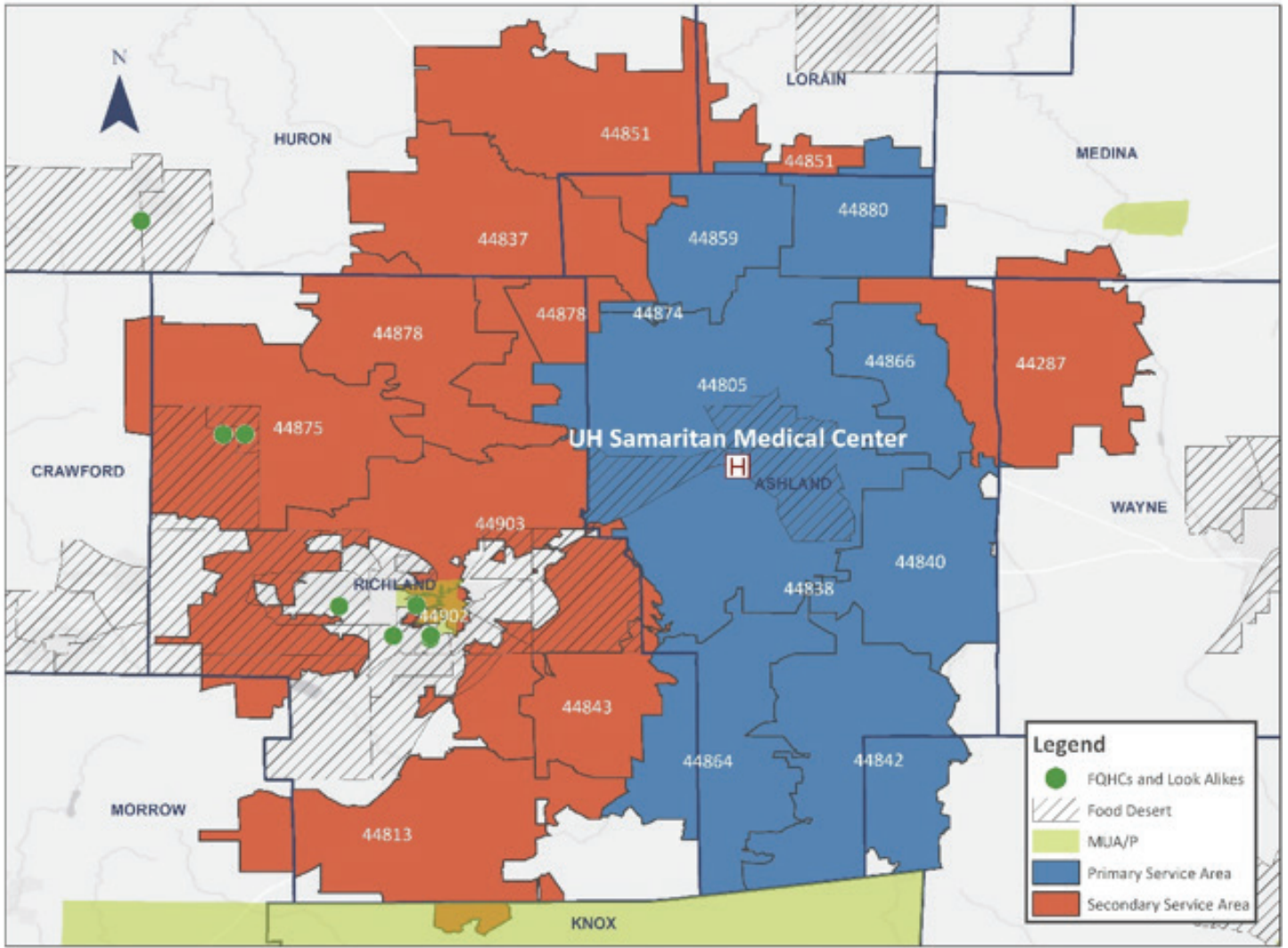
ACS Analysis of Vulnerable Populations

Race and Ethnicity

Revisiting ACS data can provide further insight into the level of access to health care for vulnerable populations. In many geographic areas, vulnerabilities fall along the lines of race and ethnicity, with racial and ethnic minorities experiencing higher rates of ACS conditions than Whites. However, the very small populations of Blacks and those of Hispanic/Latino descent in Ashland County do not allow for a statistically significant analysis.

