FHN Community Health Needs Assessment

December 31, 2019

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Introduction and Executive Summary

Process

FHN has conducted a Community Health Needs Assessment (CHNA), as required by Internal Revenue Code, section 501(r).

FHN is a non-profit health system comprised of a hospital, specialty clinics and a network of primary care clinics serving the greater Freeport region and northwestern Illinois. FHN has defined its community for the CHNA as Stephenson, Jo Daviess, and Carroll Counties, Illinois, as the overwhelming majority of inpatients and emergency department patients draw from this area. Both primary and secondary data were collected to identify health needs within FHN's community.

Primary data was collected from a survey conducted with nearly 50 community leaders, 16 Care Transitions Team members, and 10 FHN executives. FHN commissioned an in-depth survey of community members who represent the broad interests as well as the specific populations in Freeport and the surrounding area. The survey measured perspectives on a range of issues that affect the population's health and well-being, e.g., community resources, barriers to health care providers, and reasons for high rates of disease and mortality. This survey measured the perception of these members of the community on various aspects of access to healthcare, perceived quality of care and the knowledge of resources available to community members.

FHN also collected secondary data on a broad array of health indicators and demographic information. Secondary data was collected using databases created by other agencies or organizations. Types of data collected included demographic information, chronic disease and morbidity/mortality information, health status indicators and health behaviors, family planning and births, general community/environment information, and local, state and national benchmarks.

Summary Findings

Community health needs identified through primary and secondary data collection fall into four prominent categories. FHN initially prioritized these health needs. The requirement that the hospital conducts a Community Health Needs Assessment (CHNA) under the Patient Protection and Affordable Care Act (PPACA) asks hospitals to pay specific attention to health care concerns that affect vulnerable populations. The preliminary prioritized need list was then presented to FHN's Care Transitions Committee, who reached consensus by making adjustments to the initial prioritized list. Here is the final list of prioritized health needs:

- 1. Community Health and Well Being
- 2. Chronic Disease Management
- 3. Adolescent Health
- 4. Behavioral Health

1. Community Health and Well Being

The availability of preventive care resources, nutritional status, and one's overall wellness significantly influence the health of the hospital community. The Care Transitions Committee (hereafter referred to as the Committee) identified social determinants of health, including obesity, as the primary health concern. Research shows that poor diet and inactivity greatly increase the risk for developing health conditions such as diabetes and obesity. Physical inactivity and diabetes rates within the hospital community are more severe than Illinois. Similarly, the Committee associated high mortality rates with lifestyle patterns (i.e., social determinants), so a primary initiative has been to provide both education and actual aid where needed, including activities such as widespread blood pressure screenings and access to healthy foods.

2. Chronic Disease Management

Chronic diseases and conditions – such as heart disease, stroke, cancer, type 2 diabetes, COPD, obesity, and arthritis – are among the most common, costly, and preventable of all health problems. Half of all American adults have at least one chronic condition, and almost one of three have multiple chronic conditions. Transformation of health care, from a system that is essentially reactive – responding mainly when a person is sick – to one that is proactive and focused on keeping a person as healthy as possible is needed. While FHN has taken a systems approach to understanding and identifying the barriers faced by people with chronic illnesses – including their social networks, clinical teams and healthcare payers – the initial approach to combatting chronic disease must continue in order to realize true changes. Our first entre into this arena has been a program called Connect the DOTS (Doors of Team Support) that launched in 2017 and has been growing more successful annually, currently including over 21 organizations from a wide cross-section of the community. In addition, FHN has launched two new efforts, a chronic care management program called Complex Care Management and a palliative care program called Supportive Care, to address the clinical aspects of chronic disease management as well as the need to partner with other community organizations and individuals.

3. Adolescent Health

FHN has identified this primary health need from the FHN CHNA survey, supported by primary research conducted by the Stephenson County Health Department. Elements of this need include behavioral health, food and nutrition, child abuse and neglect, physical activity, and safety both at home and throughout the community. Examples of activities and efforts that support progress in these areas (which will be covered in more detail further in this document), include Miles And Minutes (a community-wide activity/exercise program), a Back to Sleep campaign to encourage safe sleeping behaviors for babies, availability of items such as car seats, and outreach for vaccinations and school physicals. Further activity is planned and will be discussed later in this document.

4. Behavioral Health

Throughout primary research conducted by the community and FHN, a linkage to the importance of good mental/behavioral health was undeniable. From obvious examples such as physical and substance abuse to poor behavioral health – such as depression, which can lead to inactivity, poor eating habits, loneliness, and a host of other social determinant challenges – behavioral health is an underpinning to the majority of issues facing the northwest Illinois community. This has been demonstrated through an increasingly higher level of suicide, more visits to the emergency room for both extreme health issues as well as behavioral health outbursts, greater levels of incarceration, and a strongly negative impact on area youth as evidenced by school measures such as truancy and eligibility for school lunch programs extending to providing "weekend backpacks" to provide for food sufficiency when school is not in session.

