Carle
Hoopeston Regional Health Center

COMMUNITY HEALTH NEEDS ASSESSMENT

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Carle Hoopeston Regional Health Center (CHRHC) is pleased to present the 2013 Community Health Needs Assessment for the hospital's service area of Vermilion County. As federally required by the Affordable Care Act, this report provides an overview of the methods and process used to identify and prioritize significant health needs in the community.

SERVICE AREA: VERMILION COUNTY

The service area of Carle Hoopeston Regional Health Center is defined as the geographical boundary of Vermilion County, Illinois. While some residents of surrounding counties utilize CHRHC services, this assessment and subsequent interventions will be targeted at Vermilion County residents, who make up 84% of CHRHC patients.

DEMOGRAPHICS

Vermilion County residents (2012 population: 80,727) are, as a whole, older and less racially and ethnically diverse compared to the state of Illinois. Income levels are lower and poverty rates are higher in Vermilion County, especially in areas around the City of Danville and among Black or African American residents. Higher educational attainment in the county also lags behind the state.

IDENTIFYING COMMUNITY HEALTH NEEDS: METHODOLOGY

Secondary Data

The secondary data used in this assessment was obtained and analyzed from the Carle Foundation Community Dashboard (http://www.carle.org/About/ServingOurCommunity/Healthy-Communities.aspx), which includes a comprehensive dashboard of over 100 community health and quality of life indicators covering over 20 topic areas. Indicator values for Vermilion County were compared to other counties in Illinois and nationwide to score health topics and compare relative areas of need. Other considerations for health areas of need included trends over time, Healthy People 2020 targets, and disparities by age, gender, and race/ethnicity.

Primary Data

The needs assessment was further informed by interviews with community members who have a fundamental understanding of Vermilion County's health needs and represent the broad interests of the community. These key informants provided valuable input on the county's health challenges, the sub-populations most in need, and existing resources for county residents.

SIGNIFICANT COMMUNITY HEALTH NEEDS IDENTIFIED

Primary and secondary data were evaluated to identify the significant community health needs in Vermilion County. These needs span the following topic areas and are often inter-related:

Access to Health Services	Exercise, Nutrition, & Weight	Older Adults & Aging
Cancer	Heart Disease & Stroke	Oral Health
Children's Health	Immunization & Infectious Diseases	Respiratory Diseases
Diabetes	Maternal, Fetal, & Infant Health	Substance Abuse
Disabilities	Mental Health	Teen & Adolescent Health

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Quality of life topics such as the economy, education, and social environment were highlighted for their influence across many health areas, and according to secondary data the socioeconomic need is strongest around the city of Danville and for Black or African American residents.

PRIORITIZATION PROCESS

Carle Hoopeston Regional Health Center developed a decision-making team to prioritize the significant community health needs of Vermilion County considering several criteria: the alignment with the hospital's mission, existing programs, the ability to make an impact within a reasonable time frame, the financial and human resources required, and whether there would be a measurable outcome to gauge improvement. The following five health areas were selected as the top priorities:

- **Children's Health**
- **Teen & Adolescent Health**
- **Oral Health**
- **Cancer**
- **Diabetes**

CONCLUSION

This report describes the process and findings of a comprehensive health needs assessment for the residents of Vermilion County, Illinois. The prioritization of the identified significant health needs will guide the community health improvement efforts of Carle Hoopeston Regional Health Center (CHRHC). From this process, CHRHC will be outlining how they plan to address the top five highest scoring health needs (Children's Health, Teen & Adolescent Health, Oral Health, Cancer, Diabetes) in their Implementation Strategy.

INTRODUCTION

The 2010 Patient Protection and Affordable Care Act, commonly known as the Affordable Care Act (ACA), requires non-profit, tax-exempt hospitals to conduct a Community Health Needs Assessment (CHNA) every three years. To meet requirements, hospitals must analyze and identify the health needs of their communities and develop and adopt an implementation strategy to meet the identified needs.

As a non-profit, tax-exempt hospital, Carle Hoopeston Regional Health Center (CHRHC) is pleased to present the 2013 CHNA report, which provides an overview of the significant community health needs identified in CHRHC's service area. The goal of this report is to offer a meaningful understanding of the health needs in the community as well as to help guide the hospital in their community benefit planning efforts and development of an implementation strategy to address prioritized needs.

This report includes a description of:

- The community demographics and population served;
- The process and methods used to obtain, analyze and synthesize primary and secondary data;
- The significant health needs in the community, taking into account the needs of uninsured, low-income, and marginalized groups;
- The process and criteria used in identifying certain health needs as significant and prioritizing such significant community needs.

ABOUT CARLE HOOPESTON REGIONAL HEALTH CENTER

Carle Hoopeston Regional Health Center (CHRHC), a 25 bed Critical Access Hospital located in Hoopeston, IL serves Hoopeston, Vermilion County and the surrounding area. CHRHC employs more than 200 staff members, with 22 physicians and advanced practice providers. CHRHC is committed to providing quality, dependable health services. CHRHC offers specialty services with cardiology, orthopedics, gynecology, mental health, urology and diagnostic services including nuclear medicine, digital mammography, radiology and laboratory. Emergency medicine and surgical services are provided in state of the art facilities which opened in 2012.

CHRHC provides access to primary care with clinics in Hoopeston, Rossville, Milford, Cissna Park, and Watseka, IL. Carle Hoopeston Regional Health Center has been dedicated to caring for those in the area for over 50 years.

ABOUT HEALTHY COMMUNITIES INSTITUTE

Carle Foundation commissioned Healthy Communities Institute to assist with the 2013 Community Health Needs Assessment for Hoopeston Regional Health Center and author this report.

The Healthy Communities Institute (HCI) offers a web-based dashboard system that allows data to be easily visualized and comprehended by its users. This allows community stakeholders to understand the variety of data, and to be able to take concrete action and improve target areas of interest. HCI has over 100 implementations of its dashboard for clients in 35+ states.

The HCI mission is to improve the health, environmental sustainability, and economic vitality of cities, counties, and communities worldwide. The company is rooted in work started in 2002 in concert with the Healthy Cities Movement at the University of California at Berkeley. HCI staff are experts in managing and presenting data with extensive experience in data visualization and data mapping.

To learn more about Healthy Communities Institute please visit www.HealthyCommunitiesInstitute.com.

SERVICE AREA: VERMILION COUNTY, IL

The service area of Carle Hoopeston Regional Health Center is defined as the geographical boundary of Vermilion County, IL. While some residents of surrounding counties utilize CHRHC services, this assessment and subsequent interventions will be targeted at Vermilion County residents, who make up 84% of CHRHC patients.

DEMOGRAPHICS

POPULATION

An estimated 80,727 people lived in Vermilion County in 2012, and the population density is much lower (90.0 people per square mile) than the state of Illinois (231.1 people per square mile). A large proportion of the county's population is clustered around the City of Danville.

Figure 1. Population Density by Zip Code, Vermilion County, IL

Source: U.S. Census Bureau, 2010 Census
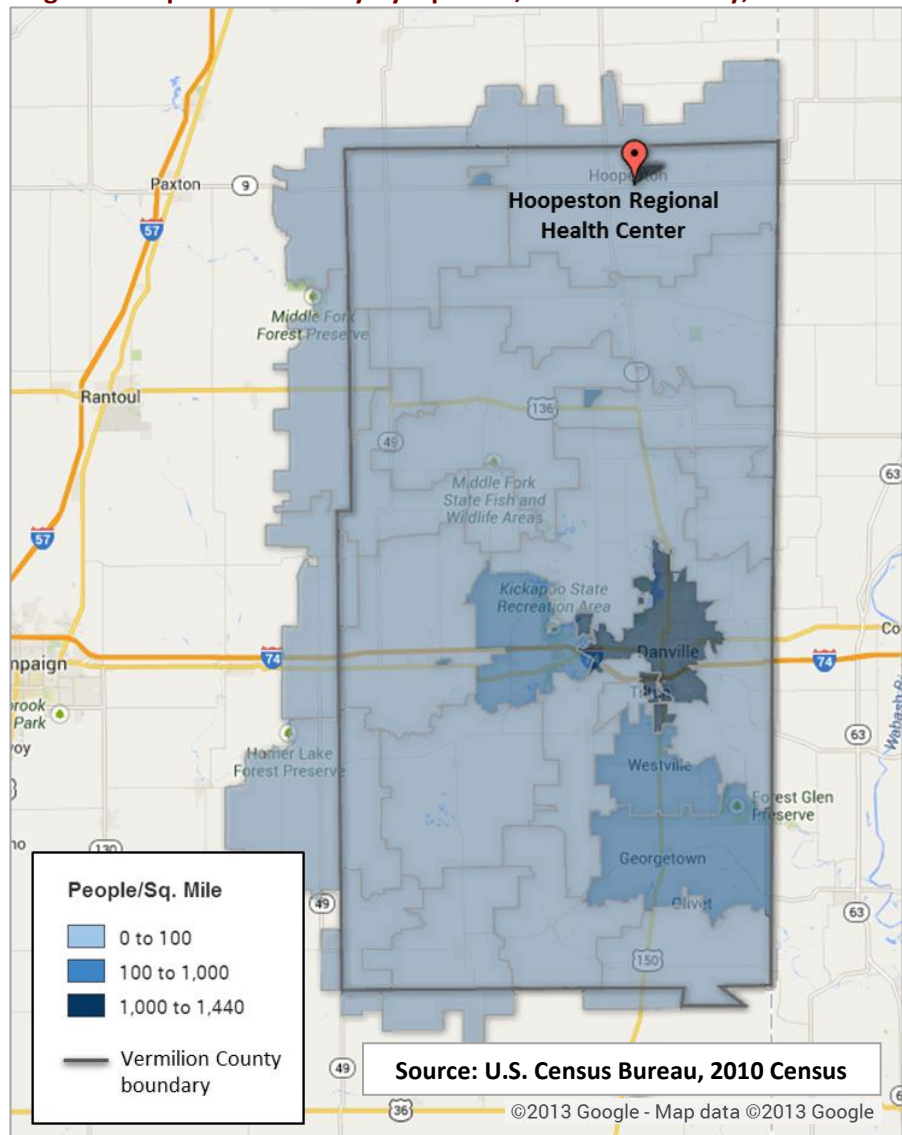
AGE

Overall, Vermilion County residents are slightly older than Illinois residents. While the proportion of residents below 18 years of age is approximately equal to the state, among adults Vermilion County has more residents over the age of 65.

Figure 2. Population by Age, 2012

U.S. Census Bureau: QuickFacts, March 2013
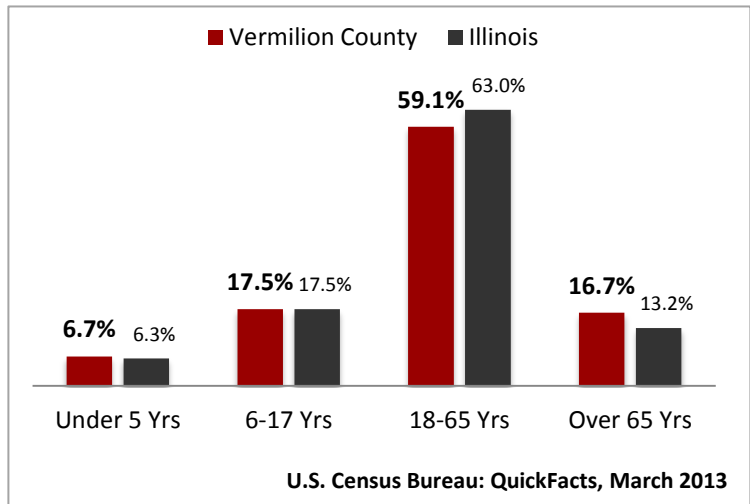
ORIGIN & RACE/ETHNICITY

A lower percentage of Vermilion County residents are foreign-born (2.0%) compared to the state (13.7%). Only 4.9% of Vermilion County residents speak a language other than English at home, versus 22.0% statewide.