TABLE 17: ASHLAND COUNTY, STATISTICS ON POPULATION 65+

	Ashland County, Ohio		
	2010	2014	Change
Percent of total population 65+	15.8%	16.5%	+0.7%
Median age (years)	74.5	74.1	-0.4
Householder living alone	40.6%	41.1%	+0.5%
Civilian veteran	23.2%	22.6%	-0.6%
With any disability	*	33.8%	n/a
Employed	14.5%	14.3%	-0.2%
Households with Social Security income	91.2%	92.4%	+1.2%
Mean Social Security income (dollars)	$16,515	$18,300	+$1,785
Households with Supplemental Security Income	4.1%	2.8%	-1.3%
Mean Supplemental Security Income (dollars)	$7,624	$9,934	+$2,310
Households with retirement income	53.5%	61.4%	+7.9%
Mean retirement income (dollars)	$17,472	$23,257	+$5,785
Households with Food Stamp/SNAP benefits	3.0%	5.8%	+2.8%
Below 100 percent of the poverty level	7.9%	6.3%	-1.6%
100 to 149 percent of the poverty level	11.7%	11.9%	+0.2%
Owner-occupied housing units	85.3%	86.6%	+1.3%

Source: U.S. Census, American Community Survey, 2010 Decennial projection to 2014.

Estimate is not available.

The larger vulnerable population within Ashland County is the elderly. As shown in Table 17: Ashland County, Statistics on Population 65+, four in 10 live alone in their household, and one-third are disabled. Roughly 18% live beneath 150% of the poverty line. Qualitative findings from this study show that, by far, the largest concern in terms of health and general well-being is for the elderly, especially those who are isolated in the most rural parts of the county.

Table 18: More Common Types of Ambulatory Care Sensitive Cases (Primary Diagnosis), 2014, Adult, Non-Maternity Inpatients Only, Seniors Versus Younger Adults provides a comparison of ACS conditions for age groupings. The ACS analysis shows that elderly inpatients in 2014 were less likely to be admitted with an ACS primary diagnosis than younger patients (younger than 55). However, the types of ACS conditions differed between the younger and older adult patients. Cellulitis was limited to mostly those under age 55, as was diabetes (as a primary diagnosis). Congestive heart failure and kidney/urinary tract infections were much more common among seniors than younger adults. The Centers for Disease Control and Prevention Community Health Status Indictors found Ashland County to be on par with peer counties with respect to older adult preventable hospitalizations, with a rate of 62.3 hospitalizations per 1,000 Medicare enrollees aged 65 and older. The median rate for the U.S. is 71.3.

TABLE 18: MORE COMMON TYPES OF AMBULATORY CARE SENSITIVE CASES (PRIMARY DIAGNOSIS), 2014, ADULT, NON-MATERNITY INPATIENTS ONLY, SENIORS VERSUS YOUNGER ADULTS

	55 or Younger	56 – 65	66 – 75	Older than 75
No ACS Condition	61.1%	72.5%	74.2%	70.9%
ACS Condition as Primary Diagnosis	48.1%	27.5%	25.8%	29.1%
Bacterial Pneumonia	7.6%	9.6%	6.0%	7.1%
Congestive Heart Failure (CHF)	0.4%	3.8%	2.2%	5.8%
Chronic Obstructive Pulmonary Disease (COPD)	4.2%	7.9%	8.8%	5.1%
Kidney/Urinary Infections	1.9%	1.3%	5.8%	5.1%
Cellulitis	8.0%	1.7%	0.5%	1.6%
Dehydration/Volume Depletion	2.3%	0.8%	0.8%	1.4%
Diabetes	9.9%	1.3%	0.3%	1.3%
Iron Deficiency Anemia	0.4%	0%	0.3%	0.5%
Asthma	0.8%	0.8%	0.3%	0.3%
Hypertension	0.8%	0.4%	0.3%	0.3%
Gastroenteritis	1.9%	0%	0.5%	0.3%
Severe ENT Infections	0%	0%	0%	0.2%
Epilepsy	0.4%	0%	0%	0%
Pelvic Inflammatory Disease	0.4%	0%	0%	0%

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I. Climate Change

Climate change and the resulting increases in temperature, air pollution, and extreme weather events will have profound impacts on the health of our population, particularly the most vulnerable (seniors, children and lower income).[2,3,4] These changes in our environment will likely exacerbate some of our current health priorities, including obesity, diabetes, cardiovascular risks, respiratory risks, mental health concerns and violence. Our community benefit investments are an opportunity to address health priorities using strategies that also reduce greenhouse gas emissions, mitigating the health risks of a changing climate, and University Hospitals will explore such opportunities as we develop our implementation strategies.

During the Community Health Needs Assessment for UH Samaritan Medical Center, an Excel-based climate vulnerability evaluation tool developed by Tohn Environmental Strategies and made available through Health Care Without Harm was used to discover key climate health indicators in the general service area for UH Samaritan Medical Center, using datasets based on Ashland County (see tables and narrative explanations, below). Evaluating future health impacts of climate change in the CHNA process and potentially incorporating climate co-benefit actions into the implementation activities phase of the work offer UH Samaritan Medical Center the opportunity to address these long-term future health impacts using short-term actions.

[2] Watts N, Adgar WN, et al. 2015. Health and climate change: policy responses to protect public health. The Lancet, June 2015.

