BORGESS HEALTH

2015 Community Health Needs Assessment

& Implementation Strategy

Borgess Health
Community Benefit Department
1521 Gull Rd
Kalamazoo, MI 49048

Our Mission, Vision and Values

Mission

Borgess Health, as a Catholic health ministry rooted in the values of Ascension Health and its sponsors, is committed to providing holistic, spiritually centered care, which strives to improve the health of individuals in communities we serve with special attention to the poor and vulnerable.

Vision

By putting safety and quality at the core of all we do, Borgess Health will provide health care that is coordinated across the continuum based on meeting the needs and expectations of the patients we serve.

Values

We are called to:

- Service of the Poor - generosity of spirit, especially for persons most in need
- Reverence - respect and compassion for the dignity and diversity of life
- Integrity - inspiring trust through personal leadership
- Wisdom - integrating excellence and stewardship
- Creativity - courageous innovation
- Dedication - affirming the hope and joy of our ministry

Guiding Principles

- Your care will be safe.
- We know who you are and are ready for you.
- We will see you when you want to be seen.
- You will know what to expect
- We will be your trusted partner in health.
- We will exceed your expectations
- We will coordinate your care.

SUMMARY OF 2013 CHNA and Implementation Plan

The 2013 CHNA identified several needs encompassing all regions of our community service areas. The needs were categorized into three general areas of concern:

1. Access to Care
2. Diabetes
3. Obesity

Over the past three years, Borgess Health (BH) has implemented action plans designed to fulfill these significant community needs. To address the Access to Care goal, BH continues to participate in the regional Health Alliance for Calhoun County as well as the Kalamazoo Health Alliance. This partnership allows for free and/or low cost services such as colonoscopies, mammography and other diagnostic tests to be provided to the poor and uninsured in our area. These services take place at the Family Health Center (FHC), the Federally Qualified Health Center (FQHC) in Kalamazoo. The FHC offers services for those in the community who are on government assisted programs such as Medicaid and Medicare. Through collaboration with both Bronson Health and Borgess Medical Center as well as the local colleges and universities not only are underserved and uninsured community members able to seek care, but students who are training in health care fields are able to learn and practice their skills at the FHC.

Additional access was created with the patient portal that was implemented in 2014. This allows two-way communication between the patient and the provider. The software, InQuicker, was implemented in July, 2015, which allows patients to schedule mammographies, primary care and internal medicine appointments online, and view wait times in the Emergency Department.

To address the Diabetes goal, BH has six (6) FTE certified Diabetes Self-Management (DSME) educators. Borgess offers DSME programs that are free to the public. There was a decrease of 9.6% patients being seen from 2014 to 2015; however an increase of 10.2% was experienced in patients' visits. BH also has a Diabetes Uninsured Clinic Diabetes Uninsured Clinic (DUC). This program is for patients within the Greater Kalamazoo Area (Counties: Kalamazoo, Van Buren, Calhoun, Barry, Allegan) who have no, or very limited, health care insurance. Patients are screened by a care manager in our clinic for financial need. Those patients who qualify by financial need criteria are, based on primary care providers referral orders, provided with physician care, diabetes education, laboratory costs for labs ordered by our clinic provider, transportation and support by the care manager for application to pharmaceutical assistance programs. Appropriate sample medications are also provided to patients, as available, until pharmaceutical assistance is received. The DUC program is funded by the non-profit organization, Cole Solutions.

To address the Obesity issue, BH worked with their medical weight loss program. Both nutrition and weight loss classes and support groups are offered three (3) times a month and are free to the community. These classes are very well attended: over 2,000 people have benefitted from these classes from July 1, 2013 to June 30, 2015. Along with that education there are cooking classes and ongoing education classes related to nutrition and healthy weight. The Borgess Health and Fitness center offers an annual Run Camp resulting in a race every spring. The Run Camp has collaborated with the Family Health Center (FHC, the FQHC in Kalamazoo) to offer to their patients training, health education and a free race at the end.

The Run Camp program sponsors over 20 buddy groups and 40 individuals. This involves Family Health Center employed staff (physicians, nurses, social workers, medical assistants, admin. etc...) who volunteer to become a Run Camp Buddy. A Run Camp Buddy provides ongoing coaching and support to a current physician selected and recommended Family Health Center patient. The FHC employed Buddy is responsible to walk, run, jog, with the FHC patient buddy every week throughout the duration of the Run Camp program. All participants within the program receive free registration for Borgess Run Camp donated by Borgess Health and a free pair of running shoes donated in combination by Family Health Center and Gazelle Sports. The only requirement to participate in the Buddy program is that all participants must complete the entire training Run Camp program. Upon completion, Borgess will sponsor "Buddy Camp" participants in the race of their choice at the annual Borgess Run for the Health of It. Requirements are the same, simply start and complete the race. The focus is on health and wellness not speed and distance. To date the participation has been overwhelmingly positive with individuals getting out and moving for the first time. A patient in this year's Buddy System weighs over 280 pounds and suffers from diabetes, hypertension, COPD, obesity, and anxiety. She has proudly participated in every session to date and state that it is the most that they have moved in over 10 years. For the first time she can now walk through an entire store absent electric carts. As spoken in the words of Blaine Lam, Race Director, "We are changing lives here and this is what it is all about!" This has been an ongoing collaboration for years and has been quite successful. It provides one to one coaching to otherwise non-exercising patients and has opened their world to the value and the "how to" of a successful physical activity program.

Much of the success of Borgess Health's Implementation Strategy can be attributed to the efforts put into creating valuable community partnerships and collaborations. BH will continue to grow and strengthen current relationships and seek new partnerships all working together to meet the health needs of our community.

