



## 2015 COMMUNITY HEALTH NEEDS ASSESSMENT

University Hospitals' (UH) long-standing commitment to the community spans more than 145 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, UH 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 Geauga Medical Center (UH Geauga Medical Center). UH Geauga Medical Center is a 226-bed, acute-care facility providing a full range of services including the

Orthopaedic Center, Spine & Pain Management Center, UH Harrington Heart & Vascular Institute, UH Seidman Cancer Center and the Center for Women's Health.

UH Geauga Medical Center offers myriad programs and activities to address the surrounding community health needs. These range from an Alzheimer's education series and to a diabetes support group and free health screenings.

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

Adopted by the UH Board of Directors September 24, 2015.

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## INTRODUCTION TO REPORT

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This report identifies and assesses community health needs in the areas served by University Hospitals Geauga Medical Center in accordance with regulations promulgated by the Internal Revenue Service. This Community Health Needs Assessment (CHNA) was adopted by the UH Board of Directors on September 24, 2015.

This is the second UH Geauga Medical Center CHNA in response to that federal government regulation.<sup>1</sup> The 2015 UH Geauga 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.

**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 (survey of market area residents, hospital discharge data) and some secondary (regarding demographics, health status indicators and measures of health care access).

This UH Geauga Medical Center CHNA took into account input from persons representing the broad interests of the community through both a randomized mail survey of households in Geauga County, and a series of mail surveys and in-person interviews with community leaders. Community leaders from the Geauga County Health District and the Lake County Health District offered their analysis based on their work as local government public health agencies. Participating community leaders provided input into the prioritization of significant health needs.

- Demographics of UH Geauga Medical Center's primary and secondary market areas;
- Economic issues facing the hospital's primary and second 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.

<sup>1</sup>*UH Geauga Medical Center followed the 2013 Proposed Regulations, published by the Treasury Department and IRS on April 5, 2013, in the Federal Register (REG-106499-12, 2013-21 I.R.B. 1111, [78 FR 20523]), in accordance with Notice 2014-2 that confirms that hospital organizations can rely on proposed regulations under section 501(r) of the Internal Revenue Code issued on June 26, 2012, and April 5, 2013, pending the publication of final regulations or other applicable guidance. The final rule entitled "Additional Requirements for Charitable Hospitals; Community Health Needs Assessments for Charitable Hospitals"; Requirement of a Section 4959 Excise Tax Return and Time for Filing the Return, was published by the IRS on December 21, 2014, and requires compliance after December 29, 2015.*

## EXECUTIVE SUMMARY

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### UH Geauga Medical Center Community by the Numbers

- 6 Service Area Counties: Cuyahoga, Geauga, Ashtabula, Lake, Portage, Trumbull
- Service Area Population, 2013: 306,932
- 48% of inpatient discharges originate from the Primary Service Area, 28% from Secondary Service Area
- Average income decreased in Ashtabula (12.1%) and Lake (5.3%) counties from 2010 to 2013
- 41.8% of community discharges were for patients with Medicare, 18% were for Medicaid patients
- A large Amish community in Geauga County is uninsured and paid for care out-of-pocket
- 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 UH Geauga Medical Center community.

UH Geauga Medical Center's service area extends into three primary service area counties: Geauga, Ashtabula and Lake, and six secondary service area counties: Cuyahoga, Geauga, Ashtabula, Lake, Portage and Trumbull. Key finding from analyses of that population are as follows.

Poverty and unemployment in the area create barriers to access (to health services, healthy food and other necessities) and thus contribute to poor health. Racial and ethnic minorities are more likely to lack economic and social resources and be at risk for poor health. These issues are most prominent in Ashtabula County:

- At 19.7%, Ashtabula County had a higher poverty rate in 2013 than state and national averages.
- Ashtabula County also had an unemployment rate that was higher than state and national averages in April 2015.
- The greatest proportions of households with incomes less than \$25,000 in 2010 were located in Ashtabula County.

Ashtabula, Geauga and Lake counties showed an increase in the proportion of those ages 65 and older who are living under the poverty line. The proportion of seniors living beneath the poverty line was highest in Ashtabula County (10.6%) and lowest in Geauga County (5.7%) in 2013.

A comparatively large portion of uninsured discharges was found in Geauga County due to a large uninsured Amish population.

At UH Geauga Medical Center, 16.8% of discharges were found to be Ambulatory Care Sensitive (ACS) or potentially preventable if patients are accessing primary care resources at optimal rates. ACS conditions as a primary diagnosis were more common among UH Geauga Medical Center patients ages 65 and older. The most common conditions were congestive heart failure and Chronic Obstructive Pulmonary Disease. In the UH Geauga Medical Center community, ACS discharges were prevalent for Medicare and uninsured patients.

### Priority Health Needs

Poor health status results if a complex interaction of challenging social, economic, environmental and behavioral factors combined with a lack of access to care is present. Addressing these "root" causes is an important way to improve a community's quality of life and to reduce mortality and morbidity.

After careful analysis of both qualitative and quantitative data, UH Geauga Medical center identified four categories of health needs that impact the community serviced by the hospital. These include (not listed in a specific order):

#### 1. Health Disparities

- Aging population
- Unemployment
- Poverty

#### 2. Access Barriers

- Access to Primary Care Providers
- Access to Dental Care
- Access to Specialty Care
- Access to providers that accept Medicaid
- Cost of Care
- Access to Transportation

#### 3. Lifestyle Barriers

- Obesity (Adult and Youth)
- Substance abuse (Adult and Youth)
  - Smoking
  - Drug abuse
  - Alcohol abuse

#### 4. Chronic Disease Conditions

- Cancer
- Heart disease
- Diabetes
- Alzheimer's
- Asthma (Older Adult and Children)
- Mental illness (Adult and Youth)
- Respiratory disease
- Digestive diseases

UH Geauga Medical Center has prioritized three primary categories of these health needs for this CHNA. Within these three categories of needs fall numerous health needs that were identified through this CHNA, which UH Geauga Medical Center will prioritize.

1. Access Barriers
2. Lifestyle Barriers
3. Chronic Disease Conditions

These needs were prioritized to align with the Geauga County Community Health Improvement Plan (CHIP) when selecting these priorities. UH Geauga Medical Center representatives are closely involved with the county's CHIP initiatives and are executing programs through the hospital as part of that collaboration. The Geauga County CHIP is primarily focused on access related initiatives. They include:

1. Increasing the number of and access to health care providers
2. Increasing awareness of and access for mental health issues
3. Increasing awareness of and treatment options for substance abuse

These CHIP initiatives will serve as part of the foundation of implementation strategies designed by UH Geauga Medical Center in response to this CHNA. Prioritizing community health needs in this way will allow for greater collaboration between the hospital, the health department, and the variety of partners involved in CHIP initiatives, and will leverage existing investments for greater community impact.

#### CHNA Collaboration

UH Geauga Medical Center worked closely with The Center for Health Affairs and Cypress Research Group to complete the data assessment and summary portions of the 2015 CHNA. University Hospitals Health System, Inc. retained The Center for Health Affairs to assist in data collection and analysis to ensure the entire community served by the hospital was captured. The Center for Health Affairs is the leading advocate for Northeast Ohio hospitals. The Center advocates on behalf of 34 hospitals in six counties. Cypress Research Group provides custom research services to meet various market and business research needs. More information about The Center for Health Affairs and Cypress Research Group is provided in the Appendix.

## DESCRIPTION OF PROCESS AND METHODS

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

UH Geauga Medical Center is located in just south of the city of Chardon, Ohio in Geauga County. Located approximately thirty miles east of Cleveland Ohio, Geauga County is largely rural, and is comprised of cities, villages and townships. The county is home to the country's second largest Amish population.

Illustrated in [Figure 1: UH Geauga Medical Center's Market Areas](#), UH Geauga Medical Center's market area includes a wide geographic area: 26 municipalities (seven in its primary market area and 19 in its secondary market area). Shown in [Table 1: UH Geauga Medical Center: 2013 Hospital Discharges – Primary and Secondary Market Areas, in 2013](#), UH Geauga Medical Center had 8,292 discharged patients. Of those, 6,331 were in the hospital's primary or secondary market (76.4%).

In 2013, 48.0% of UH Geauga Medical Center's discharges were residents of its primary market area; 28.4% were residents of its secondary market area. Almost one in four (23.6%) discharged patients in 2013 were not residents of UH Geauga Medical Center's primary or secondary market areas.

Of the seven municipalities that make up UH Geauga Medical Center's primary market area, Painesville (44077) has the largest population, comprising 18.4% of the total population in the hospital's market area, but only 4.2% of UH Geauga Medical Center's inpatient population in 2013. The population in Middlefield, a relatively small community, comprises only 5.0% of the total population of UH Geauga Medical Center's market area; however, 12.5% of the hospital's 2013 discharges were residents of Middlefield.

Emergency department visitors were more heavily concentrated within UH Geauga Medical Center's primary market area (59.7%), especially Chardon (44024), the home municipality of 20.7% of emergency room visitors in 2014, shown in [Table 2: UH Geauga Medical Center: Emergency Room Visits, 2014 – Primary and Secondary Market Areas](#).

Most inpatient and emergency room patients were residents of Geauga, Ashtabula and Lake counties. Furthermore, UH Geauga Medical Center's market area covers a significant proportion of the population for all three of these counties: Geauga (88.4%), Ashtabula (28.2%) and Lake (62.7%). Trumbull, Portage and Cuyahoga counties all include a relatively small proportion of UH Geauga Medical Center's patient population and most hospital-based care within those counties is provided by other facilities. Hence, the

majority of the analyses provided herein focus on the three main counties that comprise the bulk of UH Geauga Medical Center's market area: Geauga, Ashtabula and Lake counties.

### Geauga, Ashtabula and Lake Counties, 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** (clinical care, health behaviors/alcohol and drug use, social/environmental factors and physical environment). A rank of "1" is the best, "88" is the worst in the state of Ohio. While UH Geauga Medical Center does not include all of Lake, Geauga and/or Ashtabula counties in its market area, it does include a majority of Geauga and Lake counties and a substantial portion of Ashtabula County. Therefore, understanding where these counties rank in Ohio in terms of health is useful. It is important to note that in many of Ohio's counties, the differential between health outcomes and health factors is relatively small.

[Table 3: Geauga, Ashtabula and Lake County Health Rankings](#) illustrates UH Geauga Medical Center's service area ranks. Geauga County ranks among the highest in Ohio in terms of health outcomes (rank of 3 out of 88 counties) and health factors (4 out of 88). Geauga County ranks among the top 10 Ohio counties on all subcomponents measured in the health outcomes and health factors indices, with one exception (physical environment, rank of 61 out of 88).

On the whole, Ashtabula County achieves low ranks, compared to other Ohio counties, on health outcomes (69 out of 88 counties) and health factors (79 out of 88 counties). Regarding health outcomes, Ashtabula ranks more positively in terms of quality of life (rank of 57) than length of life (rank of 71). Regarding health factors, Ashtabula County ranks the lowest in terms of health behaviors and social and economic factors (rank of 77 on each) and physical environment (rank of 76). Ashtabula County ranks more favorably in terms of clinical care (rank of 67).

Lake County fares much better than Ashtabula County in comparison to other counties in Ohio. For health outcomes, Lake County ranks 19 out of 88 counties in Ohio, and for health factors, Lake County ranks 14 out of 88 Ohio counties. In particular, Lake County ranks well in terms of length of life (15 out of 88 counties), health behaviors (9 out of 88 counties) and social and economic factors (15 out of 88 counties).

To better identify areas of greatest need within the UH Geauga Medical Center market area, health rankings were further explored through data available at the Centers for Disease Control and Prevention (CDC, U.S. Department of Health and Human Services), which identified several areas for which Ashtabula, Lake and Geauga counties compare unfavorably to their peer counties.

In 2015, the CDC identified the following mortality and morbidity factors which are higher in Ashtabula County compared to its peer counties in the U.S. (which closely match Ashtabula in terms of demographic and physical factors). These are:

- Cancer deaths
- Coronary heart disease deaths
- Diabetes deaths

The CDC also found that Ashtabula County compared unfavorably to its peer counties in the U.S. in terms of access to primary care.

Lake County, which differs from Ashtabula County in many ways (population, economics, infrastructure), is compared to a different set of peer counties. Compared to its peer counties, Lake County shows higher-than-average rates of:

- Coronary heart disease deaths
- Adult diabetes morbidity
- Alzheimer's disease/dementia
- Gonorrhea
- Older adult asthma
- Older adult depression

Lake County was not viewed by the CDC, however, as a region with lower-than-average access to primary care.

Gauga County compares unfavorably to its peer counties on these health indicators:

- Alzheimer's disease/dementia
- Older adult asthma
- Older adult depression

FIGURE 1: UH GEAUGA MEDICAL CENTER'S MARKET AREAS

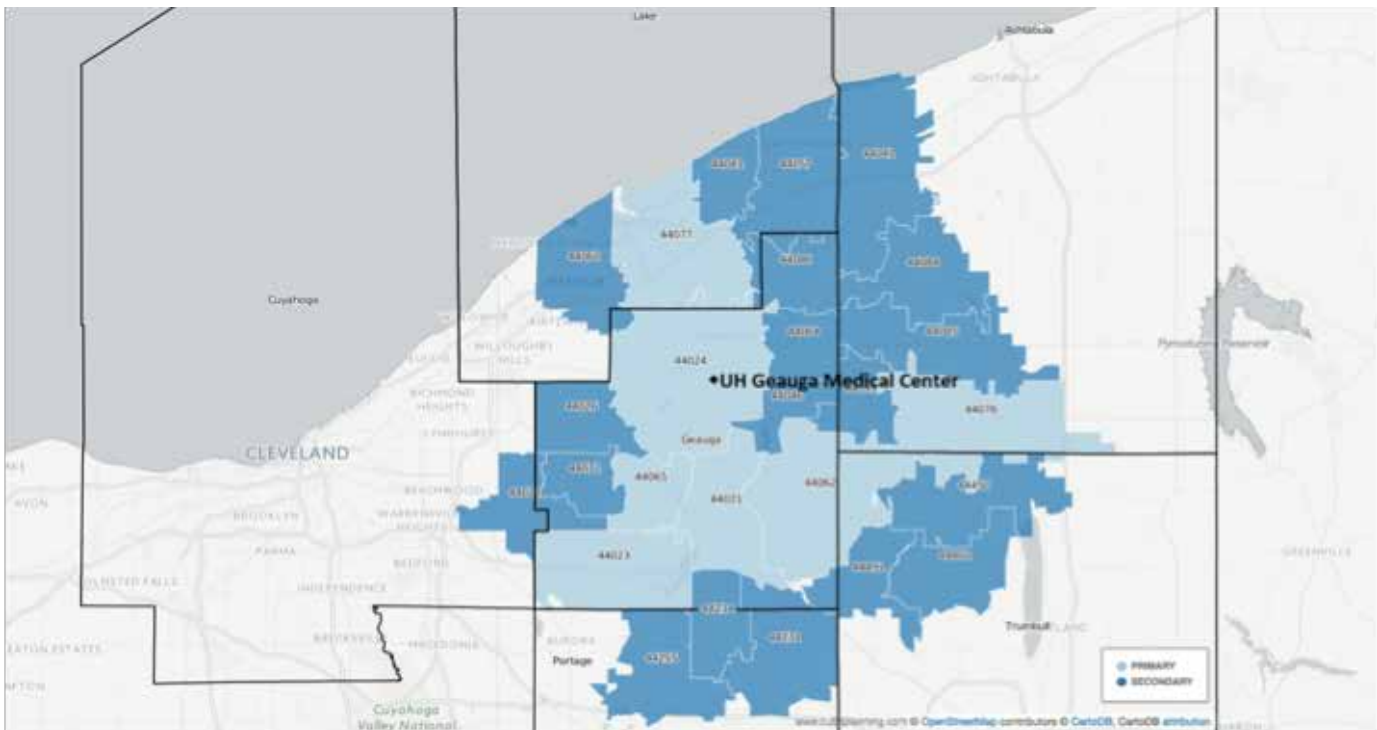


TABLE 1: UH GEAUGA MEDICAL CENTER: 2013 HOSPITAL DISCHARGES – PRIMARY AND SECONDARY MARKET AREAS

Primary Market Area	Municipalities & ZIP Codes	Number/percent of UH Geauga Medical Center Discharges* (2013)		2013 Population (American Community Survey, U.S. Census Projection)**	
		Number	Percent	Number	Percent
Gauga County	Burton (44021)	420	5.1%	6,052	2.0%
	Bainbridge (44023)	260	3.1%	17,374	5.7%
	Chardon (44024)	1,172	14.1%	23,430	7.6%
	Middlefield (44062)	1,036	12.5%	15,293	5.0%
	Newbury (44065)	272	3.3%	4,487	1.5%
Ashtabula County	Orwell (44076)	468	5.6%	4,599	1.5%
Lake County	Painesville (44077)	349	4.2%	56,334	18.4%
Subtotal Primary Market		3,977	48.0%	127,569	41.6%
<b>Secondary Market Area</b>					
Gauga County	Chesterland (44026)	172	2.1%	11,218	3.7%
	Huntsburg (44046)	125	1.5%	2,339	0.8%
	Montville (44064)	120	1.4%	1,676	0.5%
	Novelty (44072)	93	1.1%	4,227	1.4%
	Thompson (44086)	108	1.3%	2,277	0.7%
Ashtabula County	Geneva (44041)	223	2.7%	14,766	4.8%
	Rock Creek (44084)	75	0.9%	3,623	1.2%
	<b>Rome (44085)</b>	<b>168</b>	<b>2.0%</b>	<b>3,227</b>	<b>1.1%</b>
	Windsor (44099)	135	1.6%	1,836	0.6%
Lake County	Madison (44057)	134	1.6%	19,780	6.4%
	Mentor (44060)	222	2.7%	60,780	19.8%
	Perry (44081)	32	0.4%	6,779	2.2%
Trumbull County	Bristolville (44402)	18	0.2%	2,924	1.0%
	North Bloomfield (44450)	52	0.6%	2,733	0.9%
	West Farmington (44491)	137	1.7%	3,248	1.1%
Portage County	Garrettsville (44231)	201	2.4%	8,625	2.8%
	Hiram (44234)	129	1.6%	4,234	1.4%
	Mantua (44255)	110	1.3%	8,416	2.7%
Cuyahoga County	Chagrin Falls (44022)	100	1.2%	16,655	5.4%
<b>Subtotal Secondary Market</b>		<b>2,354</b>	<b>28.4%</b>	<b>179,363</b>	<b>58.4%</b>
<b>Total Market</b>		<b>6,331</b>	<b>76.4%</b>		
Other Market		1,961	23.6%		
<b>Total</b>		<b>8,292</b>	<b>100%</b>	<b>306,932</b>	

\*Ohio Hospital Association hospital discharge data, 2013

\*\*Source: U.S. Census, American Community Survey, 2010 Decennial projection to 2013