Among people reporting a single race, Vermilion County has a smaller proportion of residents who are non-White (16.3%) compared to Illinois (22.1%). The majority of non-White residents in Vermilion County are Black or African American.

In Vermilion County, fewer residents are of Hispanic or Latino origin (4.5%) compared to 16.3% statewide.

Table 1. Ethnicity and Origin

	Vermilion County	Illinois
Hispanic or Latino	4.5%	16.3%
Foreign-born	2.0%	13.7%
Speak non-English language at home	4.9%	22.0%

U.S. Census Bureau: QuickFacts, March 2013

Figure 3. Population by Race, Vermilion County, 2012

U.S. Census Bureau: QuickFacts, March 2013
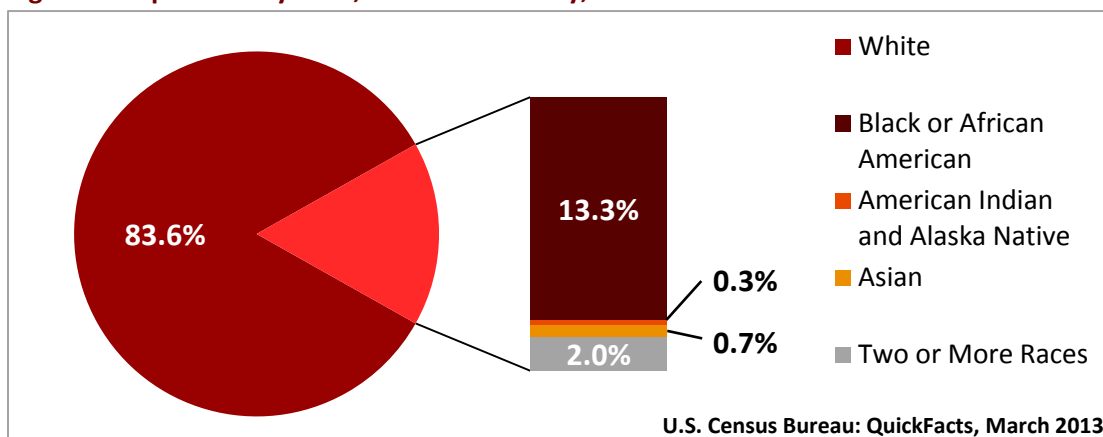
ECONOMY

INCOME

Both per capita income and median household income are lower in Vermilion County compared to the state.

Figure 4. Income Levels, 2007-2011

U.S. Census Bureau: QuickFacts, March 2013
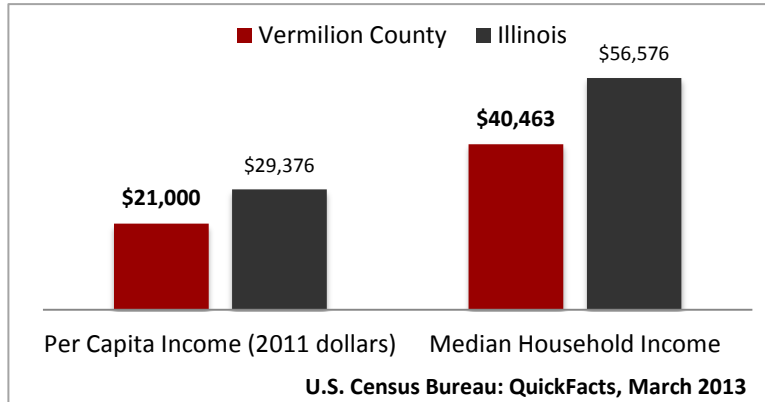
POVERTY

A higher percent of Vermilion County residents live below the federal poverty level (18.8%) compared to Illinois (13.1%). As seen in Figure 5, poverty rates are highest around the City of Danville (zip code 61832), followed by the northernmost areas of Vermilion County (zip codes 60942 & 60960). There is a large disparity by race/ethnicity for poverty in Vermilion County, with the highest poverty rates among Black or African Americans.

Figure 5. Percent of People Living Below Poverty by Zip Code, Vermilion County 2007-2011

American Community Survey, 5-Year Estimates
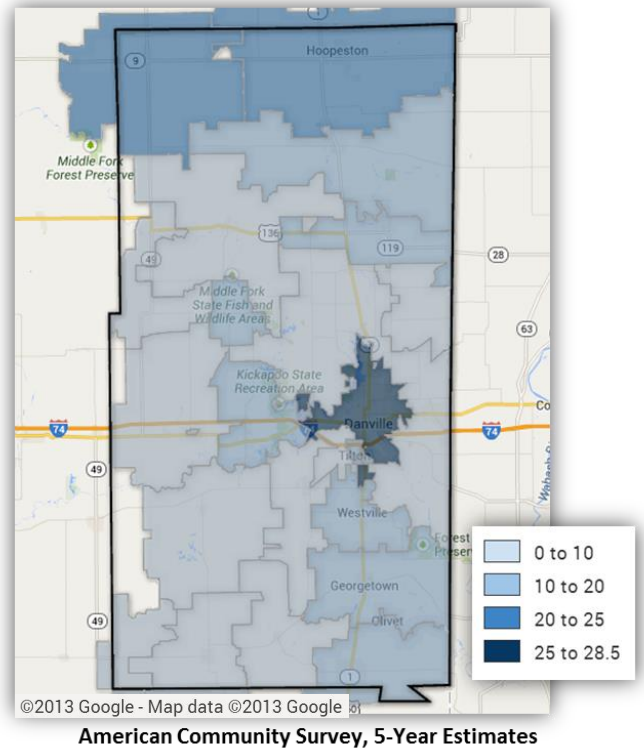
Figure 6. Percent of People Living Below Poverty by Race/Ethnicity, Vermilion County 2007-2011
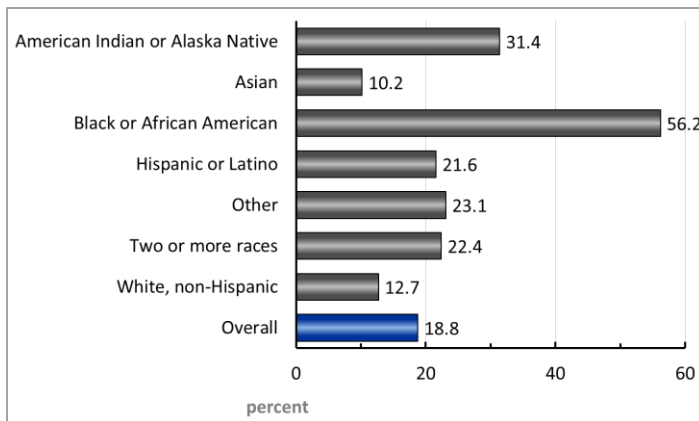
American Community Survey, 5-Year Estimates

EDUCATION

Countywide, the percent of residents 25 or older with a high school degree or higher (85.8%) is nearly equivalent to the state value (86.6%). However in some areas of the county, including zip codes with higher poverty rates such as 61832 (Danville) and 60942 (Hoopeston), the high school degree attainment rate is below 84%. Higher educational attainment is much lower countywide compared to the state. Only 14.0% of Vermilion County residents 25 and older have a Bachelor's Degree or higher compared to 30.7% statewide.

Figure 7. Educational Attainment among People 25+, 2007-2011

U.S. Census Bureau: QuickFacts, March 2013
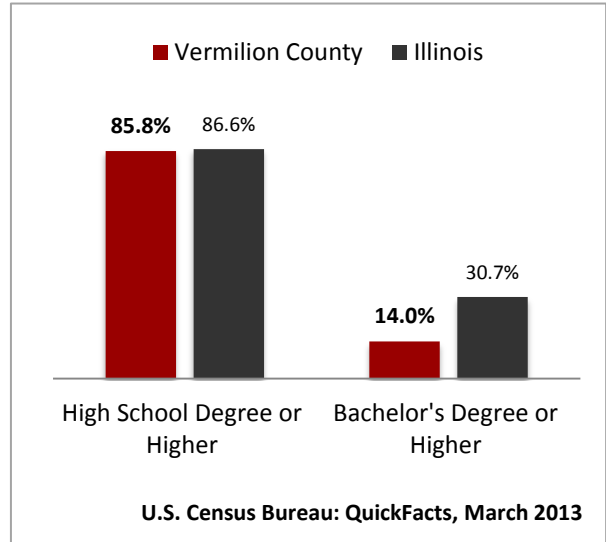
Figure 8. Percent of People 25+ with a High School Degree by Zip Code, Vermilion County 2007-2011

American Community Survey, 5-Year Estimates

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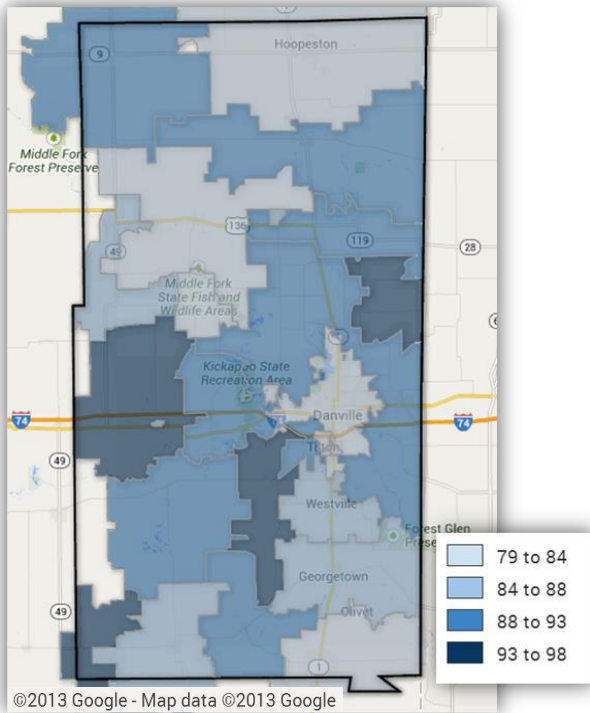
IDENTIFYING SIGNIFICANT COMMUNITY HEALTH NEEDS: METHODOLOGY

Significant community health needs for Vermilion County were determined using a combination of secondary and primary data.

SECONDARY DATA

Secondary data used for this assessment were collected and analyzed with the Carle Foundation Community Dashboard (http://www.carle.org/About/ServingOurCommunity/Healthy-Communities.aspx), a web-based community health data platform developed by Healthy Communities Institute and sponsored by Carle Foundation. The community dashboard brings non-biased data, local resources and a wealth of information to one accessible, user-friendly location. It includes a comprehensive dashboard of over 100 community indicators covering over 20 topics in the areas of health, determinants of health, and quality of life. The data is primarily derived from state and national public secondary data sources.

