

# 2019 Community Health Needs Assessment

St. Vincent Carmel



St. Vincent



Ascension

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## Executive Summary

St. Vincent Carmel Hospital conducted the 2019 Community Health Needs Assessment (CHNA) to evaluate the health needs of the community served by the hospital. The CHNA will be used to develop community programs and services. As federally required by the Affordable Care Act, this report provides 1) a comprehensive overview of the CHNA process, 2) presentation of secondary data, 3) a description of the methods used to collect survey data, and 4) the results of the prioritization session.

St. Vincent Carmel Hospital took into consideration the most pressing health needs of the hospital's service area and the population characteristics of the county. Community members were surveyed to gain further insights to the health needs of those living in the county.

Subsequent to the collection of data, the hospital conducted a prioritization process that involved the consideration of the insights gained during the CHNA activities and that resulted in the selection of local health priorities. For Hamilton County, those priorities include:

- Mental Health
- Substance Abuse/Alcohol Abuse
- Older Adults & Aging/Elder Care/Family Care
- Access to Care
- Tobacco Use

These five priorities provide an issue-oriented roadmap for the development of local programs, services, and initiatives that seek to improve the health of the local community. They are based upon an extensive and comprehensive CHNA process that considered data from a range of sources, that utilized a rigorous scientific process, and that was conducted in a participatory manner throughout that sought to include the voices of community members, stakeholders, and hospital leaders.

Your feedback on this report is welcomed and encouraged. Please send any feedback and/or comments about this report to: [CommunityDevelopment@stvincent.org](mailto:CommunityDevelopment@stvincent.org).

# Introduction

## CHNA Purpose and Overview

This report provides a comprehensive overview of the 2018 Community Health Needs Assessment (CHNA) conducted by St. Vincent Carmel Hospital. The chapters of this report provide an outline of the methods used to conduct the CHNA, summaries of existing health indicator data that was reviewed, primary data that was collected for purposes of the CHNA, and a description of the process and outcomes of a prioritization process to establish the health priorities that will drive the hospital's activities in the subsequent years.

To conduct the CHNA, the hospital worked with a range of community and academic partners to conduct a comprehensive CHNA. The purpose of the assessment is to identify the significant health needs in the community and gaps that may exist in services provided. It was also developed to provide the community with information to assess essential health care, prevention, and treatment services. This endeavor represents efforts to share information that can lead to improved access and quality of care available to the community, while reinforcing and augmenting the existing infrastructure of services and providers. The CHNA began in 2017, was completed in 2018, and approved by the hospital board in 2019. Table 1 provides an overview of the overall process and specific methods related to each activity.

## About Ascension

Ascension is the largest nonprofit health system in the United States and the largest Catholic Health System in the world. It is a collaboration of faith-based healthcare organizations that focus on delivering compassionate, personalized care to all, with special attention to persons living in poverty and those most vulnerable. Throughout the United States, Ascension employs approximately 156,000 associates. There are more than 2,600 sites of care including 151 hospitals and more than 50 senior living facilities in 21 states and the District of Columbia. Ascension also has subsidiaries that provide a variety of services including physician practice management, information services, investment management, biomedical engineering, facilities management, clinical care management, and risk management.

## About St. Vincent

As a member of Ascension, St. Vincent is a Catholic healthcare system located in the state of Indiana. St. Vincent operates 24 hospitals in addition to a comprehensive network of affiliated joint ventures, medical practices and clinics. Combined with our exceptional medical expertise, our true legacy lies in the compassionate care given every day and a commitment to put our patients and their well-being first. St. Vincent provided more than \$323 million in community benefit and care of persons living in poverty in fiscal year 2018. St. Vincent Hospitals are in central and southern Indiana, serving rural and urban communities. St. Vincent provides a broad range of health care services including, but not limited to, cancer care, cardiovascular services, sports performance, women's health, neuroscience, pediatrics, and transplant services.

## About St. Vincent Carmel and Service Area

In 1985, St. Vincent Carmel was built in Hamilton County. Since then, there have been several expansions to meet the needs of the growing county. St. Vincent Carmel Hospital is a 125-bed, acute care facility and offers the following services: bariatric services, cancer, cardiovascular services, cosmetics & plastic surgery, digestive health, emergency medicine, interventional radiology, laboratory services, maternity services, medical imaging, neuroscience, nutrition support, orthopedics, pediatrics, post-acute care, primary care, rehabilitation services, respiratory care, spiritual care, surgery, wellness medicine, and women's health. St. Vincent Carmel's primary service area is Hamilton County which is in Central Indiana.

St. Vincent Carmel's preceding CHNA was made available to the public via the website: [stvincent.org](http://stvincent.org). In order to collect comments or feedback on the report, a special email address was created: [CommunityDevelopment@stvincent.org](mailto:CommunityDevelopment@stvincent.org). No comments had been received on the preceding CHNA at the time this report was being written.

## CHNA Process and Methods

### CHNA Partners

Conducting the CHNA necessitated collaboration with a range of public health and social service partners to ensure that diverse community-based and scientific insights were included throughout the process. Concerted efforts were made to ensure that individuals who directly or indirectly represent the needs of: 1) those with particular expertise in public health practice and research, 2) those who are medically underserved, low-income, or considered among the minority populations served by the hospital, and 3) the broader community at large and those who represent the broad interests and needs of the community served.

Key partner organizations included:

- **University of Evansville.** As part of the contracted services, faculty, staff, and students in public health areas collaborated with the hospital on the data-oriented aspects of the project.
- **Indiana University, as part of the contracted services:**
  - **School of Public Health.** Faculty and students collaborated with the hospital throughout the survey process.
  - **Center for Survey Research.** Faculty and staff provided in-depth technical assistance and guidance throughout the survey process.
- **Measures Matter, LLC.** Measures Matter is a community-based research consulting firm based in Bloomington, Indiana and Palm Springs, California. As part of the contracted services, Measures Matter conducted an independent analysis of the survey data and also facilitated the prioritization process with the hospital and its partners.

- **Health System Collaborative.** A collaborative of eight major hospital systems throughout Indiana worked together to complete the CHNA. By sharing data and pooling resources, the health systems efficiently assessed the needs of the community.

Table 1. Description of CHNA Activities

CHNA ACTIVITIES	DESCRIPTION OF ACTIVITIES
Identification of the Service Population	The geographic boundaries that define the county of the hospital's location were used to determine the service area.
Review of Existing Health Indicator Data	In collaboration with public health researchers, the hospital conducted a review of existing data and indicators relevant to this assessment. Following the review of this data, key insights were incorporated into CHNA activities and considered during the selection of health priorities.
Community Health Survey	In collaboration with eight major hospital systems, health department representatives, community organizations, and with faculty researchers from the University of Evansville and Indiana University Bloomington, a survey was developed and conducted to collect data from residents in the hospital's service area. The survey process included; a) a random sample that recruited proportionately from all zip codes in the service area and b) a convenience sample survey that sought to collect the same data from individuals seeking care and services at organizations.
Health Needs Prioritization Session	Hospital staff held a meeting of key stakeholders and organizational leadership in order to review data from all activities conducted for the CHNA. Subsequent to a formal presentation and discussion of the data, attendees in the meeting participated in a nominal group process to identify the top health needs that would inform the development of the implementation strategy.
Review of Resources and Partners	Based upon the results of the CHNA activities, a list of local resources and partnerships that would be relevant to addressing the needs identified in the CHNA and the subsequent implementation strategy was created (Appendix A).

# Demographics

## Overview

This section of the report provides an overview of existing data and indicators that offer insight into the health and social issues of the service area. These data were used in a range of ways throughout the CHNA process, including:

- to inform the development of issues that would be further explored in the 2018 CHNA Community Survey,
- to guide specific analyses of data from the 2018 CHNA Community Survey,
- to provide data summaries and other insights to community members, organizational stakeholders, and hospital staff during CHNA related meetings and discussions, and
- as a foundation for the review of ongoing efforts and key decisions about the services offered by the hospital.

## Data Sources

To ensure consistency throughout the CHNA process, a review of existing data included the most recently available data related to the following community indicators:

- demographic characteristics of residents in the service area,
- social and economic characteristics of the service area,
- leading health outcomes,
- clinical characteristics of the service area, with a focus on access to care,
- quality of life indicators, and
- health-related behaviors and associated factors.

Data presented in this section of the report were sourced from the 2018 version of County Health Rankings & Roadmaps, a project of the Population Health Institute of the University of Wisconsin that is supported by the Robert Wood Johnson Foundation. Data also included those from the Indiana State Department of Health.

Throughout these data, indicators are presented for the county of interest, the state of Indiana, and the Top U.S. Performers (indicators that represent the top 10% best performing counties in the country). While comparisons across these data are valuable for identifying areas in a particular county where improvements can be made, such comparisons should always be made within the context of the vast differences that exist across the counties in the country.



## Population Characteristics

Demographic characteristics of a particular region provide important insights for the development and delivery of health-related services and programs. Hamilton County is largely homogeneous in terms of racial and ethnicity characteristics although it does have a larger Asian population than the typical Indiana county. It is evenly split with regard to gender, with low proportions of individuals living in areas considered rural. Hamilton County's population of 313,373 persons is summarized in Table 2.

Table 2. Characteristics of Hamilton County's Population<sup>1</sup>

County Population Characteristics	Hamilton County	Indiana
Population Size	313,373	6,633,053
% Below 18 years of age	27.8%	23.8%
% 65 and older	11.4%	14.9%
% Non-Hispanic African American	4.0%	9.3%
% American Indian and Alaskan Native	0.2%	0.4%
% Asian	6.0%	2.2%
% Native Hawaiian/Other Pacific Islander	0.1%	0.1%
% Hispanic	3.9%	6.8%
% Non-Hispanic white	84.2%	79.6%
% Not proficient in English	1%	2%
% Females	51.2%	50.7%
% Rural	5.60%	27.6%

## Social and Economic Characteristics

Social and economic factors are well established as important determinants of health and well-being. For purposes of the CHNA, these factors provide valuable insight into the context of health and well-being indicators and offer a foundation for considering the manner in which a hospital's programs are connected to a wider social services network. Hamilton County's population fares better than many communities in Indiana, with higher levels of educational attainment, lower levels of poverty, and lower levels of unemployment. The county, on many social and economic indicators, performs at a level equal to or better than the top U.S. performers. Table 3 provides a summary of primary social and economic factors in Hamilton County.

Table 3. Social and Economic Factors, Hamilton County<sup>1</sup>

Social and Economic Factors	Hamilton County	Top US Performers	Indiana
High school graduation	94%	95%	87%
Some college	86%	72%	62%
Unemployment	3.20%	3.20%	4.40%
Children in poverty	5%	12%	19%
Income inequality	3.9	3.7	4.4
Children in single-parent households	18%	20%	34%
Social associations	9.8	22.1	12.3
Violent crime (per 100,000)	37	62	356
Injury deaths (per 100,000)	37	55	70

### Quality of Life Indicators

Self-reported rankings of overall health status, and the number of days in a given month for which individuals would rate their physical and mental health as being poor, offer important insights into the factors that often influence individuals to seek care or support, and share well documented associations with care outcomes. Additionally, low birthweight is commonly used as a gauge for the existence of multi-faceted public health problems. Hamilton County performs quite well on each of these important indicators as is summarized in Table 4.

Table 4. Quality of Life Indicators<sup>1</sup>

Quality of Life Indicators	Hamilton County	Top US Performers	Indiana
Poor or fair health	10%	12%	18%
Poor physical health days	2.6	3	3.9
Poor mental health days	3.0	3.1	4.3
Low birthweight	7%	6%	8%

### Health Outcomes

Common health indicators that provide insight into the general health state of a community include premature mortality, infant mortality, chronic disease (diabetes), infectious disease (HIV) and both physical and mental distress. On these indicators, Hamilton County largely fares better than the averages for the state of Indiana. However, while these values place Hamilton County within the top quartiles of the state on most indicators, both the state and county have some health outcomes that are worse than the top U.S. performing regions and suggest areas for continuing improvement. Table 5 provides an overview of these leading health indicators for Hamilton County.

Table 5. Health Outcome Indicators, Hamilton County<sup>1</sup>

Health Outcome Indicators	Hamilton County	Top US Performers	Indiana
Premature age-adjusted mortality (per 100,000)	210	270	390
Child mortality (per 100,000)	30	40	60
Infant mortality (per 100,000)	4	4	7
Frequent physical distress	8%	9%	12%
Frequent mental distress	9%	10%	13%
Diabetes prevalence	9%	8%	11%
HIV prevalence (per 100,000)	88	49	196

### Clinical Characteristics

Of particular importance to the hospital were data that help to assess and consider issues that are closely aligned with the nation's objectives to continue improving access to care, reducing health care costs, and improving both the proportion of the population that has health insurance (particularly children) and adherence to preventive screenings and chronic disease monitoring. Uninsured rates in Hamilton County, while similar to the state average, are similar to the top performing areas of the U.S., as is the case with many other indicators for Hamilton County.

Hamilton County, based on the availability of healthcare providers, ranks among the best counties in the state, with the exception of mental health providers. Other indicators related to preventive screening and chronic disease management are within the top ranges of both the state and nation. Table 6 provides a summary of these clinical characteristics of Hamilton County.

Table 6. Clinical Care Characteristics, Hamilton County<sup>1</sup>

Clinical Characteristics	Hamilton County	Top US Performers	Indiana
Uninsured	6%	6%	11%
Uninsured adults	7%	7%	13%
Uninsured children	5%	3%	7%
Primary care physicians	710:1	1,030:1	1,500:1
Dentists	1,350:1	1,280:1	1,850:1
Mental health providers	760:1	330:1	700:1
Other primary care providers	1,566:1	782:01	1,367:1
Preventable hospital stays (per 100,000)	33	35	57
Diabetes monitoring	89%	91%	85%
Mammography screening	70%	71%	62%
Health care costs	\$9,281		\$9,992

## Leading Causes of Mortality

An examination of the leading causes of mortality provides valuable insight into the major health issues facing a community. Presented in terms of the rates of disease-specific death by 100,000 members of a population, these data serve as an indicator of the issues most likely to require significant attention from hospitals and other health and social service organizations.

While these data are mortality-specific, they also help to serve as an indicator of a community's morbidity given that many individuals live with these diseases for extended periods of time. They also provide a helpful guide to prevention-focused programs given that behavioral determinants of these leading health issues are fairly understood (see Appendix B).

## Behavioral Factors

For purposes of the CHNA, a range of leading health behavior indicators were assessed. Each of the selected indicators share important associations with leading causes of morbidity and mortality in the country. Table 7 provides an overview of the leading health behaviors in Hamilton County. Identification of these health behaviors provides opportunities for the ongoing development and implementation of health and social service programs.

Table 7. Health Behaviors and Behavioral Outcomes, Hamilton County<sup>1</sup>

Health Behaviors	Hamilton County	Top US Performers	Indiana
Adult smoking	13%	14%	21%
Adult obesity	27%	26%	32%
Food environment index	8.8	8.6	7
Physical inactivity	16%	20%	27%
Access to exercise opportunities	89%	91%	77%
Excessive drinking	20%	13%	19%
Alcohol-impaired driving deaths	24%	13%	22%
Sexually transmitted infections	204.5	145.1	437.9
Teen births	8	15	30

Table 8 also provides an overview of additional behavioral factors that are important for the context of the CHNA activities.

Table 8. Other Behavioral Factors, Hamilton County County<sup>1</sup>

Other Behavioral Factors	Hamilton County	Top US Performers	Indiana
Food insecurity	9%	10%	14%
Limited access to healthy foods	4%	2%	7%
Drug overdose deaths (per 100,000)	11	10	20
Motor vehicle crash deaths (per 100,000)	5	9	12
Insufficient sleep	30%	27%	36%

## Summary

A review of leading indicators related to the health and well-being of a community provides an important foundation for the remaining CHNA activities. These data offer insights into the factors underlying the health issues that are perceived by providers, organizational stakeholders, and community members as being among those needing priority attention. These data summaries were used during subsequent CHNA activities, receiving particular attention during the prioritization process that is described in section five of this report (Prioritization Process).

## Survey Methods

### Purpose of the Survey

To collect primary data from residents of communities in the hospital's service area of Hamilton County, a survey was designed, fielded, and analyzed. This section of the report includes a description of the survey methods and the results of the responses to the survey.