TABLE 2: UH GEAUGA MEDICAL CENTER: EMERGENCY ROOM VISITS, 2014 – PRIMARY AND SECONDARY MARKET AREAS

	Municipalities & ZIP Codes	Number of UH Geauga Medical Center Emergency Room Visits (2014)*		2013 Population**	
Primary Market Area		Number	Percent	Number	Percent
Gauga County	Burton (44021)	1,300	6.6%	6,052	2.0%
	Bainbridge (44023)	729	3.7%	17,374	5.7%
	Chardon (44024)	4,111	20.7%	23,430	7.6%
	Middlefield (44062)	2,639	13.3%	15,293	5.0%
	Newbury (44065)	1,102	5.6%	4,487	1.5%
Ashtabula County	Orwell (44076)	1,282	6.5%	4,599	1.5%
Lake County	Painesville (44077)	674	3.4%	56,334	18.4%
<b>Subtotal Primary Market</b>		<b>11,837</b>	<b>59.7%</b>	<b>127,569</b>	<b>41.6%</b>
<b>Secondary Market Area</b>					
Gauga County	Chesterland (44026)	590	3.0%	11,218	3.7%
	Huntsburg (44046)	395	2.0%	2,339	0.8%
	Montville (44064)	317	1.6%	1,676	0.5%
	Novelty (44072)	264	1.3%	4,227	1.4%
	Thompson (44086)	260	1.3%	2,277	0.7%
Ashtabula County	Geneva (44041)	140	0.7%	14,766	4.8%
	Rock Creek (44084)	173	0.9%	3,623	1.2%
	Rome (44085)	487	2.5%	3,227	1.1%
	Windsor (44099)	359	1.8%	1,836	0.6%
Lake County	Madison (44057)	142	0.7%	19,780	6.4%
	Mentor (44060)	280	1.4%	60,780	19.8%
	Perry (44081)	41	0.2%	6,779	2.2%
Trumbull County	Bristolville (44402)	84	0.4%	2,924	1.0%
	North Bloomfield (44450)	185	0.9%	2,733	0.9%
	West Farmington (44491)	416	2.1%	3,248	1.1%
Portage County	Garrettsville (44231)	480	2.4%	8,625	2.8%
	Hiram (44234)	433	2.2%	4,234	1.4%
	Mantua (44255)	390	2.0%	8,416	2.7%
Cuyahoga County	Chagrin Falls (44022)	139	0.7%	16,655	5.4%
<b>Subtotal Secondary Market</b>		<b>5,575</b>	<b>28.1%</b>	<b>179,363</b>	<b>58.4%</b>
Other Market		2,429	12.2%		
<b>Total</b>		<b>19,841</b>	<b>100.0%</b>	<b>306,932</b>	

\*UH Geauga Medical Center

\*\*Source: U.S. Census, American Community Survey, 2010 Decennial projection to 2013

TABLE 3: GEAUGA, ASHTABULA AND LAKE COUNTY HEALTH RANKINGS

	Geauga County, 2015	Subcomponents	Ashtabula County, 2015	Subcomponents	Lake County, 2015	Subcomponents
Health Outcomes	3 out of 88 counties	Length of Life: 3 out of 88 counties Quality of Life: 2 out of 88 counties	69 out of 88 counties	Length of Life: 71 out of 88 counties Quality of Life: 57 out of 88 counties	19 out of 88 counties	Length of Life: 15 out of 88 counties Quality of Life: 29 out of 88 counties
Health Factors	4 out of 88 counties	Clinical Care: 9 out of 88 counties Health Behaviors: 3 out of 88 counties Social & Economic Factors: 8 out of 88 counties Physical Environment: 61 out of 88 counties	79 out of 88 counties	Clinical Care: 67 out of 88 counties Health Behaviors: 77 out of 88 counties Social & Economic Factors: 77 out of 88 counties Physical Environment: 76 out of 88 counties	14 out of 88 counties	Clinical Care: 25 out of 88 counties Health Behaviors: 9 out of 88 counties Social & Economic Factors: 15 out of 88 counties Physical Environment: 58 out of 88 counties

Source: County Health Rankings & Roadmaps; Robert Wood Johnson Foundation Program, 2014.

## 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 Geauga Medical Center community.

### Primary Data

There were three main sources of primary data:

#### A. Survey Data

- UH Geauga Medical Center’s market area is contained within Ashtabula, Cuyahoga, Geauga, Lake, Portage and Trumbull counties in Northeast Ohio.

Most of UH Geauga Medical Center’s patient discharges from its market area in 2013 were residents of Geauga County (45.6%). Roughly one-tenth (8.9%) of discharges were residents of Lake County, and another one in 10 (12.8%) were Ashtabula County residents. A minority of patients discharged in 2013 were from Portage (5.3%), Cuyahoga (1.2%) or Trumbull (2.5%) counties. The remaining discharged patients lived outside of the market area.

For primary data, the results of several mail surveys completed within Lake, Geauga and Ashtabula counties during the past few years are provided:

- One random survey of adults, commissioned by Partnership for a Healthy Geauga, was completed in Geauga County in 2011. A total of 404 surveys were completed.
- Three random surveys of youth (ages 12 to 18) were completed in the three counties that include the majority of UH Geauga Medical Center’s market area. Surveys were done in 2014 in Lake County and in 2011 in Ashtabula and Geauga counties. These reports provide results from 827 surveyed youth.
- The survey of Lake County youth included 274 completed interviews of youth who live in UH Geauga Medical Center’s market area (in Lake County);
- The survey of Ashtabula County youth included 164 completed interviews of youth who live in UH Geauga Medical Center’s market area (in Ashtabula County);

- The survey of Geauga County youth included 389 completed interviews of youth who live in UH Geauga Medical Center's market area (in Geauga County);
  - A survey of Geauga County households with children ages 0 to 11 was also conducted in 2011. That survey included 261 households with children ages 0 to 5 and 218 households with children ages 6 to 11.

The Lake County youth survey was commissioned by a partnership of Lake County community organizations with mutual interest in the health of the community and led by the Lake County Health Department. The Ashtabula County youth survey was commissioned by the Ashtabula County Health Needs Assessment Committee. The survey of Geauga County youth and the survey of households with children in Geauga County were commissioned by the Partnership for a Healthy GEAUGA.

#### B. Hospital Discharge Data

- Discharge data from the Ohio Hospital Association was used to describe hospital admission patterns for UH Geauga Medical Center from 2011 to 2013.

#### C. Qualitative Data

- A survey was sent to 12 community leaders from organizations that serve the populations in the hospital's service area. Nine responses to the survey were received.
- UH Geauga Medical Center conducted interviews with three community leaders from public health, local government and social service agencies.

### Qualitative Data Analysis Summary

From January 2015 – July 2015, UH Geauga Medical Center solicited the input of individuals who represent the broad interests of the community and individuals in leadership roles in public health, both in the form of mail surveys and in-person interviews.

### Surveys

UH Geauga Medical Center sent surveys to 12 community leaders from organizations that serve the populations in the hospital's service area. Nine responses to the survey were received. A copy of the survey can be found in the Appendix.

The organizations solicited are listed below; those in **bold** responded.

Chardon Schools Superintendent

City of Mentor

Geauga County Board of Mental Health & Recovery Services

**Geauga County Department on Aging**

**Geauga County Executive**

**Geauga County Health District**

Geauga County Job and Family Services

**Geauga County Sheriff**

**Geauga Growth Partnership**

Geneva Medical Center

**Lake County Council on Aging**

**Lake County General Health District**

The top five health issues identified by those surveyed were: Substance Abuse, Obesity, Mental Health, Cancer and Tobacco use. Furthermore, survey participants identified obesity as the most significant health issue in the community.

Moreover, gaps in access to the following services were identified: (1) access to Medicaid providers, (2) access to bilingual providers, and (3) access to transportation.

When asked to identify the most significant barriers that keep people in the community from accessing health care when they need it, the following barriers were prioritized: (1) lack of transportation, (2) inability to pay out-of-pocket expenses (copays, prescriptions, etc.), (3) inability to navigate health care system, (4) time limitations, (5) basic needs are not being met (food/shelter), (6) lack of health insurance coverage, (7) availability of providers/appointments, and (8) language/cultural barriers. When asked to prioritize the most significant of these barriers, there was no clear majority response; however, inability to navigate the health care system and lack of transportation received the most votes.

Respondents predominantly agreed that there are specific populations in the UH Geauga Medical Center service area that are not being adequately served by local health services. The most commonly identified populations were the poor, uninsured and Hispanic populations. Other populations identified as underserved included immigrants, seniors and homeless populations. Moreover, the UH Geauga Medical Center service area was unique in that several survey participants identified another underserved population: the Amish.

There was a strong consensus that the majority of uninsured and underinsured individuals in this community use the hospital emergency department as their primary point of care when in need of medical care, followed by urgent care centers.

All respondents agreed that there are a number of resources and services related to health and quality of life that are missing in the community. The three highest ranked missing services identified were: free/low cost dental care, free/low cost medical care and lack of transportation. Other identified missing services included mental health services, substance abuse services, prescription assistance, specialists and bilingual services. Responses varied when asked what challenges people in the community face in trying to maintain healthy lifestyles. Examples include lack of affordable exercise facilities and healthy food options; lack of health education; insufficient home support and follow-up care; and safety concerns preventing many people from walking.

Respondents provided several recommendations that may help to improve the health and quality of life in the community. Some recommendations included increasing health education outreach; creating a transportation service to and from appointments; collaboration between public health and nonprofit agencies; addressing the substance abuse epidemic; and providing a continuum of care by embedding social services within primary care and urgent care centers. The respondents to this survey included leaders from public health organizations, health care organizations, nonprofit organizations, social service agencies, aging services, business sector affiliates and local government workers.

## Interviews

On June 26, 2015, interviews were conducted with:

- Ron Graham, Deputy Health Commissioner, Lake County General Health District
- Jessica Bolt, Director, Geauga County Department on Aging
- Jim Adams, Chief Executive Officer and Executive Director, Geauga County Board of Mental Health & Recovery Services

A brief summary of the services provided by each of these organizations follows:

**Lake County General Health District (LCGHD)** provides more than 80 programs servicing the population of Lake County. In addition to those services, LCGHD is the HIV/AIDS service provider for Lake, Geauga and Ashtabula counties and the Air Pollution oversight provider for Lake and Geauga counties. LCGHD provides traditional public health services, including health education, environmental health and clinical services. Many of the organization's newer programs focus on health equities and population health. The organization is also responsible for emergency preparedness for Lake County.

**Geauga County Department on Aging** (Department on Aging) provides services for Geauga County seniors, aged 60+. The Department on Aging manages senior centers that provide recreation and education for county seniors. The organization collaborates with many local partners to provide social services, meal delivery, congregant meals and social programs. A big challenge for this organization is the rate of growth of the senior population in Geauga County. The senior community has a lot of undiagnosed mental health conditions, which require a significant amount of resources.

**Geauga County Board of Mental Health & Recovery Services** (Mental Health Board) provides mental health recovery services for cradle-to-grave populations. The Mental Health Board works closely with Help Me Grow to provide early identification of challenges in the home for parents and kids. Services then span the lifetime and go all the way to seniors who have been in the system for 60 years. The Mental Health Board funds eight agencies in the region that provide direct clinical service. Services include provision of pharmacological medication, counseling, housing assistance, employment assistance, and drug treatment and prevention. The Mental Health Board currently funds 120 different programs in the community.

Among this group of interviewees, there were several health issues discussed as primary concerns. Access to health care was a common theme amongst the group. Access issues have several drivers including: (1) lack of transportation, (2) health literacy issues, (3) dearth of providers that accept Medicaid (particularly specialists), and (4) fragmentation/duplication of services that are difficult to navigate.

In addition to the above-mentioned themes, Mr. Graham expressed significant challenges for patients with asthma and diabetes. There is a large patient population that cannot afford the medications necessary to manage these diseases and, as such, patients suffer the results of uncontrolled diseases. He further suggested that chronic disease is generally an issue in his largely aging population. The obesity epidemic in the community is a significant contributor to these issues.

Ms. Bolt further acknowledged the issues related to physician access for the senior population with which she works. Seniors in Geauga County most often have adult children who live out of town and are unable to care for their aging parents. These seniors lack transportation to regularly visit physicians and have gaps in health literacy – there is a significant need for navigators to help them manage the health care system.

Mr. Adams highlighted some additional challenges he sees in his patient population. These include significant problems related to opiate/drug addiction and substance abuse. His organization is also seeing the aftermath of the 2012 shooting at Chardon High School – many individuals are still in care for mental health issues that have resulted since this event.

Demographic, economic and health indicator trends identified through these interviews largely depend on an increase in need and decrease in available services. Interviewees agreed that there has been a significant increase in recent years of people with chronic diseases, mental health issues and substance abuse issues. In Geauga County, the population is growing, particularly the senior population. Currently more than 26% of the Geauga County population is seniors. By 2020, seniors will comprise 30% of the county's population. The needs of this population are unique – their income is going down, they don't necessarily have caregivers who can help them at home or to navigate the health care system, and in Geauga County, there is a lack of senior housing.

There is also a growing shortage of mental health services in Northeast Ohio, particularly with regard to inpatient psych hospital beds. There is also a shortage of outpatient detox options for the increases substance abuse population.

Interviewees agreed that residents are often forced to leave the local community to seek out certain health care services. There is a shortage of specialists (both those that accept Medicaid and those that accept traditional insurance), particularly for specialties like diabetes, cardiovascular disease and HIV. There is also a shortage of available primary care physicians. While there are a number of PCPs in the region, there are significant waiting lists in order to schedule a visit. As such, acute health needs to receive responses and individuals are forced to go to the emergency room for primary care.

## 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, 2015 (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, 2014
  - 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
  - Community Commons, 2015

## Information Gaps

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

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

As illustrated in [Figure 2: Market Area Population Size Trends](#), Lake County, the largest of the three counties which contain the bulk of UH Geauga Medical Center's market area, saw a very stable population size in the first five years of this decade; it saw only a 0.3% decrease in overall population.

Ashtabula County's total population decreased by 2.2% from 2010 to 2014. Geauga County, in contrast, saw a total population increase of 0.9% from 2010 to 2014.

[Table 4: Demographic Trends in Geauga, Ashtabula and Lake Counties: By Gender, Age and Race](#) shows that the basic demographic composition of all three counties remained essentially unchanged from 2010 to 2014. All three counties are majority White, with racial minorities comprising no more than 7.1% of the total population of any of the three counties.

The largest and most noteworthy change was the aging of the population: the proportion of senior citizens (ages 65 and older) increased by 1.8 percentage points from 2010 to 2013 in Geauga County, and to a lesser degree in Ashtabula (+0.9%) and Lake (+1.2%) counties.

Household economic information is only available through 2013 and is shown in [Table 5: Economic Trends in Geauga, Ashtabula and Lake Counties: Income and Poverty](#). During that time period, the number of households was stable in Geauga County from 2010 to 2013, but decreased slightly (-0.7%) in Lake County. Ashtabula County saw an increase (+1.2%) in the number of households.

In general, economic conditions for households in Ashtabula and Lake counties worsened from 2010 to 2013; the opposite was true for Geauga County households, on the whole.

The average (median) income decreased in Ashtabula and Lake counties from 2010 to 2013, but more severely in Ashtabula County (12.1%) than in Lake County (5.3%). The mean income decreased by 9.3% in Ashtabula County and 4.4% in Lake County during that time period. In contrast, the median income in Geauga County increased by 2.3%, but the mean income decreased by 1.7%.

As the population aged in both counties, the proportion of households with Social Security increased (2.7% in Ashtabula County and 2.1% in Lake County). In both counties, about one-third of households receive some form of Social Security benefit. From 2010 to 2013, the mean

Social Security income decreased by 2.4% in Ashtabula County, but the mean retirement income increased by 10.2% during that same time period. In Lake County, the mean Social Security income decreased by 0.4% and the mean retirement income also decreased, by 3.6%, during that time period.

In Ashtabula County, there were fewer households receiving cash public assistance income in 2013 compared to 2010 (-1.0%), but that proportion was very small in both years (2.3% and 3.3%, respectively). Likewise, in Lake County the proportion of households receiving cash assistance was small in both 2010 (2.0%) and 2013 (1.8%). The proportion of households receiving cash assistance almost doubled from 0.8% to 1.5% in Geauga County from 2010 to 2013, but that 2013 proportion was still the lowest among the three counties in 2013.

In 2013, one in five households in Ashtabula County received Food Stamp/SNAP benefits (an increase of 3.5% from 2010 levels). In Lake County, not quite 1 in 10 households received Food Stamp/SNAP benefits in 2013, but more households (an increase of 2.7%) received benefits in 2013 compared to 2010. Far fewer households in Geauga County received Food Stamps/SNAP benefits in 2013 (5.5%), compared to Ashtabula and Lake counties, but that was an increase of 0.6 percentage points from Geauga County's 2010 levels (4.9%).

Ashtabula County, for the most part, shows an increase in the proportion of residents who are economically vulnerable, shown in [Table 6: Most Economically Vulnerable Geauga County, Ashtabula County and Lake County Residents](#). Lake County is relatively stable on these measures, overall. Geauga County, in contrast, shows an overall reduction in the proportion of residents who are economically vulnerable.

The proportion of Ashtabula County households living below the poverty line increased by 3.1% (from 12.0% to 15.1%) from 2010 to 2013. In 2013, one in four households in Ashtabula County with children under age 18 lived below the poverty line. More than one-third (38.9%) of Ashtabula County families with children under age 5 (but no older children) lived under the poverty line in 2013. Single mothers in Ashtabula County with only young children (under age 5) are almost all living under the poverty line (84.7%) and that is an increase from 2010 levels (69.8%). To summarize, one in five residents of Ashtabula County lived under the poverty line in 2013 (19.7%, an increase from 15.9% in 2010).

Households in Lake County show a different picture. The percent of households living under the poverty line increased by only 0.3% from 2010 to 2013. Furthermore, 6.6% of Lake County households were under the poverty line in 2013 compared to 15.1% in Ashtabula County.

Geauga County, again, shows yet a different picture: the proportion of families under the poverty line in 2013 was 0.2% lower than that in 2010, and the proportion of families under the poverty line was lower in Geauga County in both years compared to Lake and Ashtabula counties.

All three counties showed an increase in the proportion of those ages 65 and older who are living under the poverty line (a 1.2% increase in Geauga County, a 2.0% increase in Ashtabula County and a 2.4% increase in Lake County). The proportion of seniors living beneath the poverty line was highest in Ashtabula County (10.6%) and lowest in Geauga County (5.7%) in 2013.

Perhaps most concerning in both Ashtabula and Lake counties is the increase in poverty rates among mothers of young children from 2010 to 2013. In Ashtabula and Lake counties, households headed by females in which young children are present (and no older children) were more likely to be living under the poverty line in 2013 than they were

in 2010. Almost all of these families were living under the poverty line in 2013 in Ashtabula County (84.7%) and half of these families in Lake County (48.6%) were living under the poverty line during that same year. The proportion of these families living in poverty was 15 percentage points higher in 2013 than in 2010 for both Ashtabula and Lake counties. Geauga County showed the reverse trend: proportionally far fewer families with small children are living under the poverty line in 2013 (15%) than in 2010 (44.2%).