Community Health Needs Assessment Background

Requirements

FHN has conducted a Community Health Needs Assessment (CHNA) for its hospital facility, specialty clinics and primary care clinics as required by Internal Revenue Code, section 501(r). The CHNA process is designed to assess health issues within the hospital community through collecting and analyzing primary and secondary data related to demographic information, health access, vulnerable populations, health status and disparity, and health behaviors of community residents. As required by the Patient Protection and Affordable Care Act (PPACA), the CHNA will include the following:

- A definition of the community served by the hospital facility
- How data was obtained, who was consulted/interviewed
- Demographics of the community
- Consulting with community representatives:
- Primary and chronic disease needs and other health issues of uninsured persons, low-income persons, and minority groups
- Existing health care facilities and resources within the community that are available to respond to the health needs of the community
- Information gaps that limit the hospital's ability to assess the community's health needs
- Prioritized list of community health needs

Previous Assessments

Previous assessments of health needs of Stephenson, Jo Daviess, and Carroll Counties include:

- 2019 Illinois Risk and Reach Report from the Erikson Institute, the Illinois Early Childhood Asset May (IECAM) of University of Illinois at Urbana-Champaign, and the Fiscal Policy Center at Voice for Illinois Children
- SG2 study (FHN data consultant partner)
- Stephenson County Health Department IPlan 2019-2024
- Stephenson County Health Department IPlan 2009 2014
- Carroll County Community Overview, Health Systems Research on behalf of Stephenson County Health Department, 2013
- Workforce Development in Northwest Illinois, Workforce Development Commission, 2013

CHNA Approval

The CHNA was accepted and approved by the FHN Board of Directors on December 30, 2019.

Public Posting and Availability

The FHN 2019 Community Health Needs Assessment and Implementation Strategy is publicly posted on the FHN website. Hard copies are also available either through downloading through the website or through submitting written or electronic requests to Esther Baldauf, Administrative Assistant, ebaldauf@fhn.org or at FHN Memorial Hospital, 1045 West Stephenson, Freeport, IL 61032.

Methodology

Report Methodology

Information related to the highest priority health and demographic indicators is presented in the report document itself, with detailed supplemental secondary data and primary data transcripts available in the appendices.

Secondary Data Methodology

Secondary data was collected using databases created by other agencies or organizations. FHN collected secondary data for the assessment from a variety of sources and about a variety of different issues. Types of data collected included demographic information, chronic disease and morbidity/mortality information, health status indicators and health behaviors, family planning and births, general community/environment information, and local, state and national benchmarks. Due to the nature of secondary data available, data was collected on the level of zip code, city, or county for the defined hospital community. Most health indicator data was available on a county-level basis, while demographic information was available in greater detail on a city- or zip-level basis.

After data was collected, secondary data measures were compared to US and Illinois measures. Measures for Carroll, Jo Daviess, and Stephenson Counties (or their corresponding zips) that were particularly different from Illinois or national measures were considered to be of priority.

Primary Data: Survey Methodology

FHN worked to conduct key informant surveys of 46 community stakeholders. Questions were asked about an array of community health indicators, assets, needs, and solution perspectives. Community stakeholders surveyed represented healthcare and social service providers, economic organizations and political community officials, the elderly/senior population, the low- income population, children, the working class and general population.

Responses to the questions were aggregated according to number of individuals giving the same response to a question. For example, "very high" importance was given to issues mentioned by the majority of community stakeholders, and "low" importance was given to responses given by a small number of community stakeholders.

Information Gaps

Every attempt was made to collect relevant and recent primary and secondary data reflecting the health status and social determinants of health in the FHN community. Although financial and time constraints limited this assessment to the extent that they would limit any assessment of a community's needs, no significant information gaps were identified.

Hospital and Community

FHN Memorial Hospital Description

FHN Memorial Hospital is a 100-licensed bed hospital located in Freeport, Illinois. The original location that later came to be renamed as FHN Memorial Hospital was opened in 1902. Through its extensive community involvement and well-developed system for monitoring quality of care, FHN strives to improve the health of its community and to provide superior, quality healthcare services.

HOSPITAL COMMUNITY JO BAYTESS DUBUQUE JACKSON IOWA Maguinatis CARROLL OGLE Maguit Horms

FHN Memorial Hospital

FHN Memorial Hospital defined its community for the purposes of the CHNA geographically as Stephenson, Jo Daviess, and Carroll Counties. The community was defined based upon internal patient origin information by zip code for FHN's emergency room visits and inpatient discharges. A clear majority of the patients drew from these three counties.

Community Profile

General Demographics

Population by Zip Code Based on 2010 US Census



Stephenson County_is the most populous area of FHN's defined community. Most of its population is clustered around the Freeport area.

Population History

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	Carroll County	Jo Daviess County	Stephenson County	FHN Community	Illinois	USA	FHN Community Difference Compared to Illinois	FHN Community Difference Compared to USA
Total 2000 Census	16,674	22,289	48,979	87,942	12,416,145	280,405,781		
Total 2010 Census	15,387	22,678	47,711	85,776	12,830,632	307,745,539		
Total Population Change 2000-2010	-1,287	389	-1,268	-2,166	414,487	27,339,758		
Percent Change 2000-2010	-7.7%	1.8%	-2.6%	2.5%	3.3%	9.8%	-174%	-125%

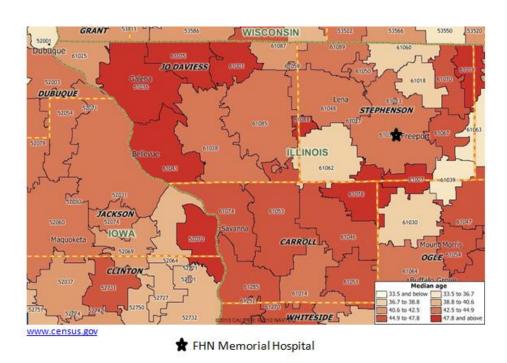
Carroll and Stephenson County populations are likely to remain relatively steady, while the Jo Daviess population is likely to increase significantly by 2030.