Borgess Health

2015 Community Health Needs Assessment (CHNA) & Implementation Strategy (IS)

Table of Contents

Executive Summary
Borgess Health

The Patient Protection and Affordable Care Act (PPACA) of 2010 mandated new IRS requirements for hospitals: (1) to conduct a Community Health Needs Assessment (CHNA) and (2) adopt an Implementation Strategy Plan, both of them to be reported in the Schedule H 990. These provisions take place in a hospital's taxable year beginning after March 23, 2012. Failure to comply could lead to a $50,000 excise tax and possible loss of tax exempt status.

In compliance with these requirements, Borgess Health conducted a community health data collection and assessment process. Upon completion of the data collection Borgess Health (BH) developed an Implementation Plan. The population assessed was Kalamazoo County. The first CHNA developed by BH was published in June, 2013. This original CHNA provided information for problem solving and asset identification, as well as for policy and program development, implementation and evaluation in compliance with the Affordable Care Act (ACA) of 2010.

The second iteration of the CHNA encompasses data collection and community input. The quantitative data was also supplemented with a community asset review and qualitative data was gathered from key informant interviews and focus groups. The information in the CHNA will help identify health problems in the community based on the collection of this data. This health information drives decisions and setting priorities and strategies addressing community health issues.

Identification and Prioritization of Needs

Following the data collection processes, the draft CHNA was presented to the Borgess Senior Leadership team as well as the Community Benefit Advisory Committee (CBAC). The CBAC is a group of community leaders representing community agencies that have knowledge and hands-on experience working with the needs of the Kalamazoo community. As with the first iteration of the CHNA, the CBAC was developed to provide oversight and guidance in the compilation of data, the process involved as well as decision making. Both of these groups were tasked to review the data collected and identify health needs based on the size and the severity of the issues and the direction the data was trending. These groups were tasked with prioritizing the needs based on:

- Borgess Health's ability to make an impact
- Alignment with other health systems and agencies serving the same population
- The state of Michigan statewide priorities, and local public health departments priorities
- Current BH priorities and programs
- Effectiveness of existing programs
- Duplication of services within the local community

The resulting top tier of prioritized needs comprises Access to Care, Diabetes, and Infant Mortality. The second tier includes Obesity, Heart Disease and Mental Health. Top tier priorities will entail more new activities and resources than the second tier.

Implementation Plan Development

Leaders across the health system were invited to serve as "leads" for each priority area. They vetted the high-level Implementation Plan which will be fluid in nature over the next several months as Borgess Health continues to build on existing community partnerships and programs.

2015 Community Health Needs Assessment
Borgess Health

Introduction

The federal Affordable Care Act (ACA) requires all Not for Profit hospitals in the country to conduct an assessment of the health of the community. This intent of this assessment is to provide an overall view of the health of the community it serves. This assessment, called the Community Health Needs Assessment (CHNA), provides necessary data and information to hospitals that is invaluable when gaining in depth knowledge of the community, their residents, and patients. This assessment not only takes into consideration local, state and federal data but also assesses the social determinants of health which play a direct role in the health of the community, families and individuals. With the knowledge gained from the CHNA, the hospital is better equipped to fully understand major health needs that extend outside the walls of the Hospital.

The CHNA

- Must take into account input from persons who represent the broad interests of the community served by the Hospital facility including those with special knowledge of, or expertise in, public health
- Must be made widely available to the public
- Will be based on current information collected by a public health agency or non-profit organizations and may be conducted with one or more organizations including related organizations.

The Internal Revenue Code Section 6033(b) (15) (A) requires hospital organizations to include in their annual information return (i.e. Form 990) a description of how the organization is addressing the needs identified in each CHNA conducted under section 501® (3) and a description of any needs that are not being addressed along with the reasons why those needs are not being addressed.

Background

In 1889, eleven Sisters of St. Joseph left Watertown New York to begin Kalamazoo's first hospital. Before that time, the sick in Kalamazoo were deposited in the City Jail. After Father Francis O'Brien administered last rites to a dying boy who had been wrongly imprisoned, he decided that Kalamazoo desperately needed a better option for caring for the ill. With a $5,000 donation from Bishop Casper Borgess, Father Francis O'Brien purchased a mansion on Portage Street that eventually became Borgess Hospital. From the very beginning Borgess Hospital was dedicated to providing care for all, especially the poor and vulnerable. Now Borgess Health System offers a complete continuum of services to nearly 1 million people living in 10 counties