The proportion of residents of all three counties who have health insurance coverage was high in both 2010 and 2013 (minimum of 85.7%). However, during that time period, fewer residents had commercial health insurance in all three counties, with the largest proportional drop being in Geauga County (-5.4%).

Finally, the unemployment rate in Ashtabula County is the 28th highest in Ohio and was 5.6% in April 2015. Lake County had a slightly lower unemployment rate (4.6%), putting that county's unemployment rate as the 48th highest out of Ohio's 88 counties. The lowest unemployment rate for these three counties was Geauga County (4.4%, or 57th highest in Ohio). (Source: U.S. Bureau of Labor Statistics, 2015)

FIGURE 2: MARKET AREA POPULATION SIZE TRENDS  
 GEAUGA COUNTY, LAKE COUNTY AND ASHTABULA COUNTY POPULATION TRENDS

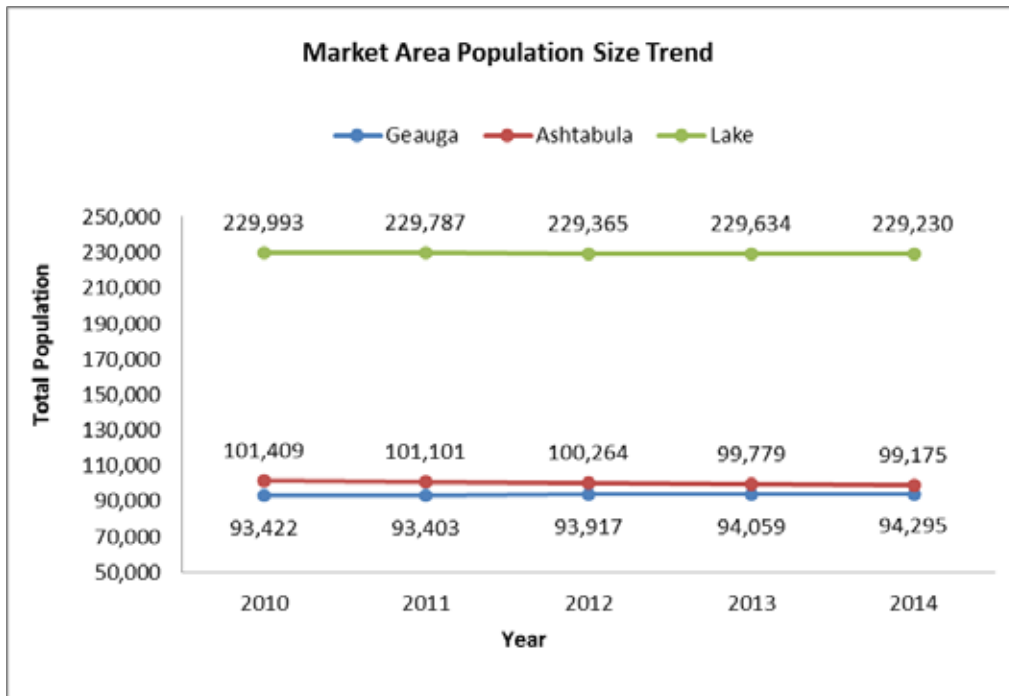


TABLE 4: DEMOGRAPHIC TRENDS IN GEAUGA, ASHTABULA AND LAKE COUNTIES: BY GENDER, AGE AND RACE

	Geauga County			Ashtabula County			Lake County		
	2010	2013	Percent Change	2010	2013	Percent Change	2010	2013	Percent Change
Total Population	93,422	94,059	+0.7%	101,409	99,779	-1.6%	229,993	229,634	-0.2%
<b>By Gender</b>									
Males	49.3%	48.9%	-0.4%	49.6%	50.2%	+0.6%	48.7%	48.9%	+0.2%
Females	50.7%	51.1%	+0.4%	50.4%	49.8%	-0.6%	51.3%	51.1%	-0.2%
<b>By Age Group</b>									
0 – 19	28.4%	27.4%	-1.0%	26.2%	25.1%	-1.1%	24.6%	23.7%	-0.9%
20 – 44	24.9%	24.2%	-0.7%	29.6%	29.2%	-0.4%	29.6%	29.1%	-0.5%
45 – 64	31.4%	31.4%	0.0%	28.6%	29.1%	+0.5%	29.8%	30.0%	+0.2%
65+	15.0%	16.8%	+1.8%	15.4%	16.3%	+0.9%	15.8%	17.0%	+1.2%
<b>By Race</b>									
White	97.2%	96.9%	-0.3%	93.1%	93.4%	+0.3%	93.5%	92.9%	-0.6%
Black or African-American	1.0%	1.4%	+0.4%	3.8%	3.5%	-0.3%	3.1%	3.7%	+0.6%
American Indian and Alaska Native	0.1%	0.0%	-0.1%	0.1%	0.2%	+0.1%	0.1%	0.1%	0.0%
Asian	0.6%	0.6%	0.0%	0.1%	0.5%	+0.4%	1.2%	1.2%	0.0%
Native Hawaiian and Other Pacific Islander	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Some other race	0.1%	0.1%	0.0%	0.4%	0.3%	-0.1%	0.6%	0.5%	-0.1%



TABLE 5: ECONOMIC TRENDS IN GEAUGA, ASHTABULA AND LAKE COUNTIES: INCOME AND POVERTY

	Geauga County			Ashtabula County			Lake County		
	2010	2013	Percent Change	2010	2013	Percent Change	2010	2013	Percent Change
<b>Total Households</b>	534,653	532,702	-0.4%	222,330	219,214	-1.4%	61,912	60,323	-2.6%
Less than \$10,000	3.8%	3.9%	0.1%	8.2%	10.2%	2.0%	4.5%	4.9%	0.4%
\$10,000 to \$14,999	2.9%	3.1%	0.2%	6.0%	8.8%	2.8%	3.7%	4.7%	1.0%
\$15,000 to \$24,999	8.2%	8.8%	0.6%	14.1%	13.5%	-0.6%	9.6%	10.8%	1.2%
\$25,000 to \$34,999	7.9%	7.7%	-0.2%	12.1%	13.3%	1.2%	10.4%	11.2%	0.8%
\$35,000 to \$49,999	13.6%	10.6%	-3.0%	14.8%	15.5%	0.7%	14.5%	14.3%	-0.2%
\$50,000 to \$74,999	19.5%	19.3%	-0.2%	21.0%	18.7%	-2.3%	20.7%	19.0%	-1.7%
\$75,000 to \$99,999	13.2%	13.9%	0.7%	12.4%	9.8%	-2.6%	15.2%	14.0%	-1.2%
\$100,000 to \$149,999	16.3%	17.8%	1.5%	8.9%	7.9%	-1.0%	13.7%	14.2%	0.5%
\$150,000 to \$199,999	6.8%	7.1%	0.3%	1.4%	1.7%	0.3%	4.7%	3.9%	-0.8%
\$200,000 or more	7.7%	7.7%	0.0%	1.1%	0.6%	-0.5%	3.0%	2.9%	-0.1%
Median household income (dollars)	\$66,565	\$68,107	2.3%	\$44,376	\$39,012	-12.1%	\$57,875	\$54,830	-5.3%
Mean household income (dollars)	\$93,619	\$91,988	-1.7%	\$53,717	\$48,744	-9.3%	\$72,539	\$69,336	-4.4%
Percent of households with Social Security	27.9%	32.0%	4.1%	33.6%	36.3%	2.7%	30.1%	32.2%	2.1%
Mean Social Security income (dollars)	\$19,243	\$19,857	3.2%	\$16,903	\$16,503	-2.4%	\$17,902	\$17,839	-0.4%
Percent with retirement income	17.7%	19.6%	1.9%	20.6%	20.9%	0.3%	21.5%	21.4%	-0.1%
Mean retirement income (dollars)	\$26,564	\$25,132	-5.4%	\$17,438	\$19,211	10.2%	\$21,104	\$20,343	-3.6%
Percent with Supplemental Security income	2.4%	3.4%	1.0%	4.9%	7.1%	2.2%	2.3%	3.7%	1.4%
Mean Supplemental Security income (dollars)	\$9,282	\$11,396	22.8%	\$9,134	\$8,331	-8.8%	\$10,344	\$9,204	-11.0%
Percent with cash public assistance income	0.8%	1.5%	0.7%	3.3%	2.3%	-1.0%	2.0%	1.8%	-0.2%
Mean cash public assistance income (dollars)	\$3,878	\$6,967	79.7%	\$2,766	\$3,162	14.3%	\$3,303	\$3,248	-1.7%
With Food Stamp/SNAP benefits in the past 12 months	4.9%	5.5%	0.6%	16.6%	20.1%	3.5%	6.6%	9.3%	2.7%

Source: U.S. Decennial Census, American Community Survey projections to 2013

TABLE 6: MOST ECONOMICALLY VULNERABLE GEUGA COUNTY, ASHTABULA COUNTY AND LAKE COUNTY RESIDENTS

	Geauga County			Ashtabula County			Lake County		
	2010*	2013*	Percent Change	2010*	2013*	Percent Change	2010*	2013*	Percent Change
Percent of families under the poverty line	5.2%	5.0%	-0.2%	12.0%	15.1%	+3.1%	6.3%	6.6%	+0.3%
Percent of households with related children under 18 years under the poverty line	8.5%	8.3%	-0.2%	21.0%	25.5%	+4.5%	11.2%	11.8%	+0.6%
Percent of households with related children under 5 years (no older children) under the poverty line	13.3%	3.0%	-10.3%	29.3%	38.9%	+9.6%	10.9%	13.4%	+2.5%
Percent of married couple families under the poverty line	3.5%	2.1%	-1.4%	5.9%	7.3%	+1.4%	2.6%	2.7%	+0.1%
Percent of married couple families with related children under 18 years under the poverty line	5.0%	3.2%	-1.8%	9.4%	11.5%	+2.1%	3.8%	4.4%	+0.6%
Percent of married couple families with related children under 5 years (no older children) under the poverty line	3.8%	1.4%	-2.4%	5.0%	17.1%	+12.1%	1.9%	2.0%	+0.1%
Percent of families with female householder, no husband present, under the poverty line	16.7%	24.6%	+7.9%	37.1%	40.3%	+3.2%	21.4%	22.1%	+0.7%
Percent of families with female householder, no husband present, with related children under 18 years, under the poverty line	23.7%	34.9%	+11.2%	54.2%	52.7%	-1.5%	33.5%	32.7%	-0.8%
Percent of families with female householder, no husband present, with related children under 5 years (no older children), under the poverty line	44.2%	15.0%	-29.2%	69.8%	84.7%	+14.9%	32.9%	48.6%	+15.7%
Percent of all people in county under the poverty line:	8.0%	8.1%	+0.1%	15.9%	19.7%	+3.8%	8.6%	9.5%	+0.9%
Of those under 18 years	12.2%	12.1%	-0.1%	22.9%	27.8%	+4.9%	13.3%	12.6%	-0.7%
Of those with related children under 18 years	11.9%	11.8%	-0.1%	22.5%	27.1%	+4.6%	13.0%	12.3%	-0.7%
Of those with related children under 5 years	16.9%	11.9%	-5.0%	31.0%	35.2%	+4.2%	14.3%	14.2%	-0.1%
Of those with related children 5 to 17 years	10.4%	11.7%	+1.3%	19.5%	24.2%	+4.7%	12.6%	11.7%	-0.9%

	Geauga County			Ashtabula County			Lake County		
	2010	2013	Percent Change	2010	2013	Percent Change	2010	2013	Percent Change
<b>Living under poverty line, by age:</b>									
Of those 18 years and over	6.5%	6.7%	+0.2%	13.7%	17.2%	+3.5%	7.2%	8.6%	+1.4%
18 to 64 years	7.0%	7.0%	0.0%	15.0%	19.0%	+4.0%	7.8%	9.1%	+1.3%
65 years and over	4.5%	5.7%	+1.2%	8.6%	10.6%	+2.0%	4.7%	7.1%	+2.4%
Percent with health insurance coverage	88.7%	86.5%	-2.2%	87.0%	85.7%	-1.3%	90.2%	90.5%	+0.3%
Percent with private health insurance	80.7%	75.3%	-5.4%	64.8%	61.5%	-3.3%	78.7%	76.2%	-2.5%
Percent with public coverage	20.5%	24.4%	+3.9%	36.2%	37.2%	+1.0%	25.3%	27.6%	+2.3%
Percent with no health insurance coverage	11.3%	13.5%	+2.2%	13.0%	14.3%	+1.3%	9.8%	9.5%	-0.3%

Source: U.S. Decennial Census, American Community Survey projections to 2013

## D. UH Geauga Medical Center Patients Served

Shown in [Table 7: Hospitalizations, UH Geauga Medical Center Market Area Residents](#), for all residents within UH Geauga Medical Center's market footprint, the number of discharges from any Ohio (or near-Ohio) hospital, including UH Geauga Medical Center, has decreased by 5.0% (not shown) from 2011 to 2013. The population within UH Geauga Medical Center's market area also decreased during that time period, but not nearly as much (less than 1%) as the hospital discharge rates did.

Between 2011 and 2013, the number of discharges for UH Geauga Medical Center decreased by 7.2% within the primary market area and 8.3% in the secondary market area, thus 7.6% overall. The hospitalization levels for the entire area (regardless of which hospitals cared for patients) decreased by 4.3% overall during that time period.

Of all discharged patients in 2013, 41.8% were Medicare patients, 18.0% were Medicaid patients and 27.2% were commercially insured patients, illustrated in [Table 8: UH Geauga Medical Center, 2013 Discharges, by Payer](#). Fewer than 5% (4.4%) were self-pay patients.

There were differences in payer mix by market area for UH Geauga Medical Center, and among the various

municipalities within the market areas. A majority of patients from Chardon (57.1%), Newbury (59.9%), Chesterland (57.6%), Novelty (62.4%), Thompson (58.3%), Rock Creek (53.3%) and Hiram (55.0%) were Medicare patients.

The communities from which more than one-fourth of discharged patients had Medicaid were: Geneva (26.5%), Windsor (25.9%), Madison (26.1%), Perry (34.4%), however, note that only 32 discharged patients were from Perry, and North Bloomfield (28.8%). Overall, 18.0% of UH Geauga Medical Center's discharged patients had Medicaid coverage.

Middlefield was distinctive in its large proportion of residents who were uninsured and paid for care out-of-pocket (15.0%).

In 2013, the median age of UH Geauga Medical Center's primary market discharged patients was 64, shown in [Figure 3: Age of UH Geauga Medical Center's Discharged Patients, 2013, by Market](#). The median age for patients discharged from the hospital's secondary market was slightly younger at 62 years of age.

UH Geauga Medical Center's patient ages in 2013 fell fairly evenly across all adult age ranges.

TABLE 7: HOSPITALIZATIONS, UH GEAUGA MEDICAL CENTER MARKET AREA RESIDENTS 2011 TO 2013

		UH Geauga Medical Center's Primary Market	UH Geauga Medical Center's Secondary Market	Total UH Geauga Medical Center Market Area Residents
2011	Discharge from Other Hospital	4,287	2,568	6,855
	Discharge from UH Geauga Medical Center	10,650	19,364	30,014
	<b>Total Discharges:</b>	<b>14,937</b>	<b>21,932</b>	<b>36,869</b>
2012	Discharge from Other Hospital	4,262	2,438	6,700
	Discharge from UH Geauga Medical Center	10,904	19,301	30,205
	<b>Total Discharges:</b>	<b>15,166</b>	<b>21,739</b>	<b>36,905</b>
2013	Discharge from Other Hospital	3,977	2,354	6,331
	Discharge from UH Geauga Medical Center	10,491	18,221	28,712
	<b>Total Discharges:</b>	<b>14,468</b>	<b>20,575</b>	<b>35,043</b>
Change in Discharges from Other Hospitals, 2011 to 2013		-1.5%	-5.9%	-4.3%
Change in Discharges from UH Geauga Medical Center, 2011 to 2013.		-7.2%	-8.3%	-7.6%

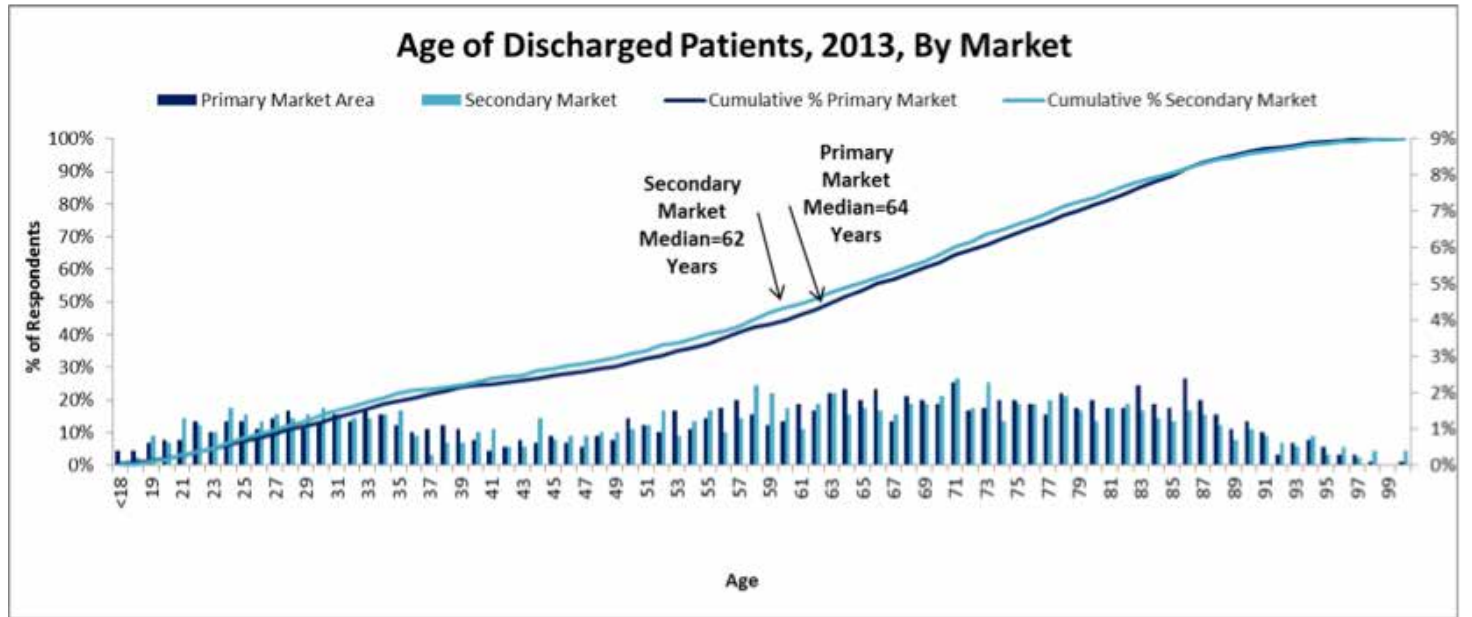
Source: Ohio Hospital Association discharge data