### Survey Development

To develop the survey used for the CHNA, the hospital partnered with faculty from Indiana-based universities who had particular expertise in community-based survey research. Dr. William McConnell of the University of Evansville served as the lead researcher on the project, in partnership with Dr. Michael Reece and Dr. Catherine Sherwood-Laughlin (both of the Indiana University School of Public Health). The University of Evansville contracted with the Center for Survey Research (CSR) at Indiana University to administer this survey in two phases: phase I was conducted as a paper survey mailed to a random address-based sample and phase II was conducted as a paper survey administered by the hospitals to a convenience sample of their choosing. The survey was conducted with approval of the Institutional Review Board (IRB) of the University of Evansville.

Planning and development for the survey began in the winter of 2017. The university faculty joined a collaborative of eight major hospital systems that served populations in Indiana and Illinois. A goal of the collaborative was to align survey activities in order to increase cost-efficiency and to work toward the development of a data infrastructure that would be useful across the systems and also of enhanced utility to the health and social service organizations with which those hospitals partner on initiatives to improve health in their respective local communities.

Using a construct-based approach that identified the leading areas to be included on the survey, the hospitals and faculty developed a survey. The survey included measures that had been validated for use in similar projects by other researchers and additional measures that were developed by the partners for specific needs of this CHNA. The survey covered ten major areas (see Appendix C). Table 9 provides an overview of the constructs covered in the survey and a description of the measures associated with each construct.

## Sample Development

To collect data, two separate samples were accessed. One sample, described below, included a random sample of individuals representative of the hospital's service area. Additionally, the hospital invited health and social service organizations in the community to participate in the convenience sample by sending them a survey (i.e., link to electronic version or paper copy).

*Phase One Random Sample.* The target population for Phase I of the 2018 Community Health Needs Assessment Survey consisted of noninstitutionalized adult residents, aged 18 years or older, in the catchment areas the participating hospitals. Sampling was performed on a household basis using an address-based sample. The faculty collaborated with the hospitals to determine catchment areas using county and zip code boundaries. Geographic areas that were shared between hospitals were reduced such that each geographic area was sampled one time. Sampling was determined using a multistage sampling design. At the first stage, sample units were drawn randomly from an address-based sampling frame of each area. Sample frames were limited to residential addresses excluding P.O. boxes (unless marked in the sample frame as 'only way to get mail'), seasonal, vacant, throwback, and drop-off point addresses. At the second stage, a within-household respondent was selected by asking the adult with the most recent birthday to complete the survey.

To develop the hospital's sample area, a set of 2,223 address-based records representing the hospital's service population were purchased from Marketing Systems Group (MSG). MSG used proprietary sampling methods and provided assurance of appropriate and accurate coverage for the target population. The sample list delivered by MSG included postal address information, FIPS code (county designator), and appended demographic information for age, gender, Hispanic surname, Asian surname, number of adults at address, number of children at address, household income class, marital status, ethnicity, and home ownership status. Upon receipt of the sample, it was stored in a secure database created and maintained by the CSR and was reviewed and corrected for any clerical errors. Using these records, a recruitment sample was constructed for the hospital's service population.

*Phase Two Convenience Sample.* A phase two sample was initiated by the hospital and its community-based partners for purposes of collecting data from those likely to be missed in address-based recruitment. St. Vincent is committed to its mission of serving all persons, with special attention to those who are poor and vulnerable. For the CHNA, there was a concerted effort to reach experts in public health, professionals with special knowledge of the community health needs and those who can be the voice of the medically underserved and vulnerable populations. To reach these individuals, the community resource list included in the 2016 CHNA was updated and used as a reference to identify relevant organizations (see Appendix A). Once identified, surveys were sent either electronically or by mail.

Table 9. Survey Constructs and Measures

SURVEY CONSTRUCTS	DESCRIPTION OF MEASURES
<b>Demographics</b>	This section included measures related to the socio-demographics of the survey participants, including: county of residence, age, gender, ethnicity, race, education, household income, employment, and number of adults and children in household.
<b>Perceived Health and Well-Being</b>	This section included a revised version of the U.S. Centers for Disease Control and Prevention's Health-Related Quality of Life measure. Items included the single-item HRQOL assessment of perceived overall health and additional assessments of physical health, mental health, and social well-being. Also included was a measure of overall life satisfaction and a measure of current level of life stress.
<b>Health Care Coverage and Relationships</b>	This section included a single measure of whether the participant had health insurance or some other type of coverage for health care and a single measure of whether they had a current personal health care provider.
<b>Health Care Engagement</b>	This section included a measure related to the types of care with which the participant had engaged in the previous 12 months. A total of 14 specific types of health care engagement were assessed.
<b>Health-Related Behaviors</b>	This section included a measure that asked participants to self-report their participation in a range of health-related behaviors. A total of 11 health behaviors were assessed.
<b>Health Care Resource Challenges</b>	This section included measures related to the extent to which participants had found themselves in need of avoiding care due to a lack of fiscal resources. Specifically assessed was the extent to which participants had to forego three types of health care, including seeing a medical provider, filling a prescription, and securing transportation for a health purpose or appointment.
<b>Felt Social Determinants</b>	This section included measures to assess the extent to which participants felt the impact of ten specific social determinants, including economics, education, community cohesion, policy, environment, housing, psychosocial, transportation, social ecological, and employment.
<b>Perceived Priority Health Needs</b>	This section included a measure to assess participants' perceptions of the importance of 21 health issues to their local community.
<b>Perceived Resource Allocation Priorities</b>	This section included a measure to assess participants' perceptions of the extent to which 21 health issues were of priority for the allocation of resources in their local community.
<b>Perceived Importance of Social and Health Services</b>	This section included a measure to assess the extent to which participants perceived 20 different health and social service programs to be of importance to their community.

## Data Collection

*Phase One Random Sample.* The questionnaire was printed as a four-page booklet on a single 11" x 17" sheet with a fold in the center. Each questionnaire was printed with a unique, numeric survey identifier that matched up a record in the sample. A separate sheet was folded over the questionnaire and printed with a cover letter, study information sheet, and return mailing instructions. The questionnaire packet was assembled in a 9" x 12" windowed envelope and included an 8¾" x 11½" postage-paid, business reply envelope for survey returns.

The field period for the 2018 Community Health Needs Assessment Survey was April 2, 2018, through June 29, 2018. Each sampled address received up to two questionnaire attempts. The addresses were divided into four batches based on USPS pre-sort, and each batch was mailed one at a time over the course of a two-week period. The second questionnaire for each address was mailed approximately 4 weeks after the first questionnaire. The addresses of returned questionnaires were excluded from the lists for the second questionnaire attempt.

After the second questionnaire attempt, a postcard follow-up was reintroduced in hopes of increasing response. In addition to reminding people to mail in their completed questionnaires, the postcard also provided a website address that allowed people to take the survey online as a member of the secondary convenience sample.

Paper questionnaires were returned to CSR in postage-paid, business reply envelopes provided in the questionnaire packet. Completed survey returns were counted, checked for unclear marks, batched in groups of 50 surveys, and scanned into ABBYY FlexiCapture OCR software for data processing. CSR's scanning partner, DataForce (dba MJT, US), received the scanned survey images electronically and reviewed the data via ABBYY FlexiCapture data verification software to ensure quality control. Missing responses and multiple responses to a single item were flagged. The compiled data was transmitted back to CSR via a secure file transfer protocol (SFTP) server.

*Phase Two Convenience Sample.* The collection of data in the convenience sample phase utilized the same survey used in the random sample. For this phase of data collection, the survey was available both in English and Spanish. Survey data for the convenience sample were collected between June 15 - July 6, 2018. All data from returned surveys, both online and paper versions, were sent directly to the IU Center for Survey Research in Bloomington, Indiana. Additionally, an online version of the questionnaire was programmed in the Qualtrics survey platform. During data collection at community-based organizations, the hospital had the choice to use the online version of the survey (using a phone or tablet) or the paper-based survey. Once collected, data were shipped to CSR for scanning.

After the data collection period ended for the convenience sample, it was determined that a meaningful analysis of this county-level survey data was not possible given low numbers from specific counties. Therefore, data were considered in the aggregate from all counties in which surveys were returned. Throughout the results section, insights and comparisons from the convenience sample are included.



## Data Management

All surveys were returned to CSR for scanning and organization. Data files were stored by CSR on a secure file server and processed using R statistical programming software. Respondent-provided counties and zip codes were cross-checked against the sample file. Discrepancies and misspellings were verified against the original scanned image of the response and, if reasonably similar, corrected prior to final data submission.

After data processing, identifiers to allow filtering by hospital catchment area and weighting variables were added (only for the random sample). The final dataset was converted to a format for analysis in STATA statistical analysis software and transmitted to the researchers via Sslashtmp, Indiana University's secure file transfer system.

## Weighting of Samples

This section provides an overview of weighting activities for the 2018 Community Health Needs Assessment and applies only to the random sample. Two weighting adjustments were made to enhance consistency between the survey sample and the characteristics of the hospital's service population. The first was a base weight adjustment to account for unequal probabilities of selection within household. The second was a post-stratification adjustment to U.S. Census Bureau 2012-2016 American Community Survey five-year population estimates. The two weighting adjustments were multiplied to calculate a preliminary final weight for each hospital's catchment area. These preliminary weights were then trimmed and scaled so that the final weights summed to the number of respondents in each catchment area. Finally, we discuss incorporating weights in analysis of the survey data. Dataset preparation and weighting activities were conducted using SAS Versions 13.1 and 14.1 and Excel. American Community Survey data were obtained using American FactFinder (<https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>).

## Survey Response Patterns

Regarding the random sample, of the 4,445 address-based records received during sample construction, 4,113 were deemed eligible for participation in the survey and received recruitment materials by mail. Of those households, a total of 505 returned a completed survey. The response rate for Hamilton County's survey was thus 12.28%. Table 10 provides an overview of survey responses by zip codes included in the hospital's service population.

Table 10. Hamilton County Response Patterns by Zip Code

County / Zip	Count of Respondent Households	Count of Households Assumed Eligible	Response Rate
HAMILTON	505	4113	12.28%
46030	1	26	3.85%
46031	1	19	5.26%
46032	89	652	13.65%
46033	73	463	15.77%
46034	9	88	10.23%
46037	55	526	10.46%
46038	67	544	12.32%
46040	5	64	7.81%
46055	1	35	2.86%
46060	60	553	10.85%
46062	54	461	11.71%
46069	13	72	18.06%
46074	50	445	11.24%
46077	2	21	9.52%
46250	1	6	16.67%
46256	2	15	13.33%
46260	0	1	0.00%
46280	21	119	17.65%
46290	1	3	33.33%
Total	505	4113	12.28%

## Data Analyses

Data analyses were conducted by Measures Matter, LLC, a research consulting group with expertise in community-based participatory research. Prior to analyses, Measures Matter staff consulted with the hospital to develop a preliminary plan for the analysis of data and the presentation of results. To retain the integrity of the phase one random sample and the methodological rigor offered by that sample, analyses were conducted separately for the phase one random sample and the phase two convenience sample.

## Survey Results

The summary of the survey results primarily reflects the phase one random sample unless otherwise stated. Throughout the summary, comparisons to the phase two convenience sample (at the statewide aggregate level) are also included where appropriate.

## Description of Participants

A total of 505 participants returned a completed survey from the phase one random sample. In this section of the survey, the primary presentation of results includes these 505 individuals from the random sample. Additionally, a total of 324 individuals completed a survey during the convenience sample phase of the project. Given that analyses by county were not possible given limited data from certain counties, these data were analyzed to offer comparisons between the county-specific random sample and the convenience data collected system-wide for St. Vincent Health. In and where appropriate, commentary is provided in each section to highlight similarities and differences between the random and convenience sample data.

*County of Residence.* Of the 214 participants, 95.3% (n = 481) indicated that their primary residence was located in Hamilton County. Although all households receiving the survey were located in Hamilton County, some participants (4.8%, n = 24) refused to provide their county of residence or indicated that it was located in an adjacent county. Figure 1 provides an overview of the participants' reported county of residence.

*Adults and Children in Household.* Participants were asked to indicate the number of adults (18 years and over) and children (under 18 years) who lived in their household. Of the participants, 76.1% (n = 374) indicated that two or fewer adults lived in the household. Of those providing a response to the question about children in the household, the majority (54.2%, n = 274) indicated no children under the age of 18 years in the home. Some participants did report children in the home, with most (34.6%, n = 174) indicated two or fewer children and only a small proportion (10.3%, n = 52) reporting three or more children in the home.

A larger proportion of individuals (> 25%) in the convenience sample indicated the presence of three or more adults in the home and 17.9% indicated the presence of three or more children in the home. Participants in the convenience sample were largely women (80%).

*Gender.* Participants were asked to report their gender. More women participated in the survey than did men, and few refused to respond to the question about gender. Figure 2 provides an overview of participant gender. Most participants in the convenience sample were also women.

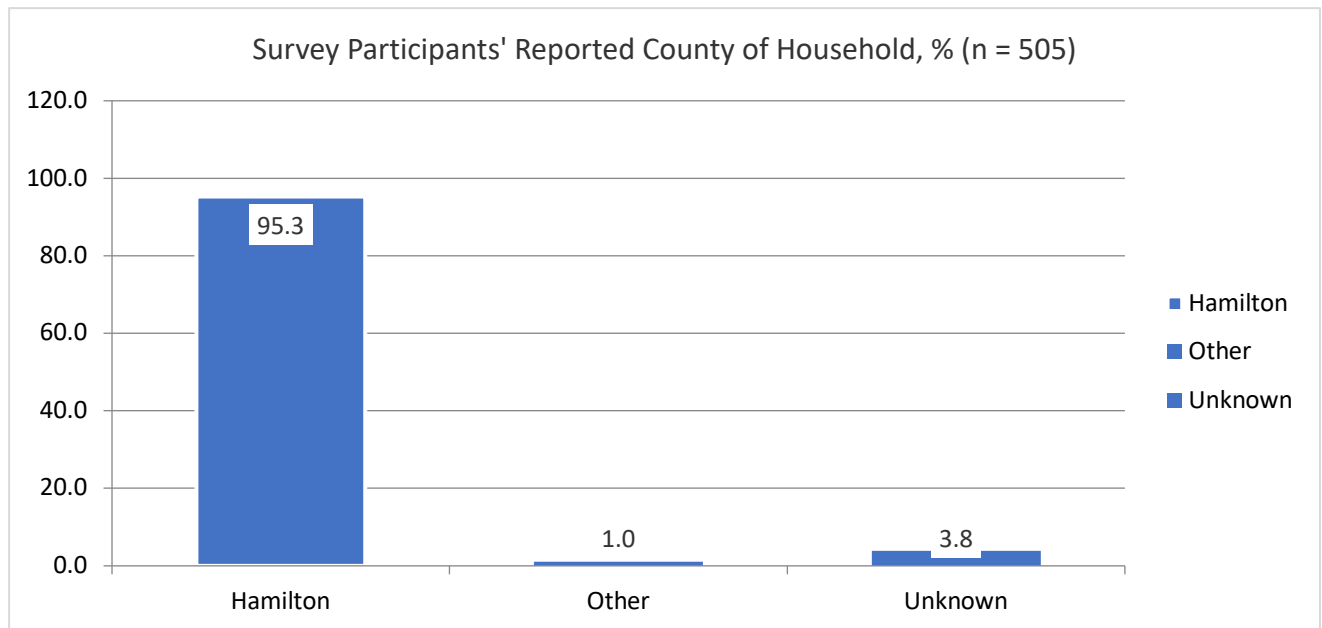


Figure 1. Participant's Reported County of Residence, by % of Participants

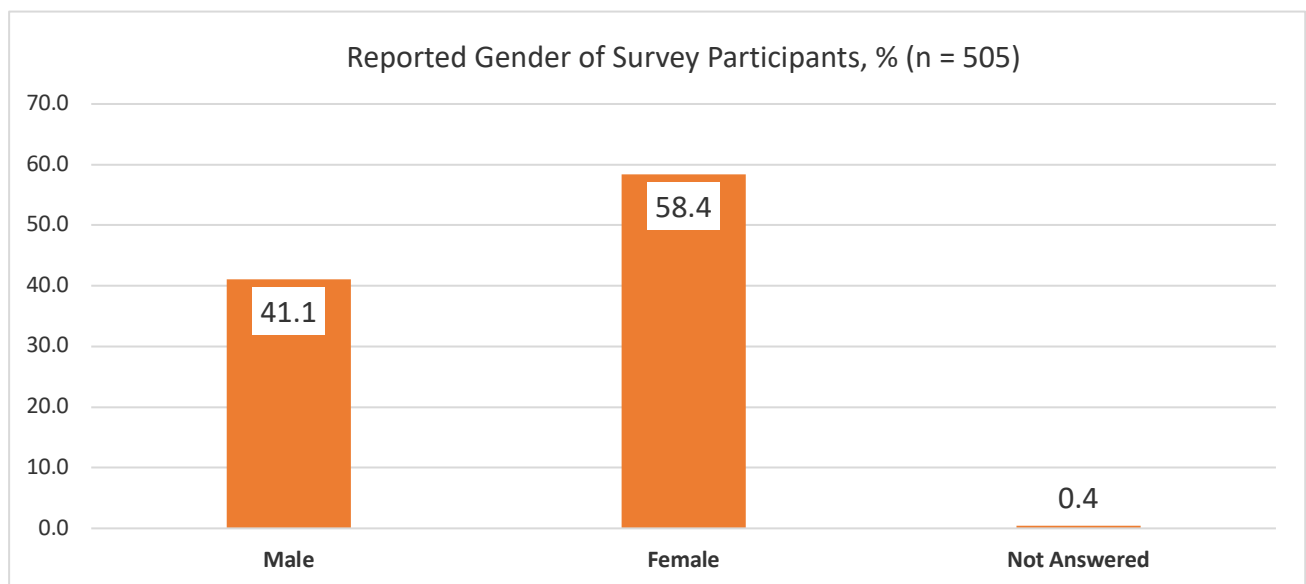


Figure 2. Reported Gender of Survey Participants, by % of Participants

**Age.** Participants were asked to provide the year in which they were born. Those data were subsequently analyzed to compute the estimated age of the individual at the time the survey was returned. Figure 3 provides a categorical overview of the age of participants

