

Pathways to Community Health

2016 Community Health Needs Assessment
for Muskegon, Oceana and Newaygo Counties



A Joint Report for Mercy Campus, Hackley Campus and
Lakeshore Campus of Mercy Health Muskegon

HEALTH PROJECT

A COMMUNITY BENEFIT MINISTRY OF  MERCY HEALTH

 MERCY HEALTH

2016 Community Health Needs Assessment (CHNA) JULY 2015

Prepared By

HEALTH PROJECT, COMMUNITY BENEFIT MINISTRY OF MERCY HEALTH

Peter J. Sartorius, Project Leader, Grants and Planning Manager
Kristina Baas, Community Benefit Program Coordinator
Stevi B. Riel, Health Project Executive Director and Community Benefit Ministry Officer of Mercy Health Muskegon

KEY PERSONNEL

Cyndi Powers, Health Project
Gerald L. Adams, Focus Group and Form Facilitator and Project Consultant
Joan Kessler, Mercy Health Regional Public Relations
Kiesha Guy, Health Project
Joan Vanover, Health Project

CHNA ADVISORY COUNCIL

Alexis Dye, Health Disparities Reduction Coalition, Hackley Community Care Center
Ben Look, Mercy Health Business Office
Bruce Spoelman, Muskegon Family YMCA
Christine Robere, United Way of the Lakeshore
Chris McGuigan, Community Foundation for Muskegon County
Chuck Fisher, Little River Band of Ottawa Indians
DJ Hilson, Muskegon County Prosecutor
Dr. Frank Duncan, Mercy Health Emergency Department
Jane Clingman-Scott, Muskegon Intermediate School District
Jane Johnson, Muskegon-Oceana Department of Human Services
Jeff Fortenbacher, Access Health
Jen Bailey, Affinia Health Network
Juanita Estrada, Migrant Council, Oceana County Department of Human Services
Judy Kell, Pathways to Better Health of the Lakeshore
Judy Novak, Mercy Health Urgent Care
Julia Rupp, HealthWest (formerly Community Mental Health)
Kate Kesteloot-Scarborough, Coalition for a Drug-Free Muskegon County
Dr. Kristen Brown, Blue Cross Blue Shield of Michigan
Linda Juarez, Hackley Community Care Center FQHC
Linda VanGills, District Health Department #10
Luke Reynolds, Lifecircles – PACE and Health Project Board
Pam Curtis, Senior Resources of West Michigan
Sheila Bridges, Muskegon Family Care FQHC
Susan Howell-Stuk, Community Access Line of the Lakeshore (CALL 2-1-1)
Tamera Collier, Disability Network of West Michigan

CONTRIBUTORS

Damian Omness, Mercy Health Language Services
Disability Network of West Michigan staff
District Health Department #10 staff
Hackley Community Care Center staff
Health Disparities Reduction Coalition members
Jacob Zobl, Health Project Intern, Central Michigan University
Jill Montgomery-Keast, Public Health Muskegon County
Kori Bissot, KWB Strategies

Laura Fitzpatrick, Health Project
Mercy Health Physician Partners
Rachel Uganski, Health Project
Rochelle Barr Sartorius, Photographer
Stacey Hachmann-Gomez, Community Access Line of the Lakeshore (CALL 2-1-1)
Tom VanBruggen, Muskegon County

KEY VOLUNTEERS

Amy Florea, Senior Resources
Benson's Sav-Mor Pharmacy staff
Bob Jakubowski, Coalition for a Drug-Free Muskegon County
Jackie Latimore, Disability Network of West Michigan
Janelle Johnson, Health Project
Janet Perrault, Disability Network of West Michigan
Karen Cross, Newaygo County Mental Health
Ken Fisher, Oceana Hispanic Center
Leah Vosburg, Every Woman's Place
Linda VanGills, District Health Department #10
Lindsay Watson, LifeCircles
Margaret Ewing, Oceana Hispanic Center
Michael Ramsey, Mercy Health McClees Clinic
Muskegon Family Care staff
Muskegon Lumberjacks
Muskegon Teen Health Center staff and teens
Newaygo County Mental Health staff
Oceana Council on Aging staff
Oceana's HOME Partnership staff
Pathways to Better Health of the Lakeshore Community Health Workers
Rob Murphy, Muskegon Lumberjacks Senior Resources staff
United Way of the Lakeshore staff
Vicki Comeau, Disability Network of West Michigan
Whitehall High School National Honor Society