TABLE 8: UH GEAUGA MEDICAL CENTER, 2013 DISCHARGES, BY PAYER

	Total Discharges	Percent of Total Discharges	Percent in ZIP Code By Payer				
			Medicare	Medicaid	Commercial	Other	Self-Pay
<b>Primary Market Area</b>							
Burton (44021)	420	5.1%	45.2%	9.5%	24.8%	15.5%	5.0%
Bainbridge (44023)	260	3.1%	37.3%	8.5%	45.8%	5.8%	2.7%
Chardon (44024)	1,172	14.1%	57.1%	10.2%	24.4%	5.4%	2.9%
Middlefield (44062)	1,036	12.5%	33.7%	14.0%	16.3%	21.0%	15.0%
Newbury (44065)	272	3.3%	59.9%	14.7%	17.6%	4.8%	2.9%
Orwell (44076)	468	5.6%	48.9%	21.6%	15.8%	8.1%	5.6%
Painesville (44077)	349	4.2%	31.5%	21.8%	37.5%	8.0%	1.1%
Subtotal:	3,977	48.0%	45.4%	13.7%	23.4%	11.1%	6.4%
<b>Secondary Market Area</b>							
Chesterland (44026)	172	2.1%	57.6%	5.2%	35.5%	1.7%	0.0%
Huntsburg (44046)	125	1.5%	48.8%	11.2%	27.2%	9.6%	3.2%
Montville (44064)	120	1.4%	48.3%	5.0%	35.8%	9.2%	1.7%
Novelty (44072)	93	1.1%	62.4%	9.7%	24.7%	3.2%	0.0%
Thompson (44086)	108	1.3%	58.3%	7.4%	26.9%	3.7%	3.7%
Geneva (44041)	223	2.7%	43.5%	26.5%	24.7%	3.1%	2.2%
Rock Creek (44084)	75	0.9%	53.3%	14.7%	28.0%	2.7%	1.3%
Rome (44085)	168	2.0%	38.1%	22.6%	32.1%	6.0%	1.2%
Windsor (44099)	135	1.6%	28.1%	25.9%	22.2%	9.6%	14.1%
Madison (44057)	134	1.6%	29.1%	26.1%	39.6%	4.5%	0.7%
Mentor (44060)	222	2.7%	28.4%	17.1%	46.8%	6.3%	1.4%
Perry (44081)	32	0.4%	25.0%	34.4%	28.1%	12.5%	0.0%
Bristolville (44402)	18	0.2%	27.8%	0%	27.8%	33.3%	11.1%
North Bloomfield (44450)	52	0.6%	30.8%	28.8%	13.5%	19.2%	7.7%
West Farmington (44491)	137	1.7%	33.6%	15.3%	22.6%	16.8%	11.7%
Garrettsville (44231)	201	2.4%	37.3%	17.4%	31.3%	10.0%	4.0%
Hiram (44234)	129	1.6%	55.0%	10.9%	24.0%	4.7%	5.4%
Chagrin Falls (44022)	100	1.2%	48.0%	2.0%	40.0%	10.0%	0.0%
Subtotal:	2,354	28.4%	42.4%	15.5%	31.4%	7.2%	3.5%
Out of Market	1,961	23.6%	33.8%	29.6%	29.8%	5.4%	1.4%
<b>Total</b>	<b>8,292</b>	<b>100.0%</b>	<b>41.8%</b>	<b>18.0%</b>	<b>27.2%</b>	<b>8.6%</b>	<b>4.4%</b>

Source: Ohio Hospital Association discharge data

FIGURE 3: AGE OF UH GEUGA MEDICAL CENTER'S DISCHARGED PATIENTS, 2013, BY MARKET  
HEALTHY NEWBORNS REMOVED FROM ANALYSIS



Source: Ohio Hospital Association discharge data

## E. Ambulatory Care Sensitive Discharges

### Adults

Using discharge data from UH Geauga Medical Center, which includes the reason for patient admission into the hospital, “ambulatory care sensitive discharges” are 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: UH Geauga Medical Center, Primary and Secondary Diagnoses of Adult (Age 19+) ACS Discharges in 2013 shows the number of adult discharges for UH Geauga Medical Center in 2013 and the percent that were ACS cases. For all discharges, there are both primary and nonprimary diagnoses (“secondary” diagnoses), and both are shown in the table below. Patients can have up to 14 different secondary diagnoses.

For UH Geauga Medical Center, 16.8% of discharges were ACS discharges of residents within the primary and secondary market areas combined.

Of adults discharged from UH Geauga Medical Center in 2013, 16.8% had an ACS primary diagnosis. Congestive heart failure was the most common ACS diagnosis (3.9%); however, 1 in 4 (23.0%) discharged patients had that as a secondary diagnosis.

Chronic obstructive pulmonary disease (COPD) was the primary reason for hospitalization for 2.9% of discharges, the second most common ACS diagnosis. Almost half (43.8%) of discharged patients in 2013 were hypertensive and 20.2% were diabetic.

ACS conditions (as a primary diagnosis) were more common among UH Geauga Medical Center patients ages 65 and older in 2013 (23.1%), shown in Table 10: UH Geauga Medical Center, Most Common Primary Diagnoses of Adult (Age 18+) ACS Discharges in 2013, by Age Group. All but two (COPD and cellulitis) of the five more common specific ACS conditions were more prevalent among older patients. COPD and cellulitis were the most prevalent ACS conditions among patients ages 40 to 64.

The analysis of ACS cases among discharged patients for UH Geauga Medical Center in 2013 is useful to point out the proportion of discharged patients who may have avoided hospitalization if they had increased access to primary medical care. Another useful review of ACS cases is that for Geauga, Lake and Ashtabula counties, along with comparisons to nearby counties. UH Geauga Medical Center’s market area covers only 28.2% of Ashtabula County’s population, but 88.4% of Geauga County’s population and 62.7% of Lake County’s population. This analysis will highlight where lack of access to primary care may be a problem at the county level.

Table 11: UH Geauga Medical Center Market Areas Versus Contiguous Counties, Primary Diagnosis of Adult (Age 18+) ACS Discharges in 2013 displays the number of adult discharges with an ACS condition as a primary diagnosis for UH Geauga Medical Center in 2013 compared to Ashtabula, Lake, and Geauga counties (hospitalizations for UH Geauga Medical Center and other hospitals, combined) along with Trumbull and Cuyahoga counties.

Of the five compared counties, Ashtabula County shows the largest proportion of ACS cases (19.2%) and Geauga County shows the lowest (15.8%). Lake County’s level of ACS discharges was moderate among these five counties (16.8%). UH Geauga Medical Center’s proportion of ACS cases was equal to or lower than all of the comparison counties, except for Geauga County.

ACS diagnoses (of any type) were more common among Medicare patients (22.6%) than those with different types of health care coverage or no coverage. Shown in Table 12: UH Geauga Medical Center, Primary Diagnosis of Adult (Age 18+) ACS Versus Non-ACS Discharges in 2013, by Primary Payer, Congestive heart failure (CHF) was the most common ACS condition among Medicare patients. COPD was the most common ACS condition among Medicaid patients, although the difference compared to other common ACS conditions was very small. Cellulitis was the most prevalent ACS condition among those with commercial insurance, self-pay patients, or those with “other” types of health care coverage.



TABLE 9: UH GEAUGA MEDICAL CENTER, PRIMARY AND SECONDARY DIAGNOSES OF ADULT (AGE 19+) ACS DISCHARGES IN 2013

**Adults Only (5,453 cases)**

	Number of Discharges	Primary Diagnosis	Number of Discharges	Secondary Diagnosis
No ACS Condition	4,538	83.2%		
ACS Condition Was Diagnosed	915	16.8%		
Congestive Heart Failure (CHF)	212	3.9%	1,253	23.0%
Chronic Obstructive Pulmonary Disease (COPD)	157	2.9%	843	15.5%
Bacterial Pneumonia	148	2.7%	338	6.2%
Cellulitis	138	2.5%	180	3.3%
Kidney/Urinary Infections	97	1.8%	345	6.3%
Dehydration/Volume Depletion	40	0.7%	516	9.5%
Diabetes	37	0.7%	1,100	20.2%
Asthma	20	0.4%	328	6.0%
Gastroenteritis	15	0.3%	41	0.8%
Epilepsy	14	0.3%	161	3.0%
Angina	11	0.2%	103	1.9%
Hypertension	10	0.2%	2,389	43.8%
Iron Deficiency Anemia	6	0.1%	100	1.8%
Convulsions	4	0.07%	28	0.5%
Severe ENT Infections	2	0.04%	34	0.6%
Hypoglycemia	2	0.04%	9	0.2%
Dental Conditions	1	0.02%	20	0.4%
Nutritional Deficiencies	1	0.02%	51	0.9%
Pelvic Inflammatory Disease	0	0.0%	10	0.2%

Source: Ohio Hospital Association discharge data.

Source: Definition of ACS conditions: Billings J, Zeitel L, Lukomnik J, Carey TS, Blank AE, Newman L. Impact of socioeconomic status on hospital use in New York City. *Health Affairs (Millwood)* 1993; 12(1):172-173

TABLE 10: UH GEAUGA MEDICAL CENTER, MOST COMMON PRIMARY DIAGNOSES OF ADULT (AGE 18+) ACS DISCHARGES IN 2013, BY AGE GROUP

Adults Only (18+)

	< Age 40	Ages 40 to 64	Age 65+
<b>Number of discharges:</b>	<b>1,346</b>	<b>1,624</b>	<b>2,488</b>
No ACS Condition	94.9%	83.3%	76.9%
Congestive Heart Failure (CHF)	0.2%	2.5%	6.8%
Chronic Obstructive Pulmonary Disease (COPD)	0.1%	4.0%	3.6%
Bacterial Pneumonia	0.4%	2.5%	4.1%
Cellulitis	1.6%	3.3%	2.5%
Kidney/Urinary Infections	1.0%	0.7%	2.9%

TABLE 11: UH GEUGA MEDICAL CENTER MARKET AREAS VERSUS CONTIGUOUS COUNTIES, PRIMARY DIAGNOSIS OF ADULT (AGE 18+) ACS DISCHARGES IN 2013

	UH Geauga Medical Center	Ashtabula County	Gauga County	Lake County	Trumbull County	Cuyahoga County	Portage County
<b>Number of Adult Discharges:</b>	<b>5,453</b>	<b>9,807</b>	<b>6,758</b>	<b>21,123</b>	<b>21,317</b>	<b>133,649</b>	<b>15,727</b>
No ACS Condition	83.2%	80.8%	84.3%	83.2%	82.4%	81.3%	82.5%
<b>Specific ACS Conditions:</b>	<b>16.8%</b>	<b>19.2%</b>	<b>15.8%</b>	<b>16.8%</b>	<b>17.6%</b>	<b>18.7%</b>	<b>17.5%</b>
Congestive Heart Failure (CHF)	3.9%	4.1%	3.4%	3.4%	4.2%	3.8%	3.5%
Chronic Obstructive Pulmonary Disease (COPD)	2.9%	3.7%	1.9%	2.5%	2.4%	2.5%	2.6%
Bacterial Pneumonia	2.7%	3.8%	2.4%	2.9%	2.9%	2.6%	3.1%
Cellulitis	2.5%	2.4%	2.3%	1.9%	1.8%	2.1%	2.2%
Kidney/Urinary Infections	1.8%	1.8%	1.9%	2.0%	1.3%	1.9%	2.0%
Diabetes	0.7%	0.8%	0.8%	1.1%	1.3%	1.4%	1.2%
Dehydration/Volume Depletion	0.7%	0.5%	0.6%	0.5%	0.6%	0.5%	0.7%
Asthma	0.4%	0.6%	0.7%	0.8%	1.3%	1.7%	0.7%
Gastroenteritis	0.3%	0.3%	0.2%	0.3%	0.4%	0.3%	0.3%
Epilepsy	0.3%	0.4%	0.5%	0.4%	0.6%	0.7%	0.4%
Hypertension	0.2%	0.2%	0.2%	0.3%	0.2%	0.4%	0.3%
Angina	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%
Severe ENT Infections	0.04%	0.02%	0.1%	0.1%	0.1%	0.1%	0.04%
Hypoglycemia	0.04%	0.008%	0.02%	0.02%	0.01%	0.02%	0.03%
Convulsions	0.04%	0.2%	0.2%	0.3%	0.2%	0.2%	0.2%
Immunization-Related and Preventable Conditions	0.02%	0.0%	0.01%	0.004%	0.004%	0.001%	0.0%
Nutritional Deficiencies	0.02%	0.02%	0.01%	0.01%	0.02%	0.02%	0.04%
Dental Conditions	0.02%	0.04%	0.02%	0.1%	0.0%	0.1%	0.1%
Iron Deficiency Anemia	0.1%	0.1%	0.2%	0.2%	0.1%	0.2%	0.1%
Acute Bronchitis (only included if a secondary diagnosis of COPD is also present)	0.0% %	0.01%	0.01%	0.01%	0.00%	0.00%	0.01%
Pelvic Inflammatory Disease	0%	0.1%	0.02%	0.02%	0.1%	0.1%	0.04%
Other Tuberculosis	0.0%	0.0%	0.0%	0.0%	0.004%	0.004%	0.0%

Source: Ohio Hospital Association discharge data.  
 Source: Definition of ACS conditions: Billings et al 1993.

TABLE 12: UH GEAUGA MEDICAL CENTER, PRIMARY DIAGNOSIS OF ADULT (AGE 18+) ACS VERSUS NON-ACS DISCHARGES IN 2013, BY PRIMARY PAYER

More Common ACS Conditions

	Medicare	Medicaid	Commercial	Other	Self-Pay
<b>Number of Discharges:</b>	<b>2,804</b>	<b>628</b>	<b>1,326</b>	<b>454</b>	<b>246</b>
No ACS Primary Diagnosis	77.4%	91.6%	90.0%	87.9%	83.7%
<b>Specific ACS Conditions:</b>	<b>22.6%</b>	<b>8.4%</b>	<b>10.0%</b>	<b>12.1%</b>	<b>16.3%</b>
Congestive Heart Failure (CHF)	6.4%	1.0%	0.9%	2.0%	2.0%
Chronic Obstructive Pulmonary Disease (COPD)	4.1%	1.6%	1.4%	1.8%	2.4%
Bacterial Pneumonia	3.9%	1.1%	1.7%	1.5%	0.8%
Kidney/Urinary Infections	2.6%	1.1%	0.7%	1.3%	1.2%
Cellulitis	2.5%	1.1%	2.3%	3.1%	6.1%

Source: Ohio Hospital Association discharge data.  
 Source: Definition of ACS conditions: Billings et al 1993.

## UH Geauga Medical Center Discharges

This section again examines UH Geauga Medical Center's discharge data from 2013. These data provide primary and secondary diagnosis information for each patient discharged in 2013. This data 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.

Table 13: UH Geauga Medical Center, Primary and Secondary Diagnosis of Adults (Age 18+) Discharged in 2013 shows the number and percentage of discharges based on the major diagnostic category of adult patients' primary diagnoses. There are over 17,000 different medical diagnostic codes. For specific diagnoses, only those that were relatively common are shown.

In 2013, the most common diagnostic category was circulatory system diseases (14.3% of primary diagnoses). Topping the list of specific primary diagnoses in that category was heart failure. In addition, a great number of patients had a secondary diagnosis of essential hypertension (43.9%). Approximately half of all UH Geauga Medical Center discharges had a circulatory system

disease as a secondary diagnosis (heart failure, essential hypertension, etc.) in 2013 (not shown).

In 2013, the second most common primary diagnostic category (not related to childbirth) was diseases of the respiratory system (8.9%). In particular, pneumonia (2.7%) and chronic bronchitis (2.8%) were very common primary diagnoses in that category.

Diseases of the digestive system were the third most common category of primary diagnoses, afflicting 8.5% of patient discharges. No specific diagnosis dominated in this category; however one in four discharges had a secondary diagnosis of disease of the esophagus.

While endocrine and metabolic disorders were rarely primary diagnoses (2.7%), they were very common secondary diagnoses, especially diabetes (25.5%) and lipid metabolism diseases (39.0%). While few discharged patients in 2013 had a mental illness as a primary diagnosis (5.9%), mental illnesses were very common secondary diagnoses, especially nondependent drug abuse (22.5%) and/or depression (18.3%).

TABLE 13: UH GEAUGA MEDICAL CENTER, PRIMARY AND SECONDARY DIAGNOSIS OF ADULTS (AGE 18+) DISCHARGED IN 2013

	Primary Diagnosis		Secondary Diagnoses	
	Number of Cases With Diagnosis*	Percent of All Adult Cases*	Number of Cases With Diagnosis	Percent of All Adult Cases**
<b>Diseases of the circulatory system</b>	<b>906</b>	<b>14.3%</b>		
Most common specific diagnoses in category:				
Heart failure	208	3.8%	1,238	22.8%
Cardiac dysrhythmias	194	3.5%	1,620	29.9%
Acute myocardial infarction	141	2.6%	137	2.5%
Other chronic ischemic heart disease	5	0.6%	1,424	26.3%
Essential hypertension			2,377	43.9%
Hypertensive renal disease			650	12.0%
Old myocardial infarction			486	9.0%
Other endocardial disease			425	7.8%
<b>Diseases of the respiratory system</b>	<b>566</b>	<b>8.9%</b>		
Most common specific diagnoses in category:				
Chronic bronchitis	154	2.8%	274	5.1%
Pneumonia, organism unspecified	147	2.7%	337	6.2%
Other lung diseases	102	1.9%	359	6.6%
Chronic airway obstruction, not elsewhere classified			553	10.2%
Asthma			329	6.1%
<b>Diseases of the digestive system</b>	<b>535</b>	<b>8.5%</b>		
Most common specific diagnoses in category:				
Diverticula of intestine	68	1.2%	225	4.2%
Diseases of esophagus	9	0.2%	1,277	23.6%
<b>Injury and poisoning</b>	<b>428</b>	<b>6.8%</b>		
<b>Diseases of the musculoskeletal system and connective tissue</b>	<b>403</b>	<b>6.4%</b>		
Most common specific diagnoses in category:				
Osteoarthritis et al	296	5.4%	527	9.7%
Back disorder, not elsewhere classified/not otherwise specified			319	5.9%
<b>Mental disorders</b>	<b>371</b>	<b>5.9%</b>		
Most common specific diagnoses in category:				
Affective psychoses	159	2.9%	249	4.6%
Nondependent drug abuse			1,217	22.5%
Neurotic disorders			1,084	20.0%
Depressive disorder, not elsewhere classified			994	18.3%
Organic psychosis conditions (general)			497	9.2%

	Primary Diagnosis		Secondary Diagnoses	
	Number of Cases With Diagnosis*	Percent of All Adult Cases*	Number of Cases With Diagnosis	Percent of All Adult Cases**
<b>Infectious and parasitic diseases</b>	<b>347</b>	<b>5.5%</b>		
Most common specific diagnoses in category:				
Septicemia	298	5.4%	76	1.4%
Bacterial infection in other diseases			265	4.9%
<b>Diseases of the genitourinary system</b>	<b>278</b>	<b>4.4%</b>		
Most common specific diagnoses in category:				
Acute renal failure	93	1.7%	363	6.7%
Other urinary tract disorder	91	1.7%	419	7.7%
Chronic renal failure			407	7.5%
Hyperplasia of prostate			268	4.9%
<b>Endocrine, nutritional and metabolic diseases, and immunity disorders</b>	<b>170</b>	<b>2.7%</b>		
Most common specific diagnoses in category:				
Fluid/electrolyte diseases	72	1.3%	2,036	37.6%
Diabetes mellitus	50	0.9%	1,382	25.5%
Diseases of lipid metabolism			2,114	39.0%
Obesity/hyperalimentation			873	16.1%
Acquired hypothyroidism			849	15.7%
Diseases of mineral metabolism			493	9.1%
<b>Diseases of the skin/subcutaneous tissue</b>	<b>153</b>	<b>2.5%</b>		
Most common specific diagnoses in category:				
Other cellulitis/abscess	130	2.4%	158	2.9%
<b>Symptoms, signs and ill-defined conditions</b>	<b>123</b>	<b>1.9%</b>		
<b>Neoplasms-malignant</b>	<b>95</b>	<b>1.5%</b>		
<b>Diseases of the nervous system</b>	<b>79</b>	<b>1.2%</b>		
Most common specific diagnoses in category:				
Organic sleep disorders			581	10.7%
Central pain			487	9.0%
<b>Diseases of the blood and blood-forming organs</b>	<b>51</b>	<b>0.8%</b>		
Most common specific diagnoses in category:				
Anemia not otherwise classified	27	0.5%	1,324	24.4%
<b>Neoplasms-benign</b>	<b>41</b>	<b>0.6%</b>		
<b>Congenital anomalies</b>	<b>5</b>	<b>0.1%</b>		
<b>Diseases of the sense organs</b>	<b>4</b>	<b>0.1%</b>		
<b>Complications of pregnancy, childbirth and the puerperium</b>	<b>889</b>	<b>14.0%</b>		
Most common specific diagnoses in category:				
Perineal trauma with delivery	268	4.9%		

\*Total includes all diagnoses within this category, not just those shown. \*\*These are duplicated counts; patients may have more than one secondary diagnosis.  
Source: Ohio Hospital Association discharge data.