[3] EPA. 2015. Climate Change in the United States: Benefits of Global Action. United States Environmental Protection Agency, Office of Atmospheric Programs, EPA 430-R-15-001.

[4] USGCRP, 2016: The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment. Crimmins, A., J. Balbus, J.L. Gamble, C.B. Beard, J.E. Bell, D. Dodgen, R.J. Eisen, N. Fann, M.D. Hawkins, S.C. Herring, L. Jantarasami, D.M. Mills, S. Saha, M.C. Sarofim, J. Trtanj, and L. Ziska, Eds. U.S. Global Change Research Program, Washington, DC, 312 pp. http://dx.doi.org/10.7930/J0R49NQX.

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Vulnerable Populations	Service Area Population	% Population	Potential Climate Health Impacts			
			Extreme Heat	Air Pollution	Extreme Weather	Vectors and Waterborne Disease
Population > 65 years of age[1]	8,764	16.5%	*	*	*	*
Medicare Beneficiaries with Heart Disease[2]	1,505	2.8%	*	*		
Population with Diabetes[3]	4,520	8.5%	*			
Population of Overweight Adults[4]	14,551	27.4%	*			
Population with Asthma[4]	3,627	6.8%		*		
Population Under 200% of Federal Poverty Level[1]	19,348	36.4%	*			
Population with Any Disability[1]	7,168	13.5%	*		*	
Total	53,202	100.0%				
Climate Vulnerable Population Overall Score	44.1	(0=low vulnerability, 100=highly vulnerable)				

Notes: The "service area" in the above table is defined as Ashland County. Data sources for each vulnerable population: [1]U.S. Census Bureau, American Community Survey, 2010 – 14. Source geography: Tract; [2]Centers for Medicare and Medicaid Services, 2014. Source geography: County; [3]Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 2013. Source geography: County; [4]Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2011 – 12. Source geography: County (http://www.communitycommons.org/chna/).

Table 19: Potential Climate Health Impacts on Vulnerable Populations depicts a snapshot summary of populations whose health is typically most affected by Climate Change Impacts, as shown by research conducted by Tohn Environmental Strategies, and lists the percent of those populations in Ashland County. Several of these populations are also highlighted in the CHNA completed for UH Samaritan Medical Center, including the elderly, the poor, and those diagnosed with diabetes, cardiovascular conditions (hypertension, congestive heart failure), and respiratory illnesses (COPD, bacterial pneumonia).

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Table 20: Community Health Impact is a summary of projected health impact risks for Ashland County, based on current trends that contribute to temperature rise, reduced air quality and extreme storm events. The summary shows that Ashland County has smaller numbers of climate-related risks and hospital events than are seen in larger population areas. Nevertheless, taking into consideration the vulnerable populations cited earlier, as well as the future health impacts of our changing climate that are imminent to this UH Samaritan Medical Center service area, meaningful opportunities exist to structure community benefit activities to have climate co-benefits whenever possible.

TABLE 20: COMMUNITY HEALTH IMPACT

Changing Climate Conditions	Community Health Impact/Year
Rising Temperature and Extreme Heath	200% increase in days > 95 degrees by 2100
	99/year more heat-related ER visits by 2030
	5.5% increase in violent crime by 2030
Reduced Air Quality	566/year more cases of acute respiratory symptoms by 2100
Increased Ozone and Particulate Matter	Slight increase in particulate matter-related mortality, 7 additional deaths/year by 2100
More Extreme Storm Events	Heavy rain events five times more likely in 2100
	9.5% decline in water quality index by 2100
Increased Vector-Borne Risk	No notable increased risk for West Nile, Zika or Lyme disease by 2100

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J. Evaluation of the Impact of Any Actions Taken Since the Last CHNA

UH Samaritan Medical Center (then Samaritan Hospital) completed a Community Health Needs Assessment in 2013. From that assessment, several implementation strategies for 2014 – 2016 were begun or reinvigorated, and below we describe those strategies, their goals and objectives, and their results.

A. Quick Care (QCare)

In 2009, QCare was established in response to market demands for alternatives to emergency department care and to limited immediate access to family physicians for treatment of minor injuries and illnesses. As usage of QCare by community members increased, days/hours of operation were expanded and a second physician was added. The anticipated impact of these changes is easier, more convenient access to health care for minor illnesses and injuries for the community.

Usage is monitored on a continuous basis through multiple quality assurance measures including numbers of visits, time of visit, reason for visit, etc.

The number of visits peaked in 2013 (8,032) but dropped to 5,747 by 2015. We attribute this decrease in use not to a decrease in community need but rather to the opening of a "Minute Clinic" at a nearby CVS and a second nearby Urgent Care center.

Challenges: Like many physician practices in Ashland County, physician turnover is a recurring problem. That being said, the ultimate goal is to minimize nonemergent visits to UH Samaritan Medical Center's emergency department by providing or ensuring there are convenient and cost-effective options for community members to obtain treatment for minor injuries and illnesses.