Population Projections

	2000	2005	2010	2015	2020	2025	2030	% Change 2000 to 2030
Carroll	16,705	16,477	16,368	16,610	17,003	17,384	17,729	6%
Jo Daviess	22,324	23,906	25,472	26,721	27,932	28,943	29,574	32%
Stephenson	49,058	48,152	47,812	48,136	49,268	50,553	51,737	5%
Illinois	12,440,846	12,875,035	13,279,091	13,748,695	14,316,487	14,784,968	15,138,849	22%

www.ildceo.net

Median Age by Zip Code Based on 2010 Census



The median age of people in the FHN community is varied and the average age is 47.2. This translates to a broad variety of health needs across the community, based on age population. As a comparison, the median age in Illinois is 37.7, and the national median age is 37.8.

	Carroll County	Jo Daviess County	Stephenson County	FHN Community	Illinois	USA	FHN Community Difference Compared to Illinois	FHN Community Difference Compared to USA
Total Population	14,704	22,046	45,839	82,589	12,854,526	321,004,407		
Median Age	47.4	49.4	44.7	47.2	37.7	37.8	25%	25%

Projected 65 and Older Population

	2000	2005	2010	2015	2020	2025	2030	% Change from 2000 to 2030
Carroll	3,216	3,247	3,415	3,732	4,176	4,671	5,093	58%
Jo Daviess	4,006	4,433	5,044	5,808	6,628	7,523	8,142	103%
Stephenson	8,041	8,390	9,048	10,089	11,525	13,154	14,366	79%
Illinois	1,502,550	1,550,281	1,658,029	1,889,689	2,201,461	2,567,497	2,883,470	92%

www.ildceo.net

As shown in the chart above, the 65 and over population in Stephenson, Jo Daviess, and Carroll Counties is rapidly growing and will likely continue to increase in the coming years, similar to the overall aging rate in Illinois. In the case of Jo Daviess and Stephenson Counties, in the next five years, this population segment is expected to increase by over 14 percent, while Carroll County's senior population is expected to increase by over 11 percent. Because this population segment is expected to grow more rapidly than the overall population, this indicates that the vulnerable population of seniors in the FHN community will become a larger proportion of residents in the coming years. In this sense, health issues for seniors are likely to become more prominent in the future.

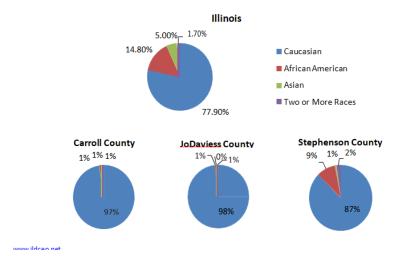
Current 17 and Younger Population

In general, those 17 and younger make up about 2% less of the total population in FHN's service area than in the state of Illinois and the US overall.

	Carroll County	Jo Daviess County	Stephenson County	FHN Community	Illinois	USA	FHN Community Difference Compared to Illinois	FHN Community Difference Compared to USA
Total Population	14,704	22,046	45,839	82,589	12,854,526	321,004,407		
Population 0-17	2,873	4,279	9,973	17,125	2,958,997	373,601,279	25%	25%
Percent Population 0-17	19.54%	19.41%	21.75%	20.74%	23.02%	22.93%	-10%	-10%

When compared to the modest population increases projected in the 17 and under age group, the aging of the hospital community as well as Illinois is particularly pronounced.

Race



As seen above, the racial makeup of the hospital community is predominately Caucasian, and African American as a very distant second. All three counties have very small Asian population segments as well. The FHN community is significantly less racially diverse than the State of Illinois overall.

Projected African American Population

	2000	2005	2010	2015	2020	2025	2030	% Change from 2000 to 2030
Carroll	91	95	103	111	113	119	129	42%
Jo Daviess	44	58	73	84	97	115	130	195%
Stephenson	3,761	3,844	4,016	4,297	4,682	5,131	5,590	49%
Illinois	1,880,101	1,932,802	1,981,006	2,035,723	2,094,687	2,132,678	2,150,187	14%

www.ildceo.net

Stephenson County has the largest African American population in the FHN community. Relative to their current numbers, the African American population in the FHN community is growing rapidly.

Projected Asian Population

	2000	2005	2010	2015	2020	2025	2030	% Change from 2000 to 2030
Carroll	68	87	105	135	171	206	243	257%
Jo Daviess	36	40	44	45	48	49	48	33%
Stephenson	334	334	356	373	405	445	485	45%
Illinois	424,291	525,866	628,663	742,266	872,341	989,467	1,094,499	158%

www.ildceo.net

The Asian population in the FHN community is growing at a more rapid rate than overall population. This growth rate is particularly strong in Carroll County, where the Asian population is expected to grow by over 80 percent between 2013 and 2030.

Projected Hispanic Population

	2000	2005	2010	2015	2020	2025	2030	% Change from 2000 to 2030
Carroll	340	367	407	444	485	526	561	65%
Jo Daviess	342	370	400	428	445	461	483	41%
Stephenson	747	826	912	998	1,095	1,202	1,301	74%
Illinois	1,532,791	1,709,072	1,877,681	2,041,127	2,206,816	2,380,472	2,562,430	67%

Note: Information does not include undocumented individuals www.ildceo.net

At between 2 and 3 percent of the total population in the hospital community, the Hispanic population is small, relative to 15 percent in Illinois. However, this ethnic group is growing at a larger rate than overall population, and it will likely become more central to this community in the future.