Please note that the most recent period of measure was used for all secondary data presented in this report (as publicly available on August 28, 2013). For more information on the data and topic selection process, please see Appendix A: Secondary Data Analysis.

STATE AND NATIONAL COMPARISONS

For ease of interpretation and analysis, indicator data is visually represented as a green-yellow-red gauge showing how the community is faring against a distribution of counties in Illinois or the United States or against the IL state or US national value. An indicator represented by a needle pointing to the green section signifies that the community value is in the better performing half (or top 50th percentile) of all Illinois or US counties, yellow signifies that the value is between the bottom 25th and 50th percentile, and red signifies that the value is in the worst performing quartile (or bottom 25th percentile) of all Illinois or US counties.

Table 2. Quality of Life and Health Topic Areas

Quality of Life	Health	
Economy	Access to Health Services	Maternal, Fetal, & Infant Health
Education	Cancer	Mental Health
Environment	Children's Health	Older Adults & Aging
Prevention & Safety	Diabetes	Oral Health
Social Environment	Disabilities	Respiratory Diseases
Transportation	Exercise, Nutrition, & Weight	Substance Abuse
	Heart Disease & Stroke	Teen & Adolescent Health
	Immunization & Infectious Diseases	

Indicators were categorized into 21 topic areas, which were further classified as a quality of life or health topic.

In order to assess the topic areas for which secondary data indicators demonstrate the most need, a scoring system was applied to objectively summarize the comparisons of Vermilion County to other counties. If possible, both state and national comparisons were factored into the score. Indicators with the poorest comparisons ("in the red") scored highest, whereas indicators with good comparisons ("in the green") scored lowest. Points were summed across all indicators in a topic area and divided by the total possible points. Resulting scores range from 0-1, where a higher score indicates a greater level of need as

Figure 9. Indicator Gauge Color Point Values

Gauge	Points
	0
	1
	2

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evidenced by the data. These scores were used to categorize the topics as red (score≥0.67), yellow (0.5≤score<0.67), or green (score<0.5).

For score values and details on the scoring methods please see Appendix A: Secondary Data Analysis.

OTHER COMPARISONS

Outside of the state and national comparisons, other indicator comparisons were also considered in the findings of this assessment but were not used in calculating the topic scores:

- If there was a comparable value available measuring Vermilion County for an earlier time period, the trend of an indicator was assessed. If no confidence intervals are available, the trend was considered poor if the value for Vermilion County has worsened by at least 5% per year from the baseline value.
- Healthy People 2020 goals are national objectives for improving the health of the nation set by the Department of Health and Human Services' (DHHS) Healthy People Initiative. If a Healthy People 2020 goal matched an indicator definition, it was noted if Vermilion County had not met the target.
- Whereas an overall county value may compare well to the state or nation, disparities may exist among sub-populations within Vermilion County. If age, gender, or race/ethnicity specific values were available, the indicator was evaluated for the presence of substantial disparities.

Details on all comparisons can be found in Appendix A: Secondary Data Analysis.

PRIMARY DATA

To expand upon the information gathered from the secondary data, Carle Hoopeston Regional Health Center conducted key informant interviews to collect community input. Interviewees who were asked to participate were recognized as having expertise in public health, special knowledge of community health needs and/or represented the broad interest of the community served by the hospital.

A preliminary review of the secondary data from the Carle Foundation Community Dashboard (http://www.carle.org/About/ServingOurCommunity/Healthy-Communities.aspx) identified any topic areas with substantial data gaps before conducting the interviews. Having this knowledge in advance, Carle Hoopeston Regional Health Center was able to inquire further about these topic areas during the interviews.

Interviews were conducted during the month of September 2013. Key informants from the following organizations participated in interviews ranging from 30-90 minutes in length:

- Carle Hoopeston Regional Health Center
- Hoopeston Multi-Agency
- Bismarck-Henning School District
- Vermilion County Health Department
- Veteran's Affairs (VA) Illiana Health Care System
- Danville Area Community College
- Crosspoint Human Services

See Appendix B: Community Input for details about the organizations and summarized findings.

During the interview, questions were asked to learn more about the interviewee's background and organization, area of expertise, biggest health needs or concerns, and the impacts on different ethnic groups as well as opportunities for collaboration.

COMMUNITY INPUT: KEY INFORMANT INTERVIEWS

Questions focused on:
- Interviewee's individual/organizational background and expertise
- Biggest community needs or concerns
- Impact of health issues on low income, underserved/uninsured persons
- Impact of health issues on different ethnic/race groups
- Barriers and contributing factors to consider
- Community resources and opportunities to collaborate
- Data gaps
- Advice to group developing a plan to address needs
- Other pertinent information

COMMUNITY RESOURCES

As a part of the primary data collection process, key informants identified available community resources and programs that could be utilized in response to the significant health needs.

A full list of the community resources organized by topic area can be found in Appendix C: Community Resources.

SIGNIFICANT COMMUNITY HEALTH NEEDS ASSESSMENT FINDINGS

The secondary data summary and key informant interview findings are presented together to capture a more holistic assessment of health needs in Vermilion County. Quality of life topics are presented first, as they are key to understanding the barriers to health in the community. Furthermore, the availability of socioeconomic data for specific sub-populations and sub-county geographies provides a framework for identifying the populations most vulnerable to the poor health outcomes identified.

QUALITY OF LIFE

Socioeconomic indicators across the quality of life topic areas point to multiple barriers to health, and the effect of these drivers was noted in primary data. Figure 10 summarizes these determinants of health as cited in the interviews for their impact on community health in Vermilion County. Low-income residents were mentioned as facing challenges in accessing health services, particularly for dental care, mental health care, and birth control. Those unable to afford medications were also described as being more affected by diabetes and sexually transmitted diseases. The high cost and time involved in obtaining healthy foods is also a challenge for this population.

Figure 10. Summary of Quality of Life Findings

Quality of Life Topics	
Score ≥ 0.67	**Impacted health areas according to primary data**
Economy	Access to Health Services Diabetes Exercise, Nutrition, & Weight Immunizations & Infectious Diseases Maternal, Fetal, & Infant Health Mental Health Oral Health Teen & Adolescent Health
Education	Maternal, Fetal, & Infant Health Teen & Adolescent Health Exercise, Nutrition, & Weight
Environment	
Social Environment	Older Adults & Aging Substance Abuse
Score < 0.5	
Prevention & Safety	
Transportation	Access to Health Services Exercise, Nutrition, & Weight

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GEOGRAPHICAL AREAS WITH HIGHEST NEED

Geographically, there are parts of Vermilion County for which these quality of life issues are of greater concern. As noted in the Demographics section, poverty rates are highest in Danville and the northernmost areas of the county, and educational attainment also varies by zip code.

The percent of households in the county without a vehicle is highest in the Danville area, and may negatively impact the ability of residents to access health care and other services. Key informants noted that accessing services like dental care and STD clinics often requires traveling large distances.

A higher percent of people over the age of 65 live alone in Vermilion County (34%) compared to other counties in Illinois and nationwide. People over age 65 who live alone may be at risk for social isolation, limited access to support, or inadequate assistance in emergency situations. Within some zip codes, such as 60942, 61812, 61832, 61845, and 61883, isolation among older adults is an even greater concern. Key informants noted that older adults might become socially isolated after family members have moved away.

Figure 11. Percent of Households without a Vehicle by Zip Code, Vermilion County 2007-2011
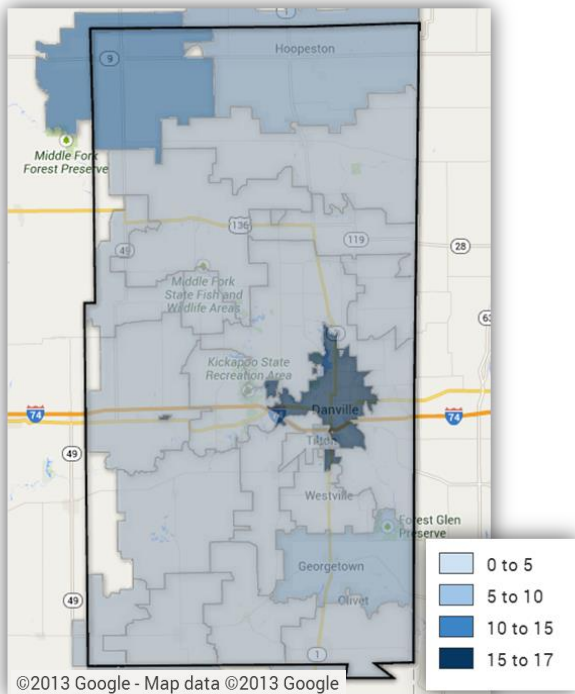
American Community Survey, 5-Year Estimates

Figure 12. Percent of People 65+ Living Alone by Zip Code, Vermilion County 2007-2011

American Community Survey, 5-Year Estimates

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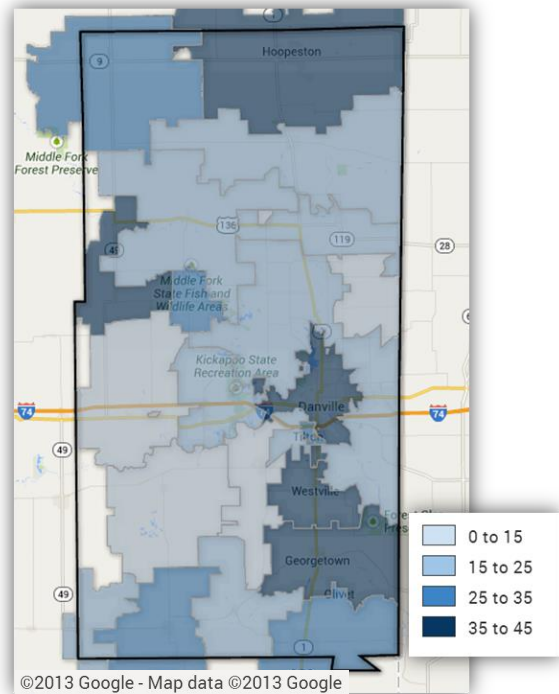
RACE/ETHNICITY DISPARITY

One notable finding across several socioeconomic indicators is a disparity by race/ethnicity. Vermilion County's Black or African American population has a higher level of poverty, lower income level, and a lower level of educational attainment compared to the overall population. Key informants also identified this group as facing more financial and social challenges.

Table 3. Race Disparities for Quality of Life Indicators

Quality of Life Indicator	All Vermilion County Residents	Black or African American Residents
Children Living Below Poverty Level	31.0%	78.9%
People 65+ Living Below Poverty Level	8.5%	31.7%
People Living Below Poverty Level	18.8%	56.2%
Median Household Income	$40,463	$19,116
Per Capita Income	$21,000	$12,377
People 25+ with High School Degree or Higher	85.8%	77.5%
People 25+ with Bachelor's Degree or Higher	14.0%	7.8%

SIGNIFICANT HEALTH NEEDS

The outcomes of the primary and secondary data analysis were combined to identify the significant community needs in Vermilion County. The analysis revealed that there were significant needs across all of the topic areas considered.

Figure 13 briefly summarizes the findings by topic area, where topics are sorted by secondary data summary score range and the number of times the area was identified as a top need by a key informant. Some topic areas which did not score high in the secondary data summary were identified as a top need by key informants, underscoring the importance of considering both quantitative data and community input when assessing health issues.

