2018 Community Health Needs Assessment

Adopted June 25, 2018

SAINT JOSEPH HEALTH SYSTEM

PLYMOUTH MEDICAL CENTER

COLLABORATIVE PARTNERS

FY 2019 - 2021 Committee membership

SJHS's community benefit activities and Community Health and Well-Being come in contact with many local organizations and participate in ongoing committee discussions attempting to provide justice in the way of caring for those who need it most in our community. Our CHNA is no exception to collaboration. We understand collaboration and partnerships are the most effective avenues for impacting the health of our community. For these reasons, SJHS's Community Health Needs Advisory Committee contains not only SJHS associates, but also community members with various representations to help us with this process.

Marshall County Community Health Needs Advisory Committee Members:

- **Sr. Nora Hahn** – President, Board of Directors, Plymouth Medical Center, SJHS
- **Debra Berger** – Coordinator, Community Health & Well-Being, SJHS
- **Theresa Budd** – Health Educator, Marshall County Health Department
- **Connie Deery** – Manager, Saint Joseph Health Center and Volunteers, Plymouth Medical Center, SJHS
- **Eck Fellow or Intern**, Community Health & Well-Being, SJHS
- **Teresa Fox** – Women's Care Center
- **Kathleen Freet** – Assistant Director, Bowen Center
- **Chris Garner** – Executive Director, Marshall County Neighborhood Center
- **Pamela Henderson** – Chief of Strategy & Development, SJHS
- **Mary Holm** – Owner/GM, Fitness Forum Sports & Wellness, LifePlex
- **Les Johnston** – Board member, Boys & Girls Club of Marshall County
- **Tom Keb** – Coordinator, Plymouth Farmer's Market
- **Marijo Martinec** – Associate Director, The Food Bank of Northern Indiana
- **Deborah Mix** – NEP Community Wellness Coordinator, St. Joseph County, Purdue Extension
- **Dana Neer** – Director of Wellness, Culver Academies
- **Michelle Peters** – Director, Community Health & Well-Being, SJHS
- **Sandra Read** – Health and Wellness Educator, Community Health & Well-Being, SJHS
- **Nancy Sellers** – Emergency Department Technician, Plymouth Medical Center, SJHS
- **Jessica Shirley** – Manager, Public Relations, SJHS
- **Allie Shook** – Recreation/Pool Director, Plymouth Park & Recreation
- **Sara Stewart** – Executive Director, Unity Garden
- **Kandi Tinkey** – Business Manager/Treasurer, Plymouth Community School Corporation
- **Elizabeth Trevino** – ADAPT Site Coordinator, Community Health & Well-Being, SJHS
- **Jackie Wright** – Executive Director, Marshall County Council on Aging

A combination of these members and other community members participated in the creation of the strategic action plans for FY 2019 - 2021. The Community Health Needs Advisory Committee will hold SJHS accountable during this process and serve as guidance for any necessary adaptations. Ultimately, Community Health Needs Advisory Committee of the SJHS will determine any future changes to the implementation plan based on the needs of our community.

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ABOUT THE COMMUNITY HEALTH NEEDS ASSESSMENT

Our Mission

We, Trinity Health, serve together in the spirit of the Gospel as a compassionate and transforming healing presence within our communities.

Our Mission is more than ideology. It is an important standard that we hold ourselves to, in everything we do. Our faith principles are at the core of our business and our faith demands that we do whatever it takes to have a positive impact on those around us.

Introduction

The March 2010 passage of the Patient Protection and Affordable Care Act (PPACA) introduced new reporting requirements for private, not-for-profit hospitals to maintain 501(c)(3) tax-exempt status.

Effective for tax years beginning after March 2012, each hospital must:

- Conduct a CHNA at least once every three years on a facility-by-facility basis.
- Identify action plans to address unmet community health needs.
- Report the results of each CHNA publicly.

Every three years, Saint Joseph Health System (SJHS), including Mishawaka Medical Center and Plymouth Medical Center, performs community health needs assessments (CHNA) to evaluate the overall health status of the communities it serves. The information from these assessments is routinely used to guide the strategic planning processes of the organization-at-large.

Using quantitative research analysis, with questions approved by Trinity Health, SJHS conducted its 2018 CHNA for use in the Primary Care Service Area including St. Joseph and Marshall Counties in Indiana.

SJHS set out to determine the community's needs and determine where to commit community outreach resources, especially for the poor and underserved. The assessment provides an opportunity to design an implementation plan and share our efforts toward improved health and quality of life, while building upon the foundation of our existing efforts to improve the health of our community and the populations we serve.

The 2018 CHNA report provides:

- A summarized analysis of the successes from the 2015 CHNA report and resources already committed to support SJHS's upcoming community benefit activities.
- A detailed community profile of our Marshall County community members, including the results of primary data collection from focus group discussions.
- A strategy for addressing the needs identified as the highest priority of concern for Marshall County as a result of the number of people affected, available resources and our ability to make an impact.
- Access to 2018 CHNA results to inform the community and serve as a continual guide for evaluating the health of our community and best efforts to improve activities for our community members with the greatest needs.

Summary of 2015 CHNA

Previously, the 2015 CHNA revealed several needs.

The top significant health needs were:

- Provider access
- Mental health
- Transportation

Our response

In the past three years, SJHS has implemented action plans designed to respond to these significant community needs. To address the issue of provider access, SJHS hired a Community Health and Well-Being (CHWB) RN Coordinator to help address homeless issues, increase screenings and vaccinations for the underserved and homeless populations, and provide health education. Since 2015, the CHWB Coordinator had given 563 free flu shots, 1875 blood pressure screenings and 755 cholesterol screenings. The CHWB Coordinator also initiated an education program geared toward healthy living, which has had almost 800 community participants. In addition, SJHS collaborated in creating health fairs centered in areas highly populated with underserved individuals.

To address provider access awareness SJHS expanded This Counts promotion and awareness. SJHS collaborated with Marshall County Council on Aging to add a Senior Fit class. As of 2017, the class had 110 registered senior participants that have the ability to attend classes scheduled twice weekly at one location. With increased marketing and responsiveness, This Counts activation has been ongoing and now has more than 31,000 Facebook likes for both St. Joseph County and Marshall County. SJHS has also supported the Marshall County Neighborhood Center in an effort to increase healthy food supply and has offered healthy cooking demonstrations. In an effort to enhance community resource navigation, SJHS increased availability of health information located at the Marshall County Community Resource Building.