Socioeconomic Status and Education

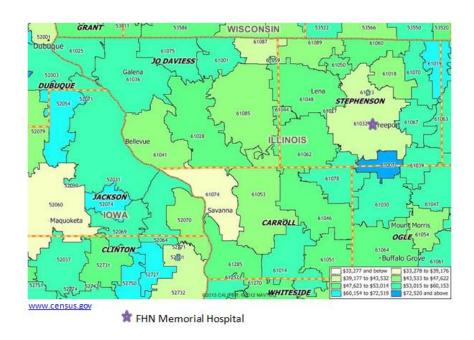
Unemployment Rate

	Carroll County	Jo Daviess County	Stephenson County	FHN Community	Illinois	USA	FHN Community Difference Compared to Illinois	FHN Community Difference Compared to USA
Labor Force	7,630	11,424	22,569	41,623	6,592,403	166,040,704		
Number Employed	7,361	11,046	21,590	39,997	6,313,972	159,398,208		
Number Unemployed	269	378	979	1,626	278,431	6,642,496		
Unemployment Rate	3.5%	3.3%	4.3%	3.9%	4.2%	4.0%	-7%	-3%

US Dept. of Labor, Department of Labor Statistics August 2019 by County [Geography: county 2019-August]

The improvement in the national unemployment rate has positively impacted the FHN community as well. The local economy has improved over the last three years to approximately the same point as the nation overall. However, a new challenge has arisen in finding entry-level qualified employees and applicants to fill jobs requiring specialized skills. While the area overall has recently achieved record low levels of unemployment, FHN's understanding of the social determinants of health, which often disproportionately impact lower-income individuals and families, still mandates a focus on reducing poverty through support of job programs and other skill development opportunities. An additional challenge exists in terms of behavioral health issues and lack of "soft" job skills such as on-time attendance, interpersonal behaviors, etc. Over 1,000 open positions were unfilled in Stephenson County in summer 2019.

Median Income by County Based on 2010 Census



As seen in the map, much of FHN's service has a significantly lower median household income than the surrounding area. Not surprisingly, the poverty level in Stephenson and Carroll Counties is significantly higher than that of Jo Daviess County. Median income (below) in the FHN community is also significantly lower than the State and the country overall.

Median Household Income

	Carroll County	Jo Daviess County	Stephenson County	FHN Community	Illinois	USA	FHN Community Difference Compared to Illinois	FHN Community Difference Compared to USA
Total Households	6,573	9,795	19,604	35,972	4,818,452	118,825,921		
Average Household Income	\$61,809	\$73,085	\$59,614	\$63,683	\$85,262	\$81,283		
Median Household Income	\$50,555	\$55,532	\$46,427	\$50,838	\$61,229	\$57,652	-17%	-12%

US Census Bureau, American Community Survey 2013-17

Poverty Rates, Population Below 100% of Federal Poverty Level

Likely owing to the recent improvement in job availability, poverty in FHN's service area overall is somewhat lower than the State and national averages, although the poverty level in Stephenson county – due to the fact that Freeport is the largest city in the service area and therefore supports a more diverse population – is higher than State and national averages.

	Carroll County	Jo Daviess County	Stephenson County	FHN Community	Illinois	USA	FHN Community Difference Compared to Illinois	FHN Community Difference Compared to USA
Total Population	14,430	21,844	44,989	81,263	12,551,822	313,048,563		
Population in Poverty	1,634	1,658	7,254	10,546	1,698,613	45,650,345		
Percent Population in Poverty	11.3%	7.6%	16.1%	13.0%	13.5%	14.6%	-4%	-11%

US Census Bureau, American Community Survey 2013-17

The child poverty rate in the service area reflects similar demographics – it is lower in the area when taken overall but significantly higher in Stephenson County (nearly twice the level in Carroll and Jo Daviess counties), again likely due to the more diverse population and different job mix in the city of Freeport.

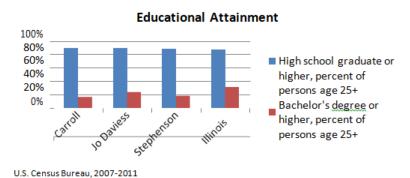
Children Below 100% of Federal Poverty Level

	Carroll County	Jo Daviess County	Stephenson County	FHN Community	Illinois	USA	FHN Community Difference Compared to Illinois	FHN Community Difference Compared to USA
Total Population	14,430	21,844	44,989	81,263	12,551,822	313,048,563		
Population Under Age 18	2,800	4,231	9,823	16,854	2,915,860	72,430,017		
Population Under Age 18 in Poverty	350	380	2,283	3,013	549,508	14,710,485		
Percent Population Under Age 18 in Poverty	12.5%	9.0%	23.2%	17.9%	18.9%	20.3%	-5%	-12%

US Census Bureau, American Community Survey 2013-17

Education

Noted below, educational attainment in the FHN community is significantly lower than in Illinois and the nation overall (which is similar to Illinois), especially the rate of bachelor's or higher education within the community.



Violent Crime Rate (2012)

Violent Crime Rate per 100.000 Population

Carroll County	47
Jo Daviess County	131
Stephenson County	127
Illinois	409
USA	385

FBI Uniform Crime Reports 2019 www.fbi.gov

The violent crime rate in Jo Daviess County is the highest of the three counties in the FHN community at 131 crimes per 100,000 population, compared to Stephenson and Carroll Counties at 127 and 47, respectively. The entirety of the FHN community has a much lower violent crime rate than the rate in Illinois and the USA overall.

Rate of Child Abuse and Neglect (2011)

Rate of Child Abuse and Neglect (Rate per 1.000)

	Neglect (Rate per1,000)
Carroll County	5
Jo Daviess County	11
Stephenson County	11
Illinois	8

Voices for Illinois Children

The rate of child abuse and neglect in Carroll County is lower than the rate in Illinois at 5 per 1,000 (compared to 8), while in Jo Daviess and Stephenson Counties are higher than the state average, at 11 and 11, respectively.