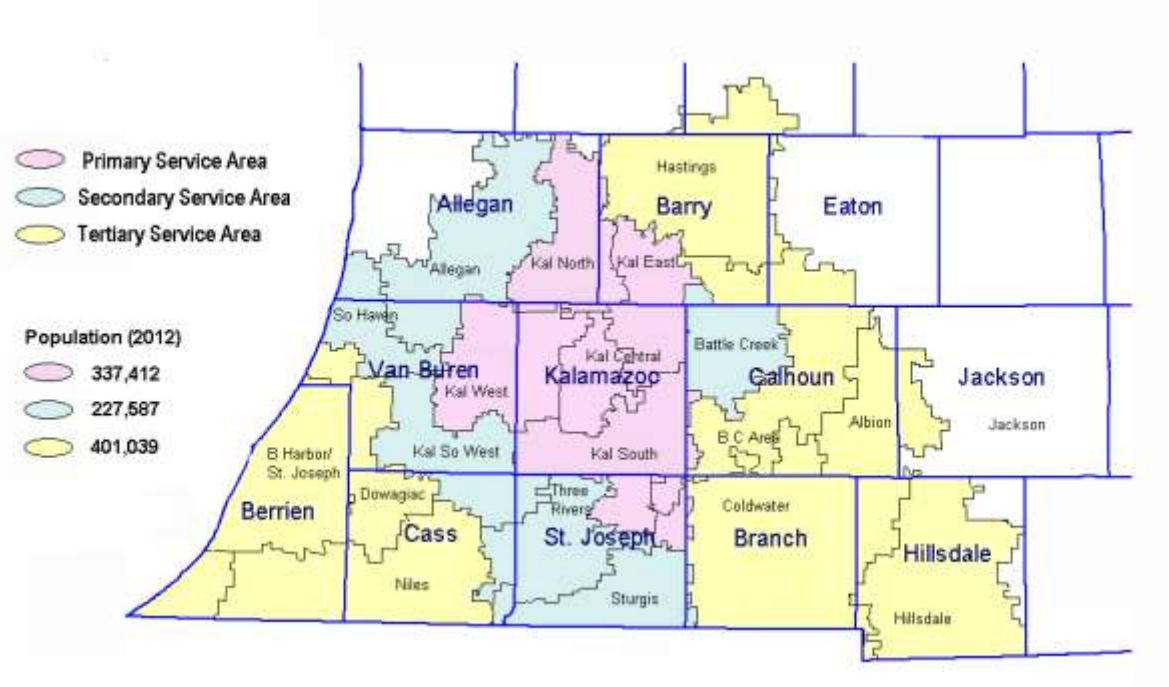
in Southwest Michigan. Borgess Health is a member of Ascension, the nations' largest Catholic Health System.

The Community Served by the Hospital

The Borgess Health Service Area

Situated in southwest Michigan, halfway between Chicago and Detroit, Kalamazoo County is home to both Stryker Medical, one of the world's leading medical technology companies, and a large manufacturing division of Pfizer Pharmaceuticals. Kalamazoo also enjoys the presence of Western Michigan University, the state's fourth-largest public university that includes a school of nursing and a privately funded medical school named W-Med; Kalamazoo College, one of the oldest private schools in the country; as well as Kalamazoo Valley Community College with nursing and medical technician programs.

Borgess Health Primary, Secondary and Tertiary Service Areas



Borgess Health Continuum of Care Facilities

Borgess Medical Center – a 422-bed tertiary care hospital and flagship of Borgess Health with a continuum of health services from a Level II Trauma Center to primary and specialty care

practices throughout southwest Michigan. The majority of Borgess Health inpatient and outpatient services are provided at Borgess Medical Center.

Borgess-Pipp Hospital – a 43-bed long-term acute care hospital with an emergency department, diagnostics, rehabilitation services, and an affiliated primary care practice.

Borgess-Lee Memorial Hospital – a critical care access hospital with 25 swing beds, an emergency department, rehabilitation services, diagnostics, outpatient surgery, and owned primary care practices.

Borgess at Woodbridge Hills – a large ambulatory care facility with an immediate medical care center, an endoscopy and outpatient surgery center, diagnostics, rehabilitation services, pharmacy and two large primary care practices.

Borgess Gardens – a 101-bed skilled nursing and short-stay rehabilitation facility.

Borgess Medical Group – a multidisciplinary group of 114 physicians and 71 midlevel providers with practice locations throughout southwest Michigan (excludes hospital based).

Southwest Michigan Population Demographics and Trends

Borgess Health is located in Southwest Michigan, which is comprised of a nine-county region that borders Indiana. Kalamazoo County is at the heart of southwest Michigan and is the most densely populated of the nine counties. Kalamazoo County covers 580 square miles. The neighboring cities of Kalamazoo and Portage, within the county, represent the largest metropolitan area in the region. For the purpose of the Community Health Needs Assessment, we will define our focus on Kalamazoo County, which includes both Kalamazoo and Portage. The estimated total population of Kalamazoo County in 2015 is 260,263. The county consists of several cities, townships and villages as described below:

Cities	**Villages**	**Townships**	**Townships**
Kalamazoo	Augusta	Alamo	Pavilion
Galesburg	Climax	Brady	Prairie Rhonde
Parchment	Richland	Charleston	Richland
Portage	Schoolcraft	Climax	Ross
	Vicksburg	Comstock	Schoolcraft
		Cooper	Texas
		Oshtemo	Wakeshma

2013 Demographics Kalamazoo County

Population Age	**% Rate**
65+	12.56
55 – 64	11.66
45 – 54	12.88
35 – 44	11.66
25 – 34	13.06
18 – 24	15.67
5 – 17	16.41
0 – 4	6.1
Household Types	
Families with Children	29.63
Race	
Non-Hispanic	
White	82.07
Black	11.17
Asian	2.33
Multi-racial	3.19
Hispanic	4.18
Other	1.24
Highest Level of Education	
Associate degree or higher	43.13
No high school diploma	7.43
Income/Poverty	
Families with income over $75,000	40.47
Children below 100% Federal Poverty Level (FPL)	22.48
Children below 200% FPL	42.22
Population below 50% FPL	37.63
Population below 100% FPL	19.1
Population below 200% FPL	37.63
Unemployment	
October 2015 US Dept. of Labor Statistics	4.6
Crime	
2013 arrests	8409
2014 arrests	9178
2014 offenses	29013
2014 CSC offenses	340
2014 murders	7
Access to Healthy Food	
46 grocery establishments	18.38 per 100,000 population

Low income low food access	10.01
Population with low food access	31.34
Access to Recreation and Fitness	
27 establishments	10.79 per 1000,000 population
Parks	5 county parks, 5 city parks and an expansive bike trail system
Health Care Specific Data	
Access to Primary Care	
243 Primary Care Physicians	95.5 per 100,000 population
Access to Dentists	
169	65.8 per 100,000 population
Federally Qualified Health Centers (FQHC)	
Family Health Center	7 locations throughout Kalamazoo County