To address mental health, SJHS trained all school health staff in mental-health first aid to better identify children who need additional mentalhealth services. Fifty participants were trained in St. Joseph County and Marshall County. Those individuals provide more than 290,000 student visits annually, with a potential student impact population total of 21,365. In addition, SJHS began offering one-on-one support to women suffering postpartum depression. Support sessions have been ongoing since initiation, resulting in approximately 250 women communicated with annually.

Due to resource constraints, transportation initiatives were not feasible at the time. Nevertheless, SJHS continues meeting with community partners to become more actively engaged in initiating plans to address transportation issues.

SJHS continues to dedicate many resources to community benefit in several different areas. SJHS provides millions of dollars in charity care every year. This includes costs for unpaid Medicare and Medicaid expenses. SJHS has two locations that provide care to those who are without insurance and are eligible for Medicaid or Medicare. The Family Medicine Center caters to Medicare and Medicaid patients by employing medical residents, faculty practitioners and office staff that can assist in determining individual insurance requirements.

In the 2017 fiscal year (FY 2017), SJHS committed:

- **$556,065** for clinics that benefit the underserved, such as Saint Joseph Health Center.

- $2,321 for medical residencies and other educational opportunities for both clinicians and non-clinicians.
- $200,096 for community-support donations, in-kind contributions and community building activities.

SJHS's efforts to address community needs have been successful, and there is no doubt that future efforts will also be. While not able to fulfill every need identified through the CHNA, SJHS will make every effort to align the defined and redefined priorities within our mission.

2018 executive summary

The SJHS Community Health Needs Advisory Committee has responded to the needs of the communities we serve, in a way aligned with our Mission, by creating a document that would serve as one of the key components of the system's FY 2018 - 2021 strategic implementation plan.

The findings of the CHNA will also assist leadership in stewarding resources entrusted to SJHS by providing services where assistance is most needed. A benefit to this CHNA process is studying the separate and distinct groupings of respondents by county. As a result, responses are pertinent to the health status of St. Joseph County for Mishawaka Medical Center and Marshall County for Plymouth Medical Center.

Community survey

The methodology for conducting the community health needs assessment involved deployment of the survey both online and on paper from August to November 2017. Participation was voluntary and provided data including, but not limited to, zip codes, individual demographics, health status and community need as perceived by the individual. The CHNA took participants roughly 10 - 15 minutes to complete, with online participation accounting for a shorter timeframe as compared to paper submissions.

A major advantage of completing the CHNA through online and paper surveys is the large amount of quantitative information we received from multiple demographics. Survey participants consisted of people from various ages, socioeconomic status and ethnic/racial background. For survey topics, some were taken directly from the 2011/12 CHNA to show healthcare progress. Other topics were identified important community-related issues. Survey takers were asked "What three areas are most important to help you and your neighbors live healthier?"

They were given a list of 16 options from which to select multiple answers, with one being open response. The top significant health needs identified by the community through the CHNA survey were:

1. Improved nutrition and eating habits.
2. Access to wellness resources (fresh foods, nutrition classes, gyms, etc.).
3. Increased participation in physical activities and exercise programs.
4. Access to mental healthcare.
5. Access to dental care.

Response

Review of data sources and community input were used to determine potential priority areas. Potential priority areas were evaluated based on the recommended priorities brought forth by the survey and were ranked using a point system based on the number of community responses, number of people impacted, and severity of the problem. Prioritized needs were analyzed and cross referenced with external health data like the Robert Wood Johnson Community Health Rankings and community input from SJHS board and Plymouth Medical Center board.

Community Health Needs Advisory Committee, consisting of content experts was formed to address the significant health needs prioritized by the community from input brought forth by the CHNA. The subcommittees met to discuss ideas for improving the areas they were assigned (wellness, nutrition, physical health). After discussion, the ideas of the subcommittees were formalized into action plans and reevaluated to determine feasibility. Once the action plans were approved, the budgeting process began.

Combining the assets and expertise of the local communities with the mission, energy and insight of SJHS, the advisory members believe in the potential to address some of the needs identified by community members.

COMMUNITY SERVED

Geographic area served

SJHS serves 898,867 people in a diverse nine-county market in Indiana and Michigan throughout the continuum of care. For purposes of the CHNA, SJHS used the system's Primary Service Area as the community served, which includes St. Joseph, Marshall and Elkhart Counties in Indiana. The secondary service area encompasses Fulton, La Porte, Pulaski and Starke Counties in Indiana as well as Berrien and Cass Counties in Michigan.

Plymouth Medical Center serves the 99,539 residents of Indiana's Southern Tier, which includes Marshall, Fulton, Starke and Pulaski Counties. Surveys were collected from residents of each county; however, CHNA reports focus on counties containing Mishawaka Medical Center (St. Joseph County) and Plymouth Medical Center (Marshall County). Surveyed counties served by Plymouth Medical Center are relatively rural in nature with light industry centered in the towns of Plymouth and Bremen. Nearby Culver is the home of Culver Academies, which attracts students to Indiana from all over the world.

Total population for the System Service Area is only expected to grow 0.7 percent through 2023. Compared to the State of Indiana, the System Service Area has a lower projected population growth, a higher median age and a lower percentage of people with a bachelor's degree or higher. The population aged 65 and older represents 17 percent of the total population, and is expected to increase 13 percent during the next five years.

Total population for the Southern Tier service area is expected to decline slightly 0.7 percent through 2023. Individuals age 65 and older represent 18.2 percent of the total population, and that group is expected to increase 11.4 percent over the next five years.

Average household income ($63,174) is below that for the states of Indiana, Michigan and Ohio, though it remains stable across the region, with areas of marginally higher affluence in Marshall and Fulton Counties.

As in most rural Midwestern communities, the population is almost exclusively made up of white non-Hispanic individuals of northern European descent, although there has been an increase in the Hispanic population during the past 10 years.

In 2016, 12.0 percent of individuals in Marshall County lived in poverty*, with 12.5 percent of Fulton County residents, 16.1 percent of Starke County residents and 11.5 percent of those in Pulaski County. In Indiana overall, in 2016 14.1 percent of families lived in poverty.

There are three Critical Access Hospitals (CAH) in this area — Community Hospital of Bremen, Pulaski Memorial Hospital and Woodlawn Hospital — at which primary care professionals with prescriptive privileges furnish outpatient primary-care services.

In Marshall County, the current unemployment rate of 3.1 percent is lower than the Indiana rate of 3.3 percent and the national average of 3.7 percent for March 2018, according to the most recent data available. Education, healthcare and government are the major employers in the local economy.