HEALTH PROJECT ADVISORY BOARD OF DIRECTORS

Amy Heisser, Howmet/Alcoa Corporation
David Ramos, Ramos and Sons Auto Body
David Van Winkle, MD, Mercy Health
Cynthia Coviak, RN, PhD, Grand Valley State University, Kirkhof College of Nursing
Kristen Brown, MD, Mercy Health Physician Partners West Shore Family Medicine
F. Remington Sprague, MD, Mercy Health
Frank Bednarek, Frank Bednarek Consulting, LLC
Gerald Van Woerkom, former State Senator
Greg Loomis, President, Mercy Health Muskegon
Jim Fisher, Louis Padnos Iron and Metal Company
Kathy Moore, Public Health – Muskegon County
Luke Reynolds, Life Circles – PACE
Mary Anne Gorman, Harbor Hospice
Phil McPherson, MyLTC Pharmacy
Roger Spoelman, Regional President and CEO, Mercy Health
Ron Rademacher, Mercy Health Pharmacy – Westshore
Shaun Raleigh, Blue Cross Blue Shield of Michigan
Tony Moulatsiotis, Muskegon County Treasurer

I. Introduction and Mission Review Statement

- 5 Mercy Health Facilities and Assets

II. Looking Back at the 2013 Community Health Needs Assessment

- 7 Leading Health Conditions: Changes from 2013–2015
- 8 Mercy Health Muskegon Programs 2013–2015
- 10 Work Still to Do

III. Summary Observations from the 2016 Community Health Needs Assessment

- 11 Muskegon County
- 12 Oceana and Newaygo Counties
- 13 Additional Concerns

IV. Community Description

- 14 Muskegon, Oceana and Newaygo County Profiles
- 15 Service Area Map

V. Information Sources for the 2012 CHNA

- 16 Community Input Approaches and Supplemental Sources
- 16 Community, Health and Environment Health Data
- 17 University of Wisconsin Population Health Institute 2015 County Health Rankings
- 17 Community Action Line of the Lakeshore (CALL 2-1-1): Top Requests & Unmet Needs
- 18 2013–2014 Michigan Profile for Healthy Youth Survey
- 18 Muskegon Continuum of Care Point in Time Homeless Count, 2011–2014
- 18 Senior Resources of West Michigan 2014 Gap Analysis for Oceana County
- 18 1 in 21 Community Wellness Committee 2014 Healthy Foods Survey

VI. Key Findings from the Data Tables: Appendices 1, 2, 3 & 4

- 19 Key Community Social and Economic Factors
- 19 Key Community Health Factors
- 20 Key Environment Health Factors
- 21 Health Disparities Data Indicators: Health Disparities Report Card

VII. Key Findings from the Community Input Process

- 22 Community Participation and Input
- 22 Consumer Health Issues Survey
- 26 Muskegon County Community Conversations and Focus Groups
- 29 Oceana and Newaygo Counties Community Conversations and Focus Groups

VIII. Ranking and Prioritizing the Findings

- 34 Muskegon County Rankings
- 35 Oceana and Newaygo County Rankings

IX. Reflections on the CHNA Process and Lessons Learned

- 36 Next Steps

X. Appendices

- 38 **Appendix 1:** Community Data
- 39 **Appendix 2:** Health Data
- 40 **Appendix 3:** Environmental Data
- 41 **Appendix 4:** Health Disparities Report Card
- 44 **Appendix 5:** University of Wisconsin Population Health Institute 2015 County Rankings
- 47 **Appendix 6:** Community Access Line of the Lakeshore (Call 2-1-1): 2014 Requests & Unmet Needs
- 50 **Appendix 7:** 2013–2014 Michigan Profile for Healthy Youth (MiPHY)
- 53 **Appendix 8:** Graphic Information System (GIS) Maps for Muskegon County
- 54 **Appendix 9:** 2015 Consumer Health Survey Questionnaire
- 58 **Appendix 10:** 2015 Community Focus Group Participants

Introduction and Mission Review

At Mercy Health Muskegon, everything we do is rooted in our heritage as a faith-based organization and our strong commitment to improving the communities we serve.