Existing Health Care Facilities and Resources

In addition to the Borgess Health Continuum of Care, there are other healthcare agencies in Kalamazoo County. Those agencies are:

Allegan General Hospital

Area Agency on Aging

Bronson Health Care

Community Mental Health

Family Health Center – the county's Federally Qualified Health Center, 7 locations

Kalamazoo Health and Human Services

Pine Rest Christian Mental Services

Planned Parenthood

West Michigan Air Care

W. Med, Western Michigan University School of Medicine

Establishing the CHNA Infrastructure and Partnerships

Internal

After the initial CHNA, BH developed a defined process to continue the ongoing process of CHNA and Implementation strategy reporting. No third parties were contracted to conduct the 2015 CHNA. Several infrastructure building activities were completed:

Dedicated 1 Full Time equivalent employee (Community Benefit Manager) to CHNA, Implementation Plan and the community benefit process.

Internal community benefit reporting was implemented that provides a formal process for reporting all community benefit provided by BH.

The Community Benefit Manager attended ongoing training that is provided to all Ascension Ministries to complete CHNA and the Implementation Strategies.

The creation of an internal senior leadership team that will meet several times throughout the year to provide expertise and information for reporting purposes.

External

The Community Benefit Advisory Committee (CBAC) represents a large cross section of community agencies. The committee members' expertise involves public health, Not for Profit agencies, school/educational programs, elderly support services, family health centers, chronic disease specialty clinics, and Borgess Health representatives involved in community work. This committee represents nine (9) community agency leaders throughout Kalamazoo County and is intended to represent a wide range of expertise and services that impact our community's health status.

All agencies and their representatives on the committee are involved with providing services to the medically underserved, low income and minority populations. The following list represents the Community Benefit Advisory Committee participating members.

Name	Agency/Role
Denise Crawford	Family Health Center, President & Chief Executive Officer
Tim Lieser	Catholic Charities, Executive Director

Patrick Dyson	Borgess Health, Executive VP, Strategy & Corporate Services
Mary Gustas	Comstock Community Center, Executive Director
Susan Pozo	Professor of Economics, Western Michigan University
Linda Root	Borgess Health - Vice President, Mission Integration
John Ryder	Borgess-Pipp Hospital, Administrator/COO
Cheryl Tenenbaum	Borgess Diabetes Center, Clinical Manager
Gillian Stoltman	Kalamazoo County Health & Community Services

Defining Purpose and Scope

The purpose of the CHNA was to 1) Evaluate the current health needs of the community and prioritize them 2) identify resources available to meet both the priorities as well as opportunities identified through the CHNA process 3) create an Implementation Plan to systematically address health priorities and 4) build capacity to address opportunities within the health system's existing programs, resources, partnerships and 5) develop a reporting tool for means of providing information to BHS Board and senior leadership as well as the IRS 990 report.

Data Collection and Analysis

Description of process and methods used

The framework used to guide Borgess Health through the process was based on two different models, Best Practices for Community Health Needs Assessment and Implementation Strategy Development: A Review of Scientific Methods, Current Practices and Future Potential Report of Proceedings from a Public Forum and Interviews of Experts submitted by Kevin Barnett, DrPH, MCP, The Public Health Institute, February 2012. Also considered in the development of the 2015 Borgess Community Health Needs Assessment was the Community Health Needs Assessment Template developed by the Catholic Health Associate of the United States.

Types of data collected for the assessment include, but are not limited to the following:

- Disease incidence and/or prevalence
- Inpatient, emergency room, and/or outpatient utilization
- Household income, unemployment
- Home ownership/rental properties
- Arrests and criminal activity
- Proximity of healthy food sources
- Proximity of basic and social services
- Parks, recreational facilities, open space
- Access to public transportation

The framework used to guide BH through the CHNA process was based on the six step model provided by The Association for Community Health Improvement:

1. Identify the Team and Resources
2. Define the Purpose and Scope
3. Collect and Analyze data
4. Determine Priorities
5. Document and Communicate Results
6. Plan for Action and Monitor Progress

Description of Data Sources

Quantitative Data

A wide variety of sources were reviewed as part of the data collection process. Those data sources are described below:

Quantitative Community Health Data Sources

Source	Description
Borgess Medical Center	Internal data from inpatient, emergency room and out-patient utilization years 2014 - 2015
Michigan Incident Crime Reporting, (MICR)	Michigan State Police Criminal justice Information Center, county arrests and county offenses 2013, 2014
County Health Rankings	Annual public report available through a grant from the Robert Wood Johnson Foundation using most recent data to rank the health of each county in each state
US Census Bureau	The 2009 – 2013 American Community Survey, County Business Patterns, 2013
National Center for Education Statistics (NCES)	Common Core of Data, 2013 - 2014
US Department of Education	EDFacts via DATA.gov Data analysis by CARES, 2011 - 2012
US Census Bureau	Small Area Health Insurance Estimates, 2013

Centers for Disease Control and Prevention	Behavioral Risk Factor Surveillance System, Health Indicators Warehouse, US Department of Health and Human Services, 2006 - 2012
Center for Disease Control and Prevention	Division of Nutrition, Physical Activity and Obesity, 2011 Program Evaluation Guide
US Department of Agriculture	Economic Research Service, USDA – Food Access Research Atlas, 2010
US Department of Health and Human Services	Health Resources and Services Administration, Area Health Resource File, 2012.
Michigan Department of Health and Human Services (MDCH)	2014 Behavioral Risk Factor Survey (MiBRFS)

Qualitative Data

While data tells an indisputable story of the health of the community, oftentimes the untold, yet equally important, part of the picture is how the members of the community feel about their health and the health of the community. With regard to the IRS Treasury Notice 2011 – 52, data was derived from key informant interviews and focus groups to represent the broad interest of the community as well as members of the community considered to be the most vulnerable population; the low-income, medically under-served, homeless, minorities and those with chronic health conditions. Permission to use the data gleaned from the groups was granted by each individual or the group lead contact.