Accessing Providers and Transportation

MUA and HPSA Summary (for more detail, please see Appendices)

Stephenson County's Winslow Service Area and both Carroll and Jo Daviess Counties include census tracts (MUAs 796 and 809, respectively) designated medically underserved areas (MUAs) by the Health Resources and Services Administration (HRSA). Additionally, the low income population of the North Freeport Service Area is considered to be a medically underserved population (MUP). This MUP applies to census tracts CT 0007.00, 0008.00, 0009.00, and 0012.00. The MUA or MUP designation is developed by HRSA and indicates that a combination of four components exists in the area or population, respectively:

- A low ratio of primary medical care physicians per 1,000 population
- A high infant mortality rate
- A high percentage of the population with incomes below the poverty level
- A high percentage of the population age 65 or over.

Carroll, Jo Daviess, and Stephenson Counties have health professional shortage areas (HPSAs) for primary care providers, dental providers, and/or mental health providers. The HPSA designation is developed by HRSA, and indicates that an area or population either:

- Has a population to full-time-equivalent primary care physician ratio of at least 3,500:1
- Has a population to full-time equivalent primary care physician ratio of less than 3,500:1, but greater than 3,000:1 with unusually high needs for primary care services or insufficient capacity of existing primary care providers

HPSAs for primary care providers include:

- The entirety of Carroll County
- The low-income population of Jo Daviess County
- The low-income population of Stephenson County

HPSAs for dental providers include:

- The low-income population of Carroll County
- The low-income population of Freeport

HPSAs for mental health providers include

- The Whiteside/Lee catchment area of Carroll County
- Jo Daviess/Stephenson catchment area of Jo Daviess and Stephenson County

Preventable Hospitalizations (2010)

Discharge Rate for ACSCs per 1,000 Medicare Enrollees

	Rate
Carroll County	68.00
Jo Daviess County	57.00
Stephenson County	67.00
Illinois	75.00

Medicare/Dartmouth Institute

Preventable hospitalizations due to ambulatory care sensitive conditions (ACSCs) in the FHN community are significantly lower than the rate in Illinois. However, as shown in the primary care physician to population ratio, there are significantly fewer primary care physicians per resident in Carroll, Jo Daviess, and Stephenson Counties than in Illinois.

Primary Care Population to Physician Per 100,000 (2014)

	Ratio
Carroll County	20
Jo Daviess County	45
Stephenson County	43
Illinois	97
USA	88

HRSA

As seen above, there is a significant gap in the community population to primary care providers in the FHN community. Some mentioned the lack of care coordination as contributing to difficulty in accessing care and that due to provider clinic hours, it is often difficult for adults who work during the day to access health care.

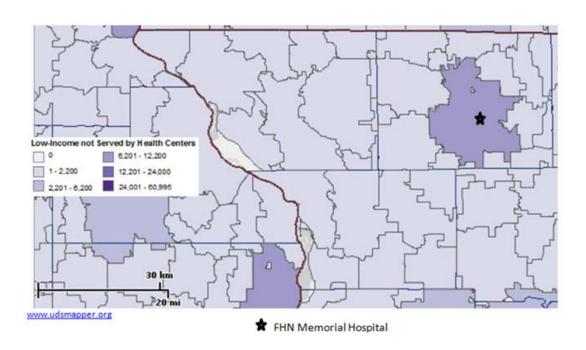
Respondents also noted that there is a general lack of knowledge about access points and how to use the healthcare system within the community. Several called for much more information about location, cost, and accepted insurance coverage.

Transportation in general within the community was also noted as a major obstacle to residents seeking medical care. A lack of affordable, convenient transportation was also recognized as a barrier. This affects vulnerable populations such as low income and seniors within the community more heavily. Respondents noted that public transportation in Freeport was particularly challenging due to the logistics and cost to use the system.

Access to Care for Low-Income Individuals and Families

As demonstrated below, there are no Federally Qualified Health Centers (FQHCs) in the Freeport area to serve low-income individuals. There is only one Rural Health Center, and there are no FQHCs or Health Center Program (HCP) Grantees. An HCP Grantee is an organization that receives grant funding under section 330 of the Public Health Service Act. The majority of HCP Grantees are funded to serve a general underserved community or population.

Low-Income Population Not Served by HCP Grantees, 2011



Overall, financial barriers to care are a major health concern within the FHN Memorial Hospital community. Respondents listed financial and health insurance barriers as the biggest issues in the hospital community, including new concerns raised by the dismantling of the Affordable Care Act. Inadequate health insurance coverage was cited as preventing individuals from seeking preventive care and staying well. The FHN Community Health Clinic offers many services to the underinsured, although this is not widely understood within the community and it is not a comprehensive primary care site. It was noted by some respondents that low-income families seek primary care in the Emergency Room at FHN once their condition reaches an unbearable point.

Community Needs, Behaviors, and Risk Factors

Community Need Index

The Community Need Index (CNI) indicates that cities in the FHN community experience considerable barriers to accessing health care. The CNI is a rating system that accounts for the underlying economic and structural barriers that affect access to health care, related to income, culture/language, education, insurance, and housing. A CNI score of 1 represents less community need, and a score of 5 represents the highest community need. In the FHN community, there are relatively high socioeconomic barriers to health care in Savanna (61074) and Freeport (61032).