OUR MISSION: *We serve together in the spirit of the Gospel as a compassionate and transforming healing presence within our communities.*

OUR VISION: *Mercy Health is committed to being the most trusted health partner for life by building strong, genuine, long-term patient relationships through patient-centered, personalized primary care; coordinated specialty services and care management; and convenient access to the health system.*

OUR PROMISE: *We promise to be accessible, to listen intently, and to provide expert guidance that empowers you to take an active role in your health care decisions.*

OUR CORE VALUES

- **Reverence** — *We honor the sacredness and dignity of every person.*
- **Commitment to Those Who are Poor** — *We stand with and serve those who are poor, especially those most vulnerable.*
- **Justice** — *We foster right relationships to promote the common good, including sustainability of earth.*
- **Stewardship** — *We honor our heritage and hold ourselves accountable for the human, financial and natural resources entrusted to our care.*
- **Integrity** — *We are faithful to who we say we are.*

The 2016 *Community Health Needs Assessment* (CHNA) continues Mercy Health Muskegon's collaboration with a wide range of community health and human service providers and other stakeholder groups that began in 2009. The purpose is to identify the major health issues affecting the residents of our service area, which includes Muskegon, Oceana and Newaygo Counties. The current CHNA process began in January 2015 and concluded with its formal adoption by the Lakeshore Campus board of trustees on August 27, 2015 and adoption by the Mercy and Hackley Campuses on September 24, 2015.

The 2016 CHNA is a joint collaboration among the three Mercy Health Muskegon facilities, permitted under the IRS Section 501(r) Final Rule, since all three facilities serve a common community — Muskegon, Oceana and Newaygo Counties. The Lakeshore Board of Trustees, Mercy Health Muskegon's critical care facility, formally agreed to participate with the Hackley and Mercy Campuses in a joint 2016 CHNA. Lakeshore Campus primarily serves Oceana County, southeastern Newaygo County and northern Muskegon County. Mercy Campus and Hackley Campus have identical service communities, which include all three counties and, thus, overlap the community served by Lakeshore Campus. Although the 2016 CHNA report is substantively identical for all three campuses, this joint CHNA report reflects the unique needs of the Oceana/Newaygo County community served by Lakeshore Campus, and includes sections that clearly distinguish the needs of Oceana/Newaygo County from those of the Muskegon County.

Mercy Health Muskegon is committed to bringing high quality care to the residents of the lakeshore. The Community Health Needs Assessment process helps us understand what matters to those who live, work and play in this community. Health decisions happen outside the walls of a hospital or a physician's office; they happen in homes, churches, at schools, in the aisles of grocery stores and in our

“

The Community Health Needs Assessment is the cornerstone of our community benefit ministry and how Mercy Health Muskegon understands what the community has identified as prominent community health concerns. This process drives our investment in programs and services that support the health of the community and ensures that everyone has access to high quality, timely and affordable health care.

— Gregory A. Loomis, President, Mercy Health Muskegon



neighborhoods. Community is at the heart of ensuring that individuals and families have opportunity to be well and to thrive. The information presented here will be used to help Mercy Health and other health and human service organizations identify and prioritize health-related problems for developing and implementing action plans. We all can then work from comparable information platforms to strategically align the necessary resources required to improve community health, improve access to care and reduce health disparities. We continue to be challenged as stewards of our resources to provide the greatest benefit to all citizens in the most cost-effective manner possible. This is in keeping with the mission of Mercy Health as a member of Trinity Health.

The 2016 CHNA Advisory Council was convened in January 2015, comprised of 37 individuals who represented 37 organizations from all three counties. It was the goal of the 2016 CHNA Advisory Council to produce a current profile of health status, wellness, health delivery and public-sourced opinions about health in Muskegon, Oceana and Newaygo Counties. The process used a compilation of the most recent health and community data, as well as the opinions and concerns articulated by community residents through consumer surveys, community forums, focus groups and stakeholder sessions to rank and prioritize the results. Data and public opinion can be used in a variety of ways to improve community health, including development of new local programs, collaborative efforts among stakeholders to seek unified solutions, and new services and assistance to funders who must make strategic investment decisions. This information will not only help us to direct resources to build solutions, but will also help us to benchmark our successes.