B. Wellness and Wellness Education Programs

The UH Samaritan Medical Center Board of Directors and administration continue to stress and support the importance of wellness and wellness education programs for both the community at-large and its employees. A wide variety of education classes are offered on a monthly basis including childbirth, breastfeeding, freedom from smoking, pre-op education classes for knee and hip replacement patients, a Community Education Series (physicians and other health care professionals present one-hour talks on the hot topics currently in health care as well as topics suggested by the public), Medicare Part D (in conjunction with Ohio Senior Health Insurance Information Program (OSHIP)), American Heart Association, Basic Life Support (BLS) and Advanced Cardiovascular Life Support (ACLS) classes, and many more.

In addition, UH Samaritan Medical Center hosts support groups such as cardiac rehab, diabetes education, arthritis and fibromyalgia, and breast cancer survivors. Wellness programs are presented in conjunction with multiple community partners including Hospice, Akron Children's Hospital, Mental Health and Recovery Board, and the Ohio State Extension office, to name a few. UH Samaritan Medical Center participates in multiple health fairs and schedules speakers for local organizations such as the Rotary, Kiwanis, local middle school and high school fairs and career days, area churches and Leadership Ashland. UH Samaritan Medical Center, the local YMCA and the Ashland Fire Department partner to promote weight loss, exercise and heart healthy awareness through a variety of venues and programs.

The anticipated impact of such programs is a better educated and more informed community regarding health and wellness. The impact of such programs will be measured by monitoring participation and reviewing results of evaluations completed at the end of presentations. Community feedback is welcomed and vital to the planning of the Community Education Series and topics for support groups. Joint replacement education is additionally monitored via multiple volume, market share, attendance and patient satisfaction metrics.

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FIGURE 7: NUMBER OF COMMUNITY EDUCATION PROGRAMS, 2013 – 2015
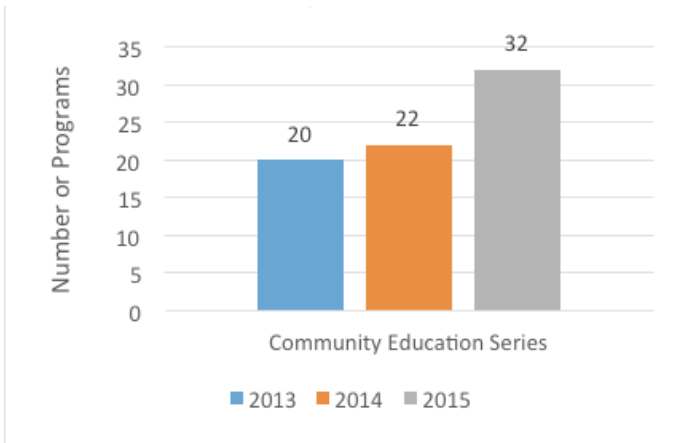