Focus Groups

A focus group was conducted by Western Michigan University (WMU) students at Ministry with Community, a local mission that offers a wide variety of services for the poor and homeless. The respondents represent the most vulnerable in our community; the uninsured, homeless, unemployed, and minorities. A group of medical students at WMed, the medical school at Western Michigan University, conducted this survey at the Ministry with Community. A wide variety of questions were asked of the focus group ranging from ages 21 – 77. This group was represented by 51% female and 49% male respondents. Questions focused on employment status, housing status, source of income, types of medications they use, street drugs, and generic questions regarding their health care in general. The issues that raised to the top, as well the most common answers, were:

Ages	21 – 77
Gender	51% female, 49% male
Race	Caucasian – 39

	African American - 29
	Hispanic - 3
	Native American - 7
Primary source of income	43% on social security, disability, or state assistance
Annual income levels	43% earn less than $5,835
	36% earn $5835 - $11,670
	11% earn $11,670 - $17,505
Seek medical care	41% see a doctor more than 10 times a year
	34% see a doctor 2 – 5 times a year
Where do you see a doctor	53% go to Family Health Center (FQHC)
	19% go to Emergency Room
	14% go to Bronson
	45% visited Urgent Care in the last 12 months
Access to healthy food	73% report they have access
	32% report getting their food from Ministry with Community
	19% report getting their meals at the Gospel Mission
Exercise on a regular basis	79% report they get daily exercise of more than 20 minutes at a time
Health insurance	89% report they have some kind of health insurance, 83% indicate it is Medicare or Medicaid
Lifestyle	56% smoke tobacco
	58% have been diagnosed with a mental health problem
	42% report being on medication for mental health
	56% of female report having a well-woman examination
	54% report not consuming alcohol
	46% report drink alcohol
	16% report drinking 1 or less in a week
	16% report drinking 1 -5 drink a week
	54% did not answer this question
Chronic health conditions	Diabetes I or II 21%
	High blood pressure 38%
	Heart problems 21%
	Kidney problems 13%
Chronic health conditions (continued)	Liver problems – 8%
	Breathing problems – 46%
	Emphysema – 11%

	Physical disability – 41%
	Chronic pain – 52%
	Arthritis – 45%
	Intestinal problems – 27%
	Allergies – 32%

Key Informant Interviews

Key informant interviews are typically conducted with local community members who have historical knowledge of the community, are engaged with the community and understand local areas of concern. The leaders of these organizations have a great deal of hands on experience and are well versed with the health needs in the community. They represented health care providers, public health officials, those from rural populations and those from urban populations. There were participants who represented the underserved, minority populations and businesses.

Those involved in the interviews and their agencies were:

Qualitative Data Sources

Name	Agency
Denise Crawford	Family Health Center, FQHC President & Chief Executive Officer
Tim Lieser	Catholic Charities, Executive Director
Mary Gustas	Comstock Community Center, Executive Director
Stacey Watson, MD	Vice President of Clinical Integration and Quality Borgess Health System
Angelique Joynes, MPH, RN	Allegan County Health Department, Health Officer
Josie Wells	Community Impact Officer, Allegan United Way, Chair, Healthy Allegan Coalition
Grace Lubwama	Executive Director, Kalamazoo YWCA
Bobby Hopewell	Mayor, City of Kalamazoo
Name	**Agency**
Reverend Michael Brown, Mike	Gospel Mission of Kalamazoo

Cook, Rachael Villanueva, Caressa Hamby, Maureen Best	
Dr. Addis Moore, Cathy Wortham	Mt. Zion Baptist Church
Gillian Stoltman, Lynne Norman	Kalamazoo County Health & Community Services

Summary of Key Informant Interviews

There were common themes in every interview and it was fairly easy to glean from the conversations the pressing issues in the community. Key informants were asked specific questions regarding, in their opinions, what the health issues are in the community, what is working and what is not working. Some comments made during the interviews are listed below along with the applicable questions:

1. What are the biggest health issues in your community?

- Mental health – biggest challenge, physical well-being and access to healthy foods
- Obesity and everything that goes with it, diabetes and heart disease
- Psychology and psychiatry, not enough mental health providers
- Not enough primary care providers
- Homeless populations – no long term solution for them, mental health is a chronic issue
- Diabetes, Hypertension, Congestive heart failure
- Lack of prosperity, (poverty), no social mobility, income inequality
- Sexually Transmitted Infections, infant mortality, obesity, diabetes

2. What changes have you seen in the health issues of the community in the last few years?

- More people have insurance now, those with multiple medical problems are now coming to physicians and they have to deal with the worst problem first
- More kids on psychotropic medications, using them as a "quick fix" at times, huge increase in mental health issues with nothing sustainable as far as programs
- People in chronic pain (there are a lot of them) have no place to go to deal with chronic pain management issues, not enough providers or no providers in the Kalamazoo area
- There are lots of resources – rich in that regard. The gap is access and mobility, no Metro transport system
- Being more systematic about approaches to health, county coalition is helpful

3. **Who struggles most with the issues you've identified?**

- People of color, 63% African American children in schools; children in general
- Those in poverty. Even with ACA, people cannot afford an ambulance or copays on physician visits
- Aging, low income, children born into Medicaid, MI has 41% of babies born to Medicaid parents
- Everyone. Obesity is an issue at all income levels, with all cultural groups.
- Homeless populations – no long term solution for them, mental health is a chronic issue

4. **Where are opportunities for your community to improve and maintain health?**

- Alignment. Making tough decisions as philanthropists; what is most important thing to fund? Best use of money coming in?
- More organizations are interested in working collaboratively, need to get beyond medical care for solutions, more and better prevention
- Community collaborations. For example, the Infant Mortality collaboration.