The 2016 *Community Health Needs Assessment* incorporates the process requirements detailed in the 2010 federal Affordable Care Act, finalized in December 2014. Priority issues that emerged have been ranked by several community stakeholder groups and the results will be used to guide Mercy Health Muskegon's leadership to develop an Implementation Strategy. The Implementation Strategy will commit hospital investments in community health for the next three years, and provide a guide for Mercy Health Community Benefit programming and activities.

In this new environment of health reform trumpeted by the Affordable Care Act of 2010, Mercy Health

Muskegon is on a journey, transforming the way health care is delivered so people will be at the center of their care. Deeply committed to high quality care, innovation and collaboration, Mercy Health Muskegon is at the forefront of this transformation. We are proving that working alongside the community to identify, address and resolve issues that impede good health has real impact and works to promote health improvement throughout the communities we serve, as well as population health management.

Our sincerest thanks go to those who contributed to the development of this planning document. Without the time and energy invested by committed leaders and organizations, Mercy Health Muskegon and the general public, the Health Project would not be able to offer a report that encompasses the work of so many and the plans for true community health improvement.

Mercy Health Muskegon Facilities and Assets

Mercy Health Muskegon, a 409 licensed-bed primary, acute and specialty care system within the Mercy Health West Michigan region, is a teaching hospital and is one of largest health systems in West Michigan with 3,500 colleagues, 17,000 inpatient discharges and nearly 145,000 emergency/urgent care visits annually. The system has four hospital campuses and 375 physicians. Mercy Health Muskegon offers a number of specialty care services for the region, including cardiothoracic surgery, neurosurgery, orthopedics, bariatric surgery and spine services. Mercy Health operates a comprehensive, multi-discipline regional simulation lab in Muskegon. Mercy Health Hackley Campus received Trauma II Verification in June 2015.

Hospital Campus and Ambulatory Locations

- **Mercy Health Mercy Campus**, 1500 E. Sherman Boulevard, Muskegon, MI — a 196-bed, full-service hospital in southern Muskegon and one of Mercy Health's four hospitals along the West Michigan lakeshore
- **Mercy Health Hackley Campus**, 1700 Clinton Street, Muskegon, MI — a 213-bed, full-service hospital in the center of the city of Muskegon
- **Mercy Health General Campus**, 1700 Oak Avenue, Muskegon, MI — an ambulatory site with urgent care, laboratory and sleep lab facility in Muskegon Township in Muskegon County

- *Mercy Health Lakeshore Campus*, 72 State Street, Shelby, MI — a 24-bed critical care hospital in rural Oceana County
- *Mercy Health Lakes Village*, 6401 Prairie Street, Muskegon, MI — an urgent care facility with physician primary and specialty offices, Bladder Clinic and Comprehensive Breast Center, located in the city of Norton Shores in southern Muskegon County
- *Mercy Health Physician Partners Lakeshore Medical Center*, 905 E. Colby Street, Whitehall, MI — an urgent care facility in northern Muskegon County
- *Mercy Health Johnson Family Cancer Center*, 1440 E. Sherman Boulevard, Muskegon, MI — a state-of-the-art cancer treatment center, located at Mercy Campus
- *Mercy Health Laboratories*, network of ten — six locations in the greater Muskegon area of Muskegon County: one in Whitehall, one in Shelby, one in Ludington and one in Norton Shores
- *Mercy Health VNS & Hospice Services*, 888 Terrace Street, Muskegon, MI

Mercy Health Physician Partners

Mercy Health Physician Partners, one of the largest primary care and specialty physician networks in West Michigan, is committed to providing excellent access to health care, a more informed patient experience, and life-long patient-doctor relationships. Primary care providers specialize in family medicine, pediatrics, obstetrics and gynecology, as well as internal medicine. The primary care physicians partner with a wide range of specialty physicians to provide the highest level of integrated patient care. The regional network comprises more than 500 physicians and advanced practice professionals in Grand Rapids, Muskegon and the lakeshore.