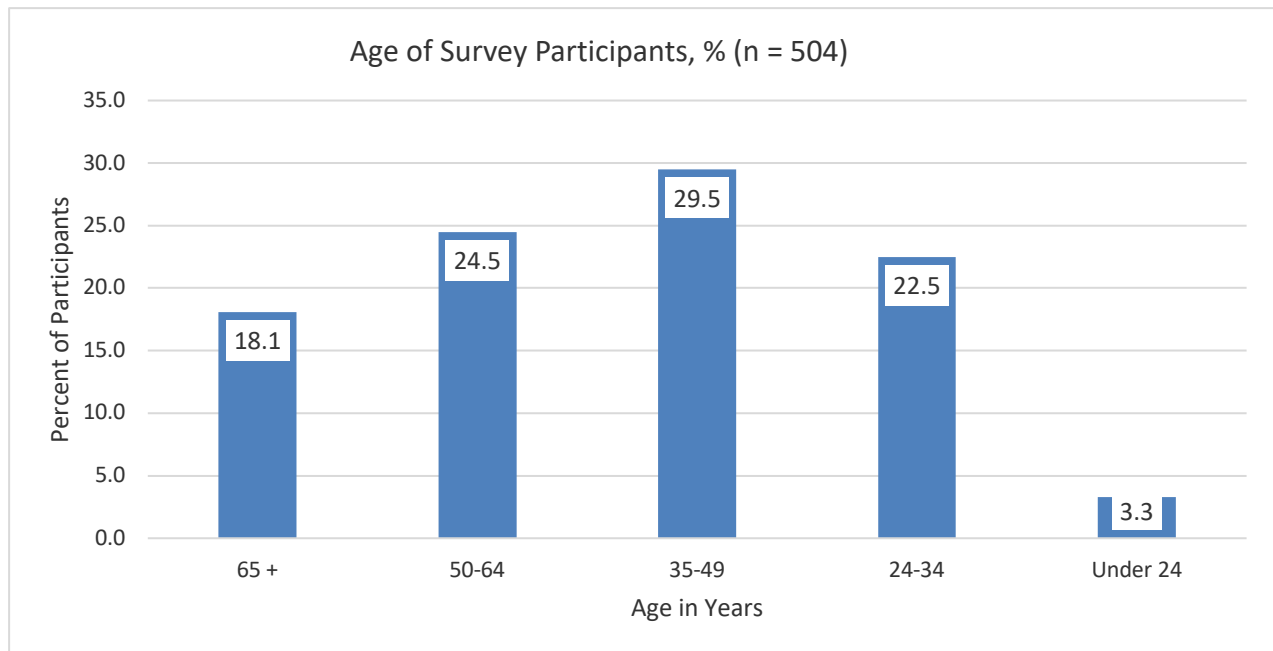


Figure 3. Reported Age of Participants, by % in Years

**Race.** Participants were asked to respond to a question regarding the race with which they identify. Participants were invited to select more than one race. The vast majority (92.2%,  $n = 465$ ) indicated that they were of “Caucasian/White” race, with 1.6% ( $n = 8$ ) describing their race as “Black/African American” and 5.6% ( $n = 28$ ) describing their race as “Asian.” Less than one percent selected another race. Figure 4 provides an overview of the race characteristics and those indicating their ethnicity as Hispanic.

**Ethnicity.** Participants were asked whether they were of Hispanic, Latino, or Spanish origin. Slightly less than three percent of participants (2.5%,  $n = 13$ ) responded in the affirmative.

Participants in the convenience sample were more diverse with regard to ethnicity and race, with approximately 6% reporting their ethnicity as Hispanic and 30.6% reporting their race as Black or African-American. Participants in the convenience sample reported incomes at levels indicating poverty, with over 50% reporting total household income of less than \$25,000 and 31.5% reporting income of less than \$15,000.00.

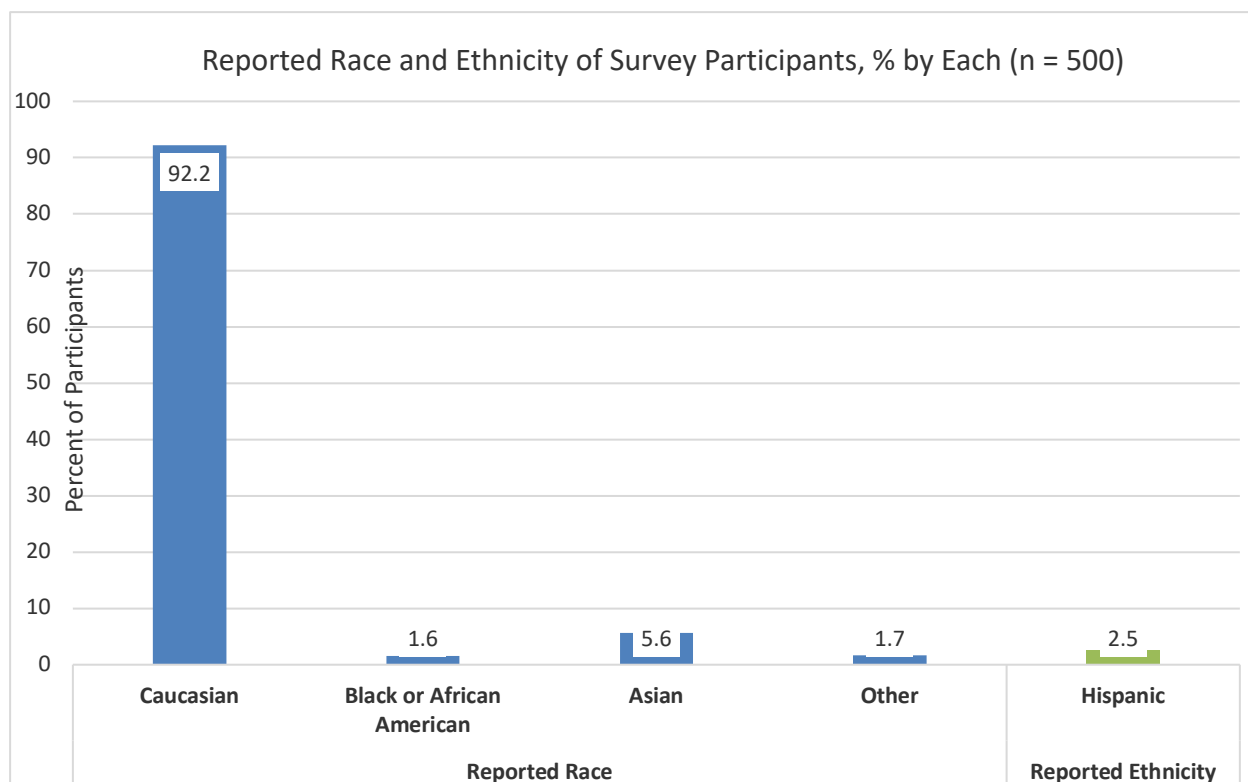


Figure 4. Reported Race and Ethnicity, by Category %

*Household Income.* Participants were asked to respond to a question regarding the total income of the household in which they lived (including all sources). Seven participants did not provide a response to this question. A small proportion of participants (6.7%, n = 34) reported total household income of less than \$35,000.00, more (17.3%, n = 87) reported income of between \$35,000.00 and \$74,999.00, and the largest proportion (72.4%, n = 366) reported total household income of \$75,000.00 or more. Figure 5 provides a categorical summary of the reported household income of participants.

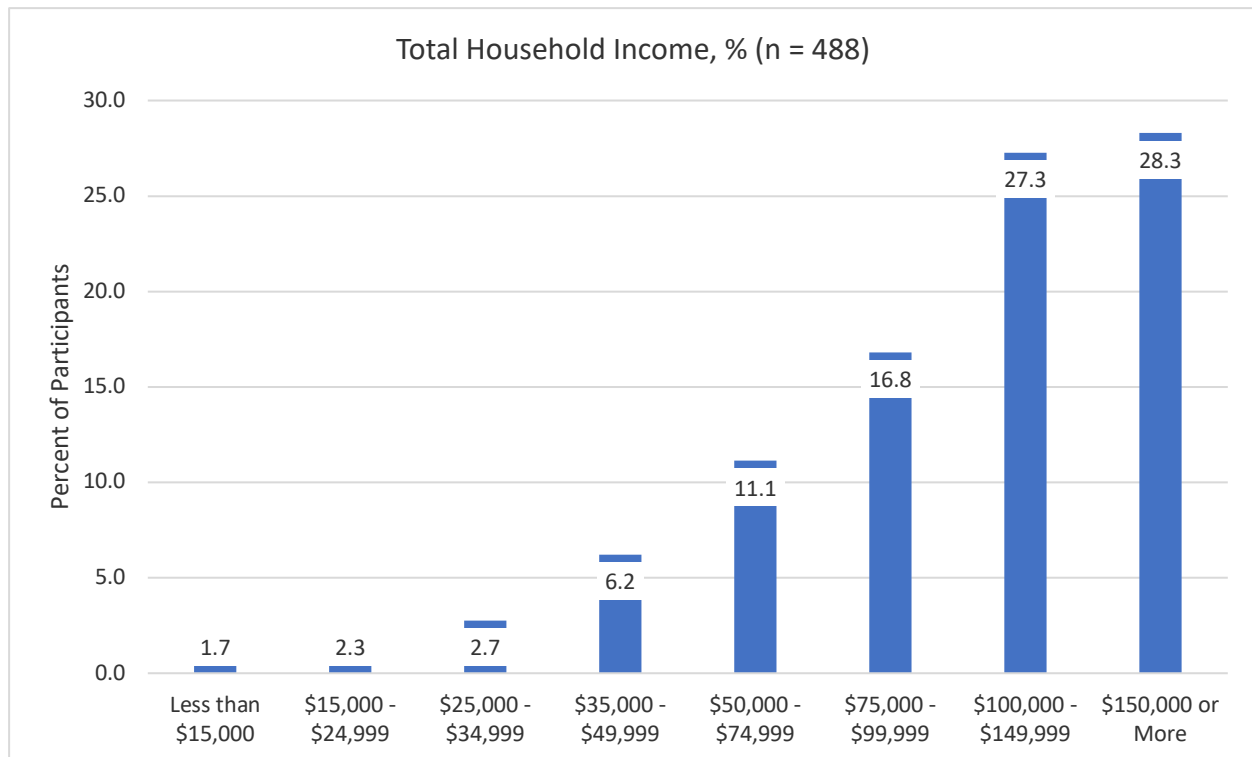


Figure 5. Reported Total Household Income, by Category %

**Level of Education.** Participants were asked to report their highest level of attained education based on specific categories. A proportion of participants (47.0%, n = 395) reported having completed an associate's or bachelor's degree from a college or university and 35.4% (n = 179) reported having attained a graduate or professional degree. Others (10.5%, n = 53) indicated that they had a diploma or certificate from a technical or vocational school or that they had completed some college. Also, 4.1% (n = 20) reported having received a high school diploma or GED, and only 1.4% (n = 7) reported that they had some high school education but had not graduated. Some individuals (1.5%) chose "other" without clarification and on participant chose not to provide a response to this question.

**Employment.** Participants were asked to describe their employment status. Most participants were employed full- or part-time (68.8%, n = 348) and 2.8% (n = 14) described themselves as unemployed. Others (16.4%, n = 83) were retired, 7.3% were "homemakers," and 2.9% reported being students.

### Participants' Perceptions of Health and Well-Being

Participants were asked to respond to four questions that sought to capture their perceptions of their current health status. Participants were asked to provide an assessment of their overall health, their physical health, their mental health, and their social well-being. Additionally, participants were asked about their overall life satisfaction and their level of stress. While responses to each area assessed are described below, Figures 6, 7, and 8 provide a summary of the participant responses.

*Overall Health.* Participants were asked “Would you say that in general, your overall health is...” with five response options ranging from poor to excellent. Most participants rated their overall health as very good (41.7%, n = 211), excellent (24.2%, n = 122), or good (24.4%, n = 123). The remainder assessed their overall health as being fair (6.7%, n = 34) or poor (1.0%, n = 5).

*Physical Health.* Participants were asked “Would you say that in general, your physical health is...” with five response options ranging from poor to excellent. Despite the vast majority who reported their overall health as being positive, participants differentiated their level of health more when being specific to their physical health. Less than one-quarter of individuals collectively rated their physical health as very good (8.8%, n = 45) or excellent (1.3%, n = 6). Larger proportions of participants rated their health as good (32.0%, n = 162), or fair (38.3%, n = 193), with the remainder rating their physical health as poor (19.5%, n = 98).

*Mental Health.* Participants were asked “Would you say that in general, your mental health is...” with five response options ranging from poor to excellent. The majority of participants rated their overall health as very good (40.9%, n = 206), excellent (35.0%, n = 117), or good (19.5%, n = 98). The remainder assessed their overall health as being fair (4.5%, n = 23) or poor (0.2%, n = 1).

*Social Well-Being.* Participants were asked “Would you say that in general, your social well-being is...” with five response options ranging from poor to excellent. The majority of participants perceived their overall social well-being to be less than good, with the largest proportion of all participants responding fair (41.2%, n = 208) and 36.1% (n = 182) responding with poor. Remaining participants rated their social well-being as good (19.4%, n = 98), with the remainder responding with very good (2.9%, n = 14) or excellent (0.4%, n = 2).

Participants in the convenience sample largely perceived their overall health and physical health as being “good to excellent” in higher than anticipated proportions, with over 75% reporting such. In terms of those expressing poor or fair levels on the specific indicators of health, over 20% rated their physical health as such, 14.2% rated their mental health as such, and 31.1 % rated their social well-being as poor or fair.