Our region includes a variety of quality education opportunities, including both public and private schools from preschool through high school. Those pursuing a higher level of education have several options, including the University of Notre Dame, Indiana University South Bend, St. Mary's College, Holy Cross College, Ancilla College, Bethel College, Indiana Tech and Ivy Tech Community College.

Estimates of the uninsured in the System Service Area range from 14.0 percent in Marshall County to 8.0 percent in Cass County, Michigan. This is compared with an Indiana rate of 11.0 percent.

**U.S. Census Bureau/Small Area Health Insurance Estimate (SAHIE) Program/ July 2015*

***U.S. Census Bureau, Small Area Income and Poverty Estimates (SAIPE) Program, 2015*


SPORTS CENTER

Population demographics

Figure 1. Marshall County is located in Northwest Indiana

Many of Marshall County's population demographics mirror the demographics of Indiana. Overall, Marshall County is slightly older, from the perspective of median age and overall proportion. An above-average percentage of Marshall County's population identifies as Hispanic and there is a much smaller African-American population in comparison to the Indiana average. A majority of the focus group sample statistics for Marshall County mirrors the overall county statistics. There are a few exceptions. The median age of CHNA participants was well above the county average, as there was a much smaller representation among young participants in Marshall County, which may also be the result of excluding the "Under 18" population.

The large variance in proportion of females to males participating in SJHS focus groups is probably the most notable difference when compared to county statistics. The races and ethnicities of focus group participants are almost identical to the Marshall County proportions. Another notable difference is the location of focus group participants based on zip code information collected with other demographics. A majority of participants reportedly live in Plymouth. Several participants from outlying areas were able to speak on behalf of others in their location. Due to the rural nature of Marshall County, it was much more difficult to gain participation from individuals living outside of Plymouth or other more populated areas.

Table 1. County demographics

Demographics*	St. Joseph County	Marshall County	Indiana
Population	270,434	46,519	6,665,667
Age			
Median age	36.4	39.8	37.4
Under 18	65,690	11,461	1,561,428
18 - 24	31.308	4,257	685,856
25 - 44	66,632	10,485	1,662,455
45 - 64	69,768	12,122	1,714,724
65+	44,207	8,194	1,041,241
Sex/gender			
Females, 2016	51.4%	50.4%	50.7%
Males, 2016	48.6%	49.6%	49.3%
Race/ethnicity			
% Non-Hispanic white	73.2	88.4	79.0
% Non-Hispanic African-American	12.5	0.6	9.3
% Hispanic	8.9	9.3	7.1
% Asian	2.4	0.4	2.3
% American Indian	0.3	0.1	0.2
% Other	2.8	1.1	2.1
Median income	**46,174**	**49,725**	**50,433**
% poverty	**17.2**	**11.6**	**15.0**
Veterans	**15,233**	**2,825**	**410,750**
Education level (HS or higher)	**87.5%**	**84.5%**	**88.1%**

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* 2010 Census & American Community Survey, 2012 - 2016, U.S. Census Bureau

Saint Joseph Health System facilities

SJHS is a Ministry Organization of Trinity Health, the fourth largest Catholic healthcare system in the country. We provide personalized, faith-based care paired with the latest in advanced medical technology and procedures.

SJHS is a not-for-profit, multi-hospital health system located in North Central Indiana, offering a full range of services.

Our system includes:

- 254-bed acute care hospital – Mishawaka Medical Center
- 58-bed acute care hospital – Plymouth Medical Center
- 40-bed Saint Joseph Rehabilitation Institute
- 30 practices in the Saint Joseph Physician Network
- Community health centers and additional points of access
- Health Insurance Services
- Saint Paul's, Holy Cross and Trinity Tower Senior Living Communities
- SJHS VNA Home Care
- Saint Joseph PACE (Programs of All-inclusive Care for the Elderly)

Services provided

As part of our mission, SJHS provides several health and wellness programs at no or low cost. Community Health & Well-Being works to continually evaluate and respond to the most important needs of the community through our CHNA and partnerships with other local not-for-profit organizations through committees. Various committees and representations work with us to ensure the success of SJHS's community benefit activities. Examples of such services include the operation of our community health centers, medical education, subsidized care, early detection and prevention programs, screenings, health fairs and more.

The programs below are specific programs and services that support the needs of our community, many of which are a result of needs assessed through past CHNA's.

Community health centers

SJHS-sponsored health centers provide wellness education, prevention and a comprehensive array of primary care services to St. Joseph and Marshall Counties. The centers were established to serve the uninsured, underinsured and Medicaid populations. The centers also include medication assistance programs for those patients who qualify for these services. In addition to the health centers, SJHS's Mobile Medical Unit (MMU) provides mammograms to women in our community to promote early detection.

Pre- and post-natal care coordination

These services were developed to improve outcomes of pregnancy and reduce infant mortality rates through assessment, education, referrals and support. This outreach and home visiting program targets pregnant women who may be at risk due to medical or psychosocial factors.

School health initiatives

In agreement with Penn-Harris-Madison, School City of Mishawaka, Holy Cross College, Argos School Corporation and Plymouth Community School Corporation, SJHS provides a nurse or paraprofessional in school, totaling more than 290,000 school health visits annually. Additionally, SJHS works with several area high schools to provide on-site injury prevention and care along with athletic event coverage. SJHS also works with the University of Notre Dame Recreational Sports Department and Ancilla's and Bethel's intercollegiate athletics to provide certified athletic trainers for sporting events and other services, totaling more than 40,000 visits annually.

Senior services

These programs provide support to seniors in our community through initiatives such as Senior Needs Assessment Program (SNAP), providing referrals and resources to seniors recently discharged from physician care. We work to promote Senior Fit exercise classes offered at several locations throughout the community free of charge. Our Senior Services Navigator is able to provide a constant contact for our aging population through continual updates, newsletters, lunch and learns and much more.

Tobacco initiatives

As the lead organization for Smoke-Free St. Joseph County and Breathe–Easy Marshall County, SJHS works against the tobacco industry's influence through advocacy, social alteration and policy change. Smoking cessation classes are provided free of charge.

**Visit sjmed.com for a complete list of services and community benefit programs.*

PROCESS AND METHODS USED FOR COMMUNITY INPUT

Primary data collection

The methodology for conducting the resident survey involved deployment of the survey both online and on paper and in both English and Spanish from August to November 2017. The online methodology was used to ensure a wide distribution of the survey. This survey was delivered via invitation based on a stratified random sampling of the community-at-large using a third-party database. This data included names and email addresses of patients, donors and colleagues of SJHS as well as the population at large that had no prior contact with SJHS. Other means of community engagement to participate in the survey included attending community events and other local organizations to gain more survey participants via going directly to people.