5. **What are the resources available in the community that might address some of these health issues?**

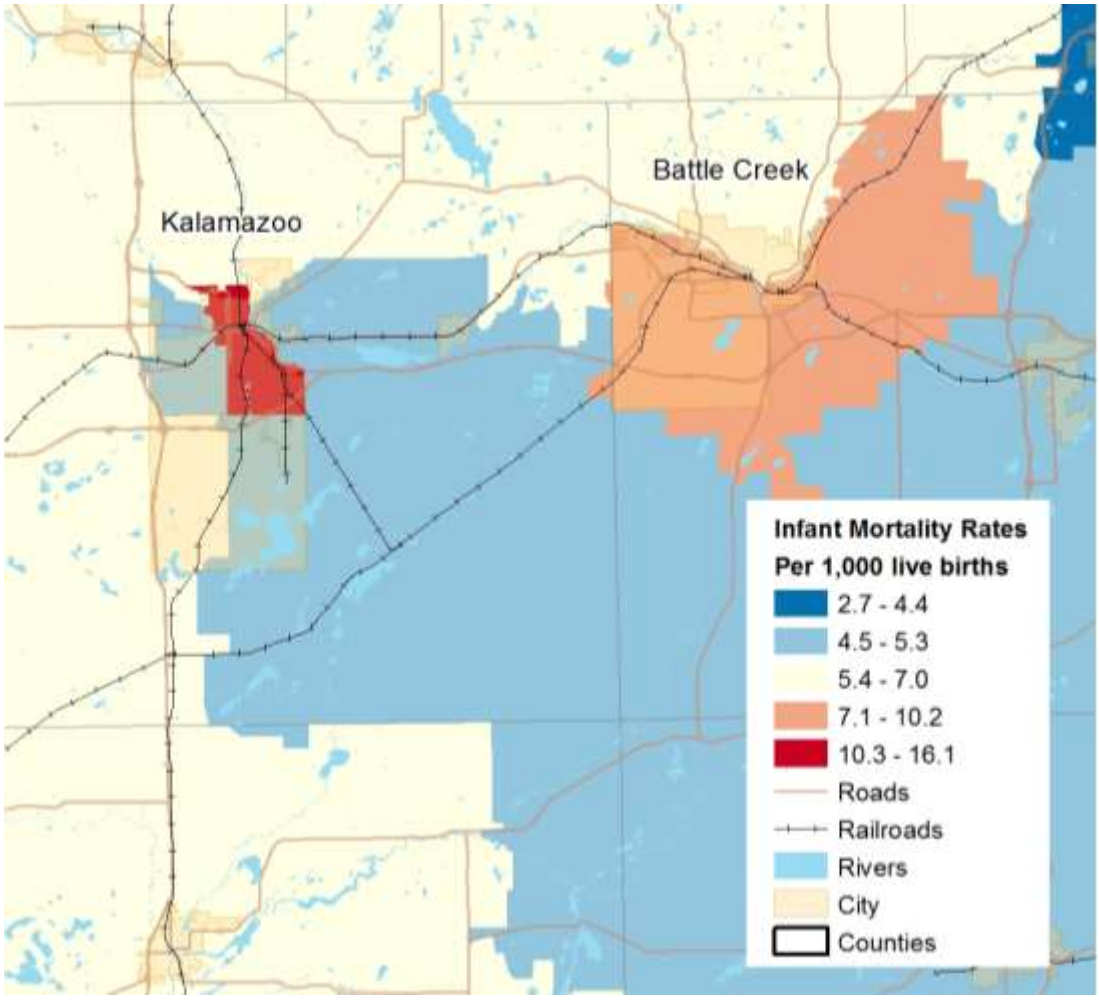
- Kalamazoo is resource rich but people do not know how to access resources
- Need to implement more community health workers
- We need to get in front of the health issues not keep chasing them from behind
- Education sectors. Great Start and Head Start. Getting health messages embedded early and often working with families through the school system. Community based clinics and taking health care into the community is key
- Family Health Center soon will have a mobile unit that will go to Kalamazoo Public Schools on a rotating basis It will be fully functioning with labs, exams rooms, crash cart. Children who cannot attend a physician appointment will have the opportunity to be seen

While the interviewees responded one by one, it was very clear there was considerable overlap with the issues. Based on the sampling of responses above and the overall responses, the most important health issues clearly stood out as:

- Diabetes, obesity and other chronic conditions associated with diabetes
- Access to primary care
- Infant Mortality
- Mental Health and lack of mental health providers