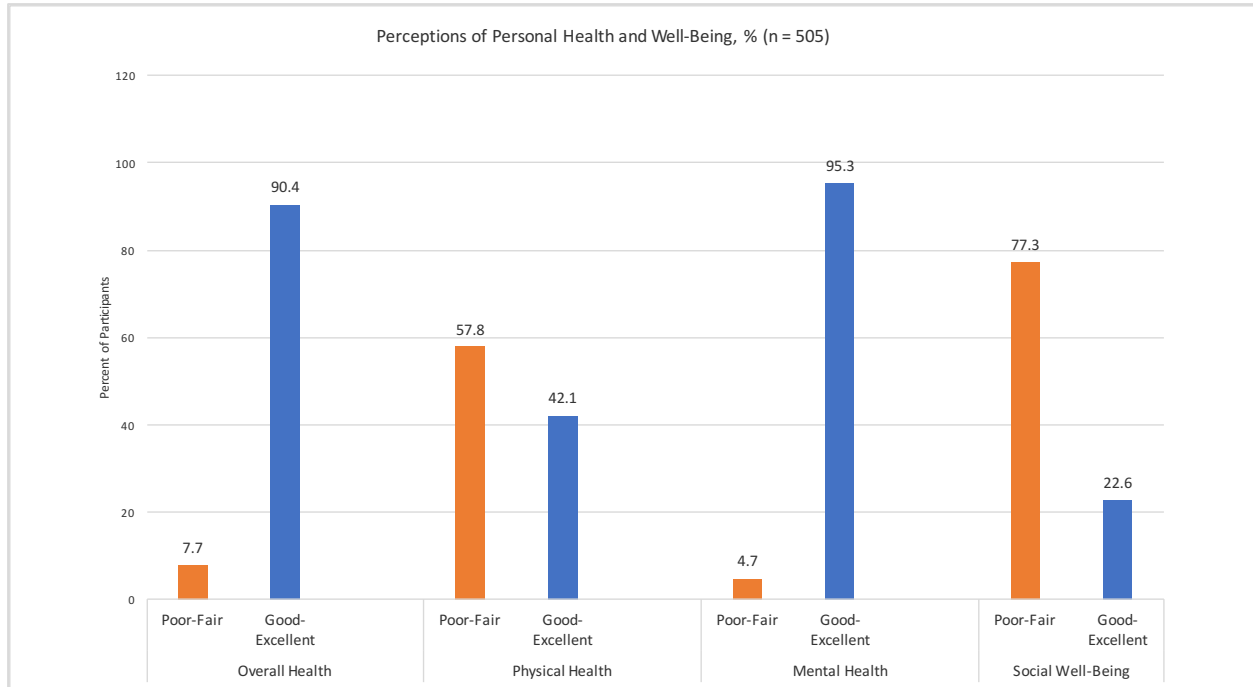


Figure 6. Participants' Perceptions of Health and Well-Being

**Overall Life Satisfaction.** Participants were asked to respond to a single question “overall I am satisfied with my life” with five response options ranging from strongly disagree to strongly agree. Figure 7 provides an overview of responses to this item.

**Level of Life Stress.** Participants were asked to rank their current level of life stress by responding to a single item “Please rank yourself on a scale of 1 to 10 where 1 means you have “little or no stress” and 10 means you have “a great deal of stress.” Figure 8 provides the percentage of respondents who ranked themselves on this measure.

Participants in the convenience sample tended to report higher levels of stress, with 29.9% describing their stress as being in the top levels (greater than 8 on scale of 1-10). Regarding life satisfaction, 20.2% of those in the convenience sample disagreed with the statement “overall I am satisfied with my life.”

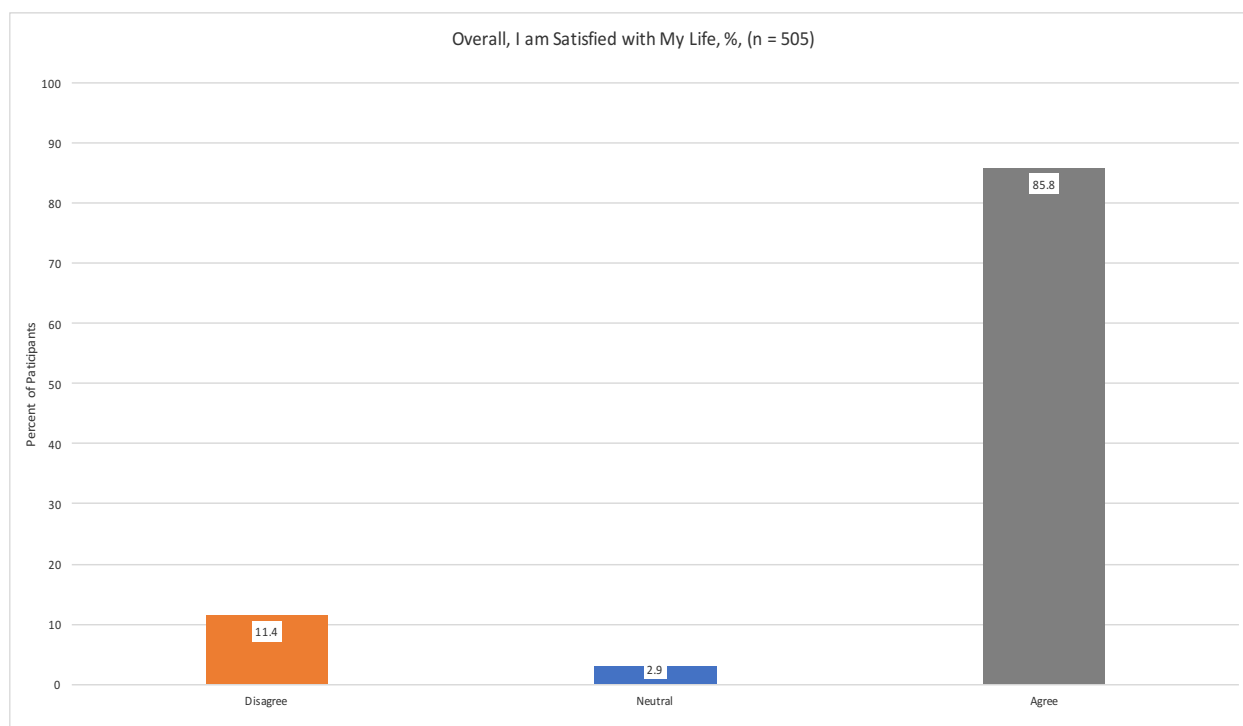


Figure 7. Participants Agreement with Life Satisfaction Item

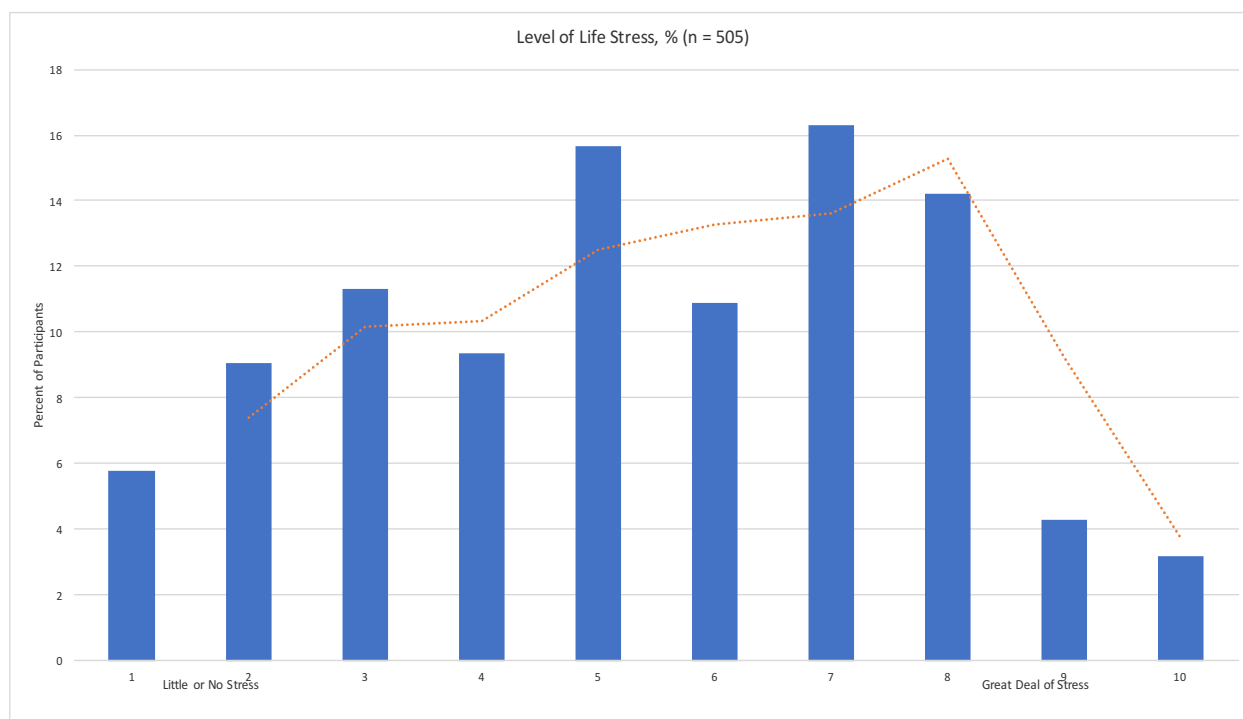


Figure 8. Ranking of Level of Life Stress

## Health Care Access and Engagement

Participants were asked to respond to a range of questions related to their current level of health-care coverage and also asked to describe the types of engagement they had with the

health care system in their community within the 12 months prior to the survey. Also assessed was whether participants had found themselves in situations within the past year that made it necessary to forego some level of health care based on a lack of financial resources or because they had to prioritize other matters.

*Insurance or Health Care Coverage.* Participants were asked “do you currently have insurance or coverage that helps with your healthcare costs?” Of the participants, the vast majority (96.3% n = 486) reported that they did have such coverage or insurance, while 3.2% (n = 16) responded “no.” The remaining three percent either did not know whether they had coverage or did not respond to this question.

*Current Personal Provider.* Participants were asked “do you currently have someone that you think of as your personal doctor or personal healthcare provider?” Most participants indicated that they did have such a personal provider (84.0%, n = 424), while 15.5% (n = 78) responded “no.” Figure 9 provides an overview of the responses to the questions about insurance or healthcare coverage and the presence of a personal healthcare provider.

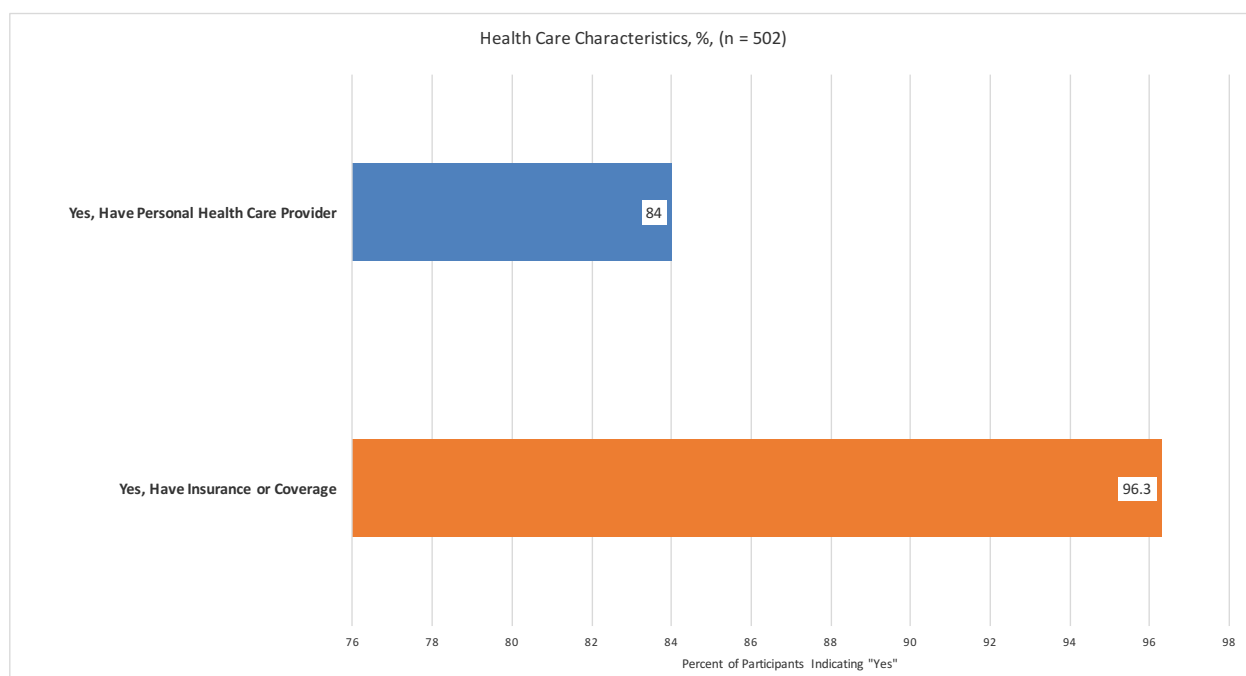


Figure 9. Participants' Reported Insurance and Personal Provider Characteristics

Of those participating in the convenience sample, 22.2% reported a lack of health insurance and 17.6% reported a lack of a personal provider.

*Healthcare Engagement.* Participants were provided with a list of 14 health-related services and types of healthcare engagement and asked whether they had received or utilized each of those within the past 12 months. Table 11 provides a summary of the participants' responses to this question, ordered from the highest to lowest levels of care engagement.

Table 11. Participants' Reported Types of Health Care Engagement (n = 505)

Type of Healthcare Engagement	Received Past 12 Months (%)	Did Not Receive Past 12 Months (%)
Filled Prescription	73.2	26.8
Dental Care	70.2	29.8
Physical Exam	67.6	32.4
Immunizations or Preventive Care	51.3	48.7
Acute Care	31.0	69.0
Chronic Care	17.4	82.6
Urgent Care	16.3	83.7
Care at Emergency Room	10.6	89.4
Prenatal Care	9.9	90.1
Screened for Anxiety or Depression	8.6	91.4
Hospital Inpatient Care	8.4	91.6
Mental Health Treatment	7.3	92.7
Family Planning Care	5.5	94.5
Addiction Treatment	1.4	98.6

Participants in the convenience sample reported different patterns of health care engagement than did the random sample, in key areas. Rates of engagement in the convenience sample included: immunizations or preventive care (18.5%), routine physical exam (37.3%), using emergency rooms (15.4%), acute care (16.7%), chronic care (19.1%), emergency room treatment (15.4%), urgent care use (11.4%), dental care (38.3%), and filling a prescription (52.2%). Only 2.2% reported receiving treatment for addiction, and 6.5 percent reported receiving treatment for a mental health diagnosis, yet 12.7% reported being screened for depression by a medical provider.

*Resources and Healthcare Engagement.* Participants were provided a list of three types of healthcare engagement needs including seeing a provider, filling a prescription, and finding transportation for care and asked to indicate whether there had been a time within the past 12 months that they could not act upon that need because “they couldn’t afford it or had to prioritize spending money on something else.” Less than 20% of participants indicated that it had been the case that they prioritized something over their healthcare across the three types assessed. Figure 10 presents this data. Regarding seeing a medical provider, 10.8% of participants (n = 55) indicated that they had a need to see a provider but did not due to other needs. Regarding needing to fill a prescription, 11.8%, (n = 60) indicated that that they had a need to avoid filling a prescription due to other needs. Regarding needing transportation for healthcare, less than one percent of participants indicated that they had not been able to access transportation due to other needs.

Across all three areas, participants in the convenience sample reported fairly elevated levels of incidence of needing to forego care due to the need to prioritize other resources. Of those, 27.2% reported foregoing seeing a provider, 27.2% reported not filling a prescription, and 17.6% reported foregoing transportation for care due to other needs.