Carroll County Community Need Index

Zip Code	CNI Score
61053	2.4
61074	4
61285	2.85
61014	2
61051	2
61046	1.8
61078	2.2

Jo Daviess County Community Need Index

Zip Code	CNI Score
61025	2
61036	2.4
61041	2.8
61028	2
61085	2.6
61001	1.8
61087	2.8

Stephenson County Community Need Index

Zip Code	CNI Score
61089	2
61050	2
61048	2.8
61062	2
61027	2.15
61032	3.8
61039	1.4
61067	2.4
61018	2
61019	1.5
61060	2
61070	1.6

Dignity Health, 2018

Mortality Indicators

Age-adjusted Death Rate per 100,000 Population by Cause in 2013-17

	Illinois	Carroll County	Jo Daviess County	Stephenson County	FHN Community
Heart Disease	90	109	74	71	79
Cancer	166	163	164	163	163
Lung Disease	38.46	41.1	22.9	<mark>46.7</mark>	38.3
Cerebrovascular Disease (Stroke)	37.9	38.4	43.3	33.3	36.9
Unintentional Injury	37.81	<mark>59.2</mark>	<mark>55.8</mark>	<mark>42.9</mark>	<mark>49.3</mark>
Infant Mortality	6.9	9.7	4.7	6.9	6.8
Suicide	10.5	suppressed	suppressed	<mark>13.1%</mark>	13.1

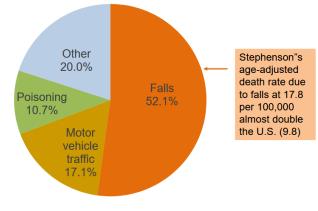
CDC Wonder

The leading causes of death in the FHN community per 100,000 population include cancer, heart disease, and unintentional injury. Lung disease is significantly higher in Stephenson County than the state overall. Falls were a significant element of unintentional injury deaths when reviewing the data in more detail. Suicide was also significantly higher in Stephenson County than the state, reflecting the need for more behavioral health services.

Deaths from Falls

Secondary data derived from both FHN's data consultant SG2 and the Stephenson County Health Department County Analysis for 2019 has shown a significant spike in deaths due to accidental deaths, with over half of those deaths resulting from falls. According to the CDC, the US average death from falls is 9.8 per 100,000 population, where Stephenson County reports a death rate of 17 per 100,000. As a result of this finding, the Connect the DOTS team members have identified education on fall prevention as a priority action item. The team was previously unaware that one member organization, the Senior Resource Center, is actually funded and certified to provide fall prevention education. By leveraging this resource, all the member organizations of Connect the DOTS will be able to benefit without expending additional resources.

Accidental Deaths 2013-2017



Cancer

Although frequently a cause for concern in many communities, the incidence of cancer per 100,000 throughout the FHN Community — while still a health concern that of course requires attention — is actually lower for almost all forms of cancer than what is seen in the state. While we do not have comparative data to prove the point, we believe this can be attributed in no small part to the presence of the Leonard C. Ferguson Cancer Center at FHN Memorial Hospital, which provides university-level cancer treatment very close to most people's homes in the area, making it more convenient to receive care and reduce cancer mortalities.

Cancer Incident Rate per 100,000 Population in 2011-15

	Illinois	Carroll County	Jo Daviess County	Stephenson County	FHN Community
Breast	131.7	148.2	125	119.8	125.9
Colon/rectum	43.9	44.3	36.7	43.1	41.5
Lung	66	57.8	61.6	57.5	58.7
Prostate	114.9	110.3	118.5	99.6	107.3
All sites	463.7	482.7	487.5	443.2	434.2

State Cancer Profiles

Behavior Indicators

Physical Inactivity, Diabetes, and Obesity

A lack of education about healthy behaviors can be a driver of health issues within the community. Correspondingly, lack of education about seeking preventive care can be a major contributor to mortality rates. Community education on healthcare topics has been a priority for FHN for the last three years and will continue to be for the foreseeable future. Data below indicate areas where education may be focused, although general health and wellness education will continue to be important as each of the focus areas reflects an overall lack of attention to wise healthcare choices.

Throughout the FHN service area, our constituents are less active than the state and national averages, although not by a great deal.

Physical Inactivity (2016)

	Percent
Carroll County	26.1%
Jo Daviess County	23.9%
Stephenson County	23.4%
FHN Community	24%
Illinois	21.8%
United States	22.8%

National Center for Chronic Disease Prevention and Health Promotion

Diabetes rates in the FHN service area are lower higher than the rate in Illinois and the US overall for both adults overall and the Medicare population.

Diabetes (2015) Percentage of Total Adult Population

	Percent
Carroll County	6%
Jo Daviess County	7.3%
Stephenson County	8.2%
FHN Community	7.5%
Illinois	9.1%
United States	9.3%

Dartmouth Atlas of Healthcare

Diabetes (2015) Percentage of Medicare Population

	Percent
Carroll County	26.6%
Jo Daviess County	21.1%
Stephenson County	25.2%
FHN Community	24.6%
Illinois	27.2%
United States	27.2%

Dartmouth Atlas of Healthcare

In clinical obesity, while Carroll and Jo Daviess counties are both lower than the state and national averages, Stephenson County is higher, bringing up the percentage for the whole of FHN's service area (likely due to demographics in Freeport).

Factors like poor nutrition, dietary choices, and limited exercise are behaviors affecting weight, leading to obesity. Poverty and low levels of education are also social determinants that clearly affect community residents' ability to stay healthy with recommended levels of exercise and nutritious diet.