Infant Mortality in Kalamazoo

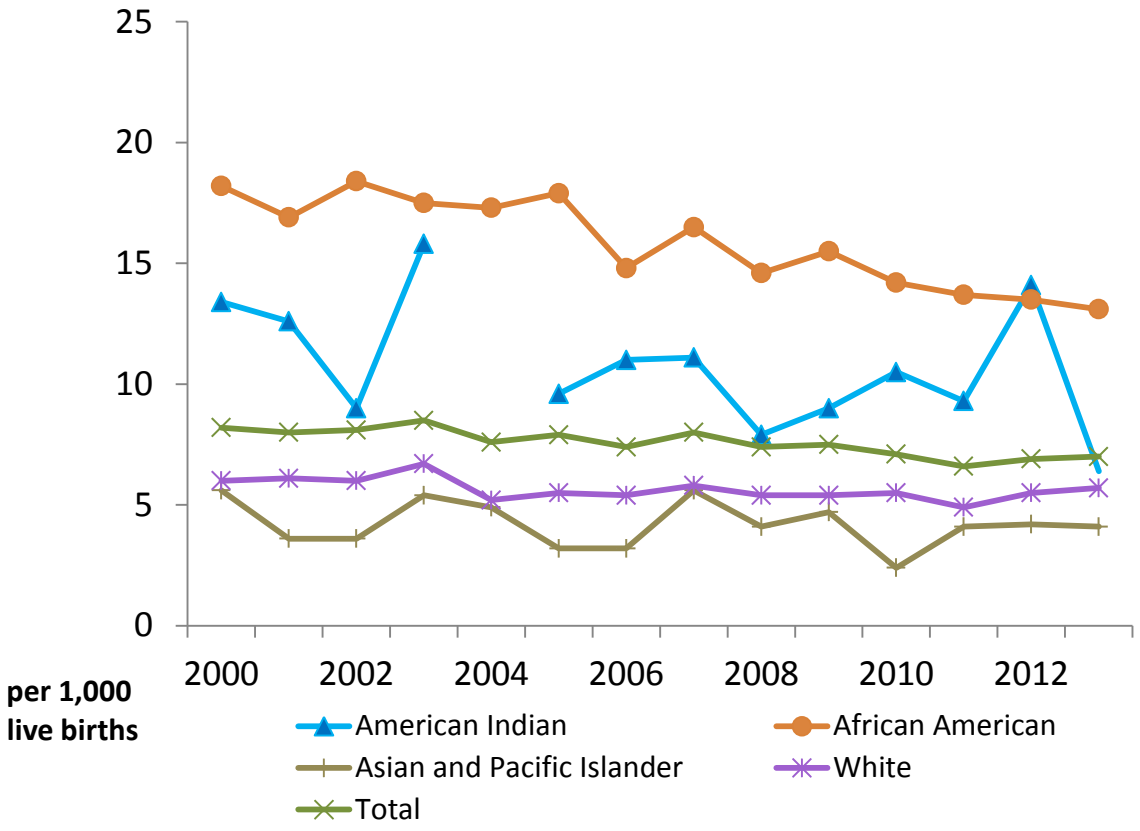
Kalamazoo has, unfortunately, been a leader not only in the state of Michigan, but in the nation, for several years in the rate of infant mortality. Currently there is a community collaborative with fifteen (15) health and human service organizations including both Kalamazoo hospital systems working on this issue.



Source: Vital Statistics Birth & Linked Infant Death Cohort (2009-2013)
Map created by Sue C. Grady, PhD, MPH Geography, Michigan State University

This map is an illustration of Region 8: Kalamazoo and Battle Creek. This is one of the areas of highest concerns in our state.

Infant Mortality Rate per 1,000 Live Births, Michigan 2009-2013



Source: Michigan resident Birth and Death Files, MDHHS Division for Vital Records and Health Statistics, Prepared by: MDHHS Epidemiology section

Description of data limitations and gaps

Limitations and gaps exist that impact the ability to create a more robust and accurate assessment. Much of the data used is considered outdated, but is the most recent data available. For example, demographics used in this assessment were derived from the US Census 2000 – 2010. Additionally, the Michigan Department of Community Health MiBRFS is an annual, statewide telephone survey of adults aged 18 years and older. The data is collected via a telephone survey from both landline and cell phone respondents. Since the information is self-reported, the information may not be 100% accurate. However it provides a good snapshot of what Michigan residents think their health is. Additionally, due to limited resources and time constraints, data was not collected on every vulnerable population desired.

Identification and Process for Prioritization of Needs

The results of the key informant interviews and the focus groups were presented to the Borgess Senior Leadership Team, the Borgess Health Community Health Needs Assessment Systems Strategy Council and the Community Benefit Advisory Committee. A copy of the health issues data was provided to each member of the groups. The members were then asked to provide feedback on the results as well as engage in conversation with the rest of their members. The Borgess Health CHNA staff provided a draft of the data collection and community findings to the committees listed above. The groups convened and reviewed the data collection and the draft CHNA report. Criteria considered when making decisions were:

- The ability of Borgess Health to make an impact based on current resources
- The effectiveness of current Borgess Health programs and services
- Avoiding duplication and/or enhancing community initiatives already established
- The Michigan Department of Community Health statewide health priorities and local health department priorities
- Healthy People 2020 goals

The nominal group planning process method of identifying and determining needs was used. Nominal group planning can be used to:

- determine what community issues are of greatest concern;
- decide on a strategy for dealing with the identified issues; and
- design improved community services or programs.

This method is based on group discussion and information exchange. Group members generate a list of ideas or concerns surrounding the topic being discussed. This list becomes decision-making criteria and the prioritization is the ultimate result of consensus and a vote to rank order the criteria.