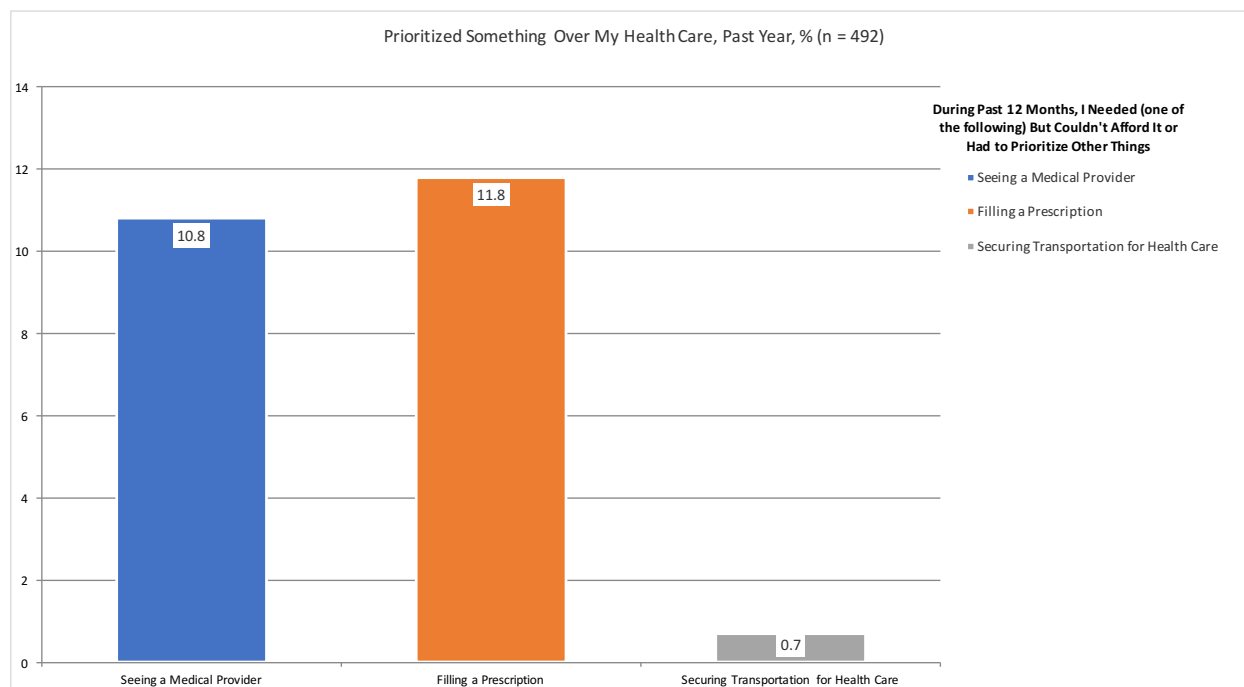


Figure 10. Participants' Reports of Resource Challenges and Health Care

## Personal Health-Related Behaviors

Of interest was understanding the extent to which participants had participated in certain behaviors within the past 30 days. Considered were behaviors that were conceptualized as health promoting (e.g., behaviors perceived by the hospital to be supportive of one's health and well-being) or health challenging (e.g., behaviors perceived by the hospital to be challenging to one's health and well-being). Table 12 provides a summary of participants' self-reported behaviors.

In the convenience sample, the most frequently reported health promoting behaviors were getting plenty of sleep (43.2%), eating a healthy balanced diet (42.9%), and having blood pressure checked (38.3%). The most frequently reported challenging behavior was using tobacco (23.1%) and 8.3% reported the use of a prescribed opioid.

Table 12. Participants' Self-Reported Health Behaviors Past 30 Days (n = 505)

Health Promoting Behaviors	% Reporting Behavior
Checked Blood Pressure	38.2
Getting Plenty of Sleep	56.1
Being Physically Active	58.1
Eating Balanced Diet	64.9
Tried to Reduce Stress	26.9
Took Prescription for Mental Health	15.5
Health Challenging Behaviors	% Reporting Behavior
Used Tobacco	3.9
Took Opioid Prescribed to Me	4.6
Took Opioid Not Prescribed to Me	0.3
Driving Intoxicated	0.7

## Social Determinants of Health

Those conducting the CHNA were particularly interested in a better understanding of whether participants perceived that certain social issues (often considered to be determinant of health status) were impacting their lives. Participants were provided with a list of 10 statements and asked to report the extent to which that statement applied to them. Each statement reflected a particular social determinant of health. The purpose of these items was to assess the extent to which participants “felt” specific characteristics of social factors known to influence health outcomes. To assess these, some items were worded positively. For example, “I feel safe in the place where I live” is a positively worded item and those reporting “never” or “seldom” to that item are among those who have identified a social factor that could be acted upon in the health and social services infrastructure to work with an individual to has concerns about his or her housing situation. Negatively worded items like “I worry about being able to pay my rent or mortgage” are considered at the other end of the response options, with those responding “sometimes,” “often,” or “always” being among those who might benefit from economic or employment assistance in ways to reduce the impact on health. Consistently across these items, there were six participants who did not respond to each item and those participants were not included in the summary provided. Table 13 provides an overview of the extent to which participants perceived those statements to be among those that applied to them.

Highlighted in this table are the social determinants with endorsement of 10% or greater that, in a typical social service setting, would indicate a need for further consideration, discussion, or triage.

Table 13. Participants' Reports of Felt Social Determinants (n = 501)

Social Determinant	Item Assessed	Total Sample Responses
<b>Positively Worded Social Determinant Items</b>		<b>Percent Reporting "Never" or "Seldom" Applies to Me</b>
Social Ecology	I feel those around me are healthy	0.9
Education	I am satisfied with my education	4.4
Community Cohesion	I make efforts to get involved in my community	28.6
Policy	I vote when there is an election in my town	11.0
Environment	I feel that my town's environment is healthy (air, water, etc)	1.7
Housing	I feel safe in the place where I live	3.1
Psychosocial	I try to spend time with others outside of work	10.2
Transportation	I have access to safe and reliable transportation	0.7
<b>Negatively Worded Social Determinant Items</b>		<b>Percent Reporting "Sometimes," "Often" or "Always" Applies to Me</b>
Economy	I worry about my utilities being turned off for non-payment	3.4
Employment	I worry about being able to pay my rent or mortgage	7.9

In the convenience sample, participants were strikingly similar in their responses to the positively worded items as those in the random sample. However, those in the convenience sample were more likely to report worry about the economic and employment items, with 32.4% reporting worry about utilities being turned off for non-payment and 34.6% indicating worry about being able to pay rent or mortgage.

### Importance of Community-Based Health and Social Service Programs

Participants were asked to provide the perspectives on the extent to which health and social service programs are important to their local community. During the survey, participants were provided with a list of 20 different programs that are often present in many communities. Participants were inconsistent with regard to the extent to which they provided an assessment of each program type. As a result, results from participants were used to calculate rankings of program endorsement. Of the twenty programs, approximately two-thirds were ranked as being either moderately or very important by more than 50% of participants. While these results do provide some insight into the types of programs perceived as most important in their local community, across the board these data do suggest that in general most community members perceive the general network of health and social service programs to be important on the whole. However, considering these data in terms of those services that participants ranked as "very" important does provide valuable insights into those most valued. Table 14 provides a list of the extent to which participants rated a program type as "moderately" or "very" important, presented in order of highest to lowest endorsement. In this table, highlighted separately are those services ranked as "very" important by more than 50% or 60%.

Table 14. Endorsement of Importance of Community Programs (n = 505)

Community Programs	Moderately/Very Important %	Moderately Important %	Very Important %
Physical Activity	93.2	41.1	52.1
Walking Trails/Outdoor Space	88.4	27.8	60.6
Aging Services	86.0	45.6	40.4
Mental Health Counseling	84.9	45.2	39.7
Substance Abuse Prevention & Treatment	79.9	35.8	44.1
Nutrition Education	75.6	52.8	22.8
Gun Safety Education	69.8	34.6	35.2
Free/Emergency Childcare	56.5	33.3	23.2
Family Planning	55.4	35.2	20.2
Job Training/Employment Assistance	55.2	42.5	12.7
Services for Women, Infants, Children	52.3	31.1	21.2
Food Pantries	52.1	34.3	17.8
Health Insurance Assistance	50.5	34.2	16.3
Transportation Assistance	40.4	33.2	7.2
Prescription Assistance	38.7	31.6	7.1
Legal Assistance	35.6	28.2	7.4
Financial Assistance	34.2	25.6	8.6
Housing Assistance	32.5	25.3	7.2
Food Stamps/SNAP	31.0	22.5	8.5
Needle Exchange	29.9	18.3	11.6

Participants in the convenience sample were equally supportive of the importance of community-based social services, with over 50% of participants endorsing all services as important. However, particularly with services such as mental health counseling, substance abuse treatment, and assistance with housing and finances, participants in the convenience sample more strongly endorsed the needs for services with more than 50% endorsing them as “very” important.

### Community Perceptions of Priority Health Needs

Important to the development of the CHNA and its subsequent Implementation Strategy was to assess the local health issues which community members perceived to be of importance. The hospital developed a list of 21 different health needs that are common in many communities similar to those in Hamilton County. Survey participants were asked to select five of those community health issues that they perceived to be among the most important for the hospital and its partners to address.

Accompanying the list of health issues was a statement that guided survey participants in their selection. The statement read “Below is a list of health issues present in many communities. Please pick the five that you think pose the greatest health concern for people living in your community.” Table 15 provides a summary of the extent to which each health issue was selected as one of the top five issues by survey participants.



Table 15. Priority Health Issues Selected by Participants as Being Among the Top 5 Most In Need of Attention in the Service Population (n = 505)

Health Issue	% Selecting Issue as One of Top 5 Needing Attention
Obesity	69.7
Chronic diseases like diabetes, cancer, and heart disease	56.8
Mental health	54.9
Substance use or abuse	52.4
Aging and older adult needs	43.2
Alcohol use or abuse	32.5
Injuries and accidents	24.5
Tobacco use	19.6
Suicide	18.9
Reproductive health and family planning	15.6
Disability needs	15.4
Environmental issues	14.0
Food access, affordability, and safety	13.2
Child neglect and abuse	10.6
Assault, violent crime, and domestic violence	8.9
Sexual violence, assault, rape, or human trafficking	7.8
Poverty	7.6
Dental care	5.9
Infectious diseases like HIV, STDs, and hepatitis	3.0
Homelessness	2.1
Infant mortality	1.7

While participants were able to select from the full list of 21 health issues during the survey, it was decided to narrow down the priority issues to the top 50% during the community prioritization session. Figure 11 provides a graphical presentation of the top health issues shared during community meetings for purposes of informing future initiatives.

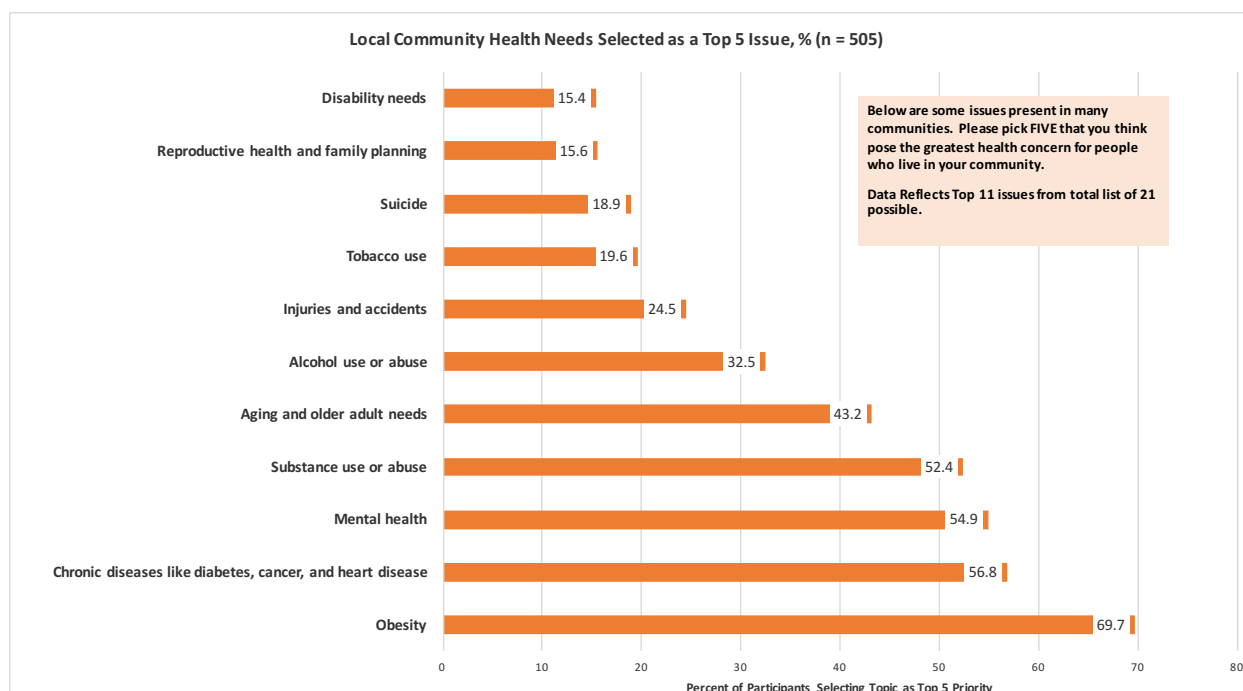


Figure 11. Most Frequently Endorsed Health Issues as Priority for Action

In the convenience sample, the top 10 issues reported as priority needs included: Substance abuse (49.4%), food access (42.3%), mental health (31.2%), poverty (30.2%), chronic disease (28.4%), alcohol use (28.1%), obesity (27.5%), homelessness (25.6%), assault and violence (25.0%), and child neglect and abuse (21.6%).

### Community Perceptions of Health Issues Needing Priority Resource Allocation

In addition to assessing the extent to which participants perceived specific needs as being among the most important for action in their community, participants were also asked to provide their perceptions of the extent to which those same 21 issues were also priorities for the allocation of resources in the local community. Participants were given a statement to consider prior to indicating their perceptions. The statement read “Previously you were asked to pick issues that pose the greatest health concern in your community. If you had \$3 and could give \$1 to help solve some of these, which are the three to which you would give \$1?”

As was the case with the health issues selected as priorities for action, it was decided to narrow down the priority issues to the top 50% during the community prioritization session. Figure 12 provides a graphical presentation of the top ranked issues that survey participants selected as priorities for the allocation of resources.

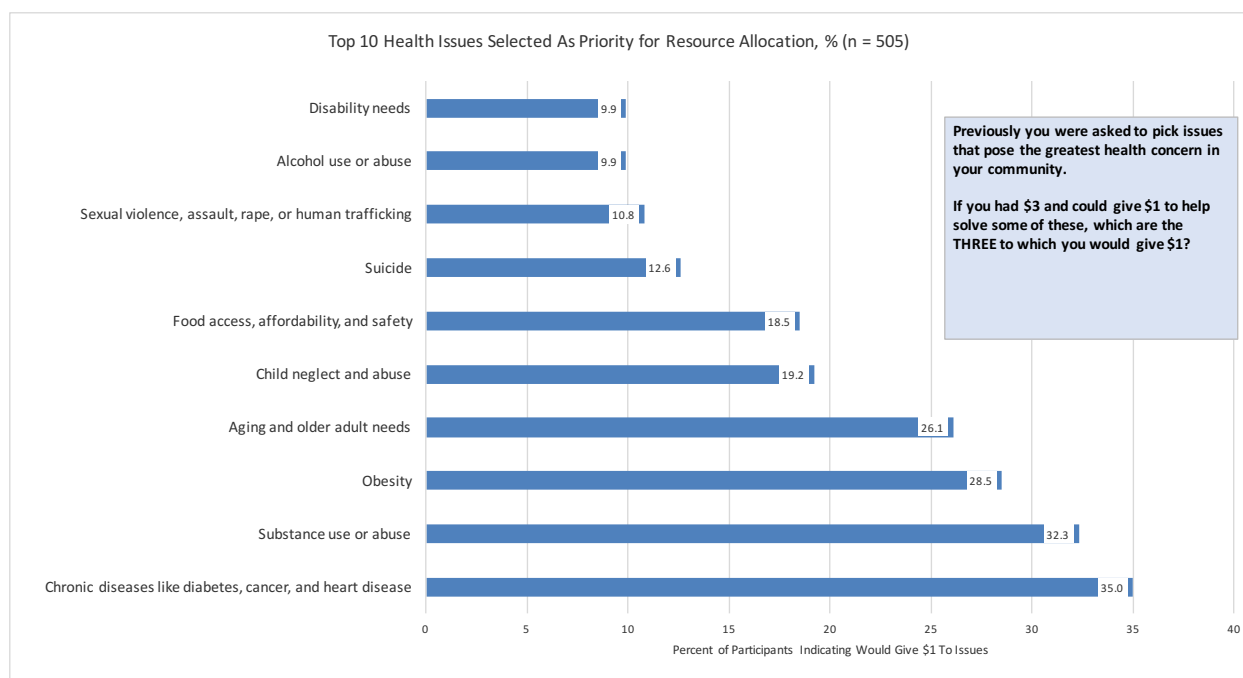


Figure 12. Most Frequently Endorsed Health Issues as Priority for Resource Allocation

In the convenience sample, the top 10 issues reported as resource allocation priorities were highly consistent with their rankings of needs, except that aging was perceived as a top 10 priority for resources but not in the top 10 needs (the opposite was the case with alcohol use which was a need but not in the top 10 for allocation). The top 10 issues for resource allocation included: food access (31.8%), obesity (27.5%), substance abuse (25.6%), homelessness (23.5%), mental health (24.1%), poverty (21.0%), child neglect and abuse (19.8%), chronic disease (16.0%), aging needs (16.0%), and assault and violence (15.7%).