Clinical Obesity Percentage of Total Adult Population (age 20+, 2015)

	Percent
Carroll County	24.4%
Jo Daviess County	28.2%
Stephenson County	33.8%
FHN Community	30.5%
Illinois	29.4%
United States	28.8%
Dartmouth Atlas of Healthcare	

Low Birth Rate and Teen Births

Low birth weight data can be indicative of lower-quality prenatal care: Carroll and Jo Daviess counties are close to or lower than state and national averages, Stephenson County is higher, again increasing the percentage for the FHN service area and again, likely due to demographics in Freeport.

Low Birth Weight Percentage (2006-2012)

	Percent
Carroll County	8.9%
Jo Daviess County	6.9.3%
Stephenson County	9.4%
FHN Community	8.7%
Illinois	8.4%
United States	8.2%

CDC Wonder

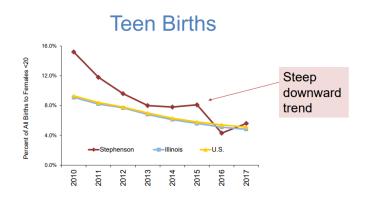
Teen Births

Every woman, no matter what her age, should be able to choose when she wants to have a child – and when she doesn't.

There are many birth control options, and one of the most effective is an IUD (intrauterine device). This form of birth control, known as Long-Acting Reversible Contraception (LARC) is now offered through a partnership with the Stephenson County Health Department that began in 2015. As part of the program, women considering LARC were made aware of the following through education provided by a healthcare provider from FHN:

- LARC is the birth control method of choice for female ob/gyn providers once inserted, there is
 nothing else to remember, and no need to plan ahead for a sexual encounter. For most women,
 effectiveness is close to 100% and the device can remain in place for 3-12 years.
- As an easy birth control option, LARC can prevent teenage pregnancies and unintended pregnancies at any age, and reduce unnecessary abortions. When a woman decides that she does want a child, the device can be removed by a healthcare provider.
- LARC can be provided at no charge, due to the fact that this program is not income-based so all women can be served. It is also completely confidential; permission is not required from parents for minors, and no referrals are necessary.
- Free birth control does not encourage sex this has been disproved in many independent studies. In Stephenson County, there have been pregnancies in girls as young as 10 and 11 so it's clear that unintended pregnancies are an issue here in northwest Illinois.

Preliminary data from the Illinois Department of Public Health, as shown in the chart below, shows 74 births in Stephenson County teenage mothers in 2010 compared to 27 in 2017.



Risk Factors in FHN Community

Risks in Adults

The risk factors for unhealthy behaviors in adults in FHN's Community are not good when compared with the data for Illinois and the US overall. For example, the smoking rate in Stephenson County at 29.6% is significantly above the rate in Illinois and national rate.

Tobacco Use (2006-2012)

	Percent
Carroll County	Suppressed
Jo Daviess County	Suppressed (previously 15%)
Stephenson County	29.6%
Illinois	18.4%
United States	18.1%

CDC Health Indicators Warehouse

Alcohol consumption rates are also higher than Illinois and the USA throughout FHN's service area, to varying degrees, with Stephenson County being the highest by a significant margin.

Alcohol Consumption (2006-2012)

	Percent
Carroll County	Suppressed
Jo Daviess County	22%
Stephenson County	25%
Illinois	20%
United States	17%

CDC Health Indicators Warehouse

Risks in Adolescents

Acknowledging the reality that the adolescents of today will be the adults of tomorrow, the Connect the DOTS effort has designated addressing the health and well-being of adolescents in our community as a priority. While many of the types of services they require for health and well-being are the same as adults, they need to be delivered in different ways due to their age, the importance of involving their parents or others who are raising them, and the fact that they are influenced by very different factors than adults.

Primary data collected by FHN Family Counseling indicates that adolescents in Stephenson and Jo Daviess Counties have a number of adverse conditions to overcome. With over 70% of students responding, the chart below indicates the percentage of twelfth-graders who responded to FHN's 2018 State of Our Youth study as having recently experienced or used the conditions/substances shown.

	Stephenson	Jo Daviess
Physical inactivity 4-5 hours or more/day	43%	30%
Alcohol use	41%	40%
Tobacco use	53%	61%
Marijuana use	71%	59%
Other substance abuse	20%	14%
Depression*	36%	29%
Bullying	26%	23%

^{*}Felt so sad or hopeless every day for two weeks or more in a row that they stopped doing usual activities.

Risks in Infants and Toddlers

Positional Asphyxiation

According to the Stephenson County Health Department and the Stephenson County Coroner, sleep suffocation is the leading cause of reported child deaths in Illinois. Between January and May of 2018, 9 infant deaths in Stephenson County resulted from positional asphyxiation – smothering. These deaths were not SIDS (Sudden Infant Death Syndrome) – they were completely preventable.

The babies who died were all under 6 months old, with most of them being over 3 months old. Most were in families with other siblings, and a number were in families where both parents worked different shifts and the death occurred while one parent was getting home and the other was leaving so the baby was left alone – usually in the parents' bed – for a short while. Another complication has been the popularity of new mattresses or mattress pads that conform to the sleeper's body shape; if babies fall or roll into a facedown position, the mattress conforms to their faces, blocking their ability to breathe.

Through Connect the DOTS, FHN mounted a widespread campaign on the ABCs of safe sleep for babies:

ALONE

Not in a bed, on a couch, or in a chair with anyone, including parents and other children.

On their **B**ACKS

Always place baby on his or her back to sleep.

In a safe **C**RIB

Baby should sleep in a crib with a firm mattress covered by a tightly fitted sheet. Keep all stuffed animals, toys, pillows, blankets, quilts, crib bumpers, and sleep positioners out of the crib.

Communications channels included radio, social media, website promotions, public relations, community education through the DOTS partner agencies, and free doorknob hangers with the ABCs of Safe Sleep made available through all DOTS agencies and throughout FHN.