Common themes from the interviews included the challenges for low-income individuals in accessing needed care, a high teen-pregnancy rate that perpetuates poverty, barriers to mental health care, and a high prevalence of sexually transmitted diseases. The highest scoring topic areas in the secondary data summary were Substance Abuse; Maternal, Fetal, & Infant Health; Children's Health; Heart Disease & Stroke; and Respiratory Diseases.

Further details on the secondary and primary data can be found in appendices.

Figure 13. Secondary Data Summary Scores and Community Input Summary by Health Topic

Data Score ≥ 0.67	**Community Input**
Substance Abuse ♙♙♙	Race/ethnicity disparity; can stem from chronic pain management
Maternal, Fetal, & Infant Health ♙♙	Poor access to birth control; Cycle of teen pregnancy and poverty
Children's Health	Poor access for mental health and oral health services
Heart Disease & Stroke	Poor heart health can contribute to obesity
Respiratory Diseases	
0.5 ≤ Data Score < 0.67	
Teen & Adolescent Health ♙♙♙♙	High teen pregnancy rate; STDs
Access to Health Services ♙♙♙	Poor access for mental health and oral health services
Oral Health ♙♙	Poor access to dental care for Medicaid, uninsured, low-income
Immunization & Infectious Diseases	STDs an ongoing problem; VCHD resources cut
Cancer	
Disabilities	
Data Score < 0.5	
Mental Health ♙♙♙	Need for mental health services; integration with primary care
Exercise, Nutrition, & Weight ♙	Difficult for low-income to make healthy choices; race/ethnicity disparity
Older Adults & Aging ♙	Social isolation among older adults with distant family
Diabetes	Poor access to care for disease management among sub-population
	♙ Indicated as top need by key informant

Community input substantiated and expanded upon the secondary data summary findings for each topic area. When asked of the biggest community needs or concerns, key informants noted the topics in Figure 14, where the size of the text is proportional to the number of key informants who included the topic as one of the top 2-3 needs for their community.

Figure 14. Health Topics Included as Top Needs by Key Informants

Teen & Adolescent Health

Substance Abuse

Access to Health Services

Mental Health

Maternal, Fetal, & Infant Health

Oral Health

Exercise, Nutrition, & Weight

Older Adults & Aging

Beyond listing the top needs, the interviews included discussions of specific health concerns that span many of the topics. This word cloud (Figure 15) was created from the key informant interview transcripts, where the size and darkness of the words reflect the relative number of times the word appeared. The figure provides an overall picture of the themes that were most prominent in the community input.

Figure 15. Key Informant Interview Transcripts Word Cloud

PRIORITIZATION PROCESS

In order to prioritize the significant community needs, Carle Hoopeston Regional Health Center (CHRHC) developed a decision-making team to rank the significant community needs based on a set of criteria.

PARTICIPANTS

The team was chosen to represent people with community and clinical knowledge, those that manage services to the underserved and those that are knowledgeable about the needs assessment process.

The team included:

- Mike Billimack, VP of Marketing, Strategic Planning and Government Relations, Carle Foundation
- Jennifer Hendricks-Kaufmann, Public Relations Manager, Carle Foundation
- Dana Hagerstrom, Community Benefit Specialist, Carle Foundation
- Elizabeth Silver, Marketing & PR Manager, Carle Hoopeston Regional Health Center
- Harry Brockus, CEO, Carle Hoopeston Regional Health Center
- Angela Rome, RN, Director of Ambulatory Nursing, Carle Hoopeston Regional Health Center

PROCESS

The team met on October 30th, 2013 where they first reviewed the results of the secondary and primary data analysis conducted by Healthy Communities Institute and discussed the significant community needs that were identified during that process. After reviewing the data, it was decided that "Disabilities" would not be considered in the prioritization process due to the limited information available in the needs assessment for this topic. The team also felt that health needs in this area could be addressed through various other areas such as "Access to Health Services" and "Older Adults & Aging".

The team then identified six criteria most relevant for them to consider when ranking the areas of community need:

- Alignment with hospital's mission
- Existing programs
- Ability to impact within a reasonable timeframe
- Financial resources required
- Human resources required
- Measurable outcome

Figure 16. Prioritization Results

Next, the group discussed each criterion's relative importance and agreed upon weights for each criterion. Once these variables were in place, the group completed the prioritization matrix by providing a score for each of the areas of need based on how well it met each of the criteria on a scale of 1-5. The weighted sum of the scores across all criteria was used to rank the health need areas by order of highest score to lowest score.

See Appendix D for criteria weights and full ranking results.

Carle Hoopeston Regional Health Center's Prioritization Results	
Health Need	**Score**
Children's Health	4.15
Teen & Adolescent Health	4.10
Oral Health	4.00
Cancer	3.90
Diabetes	3.85
Access to Health Services	3.75
Heart Disease and Stroke	3.70
Exercise, Nutrition & Weight	3.70
Maternal, Fetal & Infant Health	3.60
Immunization & Infectious Diseases	3.60
Older Adults & Aging	3.55
Respiratory Diseases	3.30
Substance Abuse	2.65
Mental Health	1.80

PRIORITIZED HEALTH NEEDS

Upon further review, it was determined that CHRHC's prioritized needs would focus on the top five scoring health needs for Vermilion County:

- Children's Health
- Teen & Adolescent Health
- Oral Health
- Cancer
- Diabetes

The following sections will discuss the highlights of the findings for these top prioritized areas. Further details on secondary data findings, community input, and available resources can be found in appendices.

CHILDREN'S HEALTH

The health of Vermilion County's youngest residents is fraught with challenges in the economic and social environments, inadequate availability of teachers, and poor access to health services. Children in Vermilion County are more likely to have suffered abuse or neglect than children in most other Illinois counties, and are more likely to live in single-parent households. The rate of poverty among all children in the county in 2007-2011 was 31.0%, and the rate is especially high for Black or African American children (78.9%). The average number of public school students per teacher in Vermilion County (16.4 students/teacher) also compares poorly to the state and nation, and increased between 2009-2010 and 2010-2011.

Figure 17. Children's Health Indicators

Indicator	County Comparison		Other Comparisons	
	Illinois	U.S.	HP2020	Other Comparisons
Child Abuse Rate	red		Not Met	
Single-Parent Households	red	red		
Students Eligible for the Free Lunch Program	red	yellow		
Children Living Below Poverty Level	red	red		R
Children with Health Insurance	red	yellow	Not Met	
Student-to-Teacher Ratio	red	red		↑
Low-Income Preschool Obesity	green	green		

↑ Poor trend: ratio increased between 2009-2010 and 2010-2011

R Large disparity by race/ethnicity: highest poverty rate among Black or African American children

While secondary data indicates that children's health insurance coverage is comparatively low for Vermilion County, key informants also note poor availability of resources in the areas of mental health and oral health care for children. Aunt Martha's Center for Children's Services in Danville provides mental health services but they were noted to be frequently overwhelmed. Furthermore, it was noted that there are no local services that provide major dentistry at a reduced rate for uninsured people, and the closest child dentistry practice is in Paris, IL (Edgar County).

TEEN & ADOLESCENT HEALTH

Teens and adolescents in Vermilion County also face social environment challenges which inhibit overall health. The high rate of pregnancy among teenagers has persisted in the county despite a nationwide decrease, and is evidenced by the high percentage of live births to teens (5.0%, 2009) compared to other Illinois counties. Teen pregnancy is recognized by key informants for its impact on young women who are unable to finish school and therefore earn lower incomes, putting them at higher risk for repeat pregnancies which further hinder their ability to increase their incomes. Family planning resources are scarce – the only available resources for low-income individuals are located in Danville at Aunt Martha's Vermilion Area Community Health Center, which often has a 3-6 week waiting time. Furthermore, key informants note that schools do not provide comprehensive sex education and that teen pregnancy is so common that it is accepted as a cultural norm among some community members.

Figure 18. Teen & Adolescent Health Indicators

Indicator	County Comparison		HP2020	Other Comparisons
	Illinois	U.S.		
High School Graduation	red		Not Met	
Teen Births	red			
Teens who Use Alcohol	yellow*			
Teens who Smoke	green*			
Teens who Use Marijuana	green*			
				* Comparison to Illinois State value

The Vermilion County high school graduation rate (78.6%, 2011-2012) is also in the worst quartile of Illinois counties, indicating that a substantial number of young adults are ill-prepared to function in an increasingly complicated job market and society. Alcohol use among teens is slightly higher (49%) compared to the state (48%), and a considerable number of teens smoke (16%) and use marijuana (16%) despite lower rates than the state (21% and 22%, respectively; 2008). While sub-population specific data is not available, key informants mentioned that young African American residents are more impacted by poor mental health and substance abuse problems and are more likely to drop out of school and be unemployed. This area was highlighted in community input more than any other topic: five key informants felt that the health of teens and adolescents should be considered a top need for Vermilion County.

ORAL HEALTH

Already noted as a challenge for children, oral health is an area of need for adult residents of Vermilion County as well. The percent of adults who regularly visit a dentist compares poorly to other Illinois counties, as does the availability of dentists per capita. Although the percent of the population receiving optimally fluoridated water through community water supplies (54.4%, 2006) is better than most other Illinois counties, the value decreased between 2005 and 2006 and is far from meeting the Healthy People 2020 target (79.6%).

Figure 19. Oral Health Indicators

Indicator	County Comparison		HP2020	Other Comparisons
	Illinois	**U.S.**		
Adults who Visited a Dentist	red			
Dentist Rate	yellow	yellow		
Population with Optimally Fluoridated Water	green		Not Met	↓
		↓ Poor trend: Percent decreased between 2005 and 2006		

Two key informants included oral health as one of the highest needs for Vermilion County, and cited a lack of oral health care services for low-income, uninsured, and Medicaid patients. The geographic location of existing services was also noted to be a problem, as those who are unemployed or have no insurance are less likely to be able to travel larger distances to receive services like dental care if they do not have the transportation to access it. Oral health was also identified as a particular problem for the homeless population in Danville.

CANCER

There are many types of cancer for which Vermilion County residents have relatively high incidence rates (2006-2010), such as breast cancer (137.7 cases/100,000 females), prostate cancer (169.8 cases/100,000 males), lung and bronchus cancer (88.2 cases/100,000 population), colorectal cancer (54.3 cases/100,000 population), oral cavity and pharynx cancer (12.5 cases/100,000 population), and cervical cancer (8.9 cases/100,000 females, 2005-2009). The county has relatively high death rates (2006-2010) due to lung and bronchus cancer (70.2 deaths/100,000 population) and colorectal cancer (19.7 deaths/100,000 population). All cancer-related Healthy People 2020 targets are unmet in Vermilion County.