To ensure the survey sample reflected a wide variety of socioeconomic levels, age and race/ethnicity, the survey was offered to groups who were approached by Community Health & Well-Being staff and volunteers directly for their help with distributing the survey. These groups represented the medically underserved, minorities, low-income individuals, entrepreneur groups, healthcare workers, etc. The paper copy of the survey was also used with community groups to facilitate broad based representation of the elderly 65+ and underserved populations.

The survey consisted of a series of 52 questions designed to gather information about the individual's health, geographical region, insurance coverage, ideas on how to help the community and general demographic information.

Survey response

Some surveys were not usable due to incomplete responses and were removed from the data pool. Usable surveys collected totaled 4,561 responses, with 248 being completed in Spanish. Nearly all the surveys analyzed (94.3 percent) included answers to every question on the survey. Of the total surveys collected, 86 percent were community members within SJHS Primary Service Areas. Within the primary service areas of St. Joseph County and Marshall County both survey volumes surpassed the necessary sample sizes needed for statistical confidence, indicating strong data validity. This was confirmed using confidence levels of 95 percent, and 99 percent with a confidence interval of +/-5.

County/region	Surveys collected
St. Joseph County	3098
Marshall County	845
Elkhart County	229
Other areas	311
TOTAL	4561

Table 2. Total survey collection stratified by county using zip code data (N=4561).

Surveys were collected indicating each of the five age groups (18 - 24, 25 - 39, 40 - 64, 65 - 84, 85+) had analyzed samples. The mode age group was 40 - 64-year-olds at 46.7 percent. When illustrating demographic descriptions, 78.5 percent were female, 21.4 percent male and 0.12 percent identified as transgender individuals. Ethnicity data revealed 69 percent characterized themselves as Caucasian, 10.2 percent Hispanic and 9.6 percent African-American. Asian and Native American ethnicities were also cited at 1 percent. When looking by county, ethnicity responses correlate with current U.S. Census estimate population data. This shows the survey reached a wide range of unique community members.

Key demographics

- 83.2 percent of the sample identified their gender as female, while 16.4 percent indicated their gender as male and 0.3 percent identified their gender as transgender.
- 63.5 percent of Marshall County participants live in Plymouth, 12.2 percent in Culver and 24.3 percent in other cities.
- 78.8 percent of the sample identified their race as Caucasian, 10.7 percent Hispanic and 9.1 percent African-American. Native American and Asian survey respondents made up less than 1 percent.
- 78.8 percent of the respondents indicated they had health insurance coverage.

The typical participant in Marshall County was between the ages of 40 - 64, a non-Hispanic white female living in Plymouth. These demographics closely mirror the demographics of Marshall County. Further analysis demonstrated the largest volumes of survey participants were residents in the six most-populated zip codes of St. Joseph County and the most-populated zip code in Marshall County. These zip codes also represent some of the highest geographic percentages of poverty in the county, showing the survey successfully documented underserved populations.

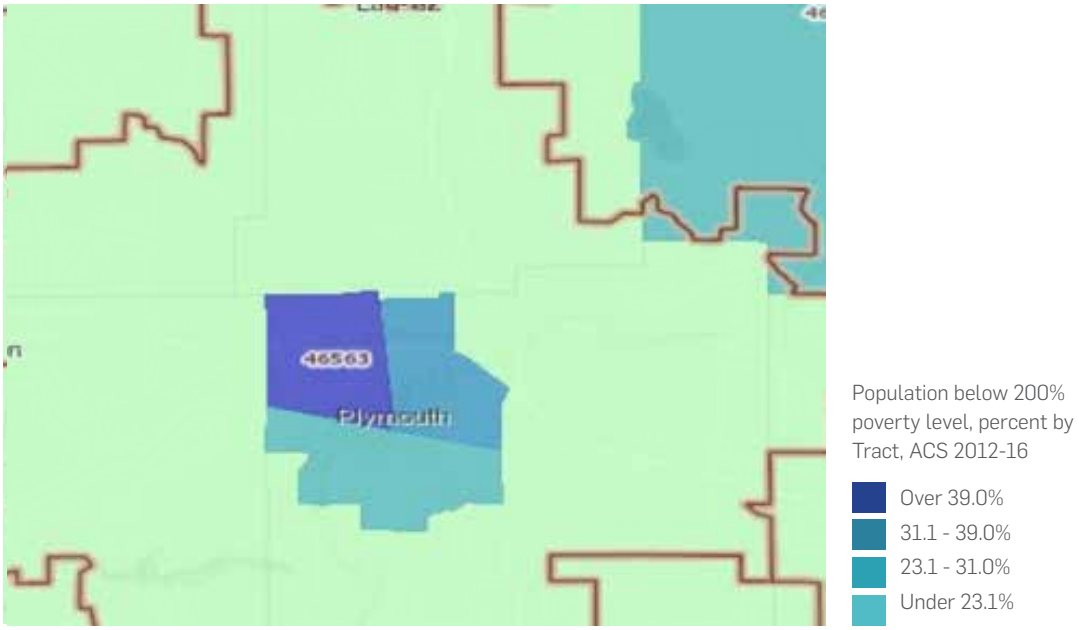

Figure 2. Plymouth, Indiana population below 200% poverty level, percent by Census Tract, American Community Survey 2012-16.

Mar. Co. zip codes	City name	Population	Poverty Index* (1 - 4)	Pop. below 200% poverty level by county*	Households (occupied)**	Persons per household**	Income per household**	Median person's age**
46563	Plymouth	23,599	3	9.1-13.0%	8,847	2.61	$ 41,922	38.6
46506	Bremen	10,070	1	< 5.1%	3,601	2.77	$ 46,167	37.7
46511	Culver	4,435	1	< 5.1%	1,775	2.46	$ 39,477	44.5
46501	Argos	3,856	1	< 5.1%	1,398	2.76	$ 39,861	35.8
46504	Bourbon	3,413	1	< 5.1%	1,233	2.77	$ 42,853	35.1
46570	Tippecanoe	1,060	1	< 5.1%	398	2.66	$ 40,385	40.5

Table 3. Marshall County population demographics.
*US Census Bureau, 2012-16 American Community Survey
**US Census Bureau, 2012-16 American Community Survey Estimates

COMMUNITY INPUT RECEIVED

For the purposes of this needs assessment, SJHS determined that quantitative analysis using survey data would most accurately assess the impact of existing services and programming in addition to providing recommendations for future improvements. The survey was assembled to provide opportunities for a large amount of community members to have their voices heard and express their health concerns and perceptions of available services privately.