Mercy Health Physician Partners is a member of Mercy Health, a multi-campus health care system serving West Michigan and the lakeshore with 5 hospital campuses, more than 60 physician offices, 1,300 medical staff physicians, 800 hospital beds, 7,200 colleagues, and hospice, home health and long-term care service offerings. Mercy Health was named in West Michigan's 2014 101 Best and Brightest Companies to Work For™ by The Michigan Business & Professional Association (MBPA). Mercy Health is a regional health ministry of Livonia, Michigan-based Trinity Health — one of the largest

multi-institutional Catholic health care delivery systems in the nation. It serves people and communities in 21 states from coast to coast, with 86 hospitals, 89 continuing care facilities and home health and hospice programs that provide nearly 2.8 million visits annually. Visit MercyHealthPhysicianPartners.com to learn more.

Subsidiaries of Mercy Health Muskegon

- *Affinia Health Network (AHN)*, 1675 Leahy Street, Muskegon, MI — a wholly-owned physician hospital organization (PHO)
- *Hackley Professional Center*, 1675 Leahy Street, Muskegon, MI — a professional office building lease management company, located at Hackley Campus
- *Hackley Professional Condos Co-Owners Association* — a management company for Hackley Professional Center
- *Health Project*, 565 W. Western Avenue, Muskegon, MI — a non-profit company that provides community benefit services for Mercy Health
- *Mercy Health Healthcare Equipment*, 1150 E. Sherman Boulevard, Muskegon, MI — providing home care equipment, located at Health Pavilion
- *Mercy Health Life Counseling*, 125 E. Southern Boulevard, Muskegon, MI — an accredited behavioral and mental health counseling practice
- *Mercy Health Pharmacies* — four locations in Muskegon and Norton Shores
- *Mercy Health Weight Management*, 1212 E. Sherman Boulevard, Muskegon, MI — a weight-loss and nutrition company that sells products and offers medically supervised programs
- *Mercy Health Workplace Health* — occupational health clinics in Muskegon, Grand Haven and Grand Rapids, MI
- *Pro Med Ambulance*, 965 Fork Street, Muskegon, MI — a service of Mercy Health, provides ambulance services
- *Westshore Condo Association* — provides business management services for West Shore Professional Building
- *West Shore Professional Building*, 1560 E. Sherman Boulevard, Muskegon, MI — a professional office building, located at Mercy Campus

Looking Back at the 2013 Community Health Needs Assessment: Progress Review

The expanded 2013 *Community Health Needs Assessment* (CHNA) included Muskegon, Oceana and Newaygo Counties, which comprise the service area of Mercy Health Muskegon. The health needs and concerns identified by the CHNA process included identifying ten key issues in Muskegon County and the combined Oceana/Newaygo Counties. Of all the issues identified in 2013, the following were the leading health concerns ranked by community stakeholder groups:

MUSKEGON COUNTY

- 1 Obesity
- 2 Diabetes
- 3 High blood pressure
- 4 Depression
- 5 Sexually transmitted diseases and teen pregnancy
- 6 Access to dental care
- 7 Need for preventive care
- 8 Nutrition education/access to healthy food
- 9 Need for health coverage
- 10 Smoking

OCEANA/NEWAYGO COUNTIES

- 1 Diabetes and preventive care
- 2 Obesity, high blood pressure and need for community care coordination
- 3 Better patient-provider communication
- 4 Transportation
- 5 Cardiovascular disease
- 6 Lack of dental care
- 7 Teen pregnancy and lack of specialty care and testing
- 8 Lack of primary care physicians
- 9 Need for after-hours urgent care
- 10 Depression

Although health issues were not ranked in 2009, a few health issues repeated from the 2009 CHNA: lack of health insurance, lack of dental care, depression, diabetes, teen pregnancy, high blood pressure/cardiovascular disease and obesity. On these issues, notable trends in all three counties from 2009 to 2015 are:

- **Significant progress** — health coverage, obesity and cardiovascular disease (Oceana County)
- **Modest progress** — teen pregnancy
- **No change** — diabetes
- **Rates rose** — low birth weight babies, overweight and cardiovascular disease (Muskegon and Newaygo Counties).

CHNA Leading Health Conditions: Changes from 2013–2015

We have seen good improvements in health coverage in Muskegon County since 2013, but the rates of uninsured have climbed slightly in Newaygo and significantly in Oceana. Depression remains an area of concern, especially in Muskegon County where the reported rate increased significantly since 2013. Teen pregnancy declined in Muskegon and Oceana Counties, but increased in Newaygo County, which also saw an increase in reported cases of chlamydia. There have been some gains in the fight against obesity, especially in Oceana County, which may suggest that many may have dropped into the *overweight* data category, which has generally increased.