FIGURE 8: NUMBER OF COMMUNITY EDUCATION PARTICIPANTS, 2013 – 2015
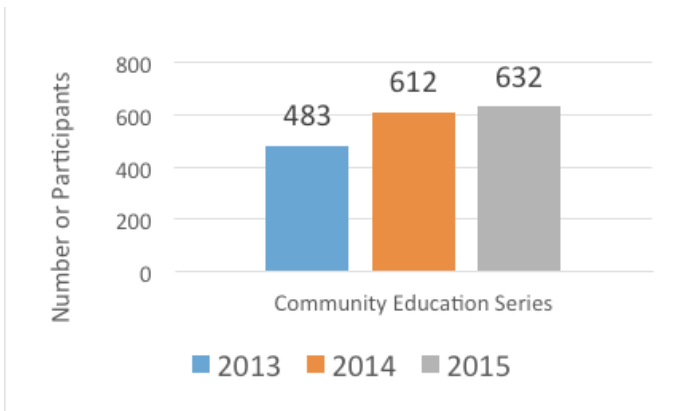

FIGURE 9: AHA BLS COURSES: NUMBER OF EMPLOYEE AND COMMUNITY MEMBER PARTICIPANTS, 2013 – 2015
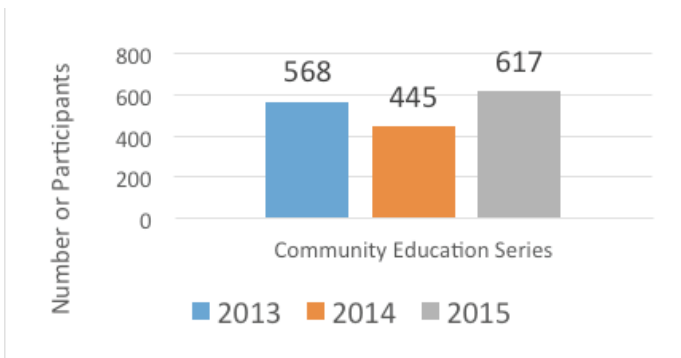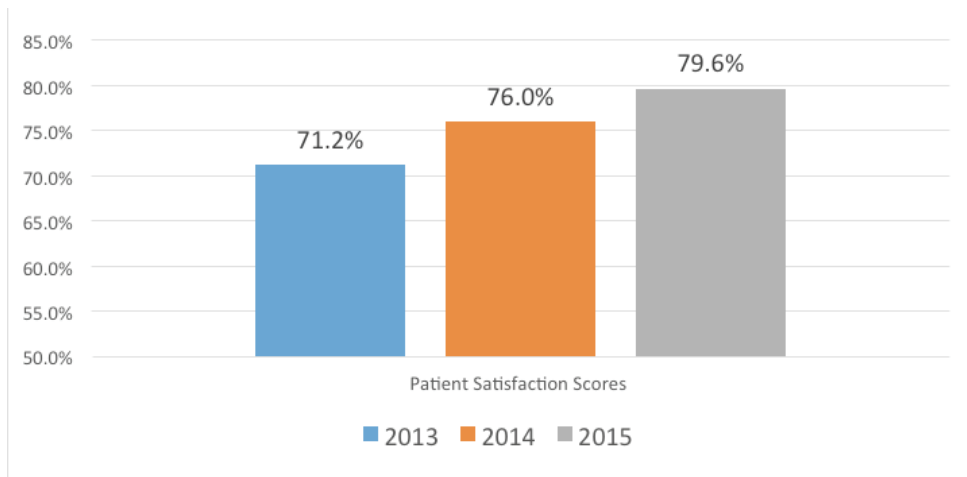

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C. Mental Health Services

UH Samaritan Medical Center is working closely with local mental health professionals to foster collaboration and create new opportunities to educate employees and the community about mental health issues. A committee of hospital and mental health advocates has been established and is working on a number of issues. Working with the Mental Health and Recovery Board, the hospital is exploring the possibility of adding a psychiatrist to the staff. In addition, the Vice President of Clinical Services now sits on the Appleseed Community Mental Health Board and is coordinating meetings between physician offices and mental health staff to foster broader access to expanded referral and consultative resources for primary care providers. A mental health series of education classes was introduced to hospital staff in 2010 and continues. The anticipated impact of this strategy will be a greater understanding of mental health needs between UH Samaritan Medical Center and mental health professionals in the community. This will be monitored with ongoing feedback between all parties.
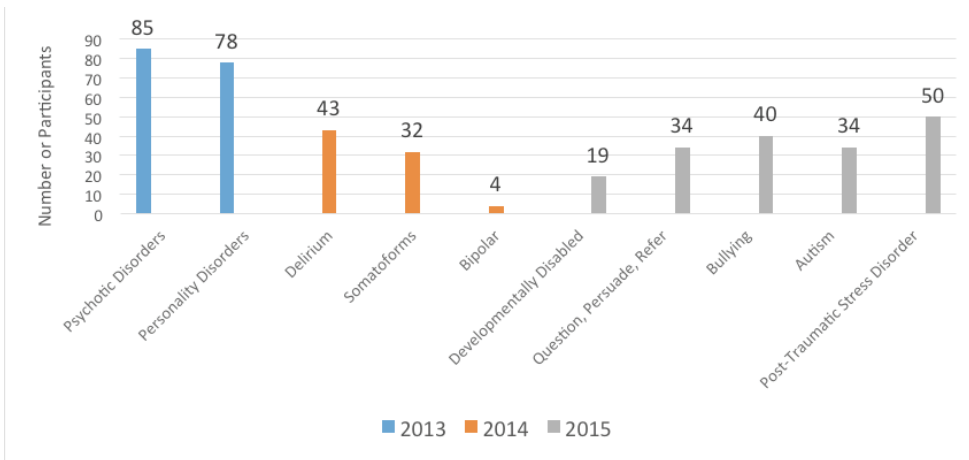
Summative evaluation results: Feedback is overwhelmingly positive that teaching methods are effective and learning material is valuable. The participants are asked to list future education requests. Some of those requests included suicide education. A four-part suicide awareness class is planned for 2016.

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D. Eldercare

While not a primary service offered by UH Samaritan Medical Center, eldercare is supported in many ways. The hospital participates in the Nursing Home Care Collaborative, which is a committee comprised of health care professionals from nursing homes, assisted living facilities, mental health agencies, the hospital and other partners invested in ensuring smooth transitions of care for this patient population. Education and support groups are available to the elderly and are included in the description for Wellness services. The hospital's Social Services department is instrumental in addressing their needs as they are patient advocates, addressing needs such as homelessness, poverty, family break-up, mental illness, physical and mental disability, alcohol and substance abuse, domestic violence and much more. They place the needs of the patient first and foremost while helping families and loved ones navigate difficult life transitions. Press Ganey patient satisfaction scores as well as Medicare and Medicaid quality measures help UH Samaritan Medical Center monitor the impact of these services.