To solicit input from members representative of the medically underserved, low-income and minority populations, SJHS disseminated the CHNA survey in locations and organizations serving those demographics. Minority coalitions, homeless shelters, food pantries, community centers and churches throughout St. Joseph and Marshall Counties allowed SJHS to survey their staff, volunteers, residents and guests. Community input from these groups was gathered throughout the entire survey time frame (August to November 2017). Survey data collected from those populations was used to help assemble this report. To take representatives' voices into more direct account, self-reported diagnoses were stratified by age and race. For significant community health needs, race/ethnicity was also taken into account.

Health status

Respondents were asked how they would rank their current health status on a scale of 1 - 5:

1 = Excellent
2 = Very Good
3 = Good
4 = Okay
5 = Not good

Most-frequent responses were either Good (39.6 percent) or Very good (35 percent). Another 14 percent rated their current health as Okay, while 9 percent said Excellent and 2.3 percent were Not Good. Those who indicated that they were having problems with accessing healthcare rated their health status more negatively. Those who reported themselves as smokers also rated their health status more negatively.

Self-reported diagnosis

Physical health

Survey participants were asked if they or anyone in their household had ever been told by a physician or health professional that they had a specific physical health problem. They could choose from a list of conditions and select all that applied to their situation. The level of responses on average was three responses, or diagnoses per household. The most frequent diagnosis selected was high blood pressure, with 42.2 percent of the total sample responding to the question. Other highly selected diagnoses selected included:

- Obesity – 31.22%
- High cholesterol – 31.02%
- Arthritis – 26.41%
- Vision problems – 25.78%

Answers	Responses	
Alcoholism	4.07%	175
Arthritis	26.41%	1136
Asthma	17.90%	770
Cancer	14.69%	632
Chronic pain	11.48%	494
Diabetes	19.81%	852
Hearing problems	15.86%	682
Heart disease or heart attack	10.67%	459
High blood pressure	42.20%	1815
High cholesterol	31.02%	1334
Lung disease (COPD)	4.02%	173
Obesity (overweight)	31.22%	1343
Opioids/heroin or other addiction	2.12%	91
Sleep problems	19.70%	847
Stroke	6.05%	260
Vision problems	25.78%	1109
None	17.62%	758
Other		318
	Answered	4301
	Skipped	253

When the most-frequent diagnoses were stratified by age, high blood pressure and vision problems were significant (top 5) health issues in all age groups. High cholesterol was a significant health issue in all age groups except 18 - 24 years. When health diagnoses were stratified by race high blood pressure and high cholesterol were seen as significant diagnoses in all racial groups. The lowest health ratings by self-reported diagnosis were addiction to alcohol or other illicit substances, lung disease (COPD) and stroke.

When asked where they got most of their information about the importance of a healthy diet, 35.65 percent reported using the Internet, while 34.5 percent use their healthcare provider. The lowest indicated response was radio (0.45 percent).

Mental health

Survey participants were asked if they or anyone in their household had ever been told by a physician or health professional that they had a specific mental health problem. They could choose from a list of conditions and select all that applied to their situation. Of the 4,065 individual responses, the most frequent mental health diagnosis was depression (25 percent). Other selected diagnoses included:

- Attention deficit hyperactivity disorder (ADD/ADHD) – 14%
- Bipolar disorder – 4.9%

Mental health diagnosis	Responses
Autism	2.70%
Intellectual or developmental disability	2.49%
Schizophrenia	0.98%
Mental illness with substance abuse	1.93%
None (MH)	48.41%
Attention deficit hyperactivity disorder (ADD/ADHD)	13.91%
Bipolar	4.84%
Depression	24.74%

Diving deeper, the most frequent age group that has been told by a physician or health professional that they suffer from depression was 18 - 24, with 26 percent of the total responses to the question. Each minority race/ethnicity group reported at least one case of having a mental health diagnosis, the most common being depression (14.2 percent). Survey participants were asked how many days in the past month has their mental health not been well. The majority (75.9 percent) of respondents reported 0 - 3 days per month, with 5 percent reporting 16+ days per month.

Due to the stigma surrounding mental health issues, further analysis was done to see if stigma was an issue our community members face. Respondents were asked if they ever had a mental health issue, but did not see a doctor, what the reason was. Of those who responded to the question as having a mental health issue and not seeing a doctor 29 percent reported it being due to "what other people may think."

Physical activity level

Survey participants were asked about their individual physical activity at vigorous and moderate levels. When asked about vigorous activity, the most reported answer was 1 - 2 days (32.79 percent) per week. However, when asked about moderate activity the most-reported answer was 5 - 7 days (36.1 percent). When asked what the greatest obstacle is to exercising regularly, 23.62 percent of respondents said they were "unmotivated."

How many days per week are you vigorously active for at least 10 minutes each day (such as running, aerobics or other, causing you to breathe heavily)?	
1 - 2 days	32.79%
3 - 4 days	26.30%
5 - 7 days	19.84%
Never	21.08%

How many days per week are you moderately active for at least 10 minutes each day (such as walking, bicycling or other, causing a small increase in breathing)?	
1 - 2 days	27.07%
3 - 4 days	28.04%
5 - 7 days	36.10%
Never	8.80%

Socioeconomic level

Income level was not directly asked in the survey, but questions regarding employment status, homelessness, access to food and adequate financial support were examined.

When asked what respondents current employment status is:

- 65.8% – Full-time employment
- 12.7% – Part-time employment
- 2.4% – Unemployed
- 12.2% – Retired
- 2.7% – Homemaker
- 3.4% – Student

When asked if respondent had permanent housing:

- 95.6% – Yes
- 4.4% – No

Of those who responded as not having permanent housing:

- 26.4% – Yes to being homeless
- 73.5% – No to being homeless

When asked if respondents have adequate income to support their family:

- 11.2% – No
- 24.1% – Yes, but barely enough
- 69.1% – Yes
- 7.01% – Yes, more than enough

When asked if, during the past 12 months, food bought lasted until respondents had money to get more:

- 60.8% – Always
- 21.3% – Mostly
- 12.8% – Sometimes
- 5.0% – Never

Access to healthcare

When asked if respondents were having trouble getting healthcare for themselves or their family:

- 88.9% – No
- 11.1% – Yes

Since the respondent could select all answers that applied to their situation, 54.5 percent reported cost of healthcare in general was a problem. The next-highest response was cost of insurance at 42.9 percent. Dental care received 28.3 percent of responses, while high deductibles represented 23.8 percent. These responses represented people who reported that they were having trouble with access to care as well as some of those who said they weren't having trouble.