Figure 20. Cancer Indicators

Indicator	County Comparison		Other	
	Illinois	U.S.	HP2020	Comparisons
Age-Adjusted Death Rate due to Lung Cancer	red	red	Not Met	
Breast Cancer Incidence Rate	red	red		
Lung and Bronchus Cancer Incidence Rate	red	red		
Prostate Cancer Incidence Rate	red	red		
Colorectal Cancer Incidence Rate	yellow	red	Not Met	
Age-Adjusted Death Rate due to Colorectal Cancer	yellow	yellow	Not Met	
Cervical Cancer Incidence Rate	yellow*	yellow		
Mammography Screening: Medicare Population	yellow	yellow		
Oral Cavity and Pharynx Cancer Incidence Rate	yellow	yellow		G
Age-Adjusted Death Rate due to Breast Cancer	green	green	Not Met	
Age-Adjusted Death Rate due to Prostate Cancer	green	green	Not Met	
Colon Cancer Screening	green			
Pap Test History	green			

* Comparison to Illinois State value
G   Large disparity by gender: highest rate among men

While key informants did not specifically discuss cancer rates, screening, or treatment in their interviews, many of the health behaviors that may be attributing factors to the cancer burden were identified as challenges for Vermilion County. Improving the community's eating habits was identified as a challenge, especially for low-income residents who may lack the resources to buy and prepare healthy meals. Key informants also discussed a need for more smoking cessation programs, smoking education, and public service announcements – key interventions that could decrease the percentage of adults who smoke from the most recent measured value (26.6%, 2005-2011).

DIABETES

Although the death rate due to diabetes in Vermilion County (20.1 deaths/100,000 population, 2008-2010) is lower than most counties in Illinois or the United States, the percent of adults who have ever been diagnosed with diabetes is higher (10.4%, 2009). Other indicators from the Exercise, Nutrition, & Weight topic area indicate that many residents are at high risk for diabetes – 30.0% of adults in the county are obese (2007-2009) and 31.4% do not participate in regular physical activity (2009).

Figure 21. Diabetes Indicators

Indicator	County Comparison		HP2020	Other Comparisons
	Illinois	U.S.		
Adults with Diabetes	red	yellow		
Age-Adjusted Death Rate due to Diabetes	green	green		G
				G Large disparity by gender: highest rate among men

As for many other health issues, key informants noted this area as particularly challenging for low-income residents. It was recognized that healthy eating can be expensive and requires more planning, and there is a general lack of inexpensive and nutritional, quick meal options available. For those who have been diagnosed with diabetes, management is an issue for those lacking access to care – including the uninsured and underinsured.

OTHER SIGNIFICANT COMMUNITY HEALTH NEEDS

As part of the community health needs assessment process, the primary and secondary data analysis identified additional significant community health needs that were not selected as priorities by Carle Hoopeston Regional Health Center. Table 4 provides an overview of the primary and secondary data findings for each of these areas. More information about the secondary findings, community input, and resources available in the community to address these needs can be found in Appendices A, B, and C. It is important to note that many of these community needs are interrelated and influence one another; hence it is recommended that the reader take advantage of the information provided in the appendices to gain a more complete picture of the needs in Vermilion County.

Table 4. Other Significant Community Health Needs

SECONDARY DATA SCORE ≥ 0.67

SUBSTANCE ABUSE

Indicators contributing to data score:
Adults who Drink Excessively **HP**
Adults who Smoke **HP**
Liquor Store Density
Mothers who Smoked During Pregnancy **HP**
Teens who Use Alcohol

Key informant interview findings:
Abuse may stem from chronic pain management
Need for smoking cessation programs
Race/ethnicity disparity
Court system keeps community safe but does not help treat mental health/substance abuse problems
(See Appendix C for identified resources)

Summary/Considerations: Heavy tobacco use and alcohol abuse; data does not capture abuse of other substances (i.e. prescription drug abuse)

MATERNAL, FETAL, & INFANT HEALTH

Indicators contributing to data score:
Babies with Low Birth Weight **HP**
Infant Mortality Rate ↑ **HP**
Preterm Births **HP**
Mothers who Received Early Prenatal Care **HP**
Mothers who Smoked During Pregnancy **HP**
Teen Births

Key informant interview findings:
Poor access to birth control
Cycle of teen pregnancy and poverty
(See Appendix C for identified resources)

Summary/Considerations: Great concern regarding teen pregnancy and lack of family planning resources

HEART DISEASE & STROKE

Indicators contributing to data score:
High Blood Pressure Prevalence **A HP**
High Cholesterol Prevalence **A HP**
Age-Adjusted Death Rate due to Cerebrovascular Disease (Stroke) **HP**
Age-Adjusted Death Rate due to Coronary Heart Disease **HP**

Key informant interview findings:
Poor heart health can contribute to obesity
(See Appendix C for identified resources)

Summary/Considerations: Poor cardiovascular health in county; strongly related to Exercise, Nutrition, & Weight topic area

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A Disparity by age
G Disparity by gender
R Disparity by race/ethnicity

↑ ↓ Poor trend
HP Healthy People target not met
HP Healthy People target met

RESPIRATORY DISEASES

Indicators contributing to data score:
Adults with Asthma
Lung and Bronchus Cancer Incidence Rate
Age-Adjusted Death Rate due to Chronic Lower
    Respiratory Diseases
Age-Adjusted Death Rate due to Lung Cancer **HP**

Key informant interview findings:
Respiratory Diseases were not directly addressed by key informants.

Summary/Considerations: Health outcomes may be related to substance abuse (i.e. smoking)

0.5 ≤ SECONDARY DATA SCORE < 0.67

ACCESS TO HEALTH SERVICES

Indicators contributing to data score:
Adults with Health Insurance **HP**
Children with Health Insurance **HP**
Mothers who Received Early Prenatal Care **HP**
Preventable Hospital Stays
Primary Care Provider Rate

Key informant interview findings:
Poor access for mental health and oral health services
Services for low-income and uninsured centered in Danville
(See Appendix C for identified resources)

Summary/Considerations: Low health insurance coverage rates in county (which may improve with implementation of Affordable Care Act); access challenges often due to distance in more rural parts of county

IMMUNIZATION & INFECTIOUS DISEASES

Indicators contributing to data score:
Chlamydia Incidence Rate
Gonorrhea Incidence Rate
HIV Diagnosis Rate
Syphilis Incidence Rate ↑

Key informant interview findings:
STDs an ongoing problem
Vermilion County Health Department resources cut
(See Appendix C for identified resources)

Summary/Considerations: High STD rates and need for STD prevention and education

DISABILITIES

Indicators contributing to data score:
Persons with Disability Living in Poverty

Key informant interview findings:
Disabilities were not directly addressed by key informants.
(See Appendix C for identified resources)

Summary/Considerations: Older adults are the most likely to have a disability.

A	Disparity by age	↑ ↓	Poor trend
G	Disparity by gender	**HP**	Healthy People target not met
R	Disparity by race/ethnicity	**HP**	Healthy People target met

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SECONDARY DATA SCORE < 0.5

MENTAL HEALTH

Indicators contributing to data score:
Poor Mental Health Days

Key informant interview findings:
Need for more mental health services
Mental health care should be integrated with primary care
(See Appendix C for identified resources)

Summary/Considerations: Poor access to mental health care; Healthy People 2020 target for suicide death rate has not been met by county.

EXERCISE, NUTRITION, & WEIGHT

Indicators contributing to data score:
Adult Fruit and Vegetable Consumption **A G**
Adults who are Obese **HP**
Adults who are Sedentary **HP**
Farmers Market Density
Grocery Store Density
Households with No Car and Low Access to a
    Grocery Store
Low-Income and Low Access to a Grocery Store
Recreation and Fitness Facilities

Key informant interview findings:
Difficult for low income residents to make healthy food choices
Race/ethnicity disparity
(See Appendix C for identified resources)

Summary/Considerations: Many poor comparisons in data despite relatively low topic score; health behavior indicators compare poorly to other IL counties (and are related to outcomes in Heart Disease & Stroke topic)

OLDER ADULTS & AGING

Indicators contributing to data score:
People 65+ Living Alone
People 65+ Living Below Poverty Level **R G**
Age-Adjusted Death Rate due to
    Cerebrovascular Disease (Stroke) **HP**

Key informant interview findings:
Social isolation among older adults with distant family
(See Appendix C for identified resources)

Summary/Considerations: Comparatively low death rates due to Alzheimer's disease and falls; isolation and poverty a challenge for this population

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A   Disparity by age
G   Disparity by gender
R   Disparity by race/ethnicity

↑ ↓   Poor trend
HP   Healthy People target not met
HP   Healthy People target met

CONCLUSION

This community health needs assessment utilized a comprehensive set of secondary data indicators measuring the health and quality of life needs of Vermilion County, Illinois residents, and was further informed with community input from knowledgeable persons representing the broad interests of the community. The prioritization of the identified health needs will guide the community health improvement efforts of Carle Hoopeston Regional Health Center (CHRHC). From this process, CHRHC will be outlining how they plan to address the top five highest scoring health needs (Children's Health, Teen & Adolescent Health, Oral Health, Cancer, Diabetes) in their Implementation Strategy.

APPENDIX A: SECONDARY DATA ANALYSIS

SCORING METHOD

Indicators are categorized into 21 topic areas and each topic area receives a score. Indicators may be categorized in more than one topic area. Topic scores are determined by the state and national comparisons of all

Education Indicator	Illinois Comparison		National Comparison		Total Points
	Gauge	Points	Gauge	Points	
High School Graduation		2			2
People 25+ with a Bachelor's Degree or Higher		1		1	2
People 25+ with a High School Degree or Higher		1		0	1
Student-to-Teacher Ratio		2		2	4

indicators within the topic. Each indicator is assigned a number of points according to its comparisons. A comparison in the red portion of the gauge accumulates 2 points, yellow accumulates 1 point, and green accumulates 0 points.

If a county distribution is not available and the value must be compared to a state or national value, the comparison is considered green if better than the comparison, red if worse by more than 25% of the comparison value, and yellow if in-between.

Green	Yellow	Red

Comparison Value   ±25%
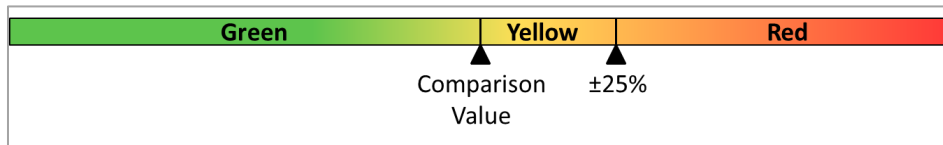
If there is no US county distribution or US value available for comparison, a comparison to a Healthy People 2020 target is substituted in for a national comparison if a target that matches the indicator definition exists. Because this comparison is to a target rather than a measured value, the maximum number of points accumulated by this type of comparison is one (if target is not met).

The sum of all points within the topic is divided by the possible number of points to calculate the score. The score has a range of 0-1, where a higher score indicates greater need according to secondary data.

Education Indicator	State Comparison Points	National Comparison Points	Total Points	Possible Points
High School Graduation	2		2	2
People 25+ with a Bachelor's Degree or Higher	1	1	2	4
People 25+ with a High School Degree or Higher	1	0	1	4
Student-to-Teacher Ratio	2	2	4	4
Total for Topic	**6**	**3**	**9**	**14**

(9 points / 14 possible) = 0.64

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TREND

A comparison of the most recent value to a previous value allows for the identification of poor trends in Vermilion County. If the confidence intervals of the two values overlap, the change over time is not considered statistically significant. For indicators with no available confidence intervals, the magnitude of the trend was utilized to identify poor trends. If an indicator value worsened by at least 5% per year, the trend is highlighted as being poor.