Additional support included:

- Providing "sleep sacks" for all babies born at FHN Memorial Hospital and to DOTS partners such as the Freeport Pregnancy Center, AOK, Amity, Dream Center, and others for their clients.
- Working with the Dream Center who took the lead on the initiative to distribute Pack 'n Play convertible cribs for families in need of a safe bed for their babies.

Lead Exposure

According to the CDC, until 2012, children were identified as having a blood lead "level of concern" if the test result is 10 or more micrograms per deciliter of lead in blood, with chelation therapy to be considered when a child has a blood lead test result greater than or equal to 45 micrograms per deciliter. CDC is no longer using the term "level of concern" and is instead using the reference value to identify children who have been exposed to lead and who require case management. Blood lead level tests are also reported at less than 5 micrograms per deciliter as any amount at all is now considered to be unsafe. This lower value means that more children will likely be identified as having lead exposure allowing parents, doctors, public health officials, and communities to take action earlier to reduce the child's future exposure to lead.

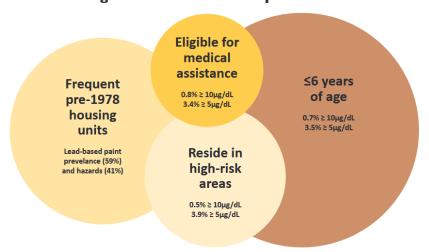
The Freeport area has a high number of older homes which likely contain lead paint and as a result, lead levels in children in Stephenson County are higher than surrounding counties (see chart below).

	Illinois	Carroll County	Jo Daviess County	Stephenson County	Winnebago County (Rockford)
Total number of children tested in 2017	229,203	239	327	1,132	6,240
Percentage children tested enrolled in Medicaid	69.4	66.1	61.5	74.2	76.4
Medicaid-enrolled children tested at ≥10 µg/dL	0.8	1.9	1.0	3.6	1.0
Medicaid-enrolled children tested at ≥5 µg/dL	3.4	8.2	5.5	13.0	4.2
Percentage children tested not enrolled in Medicaid	30.6	33.9	38.5	25.8	23.6
Non-Medicaid-enrolled children tested at ≥10 μg/dL	0.7	1.2	0.0	2.4	1.4
Non-Medicaid-enrolled children tested at ≥5 µg/dL	2.7	2.5	2.4	6.8	4.1

Illinois Lead Program 2017 Annual Surveillance Report

The graphic below indicates children who are highest risk of lead poisoning, who will be addressed in FHN's outreach efforts as part of the Connect the DOTS initiative.

Children at Highest Risk for Lead Exposure



Illinois Lead Program 2017 Annual Surveillance Report

Behavioral Health in the Overall FHN Community

Following the closure of many mental health treatment centers in Illinois in recent years, the importance of addressing behavioral health services in a more robust fashion arose from a number of sources, including a quarterly advisory meeting of the Connect the DOTS group, FHN's emergency department statistics (including daily Safety Huddle reports), the Stephenson County Health Department County Analysis 2019, and a number of national data sources through FHN's data consulting partner SG2. The data — which was consolidated into a business plan at FHN — was sobering enough to move FHN to begin to address the situation sooner rather than later.

For example, in the Medicare population alone....

Depression in the Medicare Population (2017)

	Percent
Carroll County	Suppressed
Jo Daviess County	22%
Stephenson County	25%
Illinois	20%
United States	17%

CMMS

In addition, with psychoses being the fourth leading cause of hospitalization (see below), when considering the cost of emergency transportation and other first community first responders, the Crisis Stabilization Center will be far more cost-effective and accessible for the whole community than having these patients come to the hospital emergency room.

Leading Reasons for Hospitalization

Rank	Diagnosis	Number
1	Normal newborn	294
2	Major joint replacement or reattachment of lower extremity	274
3	Vaginal delivery w/o complicating diagnoses	215
4	Psychoses	178
5	Heart failure, shock w MCC or peripheral extracorporeal membrane oxygenation (ECMO)	148
6	Simple pneumonia and pleurisy w CC	135
7	Septicemia or severe sepsis w MCC	128
8	Cellulitis	103

Note: 2018 inpatient discharges of Stephenson County residents from hospitals in Illinois or Wisconsin

Source: Illinois Hospital Association, COMPdata

As a result, a new Crisis Stabilization Center is being finalized in early 2020. This Center, much of which has been funded through the community, is a state-of-the-art solution to providing care in a setting that is much more conducive for healing in behavioral health and substance abuse patients.

Community Health Resource Review

There are many different providers and medical resources available within the FHN community, even though they may not be sufficient to meet community needs or be numerous enough to meet industry benchmarks.

FHN Memorial Hospital is the only facility within the community available to address inpatient care needs. FHN offers financial discounts or financial assistance to uninsured, underinsured and economically disadvantaged patients.

There are 26 outpatient facilities located within the FHN community, all of which offer medical care regardless of ability to pay, financial assistance to those in financial need, or discounts to uninsured patients. There are also two behavioral health facilities in the FHN community. In addition, FHN offers virtual provider visits (via phone or video) through *FHNow*, which is available for anyone (need not be an FHN patient) as well as telehealth behavioral health counseling with licensed clinical therapists throughout the region in FHN office settings.

For more detailed information, please see Community Health Resources in the Appendices.

Prioritized Health Needs

Health needs were considered and prioritized by FHN, and the following order of priority of needs in the community was determined:

- 1. Community Health and Well Being
- 2. Chronic Disease Management
- 3. Adolescent Health
- 4. Behavioral Health