CHNA Leading Health Conditions: Changes from 2013–2015

ISSUE	MUSKEGON		OCEANA		NEWAYGO	
	2013	2015	2013	2015	2013	2015
Diabetes (BRFS, self-reported)	10.20%	11.10%	12.50%	10.50%	12.20%	11.10%
Uninsured (U of WI County Rankings)	26.7%	14.0%	12.7%	19.0%	15.2%	16.0%
Depression (CHNA, self-reported)	28.00%	40.00%	43.00%	27.90%	31.00%	27.00%
Dentists per 100k (U of WI County Rankings)	70.70	51.31	34.67	26.30	59.58	45.35
Teen Pregnancy per 1,000 (U of WI County Rankings)	65.10	59.34	75.20	57.80	61.20	70.30
Cardiovascular Disease (MDCH)	4.60%	4.70%	4.50%	1.80%	3.20%	4.20%
Obesity (CDC, BMI)	35.70%	34.70%	38.50%	26.00%	28.70%	36.80%
Gonorrhea (new cases)	261	202	2	2	7	3
Chlamydia (new cases)	1,248	1,194	57	64	94	117

Numbers in red indicate increases from 2013 to 2015 data.

Health Coverage

Mercy Health Muskegon's ongoing health coverage screening and enrollment program, operated by the Health Project, was enormously boosted by the passage of the Affordable Care Act. The Healthy Michigan program, inaugurated in October 2014, expanded Medicaid to persons at 133% of the Federal Poverty Level and added the federally subsidized health insurance "Marketplace" program to make private insurance more affordable for other low and moderate income families. The Health Project screened 3,254 people for eligibility in Medicaid, MiChild, Healthcare.gov Marketplace and the Mercy Health Financial Assistance Program. About 70% were enrolled in the Medicaid and Marketplace programs. Another 123 senior citizens were assisted with Medicare enrollments.

Health Disparities & Access to Care

Significant strides were made to address health disparities and access to health care. The Health Disparities Reduction Coalition published a *Health Disparities Report Card* in June 2012, which highlighted 11 areas of disparities affecting African Americans and Hispanic populations in our service area. The Report Card serves as a baseline for reference and gauging progress. The Report Card is included in this report as Appendix 4. Although there is very little updated health disparities data published since 2012, there has been significant improvement in reduced unemployment rates and some improvement in poverty rates. Nonetheless, enrollment in health coverage under the Healthy Michigan program of expanded Medicaid, the Healthcare.gov Marketplace, as well as Medicare, Mercy Health's Financial Assistance Program and other coverage plans has generally made access to care more affordable for low-income population segments.

Mercy Health Muskegon Programs: 2013–2015

Mercy Health Muskegon's outreach program, operated by the Health Project (a Community Benefit Ministry of Mercy Health) hosted or attended a total of 315 outreach events throughout the three-county region in the last three years, wherein staff reached over 22,000 people with information, enrollment and referral services. Two *Wheels of Mercy* Mobile Medical Units visited over 60 locations in Muskegon and Oceana Counties and served over 1,300 people with health information, health screening and referral to services.



The **Pathways to Better Health and Pathways to Healthy Pregnancy programs** that began in 2012 have connected 3,134 low-income and vulnerable patients with chronic diseases or high-risk pregnancies to health coverage, primary care homes and community services that support treatment plans of care. This expanded program has deployed 34 community health workers throughout our service area to improve communication among patients, medical providers, mental health and social service providers, and help ensure coordinated care for better health outcomes. A welcomed result of these programs is reduced use of the emergency room, especially for primary care, as well as reductions in early hospital readmissions.

Mercy Health Muskegon's 2013–2015 **Pharmaceutical Assistance Program** was composed of five different programs, all of which provided either reduced cost or free prescription medications to low-income patients. Over 10,000 people received over 25,000 prescriptions during the three-year period. Mercy Health spent \$546,000 on pharmaceutical assistance and helped 1,800 people receive \$1,744,000 in free prescription drugs through drug company Patient Assistance Programs. As a result of the Mercy Health health coverage enrollment programs, the Affordable Care Act/Healthy Michigan expanded Medicaid and Healthcare.gov Marketplace, the number of patients needing assistance with their prescription medications has dropped over 75% since 2013. Notwithstanding the reduction in patients, the cost of the Mercy Health pharmaceutical assistance program has dropped only about 15%, due to the rising prices of the drugs purchased.