As a result of discussions with the long-term care facilities in the area, a pilot program that utilizes a grant to provide an "Anti-Coagulation" clinic at one large facility in Ashland was created. UH Samaritan Medical Center provides a pharmacist for consultation in monitoring and adjusting medications and a phlebotomist to perform the necessary blood-draws for monitoring. The goal of this program is to avoid readmission to the hospital for anti-coagulation problems. While it is difficult to measure a "non-event," the long-term care facility and UH Samaritan Medical Center believe the results have been beneficial and have entered into a more formal agreement to continue the clinic. The same model will be offered to other facilities in the area.

Similarly, the lab at UH Samaritan Medical Center has reached out to long-term care facilities in the area to offer lab services. While there is little economic benefit for the hospital, patients will benefit through faster result times and those results being included in the UH Samaritan Medical Center Electronic Health Record, and available to attending physicians as well as facilities in a timely and predictable fashion. This may result in quicker treatment for certain conditions.

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CONCLUSIONS

A. Priority Health Needs

Poor health status can result if a complex interaction of challenging social, economic, environmental and behavioral factors, combined with a lack of access to care, perceived or actually present. Addressing the more common "root" causes of poor community health can serve to improve a community's quality of life and to reduce mortality and morbidity. Figure 12 (below) describes the community health needs identified through the 2016 CHNA as priorities. Those needs that the hospital plans to help address during 2016 through 2018, at least in part, are noted. After careful analysis of both qualitative and quantitative data, UH Samaritan Medical Center identified three broad priority health needs that impact the community served by the hospital. They are:

- Services for the elderly

- Access to specialists

- Addressing lifestyle modification

All needs identified in the 2016 CHNA are addressed, in one way or another, by UH Samaritan Medical Center. However, herein we pinpoint those issues for which the hospital is in the best position to impact the greatest number of community members with the greatest level of need. Below we repeat all health issues identified by the 2016 CHNA and denote those issues that UH Samaritan Medical Center will proactively address in its 2016 – 2018 CHNA Implementation Strategy. Those denoted as "no" are, and will continue to be, addressed by numerous programs offered by the hospital. Those denoted as "yes" are the areas toward which new and/or additional hospital resources will be dedicated from 2016 to 2018. Please note that "Health Literacy/Knowledge of Resources" and several of the "Chronic Disease Conditions" are encapsulated in the three broad categories identified above.

The list that follows describes the priority health issues identified through this CHNA.

FIGURE 12: COMMUNITY HEALTH NEEDS IDENTIFIED IN 2016 CHNA

Identified Health Needs	Priorities for 2016 – 2018
Vulnerable Populations	
Services for the Elderly	Yes
Lower Income Sub-Set: Single-Headed Households	No
Amish Population	No
Services for Children	No
Access Barriers	
Cost of Care	No
Transportation Barriers	No
Access to Primary Care	No
Insufficient Specialists	Yes
Health Literacy/Knowledge of Resources	Yes
Lifestyle Barriers	
Obesity	Yes
Substance Abuse	Yes
Smoking	Yes
Chronic Disease Conditions	
Cancer, Especially Breast Cancer	Yes
Diabetes/Hypertension	Yes
Heart Diseases	Yes
Mental Illness/Neurology	Yes
Other	
Violence: Domestic and Child Abuse	No

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The 2016 – 2018 priorities were selected based on input from the broad interests of the community as well as data regarding hospital discharges and extensive data collection from secondary sources that was discussed and vetted with the consultants hired to assist with the 2016 CHNA. The hospital President and UH Samaritan Medical Center Outreach staff participated in a facilitated prioritization process with the UH Director of Community Health Engagement to identify the needs, identify the criteria used to aid in determining the priorities and identity potential resources available to address identified needs. The Score Sheet and Instructions can be found in Appendices D and E.

More specifically, the three broad priorities were selected based on the data; the hospital's ability to track outcomes; building on existing recruitment efforts for specialists; the growth in the elderly population; the magnitude of health disparities based on age; and the burden, scope and severity of need as it relates to addressing behavior modification (lifestyle changes) to coincide with clinical care.

UH Samaritan Medical Center is also very environmentally conscious. As such, hospital staff anticipate several "co-benefits" of addressing smoking and obesity in particular as they seek to reduce smoking rates and encourage the consumption of fresh, locally grown foods.

B. Resources Available to Address Priority Health Needs within the Community Served by the Hospital

UH Samaritan Medical Center works with numerous partners to address the needs identified in its 2016 CHNA. In addition to leveraging the resources of other UH hospitals, they anticipate specifically working with the following organizations to address their 2016 – 2018 priorities:

Appleseed Community Mental Health Center

Ashland County Council on Aging

Ashland County-City Health Department

Ashland County Family & Children First Council

Ashland University

Brethren Care Village

Kingston of Ashland

Mental Health & Recovery Board of Ashland County

The Ashland Salvation Army Ray and Joan Kroc Corps Community Center

The Good Shepherd – Lutheran Social Services

United Way of Ashland County

YMCA

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APPENDIX

A. Qualifications of Consulting Company

The Center for Health Affairs is the leading advocate for Northeast Ohio hospitals. With a rich history as the Northeast Ohio hospital association, dating back to 1916, The Center serves as the collective voice of 36 hospitals spanning six counties.