### Comparison of Needs and Resource Priorities

While participants were asked to provide an assessment of priority needs and priorities for resource allocation as separate survey items, a comparison of those priority rankings provides helpful insights into the extent to which there is consistency between the two. Figure 13 provides such a comparison and highlights some inconsistency between health issues that community members believed were a priority needing addressed and those that they believe should be a priority for the allocation of resources.

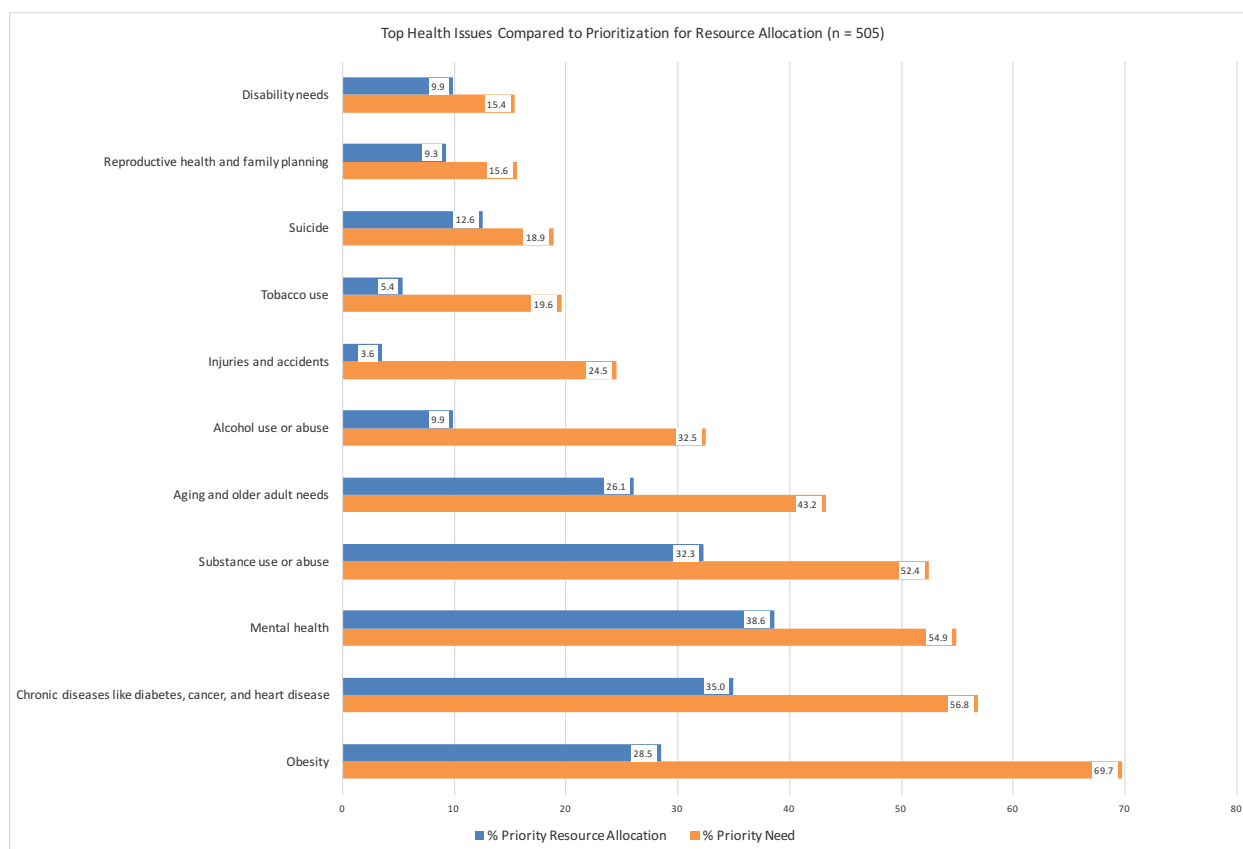


Figure 13. Comparison of Priority Needs and Resource Priorities

## Prioritization Process

To consider the CHNA data and to identify the most urgent health issues that would guide the hospital's future priority areas, a comprehensive prioritization process was conducted. Representatives of community health organizations in the service area and hospital staff participated in a meeting to review data collected for the CHNA. A list of community partner organizations from which a representative participated is included in Appendix A.

The session included the following activities:

- There was a review of the purpose of conducting the CHNA and reflections on decisions and actions taken in response to the 2016 CHNA (see Appendix D).
- A review of data was presented by a representative of Measures Matter, LLC. That data review included a summary of the existing health indicators and data from the CHNA survey.
- Hospital solicited and took into account input from those representing the broader community served by the hospital and those with special knowledge and/or expertise in public health.
- A nominal group process facilitated by Measures Matter, LLC guided the group's selection of priority health issues for the 2019 CHNA. That process was conducted in the following way:

- Participants were provided with the list of health topics that emerged as among those having the most support from both existing data and the CHNA survey. That list of health topics is provided in Figure 14.
- Participants were given the opportunity to add additional topics.
- Participants were each provided with 5 “sticky dots” and asked to place their dots on the issues that they each felt were most in need of prioritization.
- The “dots” on each topic were tallied and a discussion about the topics and any special considerations for each was held.

## Resulting Priorities

As a result of both phases of the prioritization process, five issues received endorsement for prioritization for St. Vincent Carmel. Those issues included:

- Mental Health
- Substance Abuse/Alcohol abuse
- Older Adults & Aging/Elder Care/Family Care
- Access to Care
- Tobacco Use

A list of available community health resources was also reviewed as part of the process and the potential partners for addressing these needs is included as Appendix A.

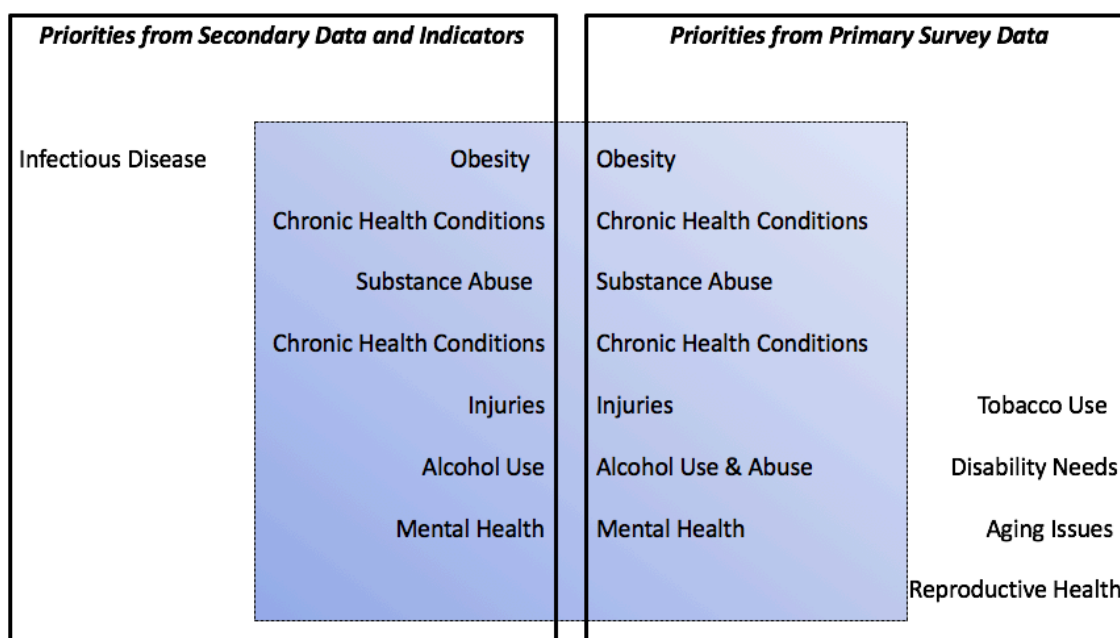


Figure 14. Overlapping health issues that emerged from secondary data and the CHNA survey

## Participating Organizations

In addition to staff person from St. Vincent Health who coordinated the session and the facilitator, 22 individuals participated in the session representing\*:

- St. Vincent Carmel Hospital
- St. Vincent Fishers Hospital
- St. Vincent Heart Center (2 participants)
- St. Vincent Indianapolis Hospital
- Prevail (2 participants)
- Cherish
- Community Health Network
- WCC/Mama's Cupboard
- Shepherd's Center of Hamilton County (2 participants)
- Aspire
- Carmel Police Department (2 participants)
- Carmel Fire Department
- Meals on Wheels Hamilton County
- Gleaners Food bank
- IU Health (2 participants)
- Partnership for a Healthy Hamilton County (PHHC)
- Indiana Tobacco Prevention & Cessation

\* unless indicated, each organization had one representative participating

## References

1. *Indiana - Rankings*. (2016, November). Retrieved from County Health Rankings & Roadmaps:  
<http://www.countyhealthrankings.org/app/indiana/2018/rankings/randolph/county/outcomes/overall/snapshot>
2. *Epidemiology Resource Center*. (2017, 12 September). Retrieved from Indiana State Department of Health: <https://www.in.gov/isdh/25154.htm>

## Appendix A - Hamilton County Resource List

Those organizations highlighted were partners in the CHNA process, particularly providing support to the collection of survey data.

Hamilton County Resource List				
Resource Name	Contact Name	Local Address	Phone Number	Website
Boys and Girls Club Noblesville		1448 Connor Street, Noblesville IN, 46060	(317) 773-4372	<a href="http://www.bgcni.org/">http://www.bgcni.org/</a>
Carmel Fire Department		5032 E 131st St Carmel, IN	(317) 571-2600	<a href="http://www.carmel.in.gov/index.aspx?page=87">http://www.carmel.in.gov/index.aspx?page=87</a>
Carmel Police Department		Three Civic Square Carmel, IN 46032	(317) 571-2500	<a href="http://www.carmel.in.gov/index.aspx?page=100">http://www.carmel.in.gov/index.aspx?page=100</a>
Chaucie's Place		4607 E. 106th St. Carmel, IN 46033	(317) 759-8008	<a href="http://chauciesplace.org/">http://chauciesplace.org/</a>
Creating Positive Relationships		160 W. Carmel Dr. Suite 232 Carmel, IN 46032	(317) 669- 6030	<a href="https://www.cpr4teens.org/">https://www.cpr4teens.org/</a>
Fairbanks Hospital		8102 Clearvista Parkway, Indianapolis Indiana	(317) 849-8222	<a href="http://www.fairbanksd.org/about-fairbanks">http://www.fairbanksd.org/about-fairbanks</a>
Fishers Fire Department		Two Municipal Drive Fishers, IN 46038	(317) 595-3200	<a href="http://www.fishers.in.us/Index.aspx?NID=219">http://www.fishers.in.us/Index.aspx?NID=219</a>
Fishers United Methodist Church Food Pantry		9691 E. 116th St. Fishers, IN 46037	(317) 849-1805	<a href="http://www.fishersumc.org/FoodPantry">http://www.fishersumc.org/FoodPantry</a>
Fishers YMCA		9012 E. 126th St. Fishers, IN 46038	(317) 595-9622	<a href="http://www.indymca.org/centers/fishers/center-news/">http://www.indymca.org/centers/fishers/center-news/</a>
Gleaners Food Bank		3737 Waldemere Ave. Indianapolis, IN 46241	(317) 925-0191	<a href="https://www.gleaners.org/">https://www.gleaners.org/</a>
Good Samaritan Network		12933 Parkside Drive Fishers, IN 46038	(317) 842-2603	<a href="http://www.gsnlive.org/">http://www.gsnlive.org/</a>
Grace Church		5504 East 146th St, Noblesville IN 46062	(317) 848-2722	<a href="http://gracechurchin.org/">http://gracechurchin.org/</a>
Hamilton County Express		1555 Westfield Road Noblesville, Indiana 46062	(317) 773-2688, EXT. 113	<a href="http://www.janus-inc.org/programs-services/hamilton-county-express">http://www.janus-inc.org/programs-services/hamilton-county-express</a>
Hamilton County Family and Nutrition Program		2003 Pleasant Street Noblesville, IN 46060-3697	(317) 776-0854	<a href="http://www.purdue.edu/hhs/extension/connect/detail.aspx?employeeid=32&amp;programid=5">http://www.purdue.edu/hhs/extension/connect/detail.aspx?employeeid=32&amp;programid=5</a>
Hamilton County Health Department		18030 Foundation Drive Suite A Noblesville, IN 46060	(317) 776-8500	<a href="http://www.hamiltoncounty.in.gov/254/Health-Department">http://www.hamiltoncounty.in.gov/254/Health-Department</a>
Heart and Soul Clinic		202 Penn Street Westfield, IN 46074	(317) 804-5782	<a href="http://heartandsoulclinic.org/">http://heartandsoulclinic.org/</a>
Hope Family Care Center, Cicero IN		270 W Jackson St, Cicero, IN 46034	(317) 984-3444	<a href="http://www.hopefamilycare.org/">http://www.hopefamilycare.org/</a>
IU Health North Hospital		11700 N. Meridian St. Carmel, IN 46032	(317)688-2000	<a href="https://iuhealth.org/find-locations/iu-health-north-hospital">https://iuhealth.org/find-locations/iu-health-north-hospital</a>
IU Health Saxony Hospital		13000 East 136th Street Fishers, IN 46037	(317) 678-2000	<a href="http://iuhealth.org/saxony/">http://iuhealth.org/saxony/</a>
Janus Developmental Services		1555 Westfield Rd., Noblesville, Indiana 46062	(317) 773-8781	<a href="http://www.janus-inc.org/">http://www.janus-inc.org/</a>
Jump IN for Healthy Kids (part of United Way Central Indiana)		3901 N. Meridian Street Indianapolis, IN 46208-0409	(317) 923-1466	<a href="http://www.uwci.org/jump-in-for-healthy-kids">http://www.uwci.org/jump-in-for-healthy-kids</a>
Mama's Cupboard		610 E. 10th St. Sheridan, IN 46069	(317) 758- 1338	Facebook
Meals on Wheels		Riverview Health, 395 Westfield Rd, Noblesville, IN 46060	(317) 776-7159	<a href="http://www.mealsonwheelshc.org/">http://www.mealsonwheelshc.org/</a>
Merciful H.E.L.P. Center - Matthew 25 Center		1045 West 146th Street, Suite A Carmel, IN 46032	(317) 663-4039	<a href="http://www.mercifulhelpcenter.org/newbuilding.html">http://www.mercifulhelpcenter.org/newbuilding.html</a>
Partnership for Healthy Hamilton County		12933 Parkside Drive Fishers, IN 46038	(317) 842-2603	<a href="http://www.hamiltoncountypnhc.com/#!/the-hospitals-and-gsn/clbe">http://www.hamiltoncountypnhc.com/#!/the-hospitals-and-gsn/clbe</a>
Prevail		1100 South 9th Street, Suite 100, Noblesville, IN 46060	(317) 773-6942	<a href="http://www.prevailofhamiltoncounty.com/">http://www.prevailofhamiltoncounty.com/</a>
PrimeLife Enrichment		1078 3rd Ave. SW Carmel, IN 46032	(317) 815-7000	<a href="http://www.primelifeenrichment.org">www.primelifeenrichment.org</a>
Riverview Health Clinic		395 Westfield Rd., Suite B Noblesville, IN 46060	(317) 776-9400	<a href="https://www.riverview.org/locations/search/?s=indiana">https://www.riverview.org/locations/search/?s=indiana</a>
RUAH Rural & Urban Access to Health Program at St. Vincent		8424 Naab Road, Building 1, Suite 1A Indianapolis, Indiana 46260	(317) 338-2273	<a href="http://www.stvincent.org/RUAH/">http://www.stvincent.org/RUAH/</a>
St. Vincent Carmel Hospital		13500 North Meridian St. Carmel, IN 46032	(317)582-7000	<a href="https://www.stvincent.org/Locations/Hospitals/Carmel">https://www.stvincent.org/Locations/Hospitals/Carmel</a>
St. Vincent Fishers Hospital		13861 Olio Road Fishers, Indiana 46037	(317) 415-9000	<a href="https://www.stvincent.org/Locations/Hospitals/Fishers">https://www.stvincent.org/Locations/Hospitals/Fishers</a>
St. Vincent Heart Center		10580 North Meridian St. Indianapolis, IN 46290	(317)583-5000	<a href="https://www.stvincent.org/Locations/Hospitals/Heart-Center-Carmel">https://www.stvincent.org/Locations/Hospitals/Heart-Center-Carmel</a>
Trinity Free Clinic		1045 West 146th St., Suite B, Carmel, IN 46032	(317) 819-0772	<a href="http://www.trinityfreeclinic.org/">http://www.trinityfreeclinic.org/</a>
United Way of Central Indiana		3901 N. Meridian Street, Indianapolis, IN 46208	(317) 923-1466	<a href="http://www.uwci.org/">http://www.uwci.org/</a>