Insurance coverage

When asked if respondents have any healthcare coverage, including health insurance or plans, such as Medicaid or Medicare, 79.7 percent said they have some kind of health coverage while 18.1 percent said they did not have healthcare coverage.

- Insurance through employer – 55.4%
- Private – 6.5%
- Medicaid – 12.3%
- Medicare – 18.7%
- Health Insurance Exchange – 2.8%
- Medical Savings Account – 3.1%

When asked if their insurance covers prescription drugs, 92.3 percent said Yes, 3.65 percent said No and 4.06 percent said they were Not Sure. Respondents were also asked if their insurance covers office visits, and 94.9 percent said Yes, 2.45 percent said No and 2.7 percent said they were Not Sure. Finally, when respondents were asked if their health insurance has an annual deductible, 77.3 percent said Yes, 11.8 percent said No and 10.8 percent said they were Not Sure.

Deferring medical care

Respondents were asked whether they had deferred or skipped medical, dental, mental or other healthcare appointments or prescriptions within the past year. Of the respondents who answered the questions regarding deferment or treatment, 35 percent said they had deferred of skipped needed medical care. The three highest reasons offered by respondents were cost of service (12.6 percent), inconvenient hours (11.2 percent) and wait time for appointment (11.1 percent).

When asked the same question regarding deferment of dental care, 34.3 percent said they had skipped needed dental care. Of the available reasoning options, the three top responses were cost of service (22.4 percent), inconvenient hours (7.4 percent) and lack of provider (5.7 percent).

Finally, deferment of mental healthcare was analyzed. Of the 15.2 percent of respondents who reported needing mental healthcare and not receiving it, the three reasons provided by respondents were cost (8.7 percent), availability (5.6 percent) and what other people may think (5.6 percent).

Physician recommendations & wellness

When asked how often respondents follow the advice of their physicians:

- 37.1% – All of the time
- 54.9% – Most of the time
- 5.7% – About half the time
- 2.3% – Less than half the time

When asked how often respondents follow physician prescription recommendations:

- 73.3% – All of the time
- 22.1% – Most of the time
- 2.5% – About half the time
- 2.2% – Less than half the time

When asked how often respondents receive a routine checkup:

- 76.4% – Within the last 12 months
- 12.6% – Between 1 - 2 years
- 6.2% – Between 2 - 5 years
- 3.8% – Don't know/not sure
- 0.9% – Never

When asked where respondents obtain information on nutrition:

- 35.3% – Health provider
- 34.4% – Internet
- 11.7% – Television
- 9.2% – Relative, friend, coworker
- 9.4% – Other

SIGNIFICANT COMMUNITY HEALTH NEEDS

One of the most anticipated results was the **"Top Three Suggestions"** from the survey respondents on how to improve the health of the community.

This question was a multiple-response question for which respondents chose on average three to four responses per person, or their top three. The table below depicts what the community has identified as the significant community health needs. By tally, those selections are improving nutrition and eating habits, access to wellness resources (fresh foods, nutrition classes, gyms, etc.), increasing participation in physical activities and exercise programs, access to mental healthcare and access to dental care.

Marshall County	No. of responses	Weighted response
1. Improved nutrition and eating habits	363	43.6%
2. Access to wellness resources (fresh foods, nutrition classes, gyms, etc.)	284	48.6%
3. Increased participation in physical activities and exercise programs	266	26.4%
4. Access to mental healthcare	255	29.1%
5. Access to dental care	163	11.3%

To address the issue that a single racial demographic skewed the overall county data due to larger volumes, significant community health needs for each ethnicity group were calculated into weighted response percentages to give even weight to each group. Those significant needs percentages were added together to compare against overall significant health needs (table above). Data results show the significant health needs demonstrated by the overall county are the same when stratified by minority group. African-Americans, Asians, Hispanics, Native Americans and Caucasians reported their top-five significant community health needs are access to wellness resources, improving nutrition and eating habits, increasing participation in physical activities and exercise programs, access to mental healthcare and access to dental care. This result indicates the overall county significant health needs reflect those of each race/ethnicity subset showing community relationship.

The priority areas for the FY 2019 - 2021 implementation strategy from the 2018 CHNA were developed through conversations regarding the results from the primary data collection, in conjunction with other activities and resources existing in the community. The conversations began in December of 2017 and continued on until May 2018. Since the primary data collection consisted entirely of quantitative information from the survey, the Community Health Needs Advisory Committee was able to listen to and reaffirm the community members' needs to improve the five areas of priority. Additionally, the members were able to speak on behalf of their representation in other committees and organizations, in conjunction with available secondary health statistics, to develop an approach to improving services most critical to our community members.

Initial meetings to discuss the primary data collection results allowed for open discussion on a number of priority areas. Many of initial priority areas contained several of the same underlying health

concerns. Review of data sources and community input were used to determine potential priority areas. Potential priority areas were evaluated based on the recommended priority areas brought forth by the survey and were ranked using a point system based on how many community responses, number of people impacted and severity of the problem. The Community Health Needs Advisory Committee recommended the following five focus areas:

1. Improving Nutrition and Eating Habits – Improving nutrition was the most commonly cited topic in all quantitative research conducted from analysis of the CHNA questionnaire for both St. Joseph County and Marshall County participants. Promotion of health and reduction of chronic disease risk through the consumption of healthful diets and achievement and maintenance of healthy body weights are the primary actions SJHS will address. SJHS believes in increasing the quality, availability and effectiveness of educational and community-based programs designed to improve health and fresh food availability, and will promote healthy eating habits to enhance quality of life.

2. Improving Access to Wellness Resources (fresh foods, nutrition classes, gyms, etc.) – Health status and related health behaviors are determined by influences at multiple levels: healthy nutrition options and preparation and physical fitness. Because significant and dynamic interrelationships exist among these different levels of health determinants, educational and community-based programs are most likely to succeed in improving health and wellness when they address influences at all levels and in a variety of environments/settings.

3. Increasing Participation in Physical Activities and Exercise Programs – Regular physical activity can improve the health and quality of life for individuals of all ages, regardless of the presence of a chronic disease or disability. Physical activity can lower the risk of early death, heart disease, stroke, high blood pressure, type 2 diabetes and depression in adults. For children and adolescents, physical activity can improve bone health, improve cardiorespiratory and muscular fitness, decrease levels of body fat and improve cognitive skills and the ability to concentrate. Even small increases in physical activity are associated with health benefits, and this is what SJHS and our partners want to address.