In this example, the indicator worsened by 19.7% per year, and therefore meets the cutoff to be highlighted as a poor trend:

Infant Mortality Rate

2006-2008: 7.1
2007-2009: 8.5

deaths/1,000 live births

% Change = $\frac{(8.5 - 7.1)}{7.1}$ = **19.7%**

Difference in years = 2009 - 2008 = **1**

% Change per Year = $\frac{19.7\%}{1}$ = **19.7%**
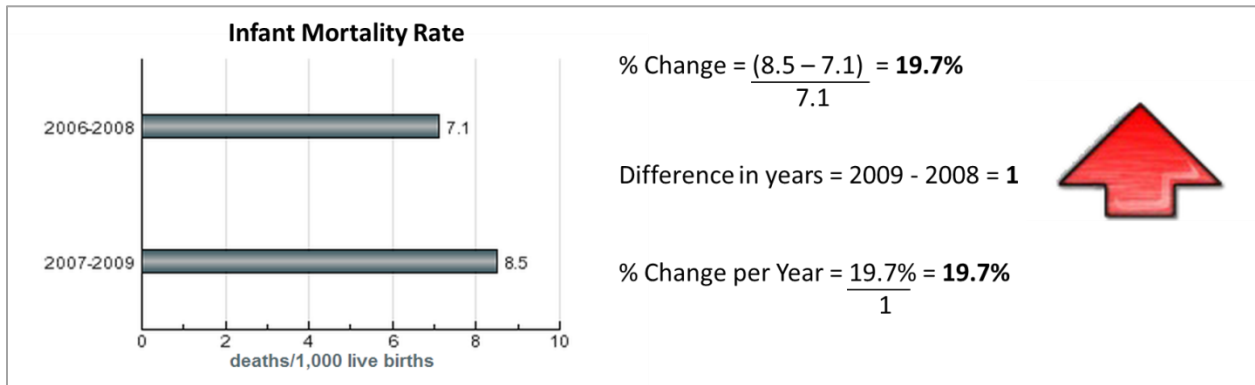
HEALTHY PEOPLE 2020

Healthy People 2020 goals are national objectives for improving the health of the nation set by the Department of Health and Human Services' (DHHS) Healthy People Initiative. If a Healthy People 2020 goal matches an indicator definition, findings note if Vermilion County has not met the target.

High School Graduation
Target Not Met
78.6   82.4
Current   Target
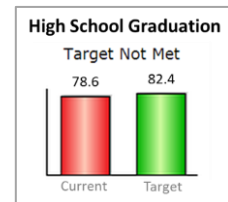
DISPARITIES

To identify indicators with the largest disparities by age, gender, or race/ethnicity, ratios were calculated between the highest and lowest sub-population values. Indicators with a disparity ratio of two or higher are highlighted as having a large disparity. The availability of sub-population data varies by source and indicator.

For this indicator, the disparity by gender would be highlighted in findings because the ratio between gender-specific values is greater than two.

People 65+ Living Below Poverty Level by Gender

Female: 11.3
Male: 4.8
Overall: 8.5

percent

Ratio = $\frac{11.3}{4.8}$ = **2.6**
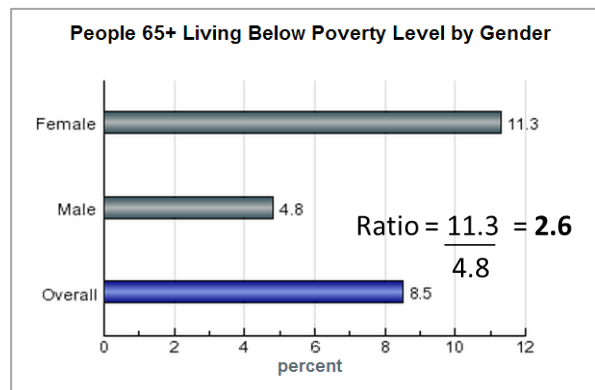
DATA SOURCES AND INDICATORS

This table lists all indicators by topic area, with the most recent value for Vermilion County and comparison findings. All geographic comparisons are made to a distribution of county values, unless noted by an asterisk (*), which indicates a comparison to a state or national value. If data was not available for a comparison the cell is left blank.

HP2020 targets are noted as met or not met. Trends and disparities are only noted if they met the cutoffs previously described. The type of disparity is noted as: **A** (age disparity), **G** (gender disparity), or **R** (race disparity).

Source: http://www.carle.org/About/ServingOurCommunity/Healthy-Communities.aspx as of August 28, 2013.

INDICATOR (Period of Measurement) *Source*	VERMILION COUNTY VALUE	COMPARISON TO COUNTIES		OTHER COMPARISONS		
		ILLINOIS	US	HP2020	TREND	DISPARITIES
ACCESS TO HEALTH SERVICES				**TOPIC SCORE: 0.63**		
Adults with Health Insurance (2011) *American Community Survey*	83.4 percent	yellow	green	**Not Met**		
Children with Health Insurance (2011) *American Community Survey*	92.5 percent	red	yellow	**Not Met**		
Mothers who Received Early Prenatal Care (2006)	74.7 percent	red		**Not Met**		
Preventable Hospital Stays (2010) *County Health Rankings*	100 discharges/ 1,000 Medicare enrollees	red	red			
Primary Care Provider Rate (2011-2012) *County Health Rankings*	49 providers/ 100,000 population	green	yellow			
CANCER				**TOPIC SCORE: 0.56**		
Age-Adjusted Death Rate due to Breast Cancer (2006-2010) *National Cancer Institute*	22.3 deaths/ 100,000 females	green	green	**Not Met**		
Age-Adjusted Death Rate due to Colorectal Cancer (2006-2010) *National Cancer Institute*	19.7 deaths/ 100,000 population	yellow	yellow	**Not Met**		
Age-Adjusted Death Rate due to Lung Cancer (2006-2010) *National Cancer Institute*	70.2 deaths/ 100,000 population	red	red	**Not Met**		
Age-Adjusted Death Rate due to Prostate Cancer (2006-2010) *National Cancer Institute*	21.8 deaths/ 100,000 males	green	green	**Not Met**		

INDICATOR (Period of Measurement) *Source*	VERMILION COUNTY VALUE	COMPARISON TO COUNTIES		OTHER COMPARISONS		
		ILLINOIS	US	HP2020	TREND	DISPARITIES
Breast Cancer Incidence Rate (2006-2010) *National Cancer Institute*	137.7 cases/ 100,000 females	red	red			
Cervical Cancer Incidence Rate (2005-2009) *National Cancer Institute*	8.9 cases/ 100,000 females	yellow*	yellow			
Colon Cancer Screening (2007-2009) *Illinois BRFSS*	67.1 percent	green				
Colorectal Cancer Incidence Rate (2006-2010) *National Cancer Institute*	54.3 cases/ 100,000 population	yellow	red	Not Met		
Lung and Bronchus Cancer Incidence Rate (2006-2010) *National Cancer Institute*	88.2 cases/ 100,000 population	red	red			
Mammography Screening: Medicare Population (2010) *County Health Rankings*	62.8 percent	yellow	yellow			
Oral Cavity and Pharynx Cancer Incidence Rate (2006-2010) *National Cancer Institute*	12.5 cases/ 100,000 population	yellow	yellow			G
Pap Test History (2007-2009) *Illinois BRFSS*	72.7 percent	green				
Prostate Cancer Incidence Rate (2006-2010) *National Cancer Institute*	169.8 cases/ 100,000 males	red	red			
CHILDREN'S HEALTH				**TOPIC SCORE: 0.78**		
Child Abuse Rate (2012) *IL Dept of Children and Family Services*	19.7 cases/ 1,000 children	red		Not Met		
Children Living Below Poverty Level (2007-2011) *American Community Survey*	31 percent	red	red			R
Children with Health Insurance (2011) *American Community Survey*	92.5 percent	red	yellow	Not Met		
Low-Income Preschool Obesity (2009-2011) *USDA Food Atlas*	11.8 percent	green	green			
Single-Parent Households (2007-2011) *American Community Survey*	42.6 percent	red	red			
Student-to-Teacher Ratio (2010-2011) *Nat'l Center for Education Statistics*	16.4 students/ teacher	red	red			
Students Eligible for the Free Lunch Program (2009) *USDA Food Atlas*	48.8 percent	red	yellow		↑	

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INDICATOR (Period of Measurement) *Source*	VERMILION COUNTY VALUE	COMPARISON TO COUNTIES		OTHER COMPARISONS		
		ILLINOIS	US	HP2020	TREND	DISPARITIES
DIABETES				**TOPIC SCORE: 0.38**		
Adults with Diabetes (2009) *County Health Rankings*	10.4 percent	red	yellow			
Age-Adjusted Death Rate due to Diabetes (2008-2010) *CDC*	20.1 deaths/ 100,000 population	green	green			G
DISABILITIES				**TOPIC SCORE: 0.50**		
Persons with a Disability (2011) *American Community Survey*	14.2 percent					A
Persons with Disability Living in Poverty (2011) *American Community Survey*	29.8 percent	yellow	yellow			
EXERCISE, NUTRITION, & WEIGHT				**TOPIC SCORE: 0.43**		
Adult Fruit and Vegetable Consumption (2007-2009) *Illinois BRFSS*	7.2 percent	red				A G
Adults who are Obese (2007-2009) *Illinois BRFSS*	30 percent	yellow		Met		
Adults who are Sedentary (2009) *County Health Rankings*	31.4 percent	red		Met		
Farmers Market Density (2012) *USDA Food Atlas*	0.01 markets/ 1,000 population	red*	red*			
Fast Food Restaurant Density (2009) *USDA Food Atlas*	0.5 restaurants/ 1,000 population	green	green			
Grocery Store Density (2009) *USDA Food Atlas*	0.16 stores/ 1,000 population	yellow	yellow			
Households with No Car and Low Access to a Grocery Store (2010) *USDA Food Atlas*	3.3 percent	red	yellow			
Low-Income and Low Access to a Grocery Store (2010) *USDA Food Atlas*	6.9 percent	yellow	yellow			
Low-Income Preschool Obesity (2009-2011) *USDA Food Atlas*	11.8 percent	green	green			
Recreation and Fitness Facilities (2009) *USDA Food Atlas*	0.09 facilities/ 1,000 population	yellow*	green*			

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INDICATOR (Period of Measurement) *Source*	VERMILION COUNTY VALUE	COMPARISON TO COUNTIES		OTHER COMPARISONS		
		ILLINOIS	US	HP2020	TREND	DISPARITIES
SNAP Certified Stores (2011) *USDA Food Atlas*	1.0 stores/ 1,000 population	green	green			
HEART DISEASE & STROKE				**TOPIC SCORE: 0.71**		
Age-Adjusted Death Rate due to Cerebrovascular Disease (Stroke; 2008-2010) *CDC*	49.5 deaths/ 100,000 population	yellow	yellow	**Not Met**		
Age-Adjusted Death Rate due to Coronary Heart Disease (2008-2010) *CDC*	155.9 deaths/ 100,000 population	red	yellow	**Not Met**		
High Blood Pressure Prevalence (2007-2009) *Illinois BRFSS*	33.8 percent	yellow		**Not Met**		**A**
High Cholesterol Prevalence (2007-2009) *Illinois BRFSS*	43.2 percent	red		**Not Met**		**A**
IMMUNIZATIONS & INFECTIOUS DISEASES				**TOPIC SCORE: 0.50**		
Adults with Influenza Vaccination (2007-2009) *Illinois BRFSS*	39.1 percent	green				**A**
Adults with Pneumonia Vaccination (2007-2009) *Illinois BRFSS*	27.9 percent	green				**A**
Age-Adjusted Death Rate due to Influenza and Pneumonia (2008-2010) *CDC*	16.2 deaths/ 100,000 population	green	green			
Chlamydia Incidence Rate (2009) *IL Dept of Public Health*	492.1 cases/ 100,000 population	red				
Gonorrhea Incidence Rate (2009) *IL Dept of Public Health*	188.3 cases/ 100,000 population	red				
HIV Diagnosis Rate (2005-2011) *IL Dept of Public Health*	7.1 cases/ 100,000 population	red				
Syphilis Incidence Rate (2009) *IL Dept of Public Health*	3.6 cases/ 100,000 population	red			↑	
Tuberculosis Cases (2012) *IL Dept of Public Health*	0 cases					