STATEWIDE ORGANIZATIONS				
Resource Name	Local Address	Phone Number	Website	Topic Area
211	3901 N. Meridian St., Ste. 300 Indianapolis, IN 46208	211	<a href="http://www.in211.org">http://www.in211.org</a>	Access to Health Services
Alzheimer's Association: Indiana Chapter	50 East 91st Street, Suite 100, Indianapolis, IN 46240	(800) 272-3900	<a href="http://www.alz.org/indiana/">http://www.alz.org/indiana/</a>	Older Adults
Cardiovascular and Diabetes Coalition of Indiana (CADI)	615 North Alabama Street, Suite 426, Indianapolis, IN 46204	(317) 456-7567	<a href="http://incadi.org/">http://incadi.org/</a>	Diabetes
Children's Bureau Inc., Community Partners	1575 Dr. Martin Luther King Jr. Street Indianapolis Indiana 46202	(317) 634-5050	<a href="http://www.childrensbureau.org/what-we-do/community-partners-for-child-safety">http://www.childrensbureau.org/what-we-do/community-partners-for-child-safety</a>	Maternal, Infant, & Child Health
Child's Advocate Network	30 South Meridian Street, Suite 500 Indianapolis, IN 46204	(317) 232-2542	<a href="http://www.childadvocatesnetwork.org/find-your-local-program/clay-county/">http://www.childadvocatesnetwork.org/find-your-local-program/clay-county/</a>	Maternal, Infant, & Child Health
CHIP- Coalition of Homelessness Intervention and Prevention*	3737 N. Meridian Street, Suite 504, Indianapolis, IN 46208	(317) 630-0853	<a href="http://www.chipindy.org/">http://www.chipindy.org/</a>	Social Determinants of Health
CICOA- Aging & In- Home Solutions	Multiple across state- see <a href="http://www.cicoa.org/about-cicoa/area-agencies-on-aging.html">http://www.cicoa.org/about-cicoa/area-agencies-on-aging.html</a>	(800) 432-2422	<a href="http://www.cicoa.org/">http://www.cicoa.org/</a>	Older Adults
Community Action Program of Western Indiana	various locations across the state		<a href="http://www.capwi.org/#">http://www.capwi.org/#</a>	Maternal, Infant, & Child Health
Diabetes Prevention Recognition Programs (CDC- endorsed)	Various throughout IN (many at YMCAs)		<a href="https://nccd.cdc.gov/DDT_DPRP/State.aspx?STATE=IN">https://nccd.cdc.gov/DDT_DPRP/State.aspx?STATE=IN</a>	Diabetes
Dining with Diabetes	consult their website for local classes (offered in each county)	(765) 494-4600	<a href="http://www.purdue.edu/hhs/extension/programs/detail.aspx?programId=1&amp;category=food">http://www.purdue.edu/hhs/extension/programs/detail.aspx?programId=1&amp;category=food</a>	Diabetes
Family and Social Services Administration	402 W. Washington Street P.O. Box 7083 Indianapolis, IN 46207-7083	(317) 233-0826	<a href="http://www.in.gov/fssa/index.htm">http://www.in.gov/fssa/index.htm</a>	Access to Health Services

STATEWIDE ORGANIZATIONS				
Resource Name	Local Address	Phone Number	Website	Topic Area
Family Voices	445 N Pennsylvania St, Ste 941 Indianapolis, IN 46204	(317) 944-8982	<a href="http://www.fvindiana.org">http://www.fvindiana.org</a>	Disability and Health
Health by Design	401 W. Michigan Street, Indianapolis IN 46202	(317) 352-3844	<a href="http://www.healthbydesignonline.org/">http://www.healthbydesignonline.org/</a>	Environmental Health
Healthy Families Indiana	Various throughout IN ( <a href="http://www.in.gov/dcs/files/HFI_Contacts_Map.pdf">http://www.in.gov/dcs/files/HFI_Contacts_Map.pdf</a> )		<a href="http://www.in.gov/dcs/2459.htm">http://www.in.gov/dcs/2459.htm</a>	Maternal, Infant, & Child Health
Healthy Indiana Plan (HIP)		1-877-GET-HIP-9	<a href="http://www.in.gov/fssa/hip/">http://www.in.gov/fssa/hip/</a>	Access to Health Services
Hoosier Environmental Council	3951 N. Meridian Suite 100, Indianapolis, IN 46208	(317) 685-8800	<a href="http://www.hecweb.org/">http://www.hecweb.org/</a>	Environmental Health
Improving Kids' Environments in Indiana	1915 W. 18th Street, Indianapolis, Indiana 46202		<a href="http://ikecoalition.org/">http://ikecoalition.org/</a>	Environmental Health
IN Office of Small Business and Entrepreneurship (OBSE) - Community Entrepreneurship Initiative (CEI)	One North Capitol, Suite 600 Indianapolis, IN 46204	(317) 234-2082	<a href="http://www.isbdc.org/cei/">http://www.isbdc.org/cei/</a>	Social Determinants of Health
Indiana Cancer Consortium	615 North Alabama Street, Suite 426, Indianapolis, IN 46204	(317) 520-9344	<a href="http://indianacancer.org/">http://indianacancer.org/</a>	Cancer
Indiana Coalition Against Domestic Violence	1915 W. 18th Street, Suite B Indianapolis, IN 46202	(317) 917-3685	<a href="http://www.icadvinc.org/">http://www.icadvinc.org/</a>	Injury and Violence Prevention
Indiana Department of Veterans Affairs		1-(844)-480-0009	<a href="http://www.in.gov/dva/index.htm">http://www.in.gov/dva/index.htm</a>	Social Determinants of Health
Indiana Healthy Weight Initiative	615 North Alabama Street, Suite 426, Indianapolis, IN 46204	(317) 456-7565	<a href="http://inhealthyweight.org/">http://inhealthyweight.org/</a>	Nutrition & Weight Status

STATEWIDE ORGANIZATIONS				
Resource Name	Local Address	Phone Number	Website	Topic Area
Indiana Joint Asthma Coalition	615 North Alabama Street, Suite 426, Indianapolis, IN 46204	(317) 520-9343	<a href="http://injac.org/">http://injac.org/</a>	Respiratory Diseases
Indiana Public Health Association	615 North Alabama Street, Suite 426, Indianapolis, IN 46204	(317) 520-9340	<a href="http://inpha.org/">http://inpha.org/</a>	Public Health Infrastructure
Indiana Rural Health Association	2901 Ohio Boulevard, Suite 240 Terre Haute, IN 47803	(812) 478-3919	<a href="http://www.indianaruralhealth.org/">http://www.indianaruralhealth.org/</a>	Access to Health Services
Indiana State Department of Health	2 N. Meridian Street 6B, Indianapolis IN, 46204	(317) 233-1325	<a href="http://www.state.in.us/isdh/">http://www.state.in.us/isdh/</a>	Access to Health Services
Indiana State Refugee Health Program		(317) 233-1325	<a href="http://www.in.gov/isdh/24668.htm">http://www.in.gov/isdh/24668.htm</a>	Access to Health Services
Indiana Tobacco Quitline		1-800-QUIT-NOW	<a href="http://www.in.gov/quitline/">http://www.in.gov/quitline/</a>	Tobacco Use
Indiana University School of Dentistry	1121 W. Michigan Street Indianapolis, IN, 46202	(317) 274-7433	<a href="https://www.dentistry.iu.edu/index.php/patient-services/">https://www.dentistry.iu.edu/index.php/patient-services/</a>	Oral Health
Indiana Youth Institute	603 E. Washington Street, Suite 800. Indianapolis, Indiana 46204-2692	(317) 396-2700	<a href="http://www.iyi.org">http://www.iyi.org</a>	Adolescent Health
InSource Indiana	1703 South Ironwood Drive South Bend, IN 46613	(574) 234-7101	<a href="http://insource.org">http://insource.org</a>	Disability and Health
IU Health Smoking Cessation Program			<a href="http://iuhealth.org/primary-care/smoking-cessation/">http://iuhealth.org/primary-care/smoking-cessation/</a>	Tobacco Use
Kiwanis Indiana	6525 East 82nd Street, Suite 109 Indianapolis, IN 46250-1545	(877) 883-5974	<a href="http://www.indkiw.org/">http://www.indkiw.org/</a>	Social Determinants of Health
Leukemia & Lymphoma Society: Indiana Chapter	9075 North Meridian Suite 150, Indianapolis, IN 46260	(317) 860-3840	<a href="http://www.lls.org/#/aboutlls/chapters/in">http://www.lls.org/#/aboutlls/chapters/in</a>	Cancer
Little Red Door Cancer Agency	1801 North Meridian Street, Indianapolis, IN 46202	(317) 925-5595	<a href="http://www.littlereddoor.org/">http://www.littlereddoor.org/</a>	Cancer

STATEWIDE ORGANIZATIONS				
Resource Name	Local Address	Phone Number	Website	Topic Area
Local Initiative Support Coalition (LISC)	The Platform, 202 East Market Street, Indianapolis, Indiana 46204	(317) 454-8486		Social Determinants of Health
Medicaid transportation service- taxis (especially for prenatal visits)			<a href="http://member.indianamedicaid.com/programs--benefits/mcicaid-programs/traditional-mcicaid/traditional-mcicaid-covered-services.aspx">http://member.indianamedicaid.com/programs--benefits/mcicaid-programs/traditional-mcicaid/traditional-mcicaid-covered-services.aspx</a>	Social Determinants of Health
Mental Health America of Indiana	1431 North Delaware Street Indianapolis IN 46202	(317) 638-3501	<a href="https://mhai.net/">https://mhai.net/</a>	Mental Health
National Alliance on Mental Illness (NAMI) Indiana	2601 Cold Spring Road Indianapolis, IN 46222	(317) 925-9399	<a href="http://www.namiindiana.org/">http://www.namiindiana.org/</a>	Mental Health
Stellar Communities Program of Indiana			<a href="http://www.stellarindiana.org/">http://www.stellarindiana.org/</a>	Social Determinants of Health
The Arc of Indiana	107 N. Pennsylvania St. Suite 800 Indianapolis, IN 46204	(317) 977-2375	<a href="http://www.arcind.org">http://www.arcind.org</a>	Disability and Health

## Appendix B - Mortality Indicators for Hamilton County, 2016<sup>2</sup>

ICD 10 Description of Mortality Causes	RATES PER 100,000 Population (Age-Adjusted)
<b>Malignant neoplasms (cancer)</b>	<b>125.61</b>
Malignant neoplasm of stomach	1.59
Malignant neoplasms of colon, rectum and anus	11.41
Malignant neoplasm of pancreas	10.00
Malignant neoplasms of trachea, bronchus and lung	26.52
Malignant neoplasm of breast	9.83
Malignant neoplasms of cervix uteri, corpus uteri and ovary	5.47
Malignant neoplasm of prostate	7.34
Malignant neoplasms of urinary tract	7.54
Non-Hodgkin's lymphoma	3.15
Leukemia	5.37
Other malignant neoplasms	37.39
<b>Diabetes mellitus</b>	<b>20.73</b>
<b>Alzheimer's disease</b>	<b>27.73</b>
<b>Major cardiovascular diseases</b>	<b>184.33</b>
Diseases of heart	142.13
Hypertensive heart disease with or without renal disease	6.98
Ischemic heart diseases	87.69
Other diseases of heart	47.45
Essential hypertension and hypertensive renal disease	4.88
Cerebrovascular diseases (stroke)	34.4
Atherosclerosis	0.36
Other diseases of circulatory system	2.57
<b>Influenza and pneumonia</b>	<b>7.68</b>
<b>Chronic lower respiratory diseases</b>	<b>38.89</b>
<b>Peptic ulcer</b>	<b>0</b>
<b>Chronic liver disease and cirrhosis</b>	<b>6.69</b>
<b>Nephritis, nephrotic syndrome and nephrosis (kidney disease)</b>	<b>14.85</b>
<b>Pregnancy, childbirth and the puerperium</b>	<b>0.63</b>
<b>Certain conditions originating in the perinatal period</b>	<b>3.56</b>
<b>Congenital malformations, deformations and chromosomal abnormalities</b>	<b>2.71</b>
<b>Sudden infant death syndrome (SIDS)</b>	<b>0</b>
<b>Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (excluding SIDS)</b>	<b>3.34</b>
<b>All other diseases</b>	<b>130.62</b>
<b>Motor vehicle accidents</b>	<b>5.46</b>
<b>All other and unspecified accidents and adverse effects</b>	<b>25.18</b>
<b>Intentional self-harm (suicide)</b>	<b>12.13</b>
<b>Assault (homicide)</b>	<b>0.71</b>
<b>All other external causes</b>	<b>1.26</b>

Source: Indiana State Department of Health, Epidemiology Resource Center. Summary Produced September 12, 2017

## Appendix C – Community Health Needs Assessment Survey

### MY Community Health Needs Assessment

*Because a Healthier Community Means a Healthier Me*

Who should fill out this questionnaire? We ask that the adult (18 years of age or older) in your household who had the most recent birthday complete this questionnaire.

Instructions: Please mark your answers clearly in the boxes using pencil or dark pen. Examples: ☐ ☒ ☐

**1** In which county do you live?  
(Please print one letter in each box.)

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**2** What is the zip code of your residence?  
(Please print one number in each box.)

--	--	--	--	--	--

**3** How many adults (18 years or older) live in your household, INCLUDING YOURSELF?  
INCLUDE everyone who is living or staying here for more than 2 months. DO NOT include anyone who is living somewhere else for more than 2 months, such as a college student living away or someone in the Armed Forces on deployment.

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**4** How many children younger than 18 years of age live in your household?

--	--

**5** What is your gender? (Select only one.)

☐ Male ☐ Female

**6** In what year were you born? (Please print a 4-digit year.)

--	--	--	--

Please answer both Question 7 about Hispanic origin and Question 8 about race.

**7** Are you of Hispanic, Latino, or Spanish origin?

☐ Yes ☐ No

**8** What is your race? (Select all that apply.)

- ☐ White
- ☐ Black or African-American
- ☐ American Indian or Alaska Native
- ☐ Asian
- ☐ Native Hawaiian or other Pacific Islander
- ☐ Other, please specify:

--

**9** Considering all sources, which of the following best describes your total household income before taxes for 2017? (Select only one.)

- ☐ Less than \$15,000
- ☐ \$15,000-\$24,999
- ☐ \$25,000-\$34,999
- ☐ \$35,000-\$49,999
- ☐ \$50,000-\$74,999
- ☐ \$75,000-\$99,999
- ☐ \$100,000-\$149,999
- ☐ \$150,000 or more

**10** Which of the following best describes your current employment status? (Select only one.)

- ☐ Employed full time
- ☐ Employed part time
- ☐ Unemployed looking for work
- ☐ Unemployed not looking for work
- ☐ Unable to work due to disability
- ☐ Homemaker
- ☐ Retired
- ☐ Student

**11** Which of the following best describes the highest level of education you completed? (Select only one.)

- ☐ Some high school
- ☐ High school diploma or GED
- ☐ Some college
- ☐ Technical or vocational school diploma or certificate
- ☐ Associate's degree
- ☐ Bachelor's degree
- ☐ Graduate or professional degree or beyond
- ☐ Other, please specify:

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**12** Would you say that in general: (Select only one.)

Very  
Excellent good Good Fair Poor  
▼ ▼ ▼ ▼ ▼

Your overall health is... ☐ ☐ ☐ ☐ ☐

- 13** Regarding different areas of your health and life, you would say that in general: (Select one answer for EACH row.)

	Excellent ▼	Very good ▼	Good ▼	Fair ▼	Poor ▼
Your physical health is...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your mental health is...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your social well-being is...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- 14** How much do you agree or disagree with the following statement: "In general, I am satisfied with my life." (Select only one.)

- ☐ Strongly disagree
- ☐ Somewhat disagree
- ☐ Neither agree nor disagree
- ☐ Somewhat agree
- ☐ Strongly agree

- 15** On a scale of 01 to 10 where 01 means you have "little or no stress" and 10 means you have "a great deal of stress," how would you rate your average level of stress during the past month? (Please print a 0 in the first box for numbers less than 10.)