## F. Market Area Mortality and Morbidity

Table 14: Most Prevalent Causes of Death or Impaired Health – Adults and Table 15: Most Prevalent Morbidity – Adults and Youth show the most prevalent types of mortality and morbidity of chronic diseases and other health-impacting events in the UH Geauga Medical Center market area.

Cancer is the leading cause of death for adults in Geauga, Ashtabula and Lake counties, followed by coronary heart disease. Both of those disease states are more common in Ashtabula County than in Geauga or Lake counties. Strokes, accidents, diabetes and kidney disease combined account for fewer deaths than cancer and/or coronary heart disease deaths; again, all of these were more common in Ashtabula County than in Lake or Geauga counties. Note that annually about 140 per 100,000 Ashtabula County adults are victims of violent crime while violent crime is higher (203 per 100,000 adults) in Lake County. Geauga County has a significantly lower violent crime rate compared to either Ashtabula or Lake counties.

Linked to the most common death rates are common habitual behaviors. Almost one-third of Ashtabula County adults are obese (BMI > 30) and almost one in three are tobacco smokers. Lake County adults are somewhat less likely to be obese (25.9%) and much less likely (20.7%)

to be smokers compared to Ashtabula County adults. The obesity rate in Geauga County (15.3%) is half that in Ashtabula County, and smoking prevalence is lowest in Geauga County compared to both Ashtabula County and – to a lesser degree – Lake County.

Linked to a lower obesity level in Geauga County is a lower prevalence of adult diabetes (5.9%) compared to Ashtabula (8.6%) and Lake counties (9.1%).

However, the prevalence of older adult depression (13.2% to 15.6%), older adult asthma (3.5% to 5.1%), and Alzheimer's disease (11.2% to 12.6%) is similar among the three counties.

The prevalence of teen births is significantly higher in Ashtabula County than in Lake County or Geauga County. Likewise, preterm births happen less frequently in Geauga County than in Ashtabula or Lake counties.

Finally, the CDC also designates Ashtabula County as one with lower-than-average access to primary care providers (32.5 per 100,000 residents). This is supported by the analysis of ambulatory care sensitive discharge cases, which found higher ACS rates in Ashtabula County compared to surrounding counties (and indicative of a potential low access to primary care). This was not true for Lake County or Geauga County.



TABLE 14: MOST PREVALENT CAUSES OF DEATH OR IMPAIRED HEALTH – ADULTS (PER 100,000 ADULTS)

	Geauga County	Ashtabula County	Lake County	U.S. Median, of All Counties
<b>Annual, Per 100,000 adults</b>				
Cancer Deaths	160.6	214.0	189.8	185.0
Coronary Heart Disease Deaths	108.8	171.8	144.3	126.7
Stroke Deaths	35.7	42.7	40.3	46.0
Accidental Deaths (including motor vehicle)	31.6	45.6	32.9	50.8
Motor Vehicle Deaths	9.9	15.8	6.7	19.2
Diabetes Deaths	20.5	31.8	24.3	24.7
Kidney Disease Deaths	8.4	15.6	10.4	17.5
Violent Crime (homicide, rape, assault)	38.4	139.9	203.2	199.2

Source, U.S. Centers for Disease Control and Prevention, 2015

TABLE 15: MOST PREVALENT MORBIDITY – ADULTS AND YOUTH

	Geauga County	Ashtabula County	Lake County	U.S. Median, of All Counties
<b>Adults:</b>				
Obesity	15.3%	29.6%	25.9%	30.4%
Smokers	18.3%	30.3%	20.7%	21.7%
Adult Diabetes	5.9%	8.6%	9.1%	
Older Adult Depression	13.2%	14.9%	15.6%	12.4%
Older Adult Asthma	4.7%	3.5%	5.1%	3.6%
Alzheimer's Disease (among older adults)	11.2%	12.1%	12.6%	10.3%
Preterm Births	9.7%	12.1%	11.2%	12.1%
<b>Youth:</b>				
Teen Births (of females ages 15 to 19)	0.9% of births	4.3% of births	2.1% of births	4.2% of births

Source, U.S. Centers for Disease Control and Prevention, 2015

## G. Primary Analysis of Representative Sample of Market Area Population

The ACS analysis section provided evidence from UH Geauga Medical Center's discharge data that market area residents may lack full access to primary care. To further understand market area health needs, the following section presents the results of a mail survey of market area residents regarding their health and access to health care. A random mail survey of households in Geauga County was conducted in 2011. A total of 404 surveys were completed. Surveys were commissioned by Partnership for a Healthy Geauga and conducted by the Hospital Council of Northwest Ohio to capture a comprehensive picture of Geauga County residents' health status.

Three random surveys of youth (ages 12 to 18) were completed in the three counties that include the majority of UH Geauga Medical Center's market area. Surveys were done in 2014 in Lake County and in 2011 in Ashtabula and Geauga counties. These reports provide results from 827 surveyed youth.

A survey of Geauga County households with children ages 0 to 11 was also conducted in 2011. That survey included 261 households with children ages 0 to 5 and 218 households with children ages 6 to 11.

The Lake County youth survey was commissioned by a partnership of Lake County community organizations with mutual interest in the health of the community and led by the Lake County Health Department. The Ashtabula County youth survey was commissioned by the Ashtabula County Health Needs Assessment Committee. The survey of Geauga County youth and the survey of households with children in Geauga County were commissioned by the Partnership for a Healthy Geauga.

## Population Health Status – Adults

This section describes the self-reported health status of the population within UH Geauga Medical Center's market area. Survey respondents for the data were designated a resident of UH Geauga Medical Center's market area via their residential ZIP code.

Seeking primary medical care outside of the county was common for Geauga County adults (within UH Geauga Medical Center's market areas) in 2011: 37.8% sought any type of medical care outside of the county within the year prior to the survey.

However, most (91.7%) report their 'overall health care' as at least good, shown in [Figure 4: Ratings of Overall Health Care](#). Only 1.7% of Geauga County adults rated their health as 'poor.'

In [Table 16: Self-Described Physical and Mental Health Status: Past 30 Days](#), residents within UH Geauga Medical Center's market area reported that their physical health was 'not good' an average (mean) of 3.4 days during the previous 30 days. On average, this group reported that their mental health was 'not good' an average (mean) of 2.6 days. For them, these less-than-optimal health days prevented them from doing their normal activities (work, school) an average of 1.7 days within that 30-day period. Note that most (66.6%) reported zero days with physical health problems within the 30-day period, and 67.1% reported zero days with any mental health issues during that time. Eight in 10 (80.9%) reported that their health didn't keep them from any of their normal activities within the past 30 days.

FIGURE 4: RATINGS OF OVERALL HEALTH CARE

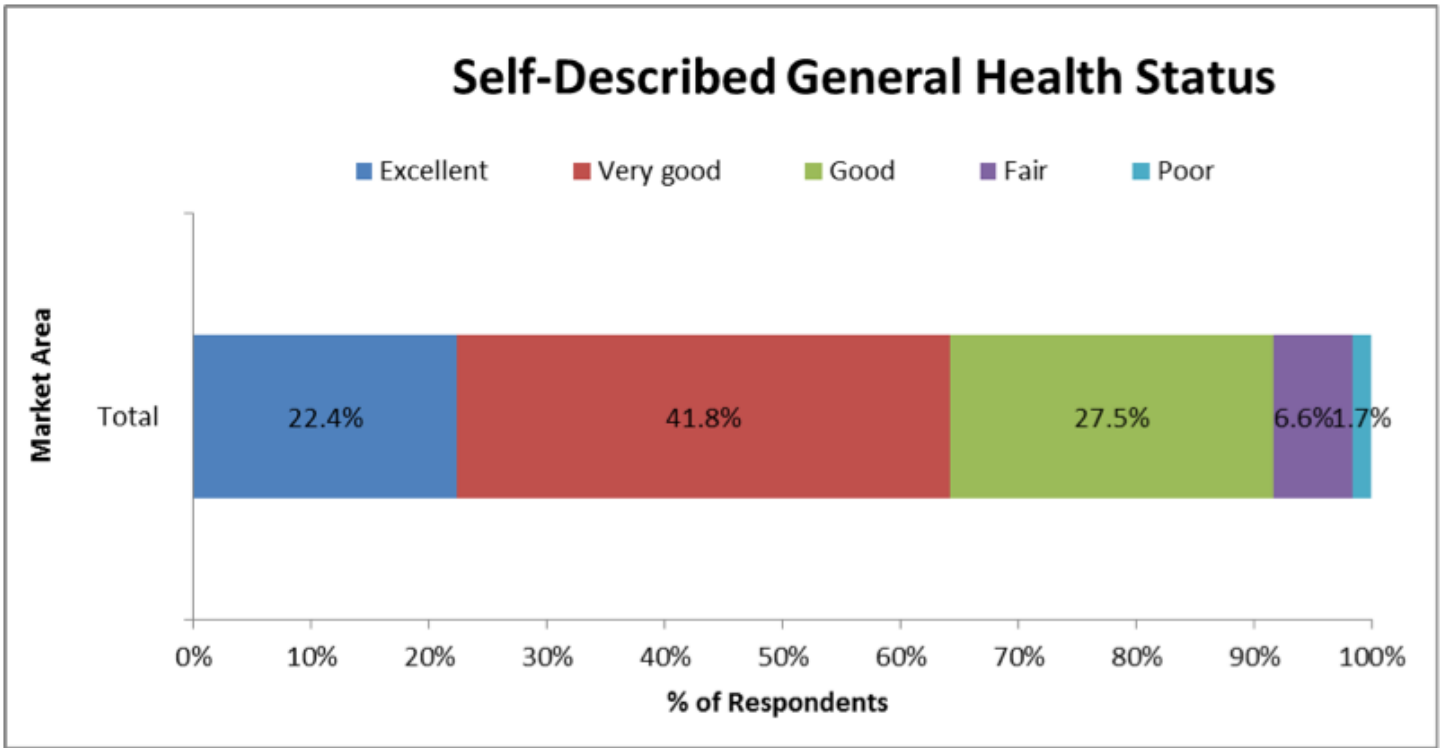


TABLE 16: SELF-DESCRIBED PHYSICAL AND MENTAL HEALTH STATUS: PAST 30 DAYS (MEAN NUMBER OF DAYS)

	Physical health 'not good'	Mental health 'not good'	Poor physical or mental health prevented normal activities
<b>Total UH Geauga Medical Center Market</b>			
Mean Number of Days	3.4	2.6	1.7
Proportion With At Least One Day	33.4%	32.9%	19.1%

## Health Care Coverage

Figure 5: Percent of Adults with Health Coverage, 2012 shows that a majority of adults in UH Geauga Medical Center's primary and secondary market areas have health coverage (90.6%).

Lack of access to health coverage is a common occurrence during some point in the adult lives of many of UH Geauga Medical Center's market area adult residents: 71.7% of those in the market area always had health coverage, meaning roughly one in four were without health coverage at some point in their adult lives.

A majority of adults in UH Geauga Medical Center's market area reported having a primary care provider (86.4%), illustrated in Figure 6: Access to Health Care. Many (29.6%) reported that their financial situation, combined with their level of health coverage, could prevent them from seeking needed medical care because of cost. Only one in 20 (4.1%) adults in UH Geauga Medical Center's market area reported transportation as a barrier to obtaining health care.

In Figure 7: Specific Courses of Care, all survey respondents (100%) were able to name a location or source from which they primarily seek health care services or information. The most common specific location where health care or information was primarily sought was a physician's office, either singly (75.4%) or in combination with other places (9.5%).

For those with health insurance coverage, eight in 10 (80.5%) have a private source of insurance, shown in Figure 8: Source of Health Care Coverage. Most commonly those with private health care coverage have it primarily paid for by their own employer (49.6%) and many obtain it through another person's employer-provided coverage (18.6%). A substantial portion (18.4%) obtain their coverage through a public source, most often Medicare (13.4%) or Medicaid (1.6%).

Figure 8: Source of Health Care Coverage shows one-fourth (28.3%) of adults reported that at some point they have been without health care coverage as adults. The reasons for lack or loss of coverage are varied, and no reason dominates, shown in Table 17: Reason for No Health Care Coverage. Note that these figures are of the total survey respondent base. Given that employers were the most common source of payment for health care coverage, loss of coverage is commonly related to a change in employment (job loss, employers not offering coverage, or loss of coverage due to reduction in work hours/status).

While almost all health coverage includes medical care, other types of health care are not covered for residents within UH Geauga Medical Center's market areas in Geauga County.

Figure 9: Type of Care Covered shows that health care coverage almost always includes medical care, and a great majority of those with coverage have a prescription plan as part of their coverage (90.1%).

Only between roughly one half and three quarters of those covered have plans that include mental health (69.5%), immunizations (77.6%), vision (56.8%), preventive care (77.0%) and/or dental (63.3%). Half of those covered are aware that they have plans that cover alcohol and drug treatment (47.2%), and about one-third know that their plans cover home care (30.4%), and/or skilled nursing (28.7%).

A majority (69.8%) of those with health care coverage say their plans can also include their spouses. Fewer (55.6%) say their children can be or are covered under their own plan.