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INDICATOR (Period of Measurement) *Source*	VERMILION COUNTY VALUE	COMPARISON TO COUNTIES		OTHER COMPARISONS		
		ILLINOIS	US	HP2020	TREND	DISPARITIES
MATERNAL, FETAL, & INFANT HEALTH				**TOPIC SCORE: 0.76**		
Babies with Low Birth Weight (2008) *IL Dept of Public Health*	9.1 percent	yellow		Not Met		
Infant Mortality Rate (2007-2009) *IL Dept of Public Health*	8.5 deaths/ 1,000 live births	yellow		Not Met	↑	
Mothers who Received Early Prenatal Care (2006) *IL Dept of Public Health*	74.7 percent	red		Not Met		
Mothers who Smoked During Pregnancy (2008) *IL Dept of Public Health*	27.0 percent	red		Not Met		
Preterm Births (2008) *IL Dept of Public Health*	11.3 percent	yellow		Met		
Teen Births (2009) *IL Dept of Public Health*	5.0 percent	red				
MENTAL HEALTH				**TOPIC SCORE: 0 38**		
Age-Adjusted Death Rate due to Suicide (2008-2010) *CDC*	10.4 deaths/ 100,000 population	green	green	Not Met		
Poor Mental Health Days (2005-2011) *County Health Rankings*	3.7 days	red	yellow			
OLDER ADULTS & AGING				**TOPIC SCORE: 0.35**		
Age-Adjusted Death Rate due to Alzheimer's Disease (2008-2010) *CDC*	14.8 deaths/ 100,000 population	green	green			
Age-Adjusted Death Rate due to Cerebrovascular Disease (Stroke; 2008-2010) *CDC*	49.5 deaths/ 100,000 population	yellow	yellow	Not Met		
Age-Adjusted Death Rate due to Falls (2008-2010) *CDC*	6.5 deaths/ 100,000 population	green	green	Met		
People 65+ Living Alone (2007-2011) *American Community Survey*	34 percent	red	red			
People 65+ Living Below Poverty Level (2007-2011) *American Community Survey*	8.5 percent	yellow	green			G R

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INDICATOR (Period of Measurement) *Source*	VERMILION COUNTY VALUE	COMPARISON TO COUNTIES		OTHER COMPARISONS		
		ILLINOIS	US	HP2020	TREND	DISPARITIES
ORAL HEALTH				**TOPIC SCORE: 0.56**		
Adults who Visited a Dentist (2007-2009) *Illinois BRFSS*	54.9 percent	red				
Dentist Rate (2011-2012) *County Health Rankings*	26 dentists/ 100,000 population	yellow	yellow			
Population with Optimally Fluoridated Water (2006) *IL Dept of Public Health*	54.4 percent	green		Not Met	↓	
RESPIRATORY DISEASES				**TOPIC SCORE: 0.93**		
Adults with Asthma (2007-2009) *Illinois BRFSS*	13.9 percent	yellow				
Age-Adjusted Death Rate due to Chronic Lower Respiratory Diseases (2008-2010) *CDC*	84.9 deaths/ 100,000 population	red	red			
Age-Adjusted Death Rate due to Lung Cancer (2006-2010) *National Cancer Institute*	70.2 deaths/ 100,000 population	red	red	Not Met		
Lung and Bronchus Cancer Incidence Rate (2006-2010) *National Cancer Institute*	88.2 cases/ 100,000 population	red	red			
SUBSTANCE ABUSE				**TOPIC SCORE: 0.67**		
Adults who Drink Excessively (2005-2011) *County Health Rankings*	18.6 percent	yellow	red	Met		
Adults who Smoke (2005-2011) *County Health Rankings*	26.6 percent	red	red	Not Met		
Liquor Store Density (2011) *US Census County Business Patterns*	17.2 stores/ 100,000 population	red	yellow			
Mothers who Smoked During Pregnancy (2008) *IL Dept of Public Health*	27.0 percent	red		Not Met		
Teens who Smoke (2008) *Illinois Youth Survey*	16.0 percent	green*				
Teens who Use Alcohol (2008) *Illinois Youth Survey*	49.0 percent	yellow*				
Teens who Use Marijuana (2008) *Illinois Youth Survey*	16.0 percent	green*				

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INDICATOR (Period of Measurement) *Source*	VERMILION COUNTY VALUE	COMPARISON TO COUNTIES		OTHER COMPARISONS		
		ILLINOIS	US	HP2020	TREND	DISPARITIES
TEEN & ADOLESCENT HEALTH				**TOPIC SCORE: 0.55**		
High School Graduation (2011-2012) *County Health Rankings*	78.6 percent	red		**Not Met**		
Teen Births (2009) *IL Dept of Public Health*	5.0 percent	red				
Teens who Smoke (2008) *Illinois Youth Survey*	16.0 percent	green*				
Teens who Use Alcohol (2008) *Illinois Youth Survey*	49.0 percent	yellow*				
Teens who Use Marijuana (2008) *Illinois Youth Survey*	16.0 percent	green*				
ECONOMY				**TOPIC SCORE: 0.70**		
Children Living Below Poverty Level (2007-2011) *American Community Survey*	31.0 percent	red	red			R
Homeownership (2007-2011) *American Community Survey*	62.5 percent	red	green			
Households with Cash Public Assistance Income (2007-2011) *American Community Survey*	2.3 percent	red	yellow			
Households with No Car and Low Access to a Grocery Store (2010) *USDA Food Atlas*	3.3 percent	red	yellow			
Households without a Vehicle (2007-2011) *American Community Survey*	10.2 percent	red	red			
Low-Income and Low Access to a Grocery Store (2010) *USDA Food Atlas*	6.9 percent	yellow	yellow			
Median Household Income (2007-2011) *American Community Survey*	$40,463	red	yellow			R
People 65+ Living Below Poverty Level (2007-2011) *American Community Survey*	8.5 percent	yellow	green			G R
People Living 200% Above Poverty Level (2007-2011) *American Community Survey*	60.3 percent	red	yellow			
People Living Below Poverty Level (2007-2011) *American Community Survey*	18.8 percent	red	yellow			A R

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INDICATOR (Period of Measurement) *Source*	VERMILION COUNTY VALUE	COMPARISON TO COUNTIES		OTHER COMPARISONS		
		ILLINOIS	US	HP2020	TREND	DISPARITIES
Per Capita Income (2007-2011) *American Community Survey*	$21,000	red	yellow			**R**
Persons with Disability Living in Poverty (2011) *American Community Survey*	29.8 percent	yellow	yellow			
Renters Spending 30% or More of Household Income on Rent (2007-2011) *American Community Survey*	49.5 percent	yellow	yellow			
Students Eligible for the Free Lunch Program (2009) *USDA Food Atlas*	48.8 percent	red	yellow		↑	
Unemployed Workers in Civilian Labor Force (June 2013) *US Bureau of Labor Statistics*	11.1 percent	red	red		↑	
EDUCATION				**TOPIC SCORE: 0.67**		
High School Graduation (2011-2012) *County Health Rankings*	78.6 percent	red		**Not Met**		
People 25+ with a Bachelor's Degree or Higher (2007-2011) *American Community Survey*	14.0 percent	yellow	yellow			**R**
People 25+ with a High School Degree or Higher (2007-2011) *American Community Survey*	85.8 percent	yellow	green			
Student-to-Teacher Ratio (2010-2011) *Nat'l Center for Education Statistics*	16.4 students/ teacher	red	red			
ENVIRONMENT				**TOPIC SCORE: 0.75**		
Drinking Water Safety (2012) *County Health Rankings*	2.5 percent	red	yellow			
PBT Released (2011) *US Environmental Protection Agency*	64 pounds					
Recognized Carcinogens Released into Air (2011) *US Environmental Protection Agency*	25,887 pounds				↑	
PREVENTION & SAFETY				**TOPIC SCORE: 0.14**		
Age-Adjusted Death Rate due to Falls (2008-2010) *CDC*	6.5 deaths/ 100,000 population	green	green	**Met**		
Deaths due to Motor Vehicle Collisions (2011) *Fatality Analysis Reporting System*	6 deaths					

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INDICATOR (Period of Measurement) *Source*	VERMILION COUNTY VALUE	COMPARISON TO COUNTIES		OTHER COMPARISONS		
		ILLINOIS	US	HP2020	TREND	DISPARITIES
Pedestrian Death Rate (2011) *Fatality Analysis Reporting System*	1.2 deaths/ 100,000 population	yellow*		Met		
SOCIAL ENVIRONMENT				**TOPIC SCORE: 0.89**		
Child Abuse Rate (2012) *IL Dept of Children and Family Services*	19.7 cases/ 1,000 children	red		Not Met		
Homeownership (2007-2011) *American Community Survey*	62.5 percent	red	green			
People 65+ Living Alone (2007-2011) *American Community Survey*	34.0 percent	red	red			
Single-Parent Households (2007-2011) *American Community Survey*	42.6 percent	red	red			
Violent Crime Rate (2008-2010) *County Health Rankings*	542.2 crimes/ 100,000 population	red				
Voter Turnout (2012) *IL State Board of Elections*	63.5 percent	red				
TRANSPORTATION				**TOPIC SCORE: 0.32**		
Deaths due to Motor Vehicle Collisions (2011) *Fatality Analysis Reporting System*	6 deaths					
Households without a Vehicle (2007-2011) *American Community Survey*	10.2 percent	red	red			
Mean Travel Time to Work (2007-2011) *American Community Survey*	20.1 minutes	green	green			
Pedestrian Death Rate (2011) *Fatality Analysis Reporting System*	1.2 deaths/ 100,000 population	yellow*		Met		
Workers Commuting by Public Transportation (2007-2011) *American Community Survey*	0.6 percent	green	green	Not Met		A R
Workers who Drive Alone to Work (2007-2011) *American Community Survey*	81.0 percent	green	yellow			

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APPENDIX B: COMMUNITY INPUT

ORGANIZATIONS PROVIDING COMMUNITY INPUT

ORGANIZATION NAME	LOCATION	ORGANIZATION DESCRIPTION	POPULATION SERVED
Bismarck-Henning School District	Bismarck, IL	Provides education for K-12 grade levels.	5-18 year old students All adult district staff
Carle Hoopeston Regional Health Center (CHRHC)	Hoopeston, IL	Strive to provide the best quality health care to our community and to provide better access to healthcare for all ages.	All Medically underserved
Crosspoint Human Services	Danville, IL	Mission is to provide quality human services in a competent and reliable fashion to individuals, families and the community.	All
Danville Area Community College (DACC)	Danville, IL	Mission is to respond to the educational needs in the community.	Low-income students Middle-income students
Hoopeston Multi-Agency	Hoopeston, IL	Provides local access to federal, state, county and private social service agencies for residents of northern Vermilion County.	Low-income senior citizens Teens/children
Vermilion County Health Department (VCHD)	Danville, IL	Primary mission is improve quality of life utilizing disease prevention, health protection and health promotion programs designed to provide a healthier life and environment through enhanced community collaboration, cooperation and communication.	Uninsured/underinsured
Veteran's Affairs (VA) Illiana Health Care System	Danville, IL	Mission is to serve and provide patient care for veterans.	Veterans

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SUMMARY OF FINDINGS

Key informant interview findings are paraphrased and summarized below by topic area. Not all topic areas were directly addressed in key informant interviews, and some comments are repeated across multiple topics to which they apply. Conflicting statements may reflect differing opinions or viewpoints based upon different populations served by key informants.