The Center recognizes the importance of analyzing the top health needs in each community while ensuring hospitals are compliant with IRS regulations governing nonprofit hospitals. Since 2010, The Center has helped hospitals fulfill the CHNA requirements contained within the Affordable Care Act. The Center offers a variety of CHNA services to help hospitals produce robust and meaningful CHNA reports that can guide a hospital's community health improvement activities. Beyond helping hospitals with the completion of timely CHNA reports, The Center spearheads the Northeast Ohio CHNA Roundtable, which brings member hospitals and other essential stakeholders together to spur opportunities for shared learning and collaboration in the region.

The 2016 CHNA prepared for UH Samaritan Medical Center was directed by The Center's vice president of corporate communications and vice president of initiatives and analytics, managed by The Center's community outreach director and supported by a project manager. More information about The Center for Health Affairs and its involvement in CHNAs can be found at www.chanet.org.

B. ACS Conditions and ICD-9-CM Codes

Below are the general categories of ACS conditions and their associated ICD-9-CM codes.

1. Congenital Syphilis: ICD-9-CM code 090 (newborns only).

2. Immunization-Related and Preventable Conditions: ICD-9-CM codes 033, 037, 045, 390, 391; (also including haemophilus meningitis for children ages 1 – 5 only, ICD-9-CM code 320.0; ICD-10-CA code G00.0).

3. Epilepsy: ICD-9-CM code 345.

4. Convulsions: ICD-9-CM code 780.3.

5. Severe ENT Infections: ICD-9-CM codes 382, 462, 463, 465, 472.1; (cases of otitis media, ICD-9-CM code 382).

6. Pulmonary Tuberculosis: ICD-9-CM code 011.

7. Other Tuberculosis: ICD-9-CM codes 012 – 018.

8. Chronic Obstructive Pulmonary Disease (COPD): ICD-9-CM codes 491, 492, 494, 496.

9. Acute Bronchitis: (only included if a secondary diagnosis of COPD is also present, diagnosis codes as above), ICD-9-CM code 466.0.

10. Bacterial Pneumonia: ICD-9-CM codes 481, 482.2, 482.3, 482.9, 483, 485, 486; (patients with a secondary diagnosis of sickle-cell anemia, ICD-9-CM code 282.6; and patients less than two months of age are excluded).

11. Asthma: ICD-9-CM code 493.

12. Congestive Heart Failure (CHF): ICD-9-CM codes 402.01, 402.11, 402.91, 428, 518.4.

13. Hypertension: ICD-9-CM codes 401.0, 401.9, 402.00, 402.10, 402.90.

14. Angina: ICD-9-CM codes 411.1, 411.8, 413 (patients with any surgical procedure coded are excluded).

15. Cellulitis: ICD-9-CM codes 681, 682, 683, 686 (patients with any surgical procedure coded are excluded, except for incisions of skin and subcutaneous tissue, ICD-9-CM procedure code 86.0).

16. Diabetes: ICD-9-CM codes 250.0, 250.1, 250.2, 250.3, 250.8, 250.9.

17. Hypoglycemia: ICD-9-CM code 251.2.

18. Gastroenteritis: ICD-9-CM code 558.9.

19. Kidney/Urinary Infections: ICD-9-CM codes 590, 599.0, 599.9.

20. Dehydration/Volume Depletion: ICD-9-CM code 276.5.

21. Iron Deficiency Anemia: ICD-9-CM codes 280.1, 280.8, 280.9.

22. Nutritional Deficiencies: ICD-9-CM codes 260, 261, 262, 268.0, 268.1.

23. Failure to Thrive: ICD-9-CM code 783.4; ICD-10-CA code R62 (patients less than one year of age only).

24. Pelvic Inflammatory Disease: ICD-9-CM code 614; ICD-10-CA codes N70, N73, N99.4 (female patients only, patients with a hysterectomy procedure coded are excluded, ICD-9-CM procedure codes 68.3 – 68.8).

25. Dental Conditions: ICD-9-CM codes 521, 522, 523, 525, 528.

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C. 2016 CHNA Community Leader Interview Guide

Community Health Needs Assessment Survey Questions

Name: _____

Organization: _____

Title: _____

Date: _____

Do we have your permission to list your name in the report? _____

Questions:

1. Briefly describe the services your organization offers and the population you serve.

2. Are your services targeted toward a particular geographical area (city, ZIP code, school, etc.)? Are they countywide?

3. In your opinion, what is the biggest issue or concern facing the people served by your agency/in your community? In surrounding counties? Particular age groups (0 – 17, 18 – 44, 45 – 65, 65+)? (Note: If not health care related, what is biggest health care related issue or concern?)