FIGURE 5: PERCENT OF ADULTS WITH HEALTH COVERAGE, 2011

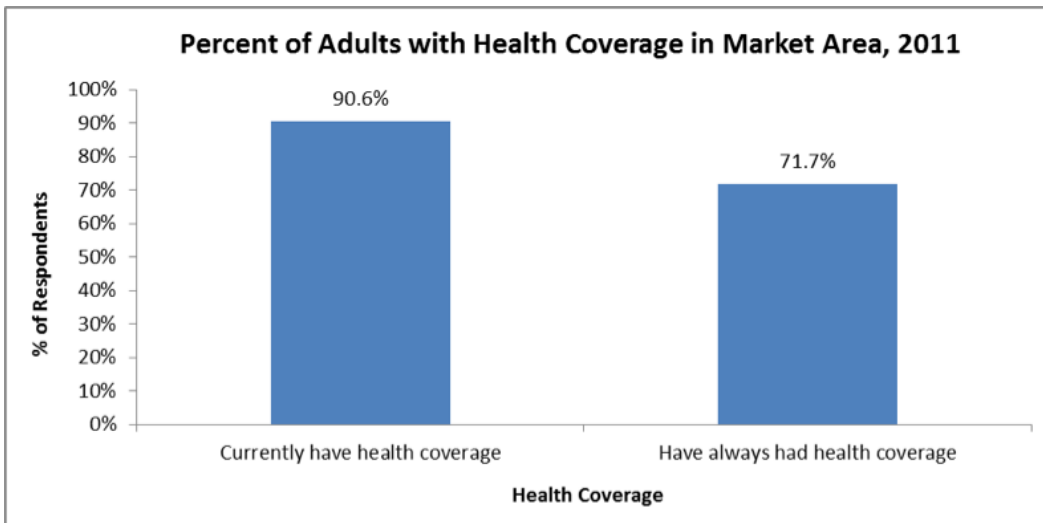


FIGURE 6: ACCESS TO HEALTH CARE

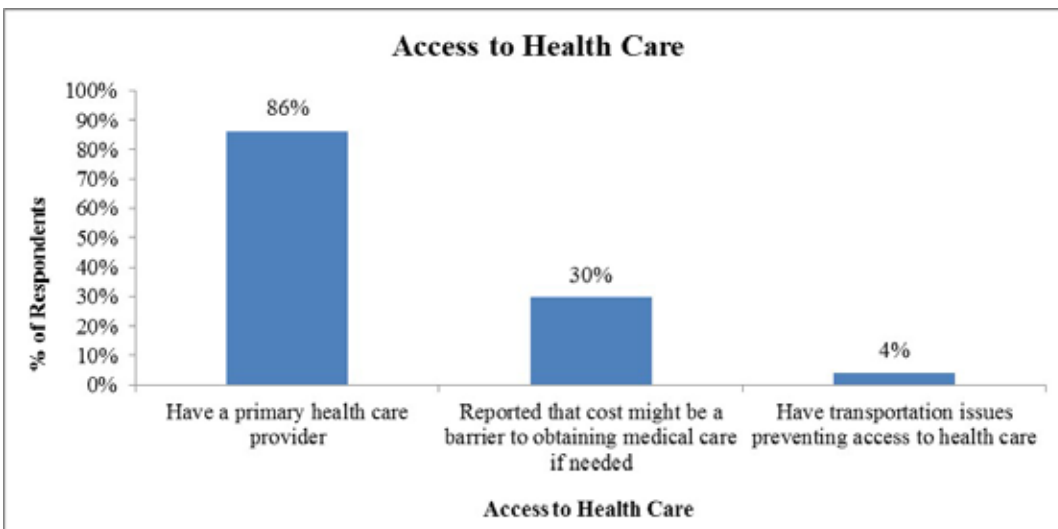


FIGURE 7: SPECIFIC SOURCES OF CARE

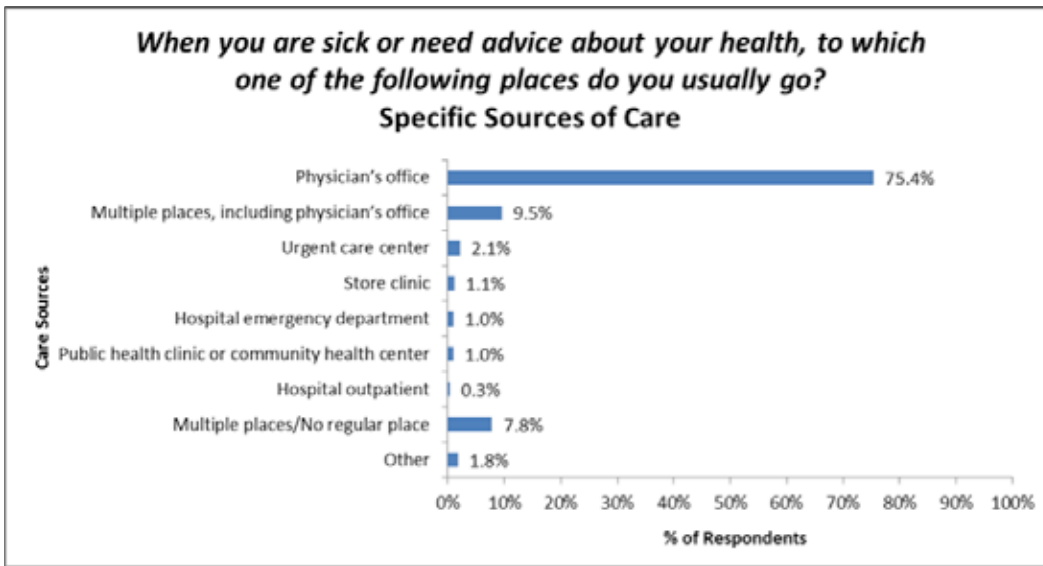


FIGURE 8: SOURCE OF HEALTH CARE COVERAGE

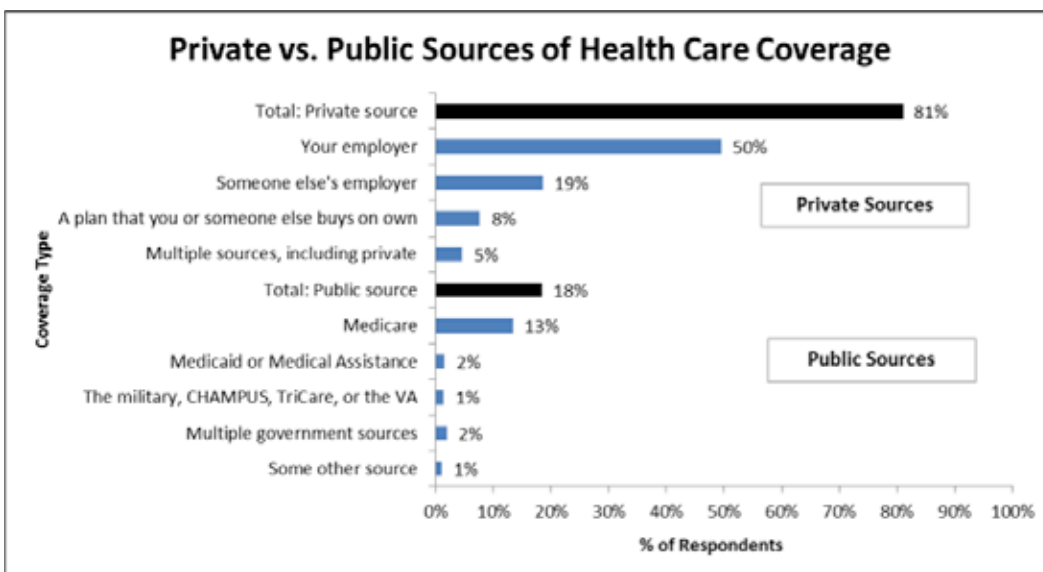
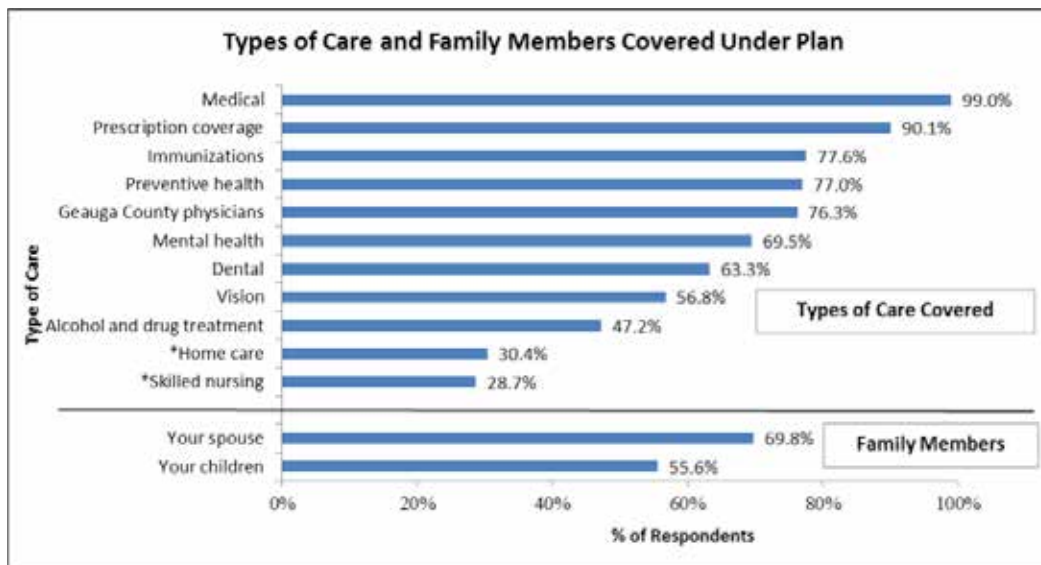


TABLE 17: REASON FOR NO HEALTH CARE COVERAGE

	Of All in UH Geauga Medical Center's Market Area (n=371)
Couldn't afford to pay the premiums	4.9%
Lost job or changed employers	5.8%
Became ineligible (aged out or left school)	1.4%
Employer doesn't/stopped offering coverage	1.8%
Lost Medicaid eligibility	1.0%
Became divorced or separated	1.0%
Became a part-time or temporary employee	0.9%
Spouse or parent lost job	0.7%
Insurance company refused coverage	0.6%
Spouse or parent died	0.2%
Benefits from employer/former employer ran out	0.1%

FIGURE 9: TYPE OF CARE COVERED



\*Roughly half of respondents were unsure of their coverage for this type of care.

## Health Care Utilization

Table 18: Percent of Adults Who Have Not Obtained Preventive Care Procedures or Other Medical Services Because of Cost shows that many reported that cost has been a barrier to seeking various specific preventive care or medical services. One in 10 (11.8%) reported that cost has prevented them from obtaining at least one of these types of medical services.

In addition, having health insurance coverage is not necessarily associated with having a primary care provider: 11.9% of those with coverage did not have a primary care physician or other provider. However, most (69.6%) of those without health care coverage (at the time of the survey) did have a health care provider for primary care.

Seeking and obtaining preventive care (general medical or dental checkup) was completed by a majority of adults in UH Geauga Medical Center's market area, shown in Table 20: Incidence of Receiving Routine Health Care: UH Geauga Medical Center Primary and Secondary Market. Males were less likely to obtain prostate cancer screenings than females were to obtain clinical breast exams, Pap smears or mammograms. Some preventive tests are routinely obtained by fewer than half of survey respondents.

Certain unhealthy or risky behaviors are fairly prevalent among adults in UH Geauga Medical Center's market area, illustrated in Table 21: Incidence of Unhealthy/Risky Behaviors: UH Geauga Medical Center Primary and Secondary Market.

The survey found that 13.7% of those within UH Geauga Medical Center's market area in Geauga County were smokers at the time of the survey in 2011. In addition, 4.6% reported using illicit drugs recreationally and 5.3% reported using medications (prescribed for others) recreationally. Recall that a large percentage of UH Geauga Medical Center patients (22.5% of adults) had a secondary diagnosis of nondependent drug abuse.

A significant proportion of households in UH Geauga Medical Center's market area either store a firearm which is not locked (15.2%), is loaded (5.9%), or is both unlocked and loaded (3.7%). About one in five (17.9%) adults in Geauga County do not always wear a seat belt while driving in a vehicle.

Among the adult population, unhealthy consumption of alcohol (binge drinking) occurred two or more times in the 30 days prior to being surveyed for 27.5% of the adult population. Many (6.5%) reported binge drinking (five or more drinks) at least once a week.

Although about three in four surveyed adults had obtained a medical checkup within the two years prior to the survey, for many that checkup did not include discussions about diet, exercise, injury prevention or healthy sexual practices, shown in Table 22: Health Care Providers' Communication of Key Health Supporting Behaviors, UH Geauga Medical Center Primary and Secondary Market Areas. Likewise, most were not counseled on the importance of family history as it relates to health or their immunization status.

While obesity levels are high among the adult population, not all have had discussions with a health care provider about improving that health condition (46.1% never have discussed diet/eating habits, and 40.8% have never discussed physical activity or exercise), shown in Table 22: Health Care Providers' Communication of Key Health Supporting Behaviors, UH Geauga Medical Center Primary and Secondary Market Areas.

Recall that about one in seven (14.3%) of UH Geauga Medical Center's adult discharged patients in 2013 had a primary diagnosis of circulatory system disease. Another 53% had a secondary diagnosis of a circulatory system disease. One in 10 had a primary diagnosis of lung disease, which is often tied to smoking. One-fourth were diabetics. These and related conditions are strongly tied to lifestyle choices.

TABLE 18: PERCENT OF ADULTS WHO HAVE NOT OBTAINED PREVENTIVE CARE PROCEDURES OR OTHER MEDICAL SERVICES BECAUSE OF COST

Preventive Care Procedures	Percent
Mammogram (females)	11.0%
<b>Pap smear test (females)</b>	<b>7.8%</b>
Medications	6.7%
<b>Colonoscopy</b>	<b>6.7%</b>
Surgery	3.4%
<b>PSA test (males)</b>	<b>2.8%</b>

TABLE 19: PERCENT OF ADULTS WITH PRIMARY CARE PHYSICIAN(S)/HEALTH CARE PROVIDER(S)

Adults with Primary Care Physicians/Health Care Providers	
	Total Market
Of All Respondents (Those With And Without Coverage)	89.2%
Of Respondents Without Health Insurance Coverage	69.6%



TABLE 20: INCIDENCE OF RECEIVING ROUTINE HEALTH CARE: UH GEAUGA MEDICAL CENTER PRIMARY AND SECONDARY MARKET

Type of Routine Health Care Service	Percent
Obtained routine checkup within past two years	73.2%
Visited a dentist for a routine checkup within past two years	80.2%
Recent blood pressure check (within past year)	85.3%
Recent cholesterol check (within past year)	71.6%
Received flu vaccine (within past year)	41.4%
Recent clinical breast exam (females only, within past year)	69.5%
Recent Pap smear (females only, within past year)	50.4%
Recent mammogram (females only, within past year)	60.9%
Recent Prostate-Specific Antigen test (males only, within past year)	33.0%
Recent digital exam of prostate gland (males only, within past year)	29.7%

TABLE 21: INCIDENCE OF UNHEALTHY/RISKY BEHAVIORS: UH GEAUGA MEDICAL CENTER PRIMARY AND SECONDARY MARKET

Type of Unhealthy/Risky Behavior	Percent
Smoke cigarettes	13.7%
Used recreational drugs within past six months	4.6%
Recreational use of medications prescribed for others or obtained illegally	5.3%
Have firearm(s) in home which is unlocked/loaded/both loaded and unlocked	15.2%/5.9%/3.7%
Do not always wear seat belt while in vehicle	17.9%
Binge drinking, two or more times a month (within past 30 days)	27.5%
Binge drinking once a week or more	6.5%

TABLE 22: HEALTH CARE PROVIDERS' COMMUNICATION OF KEY HEALTH SUPPORTING BEHAVIORS, UH GEAUGA MEDICAL CENTER PRIMARY AND SECONDARY MARKET AREAS

	Within Past Year	Before Past Year	Never
Your diet or eating habits	38.2%	15.7%	46.1%
Physical activity or exercise	44.5%	14.7%	40.8%
Injury prevention such as safety belt use, helmet use or smoke detectors	6.6%	7.4%	86.0%
Sexual practices, including family planning, sexually transmitted diseases, AIDS or the use of condoms	5.2%	7.8%	87.0%
Depression, anxiety or emotional problems	17.3%	12.5%	70.2%
Significance of family health history	24.2%	17.3%	58.6%
Quitting tobacco use (current smokers only)	40.0%	18.0%	42.0%

## Youth Survey

This section presents the results of surveys of Ashtabula, Lake and Geauga county youth (who reside in UH Geauga Medical Center's market areas) regarding their health and safety behaviors and attitudes. Survey data were obtained from a 2014 survey of Lake County youth (ages 12 to 18), a 2011 survey of Ashtabula County youth (ages 12 to 18), and a 2011 survey of Geauga County youth (ages 12 to 18).

Almost one in four youths in UH Geauga Medical Center's market area overall lives in single-family homes. 4% of youth living in UH Geauga Medical Center's market area within Lake County reported not having enough food to eat in the home at least one day per week.

Teens in Geauga, Ashtabula and Lake counties often engage in risky behavior, shown in [Table 23: Personal Safety: Risky Environments and Behaviors](#). Depending on the county, one-fourth to one-third of surveyed youth reported not choosing to wear a seatbelt always or most of the time, and 17 to 20% had driven in a car with someone who had been drinking in the 30 days prior to the survey. 2 to 7% of youth survey respondents reported driving after drinking in the 30 days prior to the survey. Many (8 to 11%) carried a weapon in the 30 days prior to the survey.

About one-third of youth in Ashtabula and Lake counties are sexually active, and 3 to 4% of Ashtabula and Lake County teens in UH Geauga Medical Center's market area were both sexually active and used no method of birth control during their most recent sexual encounter prior to the survey.

Many teens in UH Geauga Medical Center's market area reported being physically harmed by boyfriends or girlfriends (6%) or adults or other caregivers (8% to 15%) within the year prior to the survey, shown in [Table 24: Personal Safety: Harmed By Others](#). Roughly one-fourth of surveyed youth had been in a physical fight, and about half reported being bullied, within the year prior to the survey.

[Table 25: Mental Health](#) shows that mental health issues were frequent diagnoses among UH Geauga Medical Center discharges in 2013. Surveyed youth reported frequent mental health issues also.

[Table 26: Unhealthy Habits](#) shows that unhealthy and often dangerous habits are not uncommon among UH Geauga Medical Center's market area youth. Smoking prevalence (12% to 15%) is almost at adult levels, and consumption of alcohol is even more common (19% to 31%).

Use of illegal drugs is also fairly common: 10 to 20% of youth in the hospital's market area reported using marijuana within the past 30 days. Lifetime use of cocaine, inhalants, heroin, methamphetamine, and steroid pills or shots ranged from 1 to 8% of surveyed youth, depending on the county and the substance. 2% of youth in Geauga and Ashtabula counties have injected illegal drugs via a needle. Just over 1 in 10 surveyed youth in Geauga and Lake counties had been offered an illegal drug while at school within the year prior to being surveyed.

Consumption of soft drinks is very high among teens in UH Geauga Medical Center's market area, but particularly high in Ashtabula County, illustrated in [Table 27: Nutrition](#). Obesity among youth is highest in Ashtabula County and lowest in Geauga County.

Finally, [Table 28: Parental Disapproval](#) shows not all youth are clear on parental disapproval regarding their choices (Lake County youth data only; Ashtabula or Geauga county data are not available). When asked whether or not their parents would disapprove of their use of various unhealthy or illegal substances, not all were affirmative.

TABLE 23: PERSONAL SAFETY: RISKY ENVIRONMENTS AND BEHAVIORS

	Geauga County	Ashtabula County	Lake County
Ride in car, within past 30 days, with a driver who had been drinking alcohol	17%	18%	20%
Wear seat belt while riding in a vehicle, not always or most of the time	36%	23%	Not available
Drive a car after drinking alcohol (within past 30 days)	7%	4%	2%
Carry a weapon (within past 30 days)	11%	10%	8%
Sexually active	Not available	39%	30%
Is sexually active and used no form of birth control for most recent sexual activity	Not available	3%	4%

TABLE 24: PERSONAL SAFETY: HARMED BY OTHERS

	Geauga County	Ashtabula County	Lake County
Threatened or injured by someone with a weapon on school property (within past year)	5%	6%	5%
Physically harmed by boyfriend/girlfriend (within past year)	6%	6%	6%
Physically harmed by adult or caregiver (within past year)	12%	8%	15%
In a physical fight (within past year)	23%	23%	28%
Bullied (physically, verbally, cyber, sexually) (within past year)	55%	42%	53%

TABLE 25: MENTAL HEALTH

	Geauga County	Ashtabula County	Lake County
Mental health, within the past year:			
Feelings of sadness or hopelessness every day for more than two weeks enough to stop normal activities	19%	23%	30%
Attempted suicide which required treatment by a doctor or a nurse	4%*	2%	2%
Engaged in self-hurting activity (cutting, etc.)	Not available	25%	Not available

\*Question was worded: "within past 12 months...actually attempt suicide."

TABLE 26: UNHEALTHY HABITS

	Geauga County	Ashtabula County	Lake County
Smoke cigarettes	14%	15%	12%
Consumed alcohol within past 30 days	31%	19%	29%
Binge drinking within past 30 days	20%	14%	15%
Used marijuana within past 30 days	14%	10%	20%
Used cocaine in lifetime	4%	5%	4%
Used inhalants in lifetime	8%	5%	5%
Used heroin in lifetime	2%	1%	1%
Used methamphetamines in lifetime	2%	2%	2%
Used steroid pills or shots in lifetime	1%	4%	2%
Took prescription medications not prescribed to you in lifetime	9%	8%	7%
Tried other recreational "party" drugs (ecstasy, cough syrup, GbH, etc.)	Not available	12%	10%
Injected illegal drugs via a needle	2%	2%	Not available
Been offered illegal drugs on school property within past year	13%	Not available	11%

TABLE 27: NUTRITION

	Geauga County	Ashtabula County	Lake County
Drink at least one serving of a soft drink most days of the week	Not available	54%	29%
Drink at least one serving of an 'energy' drink most days of the week	Not available	Not available	16%
Ate at a fast food restaurant at least three days per week	Not available	Not available	20%
Overweight (not obese)	7%	13%	13%
Obese	10%	20%	18%

TABLE 28: PARENTAL DISAPPROVAL

	Lake County
Parents would disapprove of youth ....	
smoking cigarettes	80%
drinking alcohol	70%
using marijuana	78%
misusing prescription drugs	81%

## Survey of Households with Children (ages 0 to 11 years)

The 2011 survey of Geauga County households with children described access to health care for Geauga County families with young children along with the prevalence of various health conditions.

Shown in [Table 29: Type of Health Insurance](#), most (87.7%) children ages 0 to 11 in Geauga County (within UH Geauga Medical Center's market area) have health insurance coverage. The most common type, by far, was provided by the survey respondent's employer (52.6%) or someone else's employer (12.3%). Fewer than one in 10 people have coverage through a government source (8.2%). Almost 6% of families with young children buy their own health care coverage.