4. Mental Health – Mental disorders are among the most common causes of disability, and was listed as a leading health concern in both St. Joseph and Marshall Counties. Mental health plays a major role in people's ability to maintain good physical health. Mental illnesses, such as depression and anxiety, affect people's ability to participate in health-promoting behaviors. In turn, problems with physical health, such as chronic diseases, can have a serious impact on mental health and decrease a person's ability to participate in treatment and recovery. Because mental health has been mentioned in several CHNA reports in the past, it is prioritized as its own category for SJHS and our partners to continue addressing. The category encompasses a number of different topics, including mental health conditions, access to mental health services and insurance coverage.

5. Dental Health – Oral health is essential to overall health. Good oral health improves a person's ability to speak, smile, smell, taste, touch, chew, swallow and make facial expressions to show feelings and emotions. This category includes improving access to dental services. Certain areas in this category may not be addressed by SJHS's advisory team, as they are already being implemented within the community by SJHS and other community organizations.

Lessons learned

SJHS took a quantitative approach to the 2018 CHNA. Completed surveys collected for St. Joseph and Marshall Counties were analyzed to accurately represent the individuals and their needs in our two primary markets. Thus, we were able to identify the differences and similarities of the individuals in Mishawaka Medical Center and Plymouth Medical Center markets. The results from the content analysis were separated for the two medical centers and this methodology will continue for future CHNA processes.

In addition to separate CHNA reports, the survey results were used to gain input from our community members on improving SJHS services for the highest priority health concerns. This time, SJHS completed the data analysis entirely through the use of completed surveys, which allowed for community members to privately express their concerns and give us a better understanding of what concerns are most important to address.

Because SJHS values the input of our community members so much, we collected surveys at multiple community sites including community fairs, homeless shelters, health clinics, community centers and high-population areas with low income. This allowed SJHS to collect a wide demographic variety to include representatives of medically underserved, low income and minority populations. This led survey participants to freely share their opinions of SJHS services and the services of our community partners. From data analysis, SJHS determined which services are the most critical to address in the next three-year strategic plan for our CHNA.

SJHS will continue to evaluate our CHNA process and improve the design of questions to be clearer and easier to understand for the next CHNA. Conducting the next CHNA using similar methodology will allow SJHS to better compare and evaluate the impact of community programming. This will also allow us the opportunity to continually evaluate the impact of our ongoing efforts towards awareness, education and accessibility of services.

Community insight

To gain valued community insight for St. Joseph and Marshall Counties, SJHS sought out County Health Department board members to further explore the understood needs of the community and what health strategies are currently in place. In-person interviews were completed in April 2018. The Marshall County Health Department (MCHD) had prioritized the opioid crisis, increasing immunization rates and decreasing sexually transmitted infection rates as top health initiatives; however, it agreed with the significant health needs determined by the survey. While the SJHS CHNA focused on overall community needs, the survey did include the opioid crisis as an option for Top 3 areas of community health needs; however, it ranked low among participant responses. The testimonial from the MCHD board member confirmed survey results were sound and actions will be justifiable to best serve the community-at-large.

As seen in CHNA responses in years past, the focus of the community was disease information. Respondents wanted community action in regard to non-communicable diseases like diabetes. Now we see a change in community behavior from disease data to preventive action and healthy living plans. This shift shows change in our community and a desire to take preventive steps in regard to a potential health problem. The preventive measures needed to address most reported health problems correlate.

County health rankings

Several resources are available to provide a more detailed insight into the health status on a county-by-county basis, one of which being the Robert Wood Johnson County Health Ranking. The annual rankings provide an informative glimpse of how health is influenced by where individuals live. County health rankings were used to support the collected health and community results brought forth from the CHNA. Marshall County is one of 92 counties in the state of Indiana. The resources offer various insights and reaffirm the need for improvement in several target areas. The health indicators can be combined with the primary source data collected from SJHS's 2018 CHNA report in order to capture a more accurate picture of our findings and how they are related to the statistics reported from various other state and federal organizations. The Robert Wood Johnson Foundation's County Health Rankings seen in Figure 3 (next page) provide an analysis for comparing secondary data with the information gathered from the survey in our 2018 CHNA. Additional relevant resources included these publicly available databases:

- Centers for Disease Control and Prevention (CDC)
- County Health Rankings and Roadmaps 2017
- County Health Rankings and Roadmaps 2018
- City-Data
- Dignity Health — Community Needs Index
- United States Census Bureau/Small Area Health Insurance Estimate (SAHIE) Program/ March 2016
- United States Census Bureau, Small Area Income and Poverty Estimates (SAIPE) Program, December 2013
- United States Department of Health and Human Services