ACCESS TO HEALTH SERVICES

- Need for more affordable health care and preventive health care: people without ability to make copays are prevented from seeing a doctor when they need to and cannot afford medications.
- For those outside of Danville, health services available from Vermilion County Health Department (VCHD) for low-income and uninsured are inaccessible due to distance.
- VCHD no longer provides STD prevention services or free birth control.
- For the underserved, problems are with access to dental care and birth control.
- Lack of dental care for Medicaid patients.
- Need for mental health services, especially for uninsured and Medicaid patients. Mental health rehab stay or substance abuse help has long waiting period for those with no insurance or ability to self-pay.
- More access to health care will be needed with increase in people eligible for services due to ACA.
- All Veterans are cared for by VA.

CHILDREN'S HEALTH

- Dentists come once a year to Bismarck schools, but no local services provide major dentistry at a reduced rate for uninsured people. Closest child dentistry practice is in Paris, IL.
- Bismarck-Henning school district is trying to change the food they give students and push for kids to be more physically active, but that is only part of the equation.
- Aunt Martha's Center for Children's Services (Danville) covers mental health, but they are typically overwhelmed.

DIABETES

- For the most part, people have a handle on their diabetic care. Providers have a good understanding and work hard to keep people well managed.
- Diabetes management is a huge issue – don't have access to the care that all patients need to manage the disease.
- Healthy eating can be expensive and requires more planning. Lower-income folks don't always have the time or money for healthy food choices, and medications can get quite costly.
- Lack of inexpensive nutritional quick meal options available.
- Most affected by diabetes are the uninsured and underinsured – lack of access, information, and awareness.

EXERCISE, NUTRITION, & WEIGHT

- Nutrition and weight are a tough area where we see more challenges than many other issues.
- With obesity you have to have a continuum of care, and much of that is preventative.
- Heart health issues contribute to obesity.
- Walking and biking is dangerous due to lack of good sidewalks in Hoopeston and Bismarck communities.
- Lack of inexpensive nutritional quick meal options available.
- Low-income people do not have access to healthy foods, and no one is being educated on how to eat properly.
- The African American population has a higher rate of obesity, as do the uninsured and underinsured.

- Statistics show that the higher education you have, the more aware you are of healthy choices, and Vermilion County has a low rate of college degrees and lots of high school dropouts.

HEART DISEASE & STROKE

- Heart health issues contribute to obesity.
- Various Danville employers (larger factories), pharmacies, and CRIS Healthy Aging Center (RN from Presence United Samaritans Medical Center) do blood pressure screening.

IMMUNIZATIONS & INFECTIOUS DISEASES

- STD education is the current biggest need, primarily in teens and young adults.
- STD program at Vermilion County Health Department was cut, which ended aggressive STD education, reaching out to contacts, and detection of asymptomatic cases by the department.
- Poor economics and low income correlate with high STD rate. Low-income individuals sometimes cannot afford prescriptions for treatment.
- Free STD testing provided by Aunt Martha's often has a 3-6 week waiting period and requires transportation to Danville.
- Syphilis is an ongoing problem in older adults.
- Within the Bismarck-Henning school district, there is a trend towards immunization requirement exemptions.

MATERNAL, FETAL, & INFANT HEALTH

- Teen pregnancy has become a cross-generational, cultural norm and results in higher infant mortality rates.
- Teen pregnancy rate is higher among young African American females.
- Teen pregnancy feeds into a lot of challenges: teens don't finish school, have low paying jobs, and are low-income – which puts them at higher risk for becoming pregnant again.
- Only family planning resources for low-income individuals are in Danville (Aunt Martha's), which often has a 3-6 weeks waiting time and presents transportation challenges from other parts of the county.
- Schools do not provide comprehensive sex education – teachers are uncomfortable and schools are conservative.
- Presence United Samaritans Medical Center is a Catholic hospital and only provides abstinence education.
- Women's Care Clinic provides pregnancy testing but does not provide comprehensive education on options.

MENTAL HEALTH

- Need for mental health services, especially for the uninsured and Medicaid patients. There is a long waiting period for mental health rehab stays or substance abuse help for those with no insurance or ability to self-pay.
- The social stigma around mental health makes people less likely to talk about or admit to problems.
- Counselors come to the Hoopeston Multi-Agency on a limited basis.
- Behavioral health and primary health need to be integrated; a continuum of care for behavioral health patients will contribute to longer lives.

OLDER ADULTS & AGING

- Social isolation is a problem for older adults whose families have moved away. The community center could always use more activities.
- A couple great long-term care options are available in Hoopeston for older adults.
- The VA in Danville has an excellent extended care program known as the "Green House Model."

ORAL HEALTH

- Access to dental care is a challenge for low-income residents and Medicaid patients.

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- The unemployed and those with no insurance are less likely to be able to travel larger distances to receive services like dental care because they are not able to afford it or have the transportation to do so.
- The homeless population has horrible dental issues, and absolutely no services that they can reach out to and get help.
- Dentists come once a year to Bismarck schools, but no local services provide major dentistry at a reduced rate for uninsured people. Closest pediatric dentistry practice is in Paris, IL.

SUBSTANCE ABUSE

- Management of chronic pain can lead to substance abuse.
- There is a need for more smoking cessation programs, smoking education, and public service announcements.
- Danville Area Community College knows substance abuse is a problem for people not passing drug tests for employment.
- African Americans are more affected by substance abuse problems, which are related to dropping out of school and subsequent unemployment.
- The court system, police department, and probation are modeled to keep the community safe but not to treat and correct mental health and substance abuse issues.

TEEN & ADOLESCENT HEALTH

- The high teen pregnancy rate in Vermilion County has persisted despite a decrease elsewhere in the US.
- Teen pregnancy feeds into a lot of challenges: teens don't finish school, have low paying jobs, and are low-income – which puts them at higher risk for becoming pregnant again.
- Young African Americans are more affected by mental health problems, substance abuse, school dropouts, unemployment, etc.
- After-school structural programs help keep kids off the street and away from the temptations of drugs and alcohol, but must be deemed "cool" to be effective.

ECONOMY

- Local economy has suffered from loss of industries where you could work straight out of high school; many new jobs are minimum wage and some require a skill set beyond a high school degree which not everyone has.
- Poor economics and low income correlate with high STD rate. Low-income individuals sometimes cannot afford prescriptions for treatment.
- Mental illness makes it very difficult to find a job, and being unemployed worsens mental health.
- Teen pregnancy feeds into a lot of challenges: teens don't finish school, have low paying jobs, and are low-income – which puts them at higher risk for becoming pregnant again.
- Although people think of homelessness in relation to major metropolis areas, Danville has a large homeless population.
- African Americans more affected by cycle of poverty.

EDUCATION

- Higher education correlates with healthier choices, and Vermilion has a low rate of college degrees and many high school drop outs.
- Bright young women are often unable to complete an education due to pregnancy.
- African Americans are more likely to drop out of school.

PREVENTION & SAFETY

- Walking and biking is dangerous due to lack of good sidewalks in Hoopeston and Bismarck communities.

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SOCIAL ENVIRONMENT

- Need for more safe, affordable, clean housing in Danville.
- Young African American males are affected by racial profiling, influenced by drug use among peers, and face stigma after coming out of jail.
- Hoopeston Multi-Agency has worked with undocumented people who are afraid to go to the doctor or take children to the doctor.

TRANSPORTATION

- Walking and biking is dangerous due to lack of good sidewalks in Hoopeston and Bismarck communities.
- Services like dental care and STD clinics require traveling large distances.
- CRIS provides transit options between cities and to rural areas.

APPENDIX C: COMMUNITY RESOURCES

The following resources available to Vermilion County residents were identified by key informants during interviews or by the decision-making team during the prioritization process.

ACCESS TO HEALTH SERVICES

Aunt Martha's - Vermilion Area Community Health Center
Carle Hoopeston Regional Health Center
Carle Danville
Danville PolyClinic
DHS Family Community Resource Center in Vermilion County
Presence Health
Vermilion County Health Department
VA Illiana Health Care System

CHILDREN'S HEALTH

Aunt Martha's- Center for Children Services

EDUCATION

Danville Area Community College
Lakeview College of Nursing

ENVIRONMENT

Danville Public Housing Authority

EXERCISE, NUTRITION & WEIGHT

Boys & Girls Club of Danville, IL
Danville Family YMCA
HALO Project

FAMILY PLANNING

Aunt Martha's- Vermilion Area Community Health Center
Planned Parenthood (Champaign, IL)

MENTAL HEALTH

Crosspoint Human Services
VA Illiana Health Care System

OLDER ADULTS & AGING

Hoopeston Multi Agency
CRIS
VA Illiana Health Care System

SOCIAL ENVIRONMENT

Hoopeston Ministerial Association
I Sing the Body Electric!

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APPENDIX D: PRIORITIZATION MATRIX AND RESULTS

The following criteria, weights, and ratings were used to prioritize health needs:

Criteria	Weight	Rating
(A) Alignment With Mission	.25	1 least 5 most
(B) Existing Programs	.25	1 existing/successful 5 none
(C) Ability to Impact Within 2 years	.15	1 limited 5 significant
(D) Financial Resources Required	.15	1 significant 5 limited
(E) Human Resources Required	.10	1 significant 5 limited
(F) Measurable Outcome	.10	1 no metrics 5 metrics available

Scores were calculated for each health need area by summing the weighted ratings across the six criteria:

	Criteria						
Health Need	**(A)**	**(B)**	**(C)**	**(D)**	**(E)**	**(F)**	**Weighted Score**
Children's Health	5	2	5	5	4	5	**4.15**
Teen & Adolescent Health	3	5	4	4	4	5	**4.10**
Oral Health	2	5	5	4	4	5	**4.00**
Cancer	5	5	5	1	1	4	**3.90**
Diabetes	5	1	5	4	5	5	**3.85**
Access to Health Services	5	1	5	4	4	5	**3.75**
Heart Disease & Stroke	5	2	3	4	4	5	**3.70**
Exercise, Nutrition & Weight	4	3	3	4	4	5	**3.70**
Maternal, Fetal & Infant Health	4	4	3	3	3	4	**3.60**
Immunization & Infectious Diseases	4	3	4	3	3	5	**3.60**
Older Adults & Aging	5	1	5	4	4	3	**3.55**
Respiratory Diseases	4	3	2	3	3	5	**3.30**
Substance Abuse	1	2	1	5	5	5	**2.65**
Mental Health	2	2	1	1	1	4	**1.80**

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