The great majority of children in Geauga County, within UH Geauga Medical Center's market area, obtained health care services from a doctor's office (90%), shown in [Table 30: Places Where Health Care Services and Health Information are Obtained](#). Some obtained health care services and health information from multiple places in addition to a doctor's office (5.8%). Urgent care centers, public health clinics/community health centers and/or in-store health centers were very rarely used by families for health care for their children.

While no respondent reported using a hospital emergency department as a typical place to obtain health care for children, many (17.1%) did report taking their child to the emergency room at least once in the year prior to the survey. Mostly (14.0%) there was only one occurrence of an emergency room visit.

Although most reported that a doctor's office was the chief place where health care was sought for their child(ren), one in five respondents reported that their child does not have someone that they think of as their child's "personal doctor or nurse" (not shown).

A small but significant proportion of respondents (10.5%) said that their child did not receive all of the medical care he/she needed in the year prior to the survey. The barriers to their receiving care were extremely varied: 3% reported lack of a doctor's referral, and 2% reported lack of insurance as the main barrier to obtaining health care for their child, but no more than 1% reported other reasons (vaccine shortage, unsure of where to obtain care, doctor unaware of how to treat problem, unable to get an appointment, transportation issues, insurance not accepted).

Another small but significant proportion of respondents reported that their child could not obtain the prescription drug he/she required (7.5%). The reasons for that were also many, but were dominated by 'lack of referral' (3.0%) and high cost (2.8%).

Respondents were shown a list of the most common health issues that children face and were asked if their child had ever been diagnosed with any of the health issues on the list. Illustrated in [Table 31: Morbidity of Childhood Health Issues](#), the most common health issue diagnosed among children in UH Geauga Medical Center's market area within Geauga County was asthma (9.7%). The second most common health issue diagnosed was attention deficit disorder/attention deficit hyperactivity disorder (7.1%). Slightly fewer (6.3%) had been diagnosed with a developmental delay or physical impairment. Pneumonia was fairly common among children in the market area (5.2%); recall that pneumonia was a common ACS condition among adults discharged from UH Geauga Medical Center. Almost as many (4.5%) had been diagnosed with a behavioral/conduct problem.

TABLE 29: TYPE OF HEALTH INSURANCE

	Children Ages 0 to 5	Children Ages 6 to 11	Total
No health insurance coverage	11.5%	13.3%	12.3%
Your employer insurance	54.0%	50.9%	52.6%
Someone else's employer insurance	11.9%	12.8%	12.3%
You or someone else buys on your own	4.2%	7.8%	5.8%
Medicaid or State Children's Health Insurance Program (S-CHIP)	7.7%	5.5%	6.7%
Medicare	1.1%	1.8%	1.5%
Some other source of coverage	8.4%	6.9%	7.7%
Not sure	1.1%	0.9%	1.0%

TABLE 30: PLACES WHERE HEALTH CARE SERVICES AND HEALTH INFORMATION ARE OBTAINED

	Children Ages 0 to 5	Children Ages 6 to 11	Total
A doctor's office	88.1%	92.2%	90.0%
Multiple places including a doctor's office	6.5%	5.0%	5.8%
Urgent care center	0.8%	1.4%	1.0%
A public health clinic or community health center	0.8%	0.0%	0.4%
In-store health center	0.8%	0.0%	0.4%
Some other kind of place	0.0%	0.5%	0.2%
Multiple places NOT including a doctor's office	0.8%	0.0%	0.4%
No usual place	1.1%	0.0%	0.6%
Not sure	1.1%	0.9%	1.0%

TABLE 31: MORBIDITY OF CHILDHOOD HEALTH ISSUES

Childhood Health Issues	Percent
Asthma	9.7%
Attention deficit disorder or attention deficit hyperactivity disorder	7.1%
Developmental delay	6.3%
Pneumonia	5.2%
Behavioral or conduct problems	4.5%
Urinary tract infections	4.2%
Hearing problems	4.0%
Learning disability	4.0%
Anxiety problems	3.1%
Birth defect	3.1%
Bone, joint or muscle problems	2.7%
Head injury	2.6%
Vision problems (not corrected by glasses)	2.5%
Depression problems	2.1%
Genetic diseases	1.9%
Autism	1.3%
Epilepsy	1.0%
Digestive tract	0.6%
Appendicitis	0.6%
Diabetes	0.4%
Cancer	0.2%



## H. Infant Mortality

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 may indicate the existence of broader issues pertaining to access to care and maternal and child health. Data is shown for all of the counties that fall within UH Geauga Medical Center's market areas.

Shown in Table 32: Infant Mortality Trends, 2007 to 2012, U.S., UH Geauga Medical Center Counties, Per 1,000 Births, of the counties that contain UH Geauga Medical Center's market areas, Cuyahoga County had the highest infant mortality rate in 2012 (8.86 per 1,000 births). Rates were slightly lower in Trumbull (8.62) and Ashtabula (8.09) counties. For each of these three counties, the infant mortality rate was higher than in Ohio overall (7.57). Infant mortality rates were lower in Geauga (6.36), Portage (5.06) and Lake (4.12) counties than in Ohio overall. Infant mortality rates in Lake and Portage counties were also lower than in the U.S. overall.

Infant mortality rates for Blacks have been significantly higher in the U.S. In fact, according to the most recently available data, infant mortality rates for Blacks were almost twice as high as infant mortality rates for Whites in 2012. This disparity is also true for all counties which are part of UH Geauga Medical Center's market area, with the exception of Geauga County for which reliable data are not available.

Note that the infant mortality rates for Blacks within Ashtabula, Lake and Trumbull counties fluctuate a great deal from 2007 to 2012; this is because the absolute number of births for Blacks in these counties is low (no more than 292 births per year in any of the years), and small changes in the number of infant mortalities are reflected as large changes in the rates of infant mortalities.

TABLE 32: INFANT MORTALITY TRENDS, 2007 TO 2012, U.S., UH GEAUGA MEDICAL CENTER COUNTIES, PER 1,000 BIRTHS\*

Geography	Race	Infant Mortality Rate						Number of Births					
		'07	'08	'09	'10	'11	'12	'07	'08	'09	'10	'11	'12
United States Overall	Total	6.75	6.61	6.39	6.15	6.07	5.98	4,316,233	4,247,694	4,130,665	3,999,386	3,953,590	3,952,841
	White	5.64	5.55	5.3	5.2	5.12	5.09	3,336,626	3,274,163	3,173,293	3,069,315	3,020,355	2,999,820
	Black	13.24	12.74	12.64	11.63	11.51	11.19	675,676	670,809	657,618	636,425	632,901	634,126
Ohio Overall	<b>Total</b>	<b>7.71</b>	<b>7.7</b>	<b>7.67</b>	<b>7.68</b>	<b>7.87</b>	<b>7.57</b>	<b>150,784</b>	<b>148,592</b>	<b>144,569</b>	<b>139,034</b>	<b>138,024</b>	<b>138,284</b>
	White	6.34	6	6.4	6.42	6.41	6.37	121,267	118,901	115,328	107,189	104,906	106,004
	Black	14.79	16.23	14.23	15.47	15.96	13.93	25,959	26,131	25,433	23,469	23,252	23,696
Geauga County	<b>Total</b>	<b>8.23</b>	<b>2.21</b>	<b>2.22</b>	<b>2.13</b>	<b>7.84</b>	<b>6.36</b>	<b>972</b>	<b>905</b>	<b>901</b>	<b>939</b>	<b>893</b>	<b>944</b>
	White	8.46	2.25	2.27	2.18	8.03	6.67	946	887	880	916	872	899
	Black	0.00	0.00	0.00	0.00	0.00	0.00	18	11	7	12	9	18
Ashtabula County	<b>Total</b>	<b>9.69</b>	<b>6.64</b>	<b>10.43</b>	<b>8.56</b>	<b>8.76</b>	<b>8.09</b>	<b>1,342</b>	<b>1,204</b>	<b>1,247</b>	<b>1,156</b>	<b>1,141</b>	<b>1,112</b>
	White	7.83	6.07	10.95	7.31	6.78	7.99	1,277	1,154	1,187	1,095	1,033	1,001
	Black	56.60	21.74	0.00	76.92	46.51	26.32	53	46	52	26	43	38
Lake County	<b>Total</b>	<b>8.31</b>	<b>6.71</b>	<b>3.38</b>	<b>2.53</b>	<b>3.95</b>	<b>4.12</b>	<b>2,526</b>	<b>2,532</b>	<b>2,366</b>	<b>2,376</b>	<b>2,280</b>	<b>2,187</b>
	White	8.15	5.63	3.70	1.96	4.08	4.34	2,332	2,308	2,161	2,038	1,961	1,843
	Black	14.39	24.39	0.00	14.60	8.62	6.49	139	164	140	137	116	154
Cuyahoga County	<b>Total</b>	<b>9.97</b>	<b>10.59</b>	<b>9.08</b>	<b>9.07</b>	<b>9.47</b>	<b>8.86</b>	<b>16,450</b>	<b>16,249</b>	<b>15,525</b>	<b>15,108</b>	<b>14,993</b>	<b>14,787</b>
	White	6.17	4.95	6.06	5.23	6.06	5.69	9,233	9,092	8,746	7,842	7,750	7,554
	Black	16.27	19.32	14.05	16.07	16.13	14.51	6,576	6,573	6,192	5,912	5,829	5,789
Portage County	<b>Total</b>	<b>7.79</b>	<b>8.30</b>	<b>7.08</b>	<b>7.52</b>	<b>5.43</b>	<b>5.06</b>	<b>1,669</b>	<b>1,566</b>	<b>1,553</b>	<b>1,462</b>	<b>1,474</b>	<b>1,383</b>
	White	7.18	8.93	5.61	6.07	5.22	4.83	1,533	1,456	1,426	1,317	1,340	1,242
	Black	21.05	0.00	31.58	20.83	0.00	10.20	95	73	95	96	80	98
Trumbull County	<b>Total</b>	<b>9.03</b>	<b>8.08</b>	<b>9.68</b>	<b>9.98</b>	<b>8.13</b>	<b>8.62</b>	<b>2,463</b>	<b>2,351</b>	<b>2,272</b>	<b>2,104</b>	<b>2,092</b>	<b>2,087</b>
	White	7.90	6.39	9.45	8.24	6.44	7.40	2,153	2,036	2,010	1,821	1,708	1,757
	Black	19.31	20.55	12.05	22.81	18.66	17.62	259	292	249	263	268	227

\*Source: Ohio Department of Health

## I. Incidence of Health Issues

Shown in Table 33: Cancer Incidence by Cancer Type, prostate cancer and breast cancer are the two most common cancer diagnoses in Geauga, Ashtabula and Lake

counties and in Ohio. Note that prostate, lung, colon/rectum and cervical cancer rates in Ashtabula County are higher than rates in Geauga and Lake counties, the U.S. overall and Ohio.

TABLE 33: CANCER INCIDENCE BY CANCER TYPE

Cancer Type	Report Area	Total Population	Average New Cases per Year	Annual Incidence Rate (Per 100,000 Population)
<b>Prostate Cancer (total population Male only)</b>	Geauga County	45,951	78	136.2
	Ashtabula County	50,511	89	149.2
	Lake County	111,848	185	134.9
	Ohio	5,624,513	8,272	135.8
	United States	150,740,224	220,000	142.3
<b>Breast Cancer (total population Female only)</b>	Geauga County	47,525	73	120.6
	Ashtabula County	51,165	74	112.8
	Lake County	117,897	202	132.5
	Ohio	5,901,023	8,435	120.0
	United States	155,863,552	216,052	122.7
<b>Lung</b>	Geauga County	93,476	62	54.2
	Ashtabula County	101,676	103	81.3
	Lake County	229,745	226	77.0
	Ohio	11,525,536	9,551	72.4
	United States	306,603,776	212,768	64.9
<b>Colon and Rectum</b>	Geauga County	93,476	47	41.6
	Ashtabula County	101,676	66	52.0
	Lake County	229,745	125	42.7
	Ohio	11,525,536	5,862	44.5
	United States	306,603,776	142,173	43.3
<b>Cervical (total population Female only)</b>	Geauga County	47,525	No data	No data
	Ashtabula County	51,165	6	10.0
	Lake County	117,897	7	5.3
	Ohio	5,901,023	471	7.7
	United States	155,863,552	12,530	7.8

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

## J. Vulnerable Populations

### Medically Underserved Areas, Federally Qualified Health Centers and Food Deserts

Medically underserved areas/populations 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. Within UH Geauga Medical Center's market area there are no MUA/Ps within Geauga County. There is a MUA/P in Lake County within the hospital's service 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 is only one FQHC in UH Geauga Medical Center's market 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. There are several census tracts within UH Geauga Medical Center's market area that are designated as food deserts.

The map in [Figure 10: Medically Underserved Areas/Populations, FQHCs and Food Deserts: UH Geauga Medical Center](#) overlays medically underserved areas and food deserts in UH Geauga Medical Center's market areas and beyond to determine areas that may have the highest need for services. To provide further context, the map also pinpoints the location of FQHCs.

FIGURE 10: MEDICALLY UNDERSERVED AREAS/POPULATIONS, FQHCs AND FOOD DESERTS: UH GEAGA MEDICAL CENTER

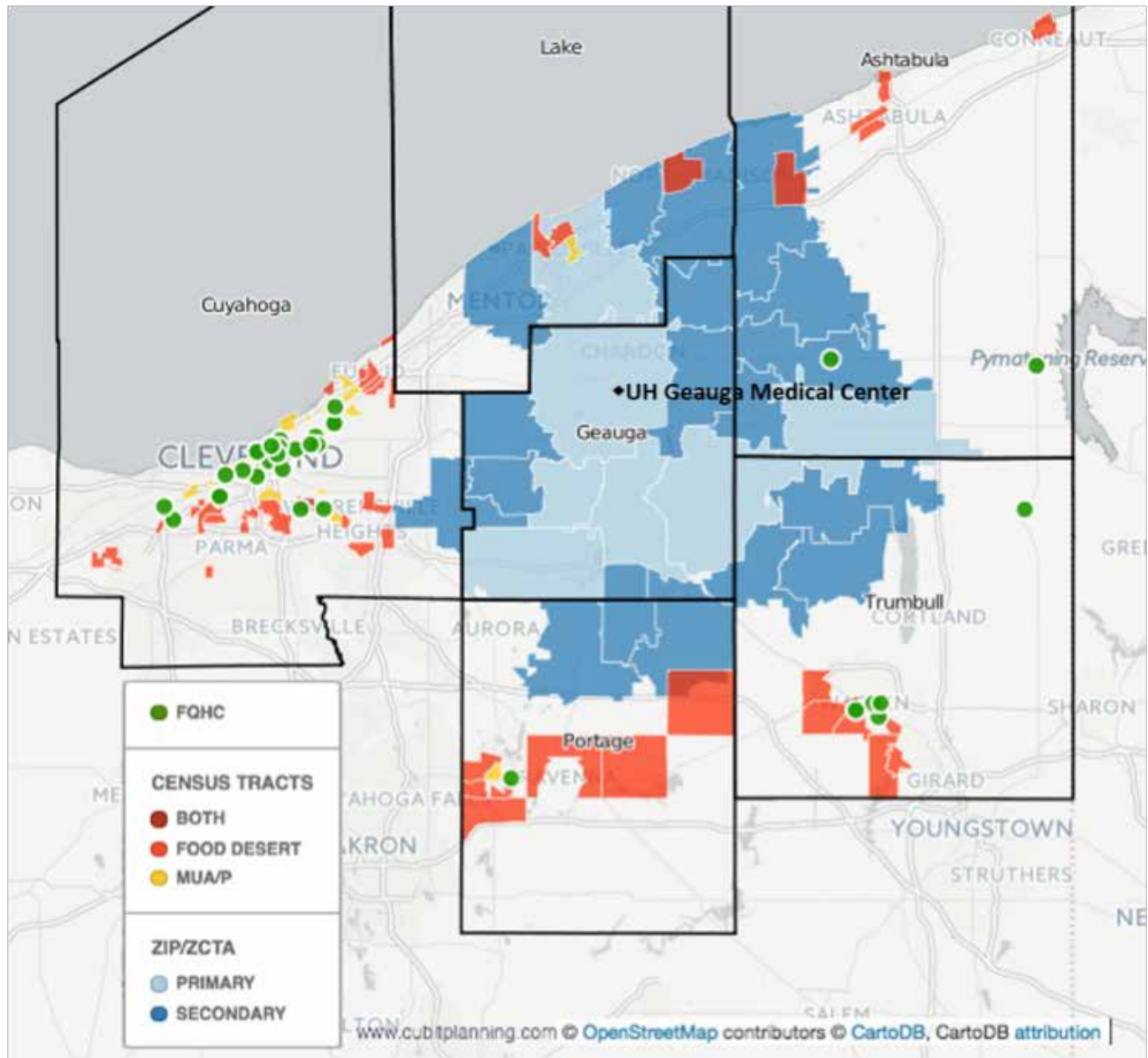


TABLE 34: FQHC IN UH GEAGA MEDICAL CENTER'S MARKET AREA:

FQHC Name and Address
Ashtabula Community Health Center, 5266 State Route, Rome

### **ACS Analysis of Vulnerable Populations**

Revisiting the ACS data can provide further insight into the level of access to health care for vulnerable populations. Details of this analysis can be found in the Appendix.

In sum, a higher incidence of ACS conditions were found among residents of UH Ahuja Medical Center's market area (from all area hospitals) among Blacks (18.2%) compared to Whites (15.2%). This suggests lower access to primary care among Blacks compared to Whites in UH Ahuja Medical Center's market area.

However, this varies by specific ACS diagnoses for residents of UH Ahuja Medical Center's market area. The ACS diagnoses of congestive heart failure, diabetes, epilepsy and asthma were higher among Blacks. The ACS diagnoses of bacterial pneumonia, cellulitis, and kidney/urinary infections were higher among Whites.

## CONCLUSIONS

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### A. Priority Health Needs

The list that follows describes the health issues identified through the assessment.

#### Health Disparities

- Aging population
- Unemployment
- Poverty

#### Access Barriers

- Access to Primary Care Providers
- Access to Dental Care
- Access to Specialty Care
- Access to providers that accept Medicaid
- Cost of Care
- Access to Transportation

#### Lifestyle Barriers

- Obesity (Adult and Youth)
- Substance abuse (Adult and Youth)
  - Smoking
  - Drug abuse
  - Alcohol abuse

#### Chronic Disease Conditions

- Cancer
- Heart disease
- Diabetes
- Alzheimer's
- Asthma (Older Adult and Children)
- Mental illness (Adult and Youth)
- Respiratory disease
- Digestive diseases

This list of health needs was compiled based on the variety of data assessed throughout this report. For example, issues like heart disease and diabetes were found prevalently throughout the data sets; including in hospital discharge data, Hospital Council of Northwest Ohio Community Health Needs Assessment Data, and qualitative data collected through surveys and public health interviews. Health needs were categorized into four primary categories of health needs, which encompassed a broader list of specific, related needs.