Based on the process and criteria listed above, Borgess Health identified the following priorities for the Implementation Plan:

- Access to Care
- Diabetes
- Infant Mortality

Description of Community Health Needs Identified

Goal 1: Access to Care

Access to Care is an ongoing issue and is listed in the Healthy People 2020 report as one of the leading twelve indicators for the nation to focus on. Healthy People 2020 provides science-based, 10-year national objectives for improving the health of all Americans. As we move into 2016 and the next phase of implementation of the Affordable Care Act, more and more individuals will become insured with Medicaid expansion. Through the Health Insurance Marketplaces (Exchanges) there will still remain the need to support those unfamiliar with the system in navigating the health system, locating a primary care physician, and obtaining support for other non-medical needs that, if not addressed, may present a barrier to Access to Care. The need to address and strengthen Access to Care is an ongoing system-wide initiative through the Ascension Health's Call to Action policy "Healthcare That Leaves No One Behind". The policy represents Ascension Health's commitment to 100% access and coverage for all Americans. Ascension Health has evolved its 2020 destination for "Healthcare That Leaves No One Behind" to describe that all people, particularly those who are poor and vulnerable, can access environments and healthcare that (1) create and support the best journey to improved health status for individuals and communities, and (2) are financed in an adequate and sustainable fashion. The vulnerable people we are focused on serving includes individuals who remain uninsured in a post-reform era, but also includes people who are vulnerable due to factors other than insurance coverage, including their economic situation, citizenship status, geographic location, health status, age, education level or decision-making ability.

Strategy 1:

Borgess Health will design, develop and deliver a Medical Mission at Home in downtown Kalamazoo. Medical Mission at Home is an Ascension initiative that delivers free medical care to those with limited access who are struggling in the community. It provides real time delivery of organized health and social services to those who do not have access to those types of services. There is a large homeless population in downtown Kalamazoo as well as two missions, Ministry with Community and Gospel Mission, who serve this population. A Medical Mission will provide basic wellness screenings and help identify any chronic conditions and make referrals where needed. Working collaboratively with Borgess providers, community partners and volunteers, this will also be an opportune time to provide health education on a number of chronic conditions, education to the attendees on how and when to access the local emergency departments, provide healthy snacks and deliver prescriptions and other basic needs.

Strategy 2:

This strategy involves two of BH goals, Access to Care and Infant Mortality combined. This strategy is aimed at reducing the racial disparity and improving birth outcomes among high risk women in Kalamazoo by increasing their access to prenatal care. Barriers to be addressed in this strategy are access to prenatal care, coordination of care and follow through, referral to community resources, and transportation. (see Borgess Health Goal #3, Infant Morality)

Goal 2: Diabetes Prevention

In Michigan, in 2014, an estimated 10.4% of Michigan adults 18 years and older were diagnosed with diabetes. According to the Centers for Disease Control and Prevention (CDC), 27.8% of people of all ages with diabetes are undiagnosed. Also the CDC reported about 37% of adults age 20 years and older were estimated to have pre-diabetes, putting them at high risk for developing type 2 diabetes. However, in 2014, only an estimated 8.2% of Michigan adults reported ever being told that they had pre-diabetes. Michigan ranked 22nd out of 50 states in highest diabetes prevalence among adults 18 years and older in 2013. Diabetes was the seventh leading cause of death in Michigan in 2013 (*Michigan Department of Community Health).* Although reducing incidence of diabetes was a priority area for the 2013 BHS CHNA, it remains one of the top causes of hospitalizations and death in Kalamazoo and at BHS from 2013 – 2015.

Strategy 1:

Provide diabetes screenings and education through community groups and local churches. Due to the fact that there remains a large percentage of the population undiagnosed, it is important to reach out to those community members who are at high risk and undiagnosed. Developing a relationship with our local churches and community groups will allow access to community members who may not have a primary care physician and may be undiagnosed or are considered pre-diabetic. Identifying those who are pre-diabetic will allow intervention and education to prevent further progression of the disease.

Strategy 2:

Design, develop and distribute web based pre-diabetes programs. Working in tandem with Borgess Diabetes and Marketing departments, an online pre-diabetes program will be developed and distributed. This will be done in a culturally appropriate manner and will be distributed widely throughout the community. This strategy greatly improves access to much needed health education where it can be delivered through computer or electronic device at any time at any place. It provides 365/24/7 access to life changing health education.

Goal 3: Infant Mortality Reduction

For every 1,000 Michigan live births, approximately seven infants die before reaching their first birthday. Michigan's infant mortality rate is consistently higher than the national average. The highest disparity is found among African American infants, which are approximately 13 deaths per 1,000 live births. In comparison with white births, this is three times greater. This has been an area of concern for many years in Kalamazoo County. This situation has not shown any sustainable improvement over the course of time and in fact, has only gotten worse. In fact, for every one death of a Caucasian baby, four black babies die. There is a group working diligently on this problem in Kalamazoo County. Some of the causes are social determinants of health such as poverty and race, as well as safe sleep habits, unintended pregnancy, and previous poor birth outcomes.

Community Needs Not Addressed

Identified needs that will not be addressed were determined by availability of services in the community. Chronic diseases with substantial support in the community such as cancer, lung disease and heart disease are supported by strong Borgess Heath programs with a variety of available resources in addition to the support of the American Cancer Society, American Lung Association and the American Heart Association. Mental Health and lack of providers is certainly a health priority; however, other agencies in the Kalamazoo area have greater resources to address this need. Injury prevention scored moderately high but will not be addressed in the CHNA implementation strategy and action plans; Borgess Health is a Level 2 Trauma Center with very specific requirements for community education, prevention strategies and safety guidelines in place. Finally, senior services scored at a moderate level; however, BHS will not address this need as top priority due to the services provided by the Council on Aging as well as many other organizations in the community.

Next Steps

The Borgess Health team and community team members will collaborate on appropriate areas of identified need and guide the development of implementation strategies and individual action plans for each area of opportunity. Measureable outcome indicators will also be established. The team will appropriately communicate the CHNA results and the Implementation Plan Strategy to the community using a variety of methods.