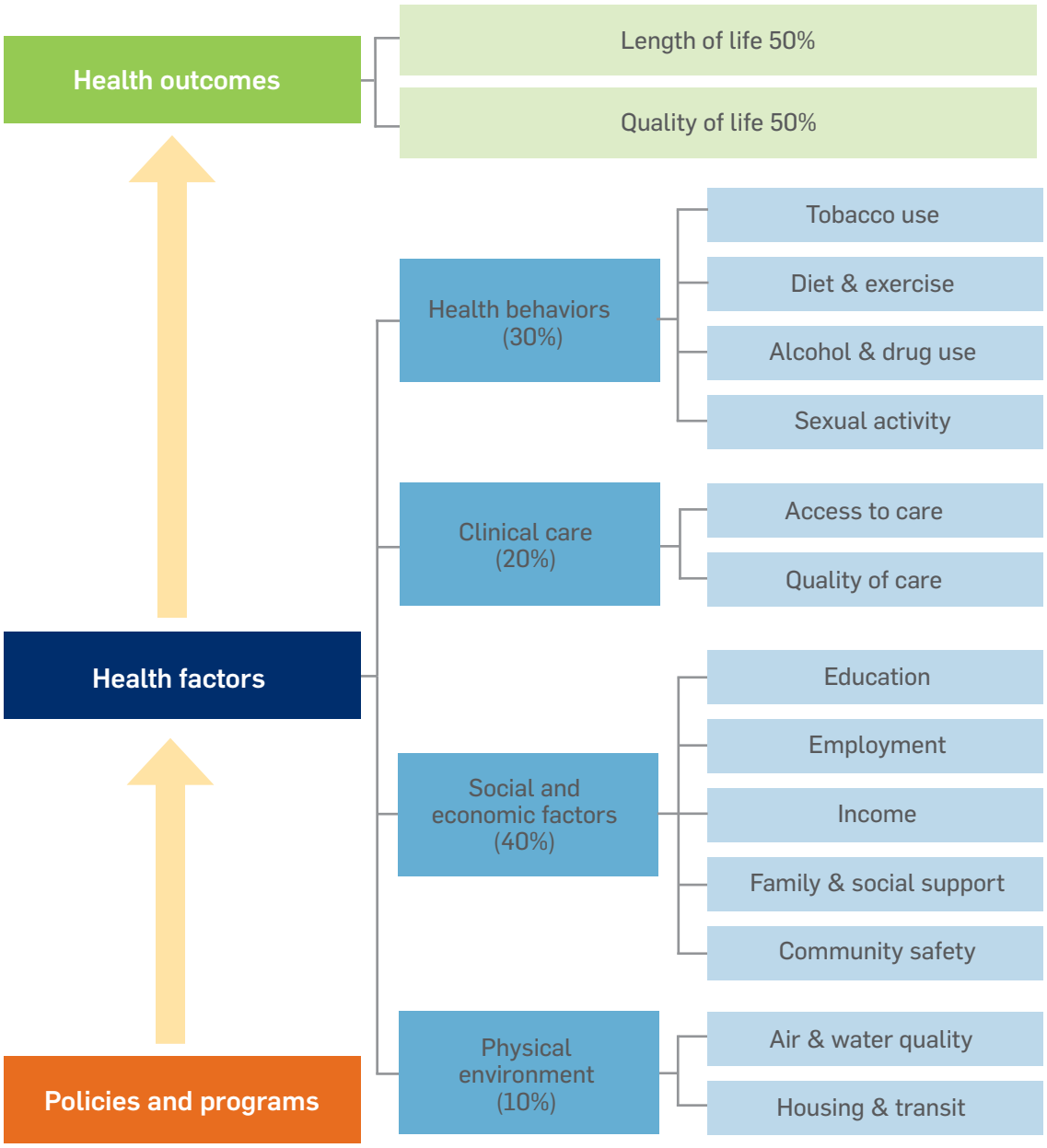

Figure 3. Robert Wood Johnson County Health Ranking methods chart.

According to the Robert Wood Johnson Foundation, Marshall County ranks 15th out of 92 counties in overall Health Outcomes in the state of Indiana. This ranking places Marshall County one county higher in 2018 compared to 2017. Marshall County also became poorer in Health Factors ranking during the same time by dropping from 21st to 25th. The areas with the greatest opportunities for improvement are clinical care and social and economic factors. While there was a slight downturn in unemployment rate from 4.1 percent to 3.8 percent, the percentage of children in poverty increased by 1 percent. In the clinical care category "Mammography Screening," and social & economic

factors category “Children in Poverty” Marshall County performs significantly worse than the top 10 percentile and even worse than the Indiana average.

It will take strong improvement efforts towards education and other areas within this category by many agencies before results are seen in improved social and economic conditions. In turn, these improvements will ideally lead to the adoption of other healthy lifestyle decisions to include improvements in other categories.

Other areas to note are higher rates of adult obesity in Marshall County and the state of Indiana as a whole. Many factors may play a part in the high rates of excessive drinking and alcohol-impaired driving deaths. One inference is the strong tie to the entire category of mental health as a whole. Not only was mental health one of the most frequently mentioned topics in the CHNA, above physical concerns, but it is also one of the 2018 CHNA strategic priorities.

Poor mental health results in the higher rates seen for alcohol and other substance abuse issues. The unhealthy, unhappy population is attempting to self-medicate rather than seek available community resources, if available.

Certainly the social indicators play a large role in the vicious cycle created by lack of education, joblessness and poverty as a whole. The lower high-school graduation rates and rates of advanced education likely result in the higher rates of poverty seen in Marshall County. In terms of community member perceptions of Marshall County, poor infrastructure to manage the needs of individuals in poverty, high rates of violent crime and so on mitigate the large efforts of community support and services available.

Table 4 (below) looks at many of the same indicators seen in the County Health Rankings, and pinpoints some of the large areas of concern. The table includes demographic and disease-specific factors that may play a role in the overall health outcomes. These indicators help identify where the largest areas for improvement may exist.

Table 4. Robert Wood Johnson County Health Ranking – Marshall County, Indiana

Health measures	Marshall County '17	Marshall County '18	Indiana	Top U.S. performers
Health outcome	**16**	**15**		
Lenth of life	11	12		
Premature death/100,000	6200	6300	7800	5300
Quality of life	**33**	**30**		
Poor or fair health	17%	16%	18%	12%
Poor physical health days per month	3.9	3.9	3.9	3
Poor mental health days per month	4	4.2	4.3	3.1
Low birthweight	6%	6%	8%	6%
Health factors	**21**	**25**		
Health behaviors	21	21		
Adult smoking	18%	19%	21%	14%
Adult obesity	31%	32%	32%	26%
Food environment index	8	8.4	7	8.6
Physical activity	26%	29%	27%	20%
Access to exercise opportunities	63%	65%	77%	91%
Excessive drinking	16%	17%	19%	13%
Alcohol-impaired driving deaths	14%	18%	22%	13%
Sexually transmitted infections/ 100,000	142.2	142.2	437.9	145.1
Teen births	31	28	30	15
Clinical care	**59**	**62**		
Unisured	18%	14%	11%	6%
Primary care physicians	1960:1	2130:1	1500:1	1030:1
Dentists	2470:1	2450:1	1850:1	1280:1
Mental health providers	1170:1	1080:1	700:1	330:1
Preventable hospital stays	39	50	57	35
Diabetic screening	85%	85%	85%	91%
Mammography screening	50%	50%	62%	71%

Social & economic factors	20	25		
High school graduation	89%	89%	87%	95%
Some college education	51%	51%	62%	72%
Unemployed	4%	3.80%	4.40%	3.20%
Children in poverty	15%	16%	19%	12%
Single-parent households	23%	25%	34%	20%
Social associations	15.9	16	12.3	22.1
Violent crime	114	114	356	62
Injury mortality	57	58	70	55
Physical environment	**32**	**34**		
Air pollution/particulate matter	11.2	11.1	11.1	6.7
Drinking-water violations	No	No		
Severe housing problems	13%	13%	14%	9%
Driving alone to work	80%	81%	83%	72%
Long commute – driving alone	30%	30%	31%	15%

Improve in rank

Drop in rank

Same rank

Our Mission

We, Trinity Health, serve together
in the spirit of the Gospel
as a compassionate and transforming
healing presence within our communities.

SAINT JOSEPH
HEALTH SYSTEM

PLYMOUTH
MEDICAL CENTER

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