UH Geauga Medical Center has prioritized three primary categories of health needs for this CHNA:

- Access Barriers
- Lifestyle Barriers
- Chronic Disease Conditions

The prioritization process included input from hospital leaders who work closely with the community and have an in-depth understanding of community needs. After reviewing the primary and secondary data analysis for the UH Geauga Medical Center service area, a team of leaders from the hospital assembled to determine priority health needs in July 2015. This team included:

1. M. Steven Jones, President, UH Conneaut, Geauga, & Geneva Medical Centers
2. LouAnn Marx, Director Regional Marketing
3. Dawn Pilarczyk, RN, Community Outreach

A significant consideration in prioritizing health needs was alignment with the Geauga County Community Health Improvement Plan (CHIP). The Geauga County CHIP responds to the Geauga County Board of Health community health assessment and is managed by the Partnership for a Healthy Geauga. Partnership for a Healthy Geauga is a group of community organizations in Geauga County, which includes the local hospitals, health department, and others that work in health and human services in the county.

UH Geauga Medical Center representatives are closely involved with the Geauga County CHIP initiatives and are executing programs through the hospital as part of that collaboration. The Geauga County CHIP is primarily focused on access related initiatives. They include:

1. Increasing the number of and access to health care providers
2. Increasing awareness of and access for mental health issues
3. Increasing awareness of and treatment options for substance abuse

These CHIP initiatives will serve as part of the foundation of implementation strategies designed by UH Geauga Medical Center in response to this CHNA. Prioritizing community health needs in this way will allow for greater collaboration between the hospital, the health department, and the variety of partners involved in CHIP initiatives, and will leverage existing investments for greater community impact.

Other considerations in selecting priority health needs were a set of specific criteria that included (1) magnitude of the problem, (2) alignment of the problem with organizational strengths and priorities, and (3) existing resources to address the problem.

Those individuals representing the broad interests of the community, who were interviewed for the Qualitative Analysis section of this report, also provided input into the prioritization of significant health needs through the interview process.



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

The following is a list of available facilities and resources that the hospital uses to assist in meeting identified community health needs:

### **Access Barriers**

- UH Geauga Medical Center, Ambulatory Health Centers and physician offices in Middlefield, Chardon, Bainbridge, Newbury, Chesterland, Orwell, Garrettsville, Mentor, Painesville, Concord and Mantua
- Ashtabula County Health Department- health/vaccination clinics  
Gauga County Health Department- vaccination clinics
- Chardon Smile Center
- Gauga County Mental Health Board
- Gauga County Sherriff Department- DARE
- Gauga County Transit
- Glenbeigh
- Haas, Haas, & Associates
- Lake County Free Clinic in Painesville
- Lake County Health District
- Laurelwood
- Medical Stabilization at UH Geauga Medical Center
- NAMI
- Rainbow Babies & Children's Dental Van
- Ravenwood Mental Health
- UH Geauga Medical Center Shuttle
- United Way 211

### **Chronic Disease Conditions/Lifestyle Barriers**

- UH Geauga Medical Center, Ambulatory Health centers and physician offices in Middlefield, Chardon, Bainbridge, Newbury, Chesterland, Orwell, Garrettsville, Mentor, Painesville, Concord and Mantua
- UH Rainbow Babies & Children's Hospital Healthy Kids, Healthy Weight™
- UH Rehabilitation Services
- UH Seidman Cancer Center
- UH Smoking Cessation program
- UH Sport Medicine
- Diabetes Partnerships of Cleveland
- Alzheimer's Association
- Arthritis Foundation
- Ashtabula County Health Department
- Catholic Charities
- Gauga County Health Department
- Gauga County Library
- Gauga County Park District
- Gauga Growth Partnership
- Lake County Health District
- Life 4 Diabetes
- Middlefield Care Center
- TOPS (Taking Pounds Off Sensibly)
- Valley Zumba

### A. Qualifications of Consulting Companies

#### The Center for Health Affairs, Cleveland, Ohio

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 34 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 2015 CHNA prepared for UH Geauga Medical Center was directed by The Center's vice president of corporate communications, managed by The Center's community outreach director and supported by a project manager. The Center engaged Cypress Research Group to provide expertise in data analysis and statistical methods.

More information about The Center for Health Affairs and its involvement in CHNAs can be found at [www.chanet.org](http://www.chanet.org).

#### Cypress Research Group, Cleveland, Ohio

Founded in 1997, Cypress Research Group focuses on quantitative analysis of primary and secondary market and industry data. Industry specialties include health care, hi-tech and higher education. Since 2002, Cypress Research Group has partnered with The Center for Health Affairs to conduct a range of studies including building forecast models for nurses and most recently to analyze data for CHNAs.

UH Geauga Medical Center's CHNA was directed by the company's president and supported by the work of associates and research analysts. The company's president, as well as all associates and research analysts, hold graduate degrees in relevant fields.

## 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.

### C. Vulnerable Populations Analysis

It is well established that access to medical care and health outcomes are weaker in the lowest income areas throughout the U.S. To shine a light on this problem and help policymakers properly allocate resources, HRSA identified Medically Underserved Areas/Populations (MUA/Ps). Currently there are very few MUA/Ps identified within UH Geauga Medical Center's market area (see body of report).

However, discharge data from all area hospitals' discharge data, including UH Geauga Medical Center's, can also be examined to look for potential health care access issues among economically vulnerable populations in terms of ambulatory care sensitive (ACS) cases. An earlier analysis showed that UH Geauga Medical Center's inpatient discharges, as a group, had a prevalence of ACS cases (16.8%) similar to that of its surrounding counties on the whole (discharges for all hospitals) in 2013.

In the major counties which UH Geauga Medical Center serves, Blacks are two to three times more likely to live in poverty than Whites, shown in [Table 35: Poverty Levels, by Race, Geauga and Surrounding Counties, 2013](#).

There are not socioeconomic indicators associated with hospital discharge data, but the association between race and hospital discharge findings can be used to illuminate

possible health care access issues within the economically vulnerable areas UH Geauga Medical Center serves.

[Table 36: Most Common\\* ACS Conditions, By County, White versus Black Discharges, 2014](#) shows the prevalence of ACS conditions by race for those admitted to any hospital for those who live in UH Geauga Medical Center's market area. Discharges from UH Geauga Medical Center cannot be solely examined because the number of racial minorities is too low for reliable analysis. For comparison the ACS discharge rates overall and primary diagnoses for those in Geauga, Lake and Ashtabula counties in 2014 are shown.

Overall, there was an almost identical prevalence of ACS conditions among residents of UH Geauga Medical Center's market area (from all area hospitals) among Blacks (16.0%) and Whites (15.9%). This suggests there is no racial disparity between Blacks and Whites in terms of access to primary care in UH Geauga Medical Center's market area.

However, this varies by specific ACS diagnoses among residents of UH Geauga Medical Center's market area. The ACS diagnoses of congestive heart failure, diabetes and asthma were higher among Blacks. The ACS diagnoses of COPD, cellulitis, kidney/urinary infections and epilepsy were higher among Whites.

TABLE 35: POVERTY LEVELS, BY RACE, GEAUGA AND SURROUNDING COUNTIES, 2013

Geography	Percent Below Poverty Level	
	White	Black
Geography	White	Black
Gauga County, Ohio	7.9%	17.5%
Lake County, Ohio	8.3%	25.3%
Ashtabula County, Ohio	17.6%	42.8%

Source: U.S. Census Bureau, American Community Survey 2013 5-year Estimates (Table: S1701)

TABLE 36: MOST COMMON\* ACS CONDITIONS, BY COUNTY, WHITE VERSUS BLACK DISCHARGES, 2014  
DISCHARGES FROM ALL HOSPITALS

	UH Geauga Medical Center Market Area		Gauga County		Ashtabula County		Lake County	
	Discharges from All Area Hospitals		Discharges From All Area Hospitals		Discharges From All Area Hospitals		Discharges From All Area Hospitals	
	White	Black	White	Black	White	Black	White	Black
<b>Number of discharges, 2014</b>	<b>33,473</b>	<b>969</b>	<b>9,101</b>	<b>160</b>	<b>13,452</b>	<b>516</b>	<b>26,724</b>	<b>1,313</b>
No ACS Condition as Primary Diagnosis*	84.1%	84.0%	<b>85.2%</b>	83.1%	82.1%	82.4%	83.7%	85.2%
<b>ACS Condition as Primary Diagnosis, Total</b>	<b>15.9%</b>	<b>16.0%</b>	<b>14.8%</b>	<b>16.9%</b>	<b>17.9%</b>	<b>17.6%</b>	<b>16.3%</b>	<b>14.8%</b>
Congestive Heart Failure (CHF)	3.3%	3.5%	2.8%	2.5%	3.5%	5.0%	3.5%	2.6%
Chronic Obstructive Pulmonary Disease (COPD)	2.1%	1.5%	1.8%	1.3%	3.1%	0.6%	2.1%	1.4%
Bacterial Pneumonia	2.7%	2.7%	2.6%	3.1%	3.4%	3.3%	2.6%	2.4%
Cellulitis	2.1%	1.4%	2.2%	1.3%	1.9%	0.8%	1.9%	1.4%
Diabetes	1.0%	1.8%	0.5%	2.5%	1.1%	1.7%	1.1%	1.1%
Kidney/Urinary Infections	1.6%	1.0%	1.4%	1.9%	1.9%	1.2%	2.0%	1.7%
Epilepsy	0.6%	0.3%	0.7%	0.0%	0.7%	0.8%	0.5%	0.4%
Asthma	0.7%	1.9%	0.8%	1.9%	0.7%	1.4%	0.8%	2.1%

\*This refers to any ACS condition. Only the most prevalent ACS conditions are shown in the table.

## D. 2012 – 2015 Implementation Strategy Objectives

Listed below are the programs and objectives outlined in UH Geauga medical Center's 2012 – 2014 Implementation Strategy, as well as a status update reporting the progress in implementing these objectives.

1. Improve access to care.
  - a. Provide access to health care services through the UH Hospital Financial Assistance Program. (STATUS: Ongoing with financial advisor)
  - b. Reduce transportation barriers through the Hospital's collaboration with the Community Care Shuttle and Geauga County transit. (STATUS: Ongoing)
  - c. Develop the primary and specialty physician workforce to provide access and meet community needs in geographic areas where these physicians are limited. (STATUS: Ongoing)
2. Enhance community outreach, health conditions and healthy behaviors.
  - a. Continue the free Healthy Kids, Healthy Weight™ program in partnership with UH Rainbow Babies & Children's Hospital to address diet- and exercise-related health conditions. (STATUS: Program discontinued at UH Geauga Medical Center)
  - b. Increase awareness of prevalent drug and tobacco use and associated health risks.
    - i. Continue and expand the relationship with the Geauga County Sheriff's Office to provide the drug abuse resistance education (DARE) program and other drug prevention education to all age groups in the community through the Hospital's nurse educator. (STATUS: Have worked with all public and parochial schools in Geauga County)
    - ii. Explore ways to offer a community smoking and tobacco cessation program. (STATUS: Using the Ohio Quit Line and providing education on lung cancer via physician/clinical presentations)
3. Reduce mortality due to chronic disease.
  - a. Develop relationships with community physicians, the UH Geauga Primary Care Institute physicians, extended care facilities, community and faith-based nonprofit organizations and public health departments to extend care management, community outreach and health education services into the community. (STATUS: Ongoing)
  - b. Focus physician continuing medical education on chronic disease topics, such as cardiovascular disease. (STATUS: CMEs and conferences provided by Medical Staff Office)
  - c. Conduct oncology screenings and explore the potential to establish an oncology Nurse Navigator program at the Hospital to coordinate cancer care. (STATUS: Monthly screening events)
4. Increase availability of health education programming and awareness of preventive care and access to community resources.
  - a. Increase outreach, improve preventive health, encourage healthy habits, improve parenting skills and enhance safety standards through the UH Geauga Healthy County Initiative, which encompasses the Hospital's entire community outreach program, through webinars, screenings, presentations, health fairs and community events with local organizations including, but not limited to, the Geauga County Department on Aging, the Geauga Park District, the Geauga County Sheriff's Department, the Geauga County Health Department and other nonprofit agencies. (STATUS: Health fairs, expos, corporate health)
  - b. Continue pediatric and young adult health education on disease prevention and safety. (STATUS: Teddy Bear Clinics YMCA Youth Day, Amish School Outreach)

5. Improve infant and maternal care.
  - a. Increase prenatal, parenting and lactation health education programs. (STATUS: Lactation specialist on staff)
  - b. Continue participation in the annual Women's Health Expo to provide health and wellness education. (STATUS: Annual)
  - c. Continue physician recruitment for maternal and pediatric care. (STATUS: Ongoing)
6. Address poor mental and behavioral health status and lack of access to these services.
  - a. Continue to operate the Hospital's behavioral health unit, a hospital-subsidized health service. (STATUS: Ongoing)
  - b. Continue to participate in community events that focus on mental health, such as the Pathways Health Fair, Metzenbaum KidsFest, and Transition Fair, by providing mental health crisis and educational information. (STATUS: Ongoing)
  - c. Continue to provide mental health education through free community seminars and webinars. (STATUS: Participate in Opiate Task Force, provide Medical Stabilization Unit, participate in NewVision)

## E. 2015 CHNA Community Leader Survey

### KEY HEALTH ISSUES

1. What are the top five (5) health issues you see in your community?

- |   |  |
|---|--|
| <input type="checkbox"/> Access to Care/Uninsured | <input type="checkbox"/> Overweight/Obesity            |
| <input type="checkbox"/> Cancer                   | <input type="checkbox"/> Sexually Transmitted Diseases |
| <input type="checkbox"/> Dental Health            | <input type="checkbox"/> Stroke                        |
| <input type="checkbox"/> Diabetes                 | <input type="checkbox"/> Substance Abuse/Alcohol Use   |
| <input type="checkbox"/> Heart Disease            | <input type="checkbox"/> Tobacco                       |
| <input type="checkbox"/> Maternal/Infant Health   | <input type="checkbox"/> Other (specify):              |
| <input type="checkbox"/> Mental Health/Suicide    |  |

2. Of those health issues mentioned, which one (1) is the most significant?

- |   |  |
|---|--|
| <input type="checkbox"/> Access to Care/Uninsured | <input type="checkbox"/> Overweight/Obesity            |
| <input type="checkbox"/> Cancer                   | <input type="checkbox"/> Sexually Transmitted Diseases |
| <input type="checkbox"/> Dental Health            | <input type="checkbox"/> Stroke                        |
| <input type="checkbox"/> Diabetes                 | <input type="checkbox"/> Substance Abuse/Alcohol Use   |
| <input type="checkbox"/> Heart Disease            | <input type="checkbox"/> Tobacco                       |
| <input type="checkbox"/> Maternal/Infant Health   | <input type="checkbox"/> Other (specify):              |
| <input type="checkbox"/> Mental Health/Suicide    |  |

3. Please share any additional information regarding these health issues and your reasons for ranking them this way below:

### ACCESS TO CARE

4. On a scale of 1 (strongly disagree) through 5 (strongly agree), please rate each of the following statements about Health Care Access in the area.

Residents in the area are able to access a primary care provider when needed (Family Doctor, Pediatrician, General Practitioner)	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
Residents in the area are able to access a medical specialist when needed (Cardiologist, Dermatologist, Neurologist, etc.)	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
Residents in the area are able to access a dentist when needed	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
There is a sufficient number of providers accepting Medicaid in the area	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
There is a sufficient number of bilingual providers in the area	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
There is a sufficient number of mental/behavioral health providers in the area	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
Transportation for medical appointments is available to area residents when needed	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5



5. What are the most significant barriers that keep people in the community from accessing health care when they need it?  
(Select all that apply)

- Availability of Providers/Appointments
- Basic Needs Not Met (Food/Shelter)
- Inability to Navigate Health Care System
- Inability to Pay Out-of-Pocket Expenses (Copays, Prescriptions, etc.)
- Lack of Child Care
- Lack of Health Insurance Coverage
- Lack of Transportation
- Lack of Trust
- Language/Cultural Barriers
- Time Limitations (Long Wait Times, Limited Offices Hours, Time off Work)
- Non/No Barriers
- Other (specify):

6. Of those barriers mentioned, which one (1) is the most significant?

- Availability of Providers/Appointments
- Basic Needs Not Met (Food/Shelter)
- Inability to Navigate Health Care System
- Inability to Pay Out-of-Pocket Expenses (Copays, Prescriptions, etc.)
- Lack of Child Care
- Lack of Health Insurance Coverage
- Lack of Transportation
- Lack of Trust
- Language/Cultural Barriers
- Time Limitations (Long Wait Times, Limited Offices Hours, Time off Work)
- Non/No Barriers
- Other (specify):

7. Please share any additional information regarding barriers to health care below:

8. Are there specific populations in this community that you think are not being adequately served by local health services?

\_\_\_ Yes \_\_\_ No

9. If yes, which populations are underserved? (Select all that apply)

- Uninsured/Underinsured
- Low-income/Poor
- Hispanic/Latino
- Black/African-American
- Immigrant/Refugee
- Disabled
- Children/Youth
- Young Adults
- Seniors/Aging/Elderly
- Homeless
- None
- Other (specify):

10. In general, where do you think MOST uninsured and underinsured individuals living in the area go when they are in need of medical care? (Choose one)

- Doctor's Office
- Health Clinic/FQHC
- Hospital Emergency Department
- Walk-in/Urgent Care Center
- Don't Know
- Other (specify):

11. Please share any additional information regarding uninsured/underinsured individuals and underserved populations below:

12. Related to health and quality of life, what resources or services do you think are missing in the community?  
(Select all that apply)

- Free/Low-Cost Medical Care
- Free/Low-Cost Dental Care
- Primary Care Providers
- Medical Specialists
- Mental Health Services
- Substance Abuse Services
- Bilingual Services
- Transportation
- Prescription Assistance
- Health Education/Information/Outreach
- Health Screenings
- None
- Other (specify):

## CHALLENGES & SOLUTIONS

13. What challenges do people in the community face in trying to maintain healthy lifestyles like exercising and eating healthy and/or trying to manage chronic conditions like diabetes or heart disease?

14. In your opinion, what is being done well in the community in terms of health and quality of life?

15. What recommendations or suggestions do you have to improve health and quality of life in the community?

### CLOSING

Please answer the following demographic questions.

#### 16. Name and Contact Information

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Organization: \_\_\_\_\_

Email Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_

17. Which one of these categories would you say BEST represents your community affiliation (Choose one):

- Health Care/Public Health Organization
- Mental/Behavioral Health Organization
- Nonprofit/Social Services/Aging Services
- Faith-Based/Cultural Organization
- Education/Youth Services
- Government/Housing/Transportation Sector
- Business Sector
- Community Member
- Other (specify):

18. What is your gender?    \_\_\_ Male    \_\_\_ Female

19. Which one of these groups would you say BEST represents your race/ethnicity?

- White/Caucasian
- Black/African-American
- Hispanic/Latino
- Asian/Pacific Islander
- Other (specify):

20. University Hospitals will be using the information gathered through these surveys to develop a community health implementation plan. Please share any other feedback you may have for them below:

## F. 2015 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 county-wide?

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?)*



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?

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?