4. Please share any trends seen in the following areas (and where, geographically, they are occurring):

a. Demographic – changes in the size, age, racial/ethnic diversity or other characteristics of the population (particularly those who are "vulnerable")

b. Economic variables – their impact on health

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c. Provider community – physicians, hospitals – who is taking care of the poor?

d. Health status/public health indicators (What illnesses/needs/issues are getting worse or better? Why?)

e. Access to care – why?

5. If residents are leaving the community to receive certain services, what services are not accessible locally? Why do residents need to travel for care? Are people entering the county for services? Why/from where? Particular age groups (0 – 17, 18 – 44, 45 – 65, 65+)?

6. Please discuss the kinds of problems that the people served by your agency (by community agencies) have in accessing health care, mental and behavioral health, and/or social services for themselves and/or their families? (Prompt: In answering this question, you may wish to consider the following problems: language barriers, transportation, no health insurance, lack of information on available resources, delays in getting needed care, economic constraints, and/or dissatisfaction with treatment.)

7. What are the community organizations/assets that are or could be working to address these needs?

8. Is there capacity within your organization to serve additional clients? If not, what are the biggest barrier(s) impacting your ability to increase capacity?

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9. What role do you see the hospital(s) in your area currently playing to help address the community health issues faced by the low-income people who live here? What role do you think the hospitals in your area should play?

10. If resources were not a concern, what specific initiative(s) would you recommend to address the most pressing access or health status problems in the community? Why?

D. UH SAMARITAN MEDICAL CENTER PRIORITIZATION SCORE SHEET

Please rate each criterion on a scale of 1 to 3:	(1) Unlikely (Mild) (2) Somewhat Likely (Moderate) (3) Very Likely (Severe) Scale 0 – 12					
IDENTIFIED NEEDS	Hospital's Ability to Meet the Need; Mission-Alignment	Ability to Track Progress; Access to Data	Magnitude of the Health Disparity; Impact on Vulnerable Populations	Burden, Scope and Severity of Need	TOTAL	Potential for "Green" Co-Benefit Strategies ("X")
Vulnerable Populations/Health Disparities						
Services for the Elderly						
Lower Income – esp. Single-Headed Households						
Amish Population						
Services for Children						
Access						
Cost of Care						
Insufficient PCPs						
Insufficient Specialists						
Transportation						
Health Literacy/Knowledge of Resources						
Life Style						
Obesity						
Substance Abuse						
Smoking						
Chronic Disease						
Cancer, esp. Breast Cancer						
Diabetes/Hypertension						
Coronary Heart Disease						
Alzheimer's						
Mental Illness						
Other						
Violence: Domestic and Child Abuse						

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E. UH Samaritan Medical Center Prioritization Background and Instructions

Below you will find a description of the assumptions and decisions that were made to develop the score sheet. These can be adjusted if necessary.

Identified Needs

The needs were populated based on discussions with the UH Samaritan Medical Center CHNA Team, President and consultants. There is also input from Dr. Mehrdad Tavallaee, Medical Director, Primary Care Institute/Ashland County (viewed with the same "weight" as all the other data points).

Criteria for Assessing Needs

Four criterion were selected by UH Government & Community Relations administrators based on a list of recommended items from the State of Ohio's Health Assessment process. The full list was previously shared with the UH Samaritan Medical Center CHNA Team.

Environmentally Sustainable Needs ("Green" Co-Benefits)

The "Green" Co-Benefits column was separated from the other criteria because of the unique nature of environmental needs that have long-term future health impacts. However, they were included based on the magnitude of future health outcomes based on practices instituted today. Additionally, they can be aligned with current, pressing needs to produce co-benefits that improve health outcomes in both the near and distant future.

This criterion may also be useful for tie-breaker decisions.

Rating Scale

The rating scale has a range of 1 – 3, with 1 being less "favorable" and 3 being most "favorable." The first two columns (criterion) require the use of the descriptors "Unlikely," "Somewhat Likely" or Very Likely." The next two columns (criterion) require the use of the descriptors "Mild," "Moderate" or "Severe."

Process

Step One: Discuss and agree on the needs.

Step Two: Discuss and agree on the criteria for prioritizing the needs.

Step Three: Rate the need by placing a number in the field beside each one based on the criteria in that column. The spreadsheet will automatically tally the score.

Step Four: Place an "X" in the final column if you anticipate a "green" co-benefit associated with this need/anticipated strategy.

Step Five: Facilitator will ask each person to report his or her final scores from each need and will tally and reveal the scores.

Step Six: Use the scores to guide the discussion to identify two to three priorities to be addressed this round (2016 – 2018).

Step Seven: Identify existing or new community partners that you anticipate engaging to assist with the work.

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