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- 16** Do you currently have insurance or coverage that helps with your healthcare costs (including private or employer-sponsored insurance or public coverage like Medicare or Medicaid)? (Select only one.)

- ☐ Yes    ☐ No    ☐ Do not know

- 17** Do you currently have someone that you think of as your personal doctor or personal healthcare provider? (Select only one.)

- ☐ Yes    ☐ No    ☐ Do not know

- 18** Within the past 12 months, which of the following health services have you received? (Select all that apply.)

- ☐ Chronic care for a disease like diabetes or a disability
- ☐ Acute care, like for an infection or injury
- ☐ Immunizations or other preventive care
- ☐ Routine physical exam
- ☐ Prenatal or well-baby care
- ☐ Care related to family planning
- ☐ Care at a hospital emergency room
- ☐ Care at an urgent care facility
- ☐ Inpatient care at a hospital
- ☐ Filling a prescription
- ☐ Dental care
- ☐ Screening for anxiety or depression by a medical provider
- ☐ Treatment for a mental health diagnosis
- ☐ Treatment for addiction

- 19** Thinking about the past month, which of the following behaviors have you participated in regularly (at least 3 days per week on average)? (Select all that apply.)

- ☐ I smoked cigarettes or used other tobacco
- ☐ I was physically active on a regular basis
- ☐ I ate a healthy balanced diet
- ☐ I got plenty of sleep
- ☐ I took an opioid or narcotic that was prescribed to me
- ☐ I took an opioid or narcotic that was NOT prescribed to me
- ☐ I took a medication for anxiety, depression, or other mental health challenge that was prescribed to me
- ☐ I had my blood pressure checked
- ☐ I drank alcohol to the point of intoxication
- ☐ I drove while under the influence of alcohol or drugs
- ☐ I took steps to reduce my level of stress

- 20** During the past 12 months, was there ever a time that you or the family members you live with needed one of the following but couldn't afford it or had to prioritize spending money on something else? (Select one answer for EACH row.)

	Yes ▼	No ▼	Do not know ▼
Seeing a medical provider	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Filling a prescription	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transportation for a health purpose or appointment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



**21** How often would you say that the following statements apply to you? (Select one answer for EACH row.)

	Never ▼	Seldom ▼	Sometimes ▼	Often ▼	Always ▼
I feel those around me are healthy (family, friends, and co-workers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I worry about my utilities being turned off for non-payment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel satisfied with my education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I make efforts to get involved in my community	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I vote when there is an election in my town	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel that my town's environment is healthy (air, water, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel safe in the place where I live	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I try to spend time with others outside of work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have access to safe and reliable transportation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I worry about being able to pay my rent or mortgage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**22** Below are some issues present in many communities. Please pick FIVE that you think pose the greatest health concern for people who live in your community. (Select only five out of all options 1 - 21.)

- |  |  |   |
|--|--|---|
| 1 <input type="checkbox"/> Food access, affordability, and safety        | 8 <input type="checkbox"/> Sexual violence, assault, rape, or human trafficking        | 14 <input type="checkbox"/> Homelessness                            |
| 2 <input type="checkbox"/> Environmental issues                          | 9 <input type="checkbox"/> Obesity   | 15 <input type="checkbox"/> Reproductive health and family planning |
| 3 <input type="checkbox"/> Tobacco use                                   | 10 <input type="checkbox"/> Chronic diseases, like diabetes, cancer, and heart disease | 16 <input type="checkbox"/> Infant mortality                        |
| 4 <input type="checkbox"/> Substance use or abuse                        | 11 <input type="checkbox"/> Suicide  | 17 <input type="checkbox"/> Injuries and accidents                  |
| 5 <input type="checkbox"/> Alcohol use or abuse                          | 12 <input type="checkbox"/> Infectious diseases, like HIV, STDs, and hepatitis         | 18 <input type="checkbox"/> Mental health                           |
| 6 <input type="checkbox"/> Assault, violent crime, and domestic violence | 13 <input type="checkbox"/> Poverty  | 19 <input type="checkbox"/> Aging and older adult needs             |
| 7 <input type="checkbox"/> Child neglect and abuse                       |  | 20 <input type="checkbox"/> Dental care                             |
|  |  | 21 <input type="checkbox"/> Disability needs                        |

**23** Previously, you were asked to pick issues that pose the greatest health concern in your community. If you had \$3 and could give \$1 each to help solve some of these, which are the THREE to which you would give \$1. (Select only three out of all options 1 - 21.)

- |  |  |   |
|--|--|---|
| 1 <input type="checkbox"/> Food access, affordability, and safety        | 8 <input type="checkbox"/> Sexual violence, assault, rape, or human trafficking        | 14 <input type="checkbox"/> Homelessness                            |
| 2 <input type="checkbox"/> Environmental issues                          | 9 <input type="checkbox"/> Obesity   | 15 <input type="checkbox"/> Reproductive health and family planning |
| 3 <input type="checkbox"/> Tobacco use                                   | 10 <input type="checkbox"/> Chronic diseases, like diabetes, cancer, and heart disease | 16 <input type="checkbox"/> Infant mortality                        |
| 4 <input type="checkbox"/> Substance use or abuse                        | 11 <input type="checkbox"/> Suicide  | 17 <input type="checkbox"/> Injuries and accidents                  |
| 5 <input type="checkbox"/> Alcohol use or abuse                          | 12 <input type="checkbox"/> Infectious diseases, like HIV, STDs, and hepatitis         | 18 <input type="checkbox"/> Mental health                           |
| 6 <input type="checkbox"/> Assault, violent crime, and domestic violence | 13 <input type="checkbox"/> Poverty  | 19 <input type="checkbox"/> Aging and older adult needs             |
| 7 <input type="checkbox"/> Child neglect and abuse                       |  | 20 <input type="checkbox"/> Dental care                             |
|  |  | 21 <input type="checkbox"/> Disability needs                        |



- 24** Below is a list of programs or services in many communities. Please mark how important these programs or services are for your community. (Select one answer for EACH row.)

	Not at all important for my community ▼	Not very important for my community ▼	Moderately important for my community ▼	Very Important for my community ▼
Nutrition education, like healthy cooking classes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Physical activity programs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Substance abuse prevention and treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Needle exchange programs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mental health counseling and support	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gun safety education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Family planning services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Walking trails and other outdoor spaces	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aging and older adult services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Assistance with filling a prescription	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Housing assistance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Financial assistance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Legal assistance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Help getting health insurance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Job training or employment assistance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transportation assistance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Services for women, infants, and children (WIC)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Food stamps or SNAP	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Food pantries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Free or emergency child care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Appendix D - Significant Health Needs Identified in Previous CHNA

### St. Vincent Carmel - FY17-19 Implementation Strategy

Significant Health Need Identified in Previous CHNA	Goals and Implementation Strategy	Indicators of Success
Access to Health Services	<p><b>Goals</b></p> <p>Establish a baseline number of FSSA medical insurance enrollments at the end of FY18.</p> <p>Increase the reported FY18 number of medical insurance enrollments by 5% in the remaining year of the cycle (FY19). Enrollment goals by FY are:</p> <ul style="list-style-type: none"> <li>FY17=planning year</li> <li>FY18=0 (baseline)</li> <li>FY19≥1 person</li> </ul> <p><b>Implementation Strategy</b></p> <p>Hospital associate(s) will work with a Health Advocate (HA) from the Rural and Urban Access to Health (RUAH) department at ≥1 community event to help start the enrollment process.</p>	<p><b>FY17 – Year 1 Update: Community benefit=\$676; Staff time=11 hours</b></p> <p>The first year of the implementation strategy was a planning year. To increase the opportunity for success, the hospital:</p> <ul style="list-style-type: none"> <li>Identified the community health need and hospital's role (completed 9/8/16).</li> <li>Developed a plan to work with HAs (completed 12/6/16).</li> <li>Created a list of possible places for community events in FY18 (completed 12/6/16).</li> <li>Submitted a tentative location for an event in FY18. An associate from the hospital will assist the HA in helping people through the enrollment pathway (completed 3/31/17).</li> </ul> <p><b>FY18 – Year 2 Update: Community benefit=\$275; Staff time=6.5 hours</b></p> <p>During the second year of the implementation strategy, the hospital:</p> <ul style="list-style-type: none"> <li>Provided an associate to assist RUAH at an enrollment event, which was held at a local elementary school (10/23/17).</li> <li>Offered information about enrolling into a medical insurance plan to 20 families, collected contact information from 1 family that requested a follow up call about HIP, and 0 people were enrolled from the event (per RUAH email 10/24/17).</li> </ul> <p><b>FY19 – Year 3 Update: Community benefit=Not Reported Yet</b></p> <p>The hospital is currently in year 3, which is the last year of this CHNA cycle. FY19 will be reported and attached to the FY19 Form 990.</p>
Exercise, Nutrition & Weight Status	<p><b>Goal</b></p> <p>Reduce the number of families in the school's weekend feeding programs who self-report feeling food insecure in FY18 by 5% at the end of FY19 (based on survey responses).</p> <p><b>Implementation Strategy</b></p> <p>The hospital will contribute to a school weekend feeding program, which provides an additional food source for families with school-aged children. The program gives a backpack of nutritious food to a child (family member) enrolled in the participating school.</p>	<p><b>FY17 – Year 1 Update: Community benefit=\$2,180; Staff time=50 hours</b></p> <p>FY17 was structured as a planning year to increase the likelihood of program sustainability and success. In the first year of implementation, the hospital:</p> <ul style="list-style-type: none"> <li>Completed a program checklist, which assisted in identifying a school, finding potential community partners, and assessing availability of hospital resources (completed by 9/30/16).</li> <li>Met with program stakeholders to determine logistics (completed by 12/31/16).</li> <li>Developed protocol describing how the weekend feeding program works and the hospital's role/contribution to the program over the three-year cycle (completed by 3/31/17). The hospital's described its role/contribution as:</li> </ul>

Significant Health Need Identified in Previous CHNA	Goals and Implementation Strategy	Indicators of Success
	<p>After calculating 5% reduction of the baseline, the overall goal for the implementation strategy is to have 2 less families reporting to be food insecure in FY19. (NOTE: FY18 baseline=38 families reported being food insecure; 5% reduction=1.9 families, rounded up to 2 families; FY19 goal=36 families report being food insecure).</p>	<ul style="list-style-type: none"> <li>• Coordination of at least 2 food drives in FY18 and FY19 for the school's food pantry</li> <li>• Analysis of survey data and summary will be prepared for the entire student population. A secondary analysis of students participating in the weekend feeding program will also be conducted.</li> <li>• Sent a partner commitment letter to the school's principal outlining the hospital's contribution to the weekend feeding program in FY18 and FY19. This letter was signed by the hospital administrator then emailed and mailed via US Postal Service (completed by 6/30/17).</li> </ul> <p><b>FY18 – Year 2 Update: Community benefit=\$1,297; Staff time=29.5 hours</b></p> <p>FY18 was an implementation year. The school incorporated the survey tool into its student registration process. De-identified data was collected and provided to St. Vincent by the school for analysis.</p> <ul style="list-style-type: none"> <li>• A total of 102 families participated in the existing weekend feeding program.</li> <li>• 100% (102) responded to the survey</li> <li>• 63% (n=64) reported being food secure</li> <li>• 37% (n=38) reported being food insecure</li> </ul> <p>St. Vincent prepared a written summary of the analysis to the school. Survey #2 will be administered in FY19 by the school during student registration. Another written summary will be sent to the school after data collection is completed.</p> <p><b>FY19 – Year 3 Update: Community benefit=Not Reported Yet</b></p> <p>The hospital is currently in year 3, which is the last year of this CHNA cycle. FY19 will be reported and attached to the FY19 Form 990.</p>
Tobacco Use	<p><b>Goal</b></p> <p>Increase the number of community training participants who screen and refer to the Indiana Tobacco Quitline by 10% by the end of FY19.</p> <p><b>Implementation Strategy</b></p> <p>Enhance existing state Quitline (1.800.QUIT.NOW) by offering Rx for Change training and education about referring to the Indiana Tobacco Quitline to any health care professional.</p>	<p><b>FY17 – Year 1 Update: Community benefit=\$897; Staff time=21 hours</b></p> <p>The first year of this implementation cycle was designated as a planning year to increase the likelihood of program sustainability and success. A template to promote the trainings was developed at the system level. The template was customizable to meet individual market needs. During FY17, the hospital:</p> <ul style="list-style-type: none"> <li>• Completed a training checklist, which facilitated in identifying associates to become formally trained Rx for Change Trainers (completed by 9/30/16).</li> <li>• Developed a distribution list of possible training participants (completed by 3/31/17).</li> <li>• Scheduled at least two dates Rx for Change trainings in your community in FY18 (completed by 3/31/17).</li> <li>• Sent 2 associates to attend an in-person Rx for Change "Train-the-Trainer" session. Both associates can deliver the Rx for Change curriculum to any health care professional (completed by 6/30/17).</li> </ul>

Significant Health Need Identified in Previous CHNA	Goals and Implementation Strategy	Indicators of Success
		<p><b>FY18 – Year 2 Update: Community benefit=\$1,030; Staff time=18 hours</b></p> <p>The hospital offered Rx for Change trainings to the community on February 7, 2018 and May 16, 2018. A total of eleven participants attended the training. The training was open to the community however, all participants were St. Vincent associates. Each participant was eligible to earn two continuing education units for the training. The continuing education unit request form doubled as the baseline survey. To increase the response rate, participants were allotted two weeks to complete the brief, online form. The response rate for the baseline was 45% (n=5). One participant reported being/working for an organization that is registered as a "Preferred Provider" with the Indiana Tobacco Quitline (Yes=1; No=4). As a result of this training, participants reported how likely they were to:</p> <ul style="list-style-type: none"> <li>• Ask more patients about tobacco use (n=5, 100%)</li> <li>• Advise more tobacco users to quit (n=5, 100%)</li> <li>• Recommend medications for quitting more often (n=5, 100%)</li> <li>• Refer patients to the tobacco quitline (n=5, 100%)</li> </ul> <p>Thirty days after the training, a brief, follow-up survey was emailed to all participants (email address provided by participant). To increase the response rate, participants received a friendly reminder message with link to the survey once a week for four weeks. Participants who answered the email within the 4-week follow-up period were removed from the email queue and did not receive subsequent messages. Timestamps indicate that participants completed the survey within the first week of the 4-week follow-up period. No incentives were offered for survey completion. A total of 4 participants completed the 30-day follow-up survey. Of those completing the follow-up survey:</p> <ul style="list-style-type: none"> <li>• 3 (75%) participants reported asking more patients about tobacco use</li> <li>• 3 (75%) participants reported advising more tobacco users to quit</li> <li>• 3 (75%) participants reported recommending cessation medications for quitting</li> <li>• 3 (75%) participant reported referring patients to the tobacco quitline</li> </ul> <p>Participants (n=4) were also asked to consider the 30 days following the training and approximate the number of patients that they:</p> <ul style="list-style-type: none"> <li>• Asked about tobacco use = ~16 (range of approximations = 0-10)</li> <li>• Advised more tobacco users to quit = ~5 (range of approximations = 0-2)</li> <li>• Recommended medications for quitting = ~3 (range of approximations = 0-2)</li> </ul>

Significant Health Need Identified in Previous CHNA	Goals and Implementation Strategy	Indicators of Success
		<ul style="list-style-type: none"> <li>Referred patients to the quitline = ~3 (range of approximations = 0-2)</li> </ul> <p>Baseline and follow-up surveys were matched at the individual participant level using a unique ID number. Nine percent of all participants completed the baseline and 30-day follow-up surveys (n=1). A change was observed in this participant's status as a "Preferred Provider" with the quitline (status at follow-up=Yes).</p> <p>Although the small sample size and low number of matched surveys preclude detecting changes in screening behaviors with statistical significance, these findings provide may provide insight into:</p> <ul style="list-style-type: none"> <li>Respondents awareness of their own/organizational status as a registered quitline "Preferred Provider".</li> <li>Respondents perception of the number of patients they screen for tobacco use in a 30-day period.</li> <li>Hospital can determine next steps, if any, for similar programs in the future.</li> </ul> <p><b>FY19 – Year 3 Update: Community benefit=Not Reported Yet</b></p> <p>The hospital is currently in year 3, which is the last year of this CHNA cycle. FY19 will be reported and attached to the FY19 Form 990.</p>