The **Food Assistance Outreach program** has helped 2,992 people access the Food Stamp Program during the last three years. Enrollment assistance included referrals, assistance with other human service programs and communications with employers, court system, financial institutions and translation services for non-English speaking clients.

The **Lions Club's Vision and Hearing Services program** served 648 low-income people with new prescription glasses and hearing aids during the last three years.

Access to primary care, specialty care and dental care has vastly improved for low- and moderate-income families as a result of the Affordable Care Act and expanded Medicaid in Michigan. Mercy Health has opened two new primary care practices, added primary care physicians, nurse practitioners, physician assistants and several specialists in the area of obstetrics, geriatrics and neurosurgery since 2013. Nonetheless, our service area is still in need of additional primary care physicians and specialists to serve the increased numbers of insured individuals seeking care.

Transportation remains a significant barrier issue, especially in the rural areas of our three-county region. Public transportation services, comparable to those in Muskegon County, are non-existent in Oceana and Newaygo Counties. However, the problem has been eased a bit by the 2015 expansion of the Muskegon Area Transit System (MATS) to the northernmost communities in Muskegon County, abutting Oceana County. Affinia Health Network is working with MATS to explore the feasibility of expanding bus service into Oceana County.



Health Care Education, Nutrition & Access to Healthy Foods

A number of developments have advanced the cause of health care education in our area, which will help make positive changes in the health of our community and help us reach the goal of being number one in the University of Wisconsin Public Health Institute's *County Health Rankings* by 2021. **Community Health Workers (CHW)** in the Pathways to Better Health program have been teaching chronic disease patients and their caregivers how to better manage their conditions to avoid frequent hospitalizations, emergency room visits and generally enhance their quality of life. Working with primary care providers, the CHWs are helping people to better understand treatment plans, taking medications, recognizing symptoms and how to ask questions about their health.

The **Drug Free Muskegon Coalition** has completed a 10-year cycle of working with schools, law enforcement, and health and human service agencies to reduce the use and abuse of alcohol, tobacco and other drugs. The Coalition for a Drug Free Muskegon County was named the GOT OUTCOMES! Coalition of Excellence Award winner by the Community Anti-Drug Coalitions of America (CADCA) in December 2014. The coalition, founded by the Health Project, was awarded Coalition of the Year, the highest honor nationally, for their comprehensive efforts to reduce underage drinking, tobacco smoking and prescription drug use in the community.

This project has changed the attitudes of parents about drinking and has increased the number of alcohol sellers passing compliance checks to reduce purchases by minors. The result has been significantly reduced self-reported use of alcohol, binge drinking and driving after drinking by underage youth. The project also focused on tobacco use by youth. The coalition helped support passage of the statewide law prohibiting cigarette smoking in public places and restaurants. The coalition's school-based tobacco education program has reached over 6,000 middle and high school students each year in Muskegon, Oceana and Newaygo Counties. Self-reported smoking among youth has dropped by 52% since 2009. The coalition collection program to help reduce abuse of prescription drugs has collected 18,000 pounds of medications in Muskegon County. The coalition will continue its efforts in 2016 and begin focusing on marijuana use among youth.

Two Mercy Health Muskegon grant-giving programs

— Mission Services’ Sister Simone Courtade Fund and Health Project Board of Directors’ Community Benefit Initiative Award program — have been funding community-based projects and programs that address needs identified in the *Community Health Needs Assessment*. Since 2013, grants have been made to support emergency dental needs, prescription medication assistance, juvenile diabetes, screening for diabetes, kidney disease and breast cancer screenings, end-of-life issues, physical activity among youth, nutrition education, food pantries, community gardens and teen parenting.

In addition, Mercy Health Muskegon donated about two acres of land at Hackley Campus to a Muskegon non-profit organization for an **urban farm project in the downtown Muskegon McLaughlin neighborhood**. The program is a model of sustainable urban agriculture with goals to provide employment and job training opportunities, promote entrepreneurship and leadership skills among youth, provide access to affordable healthy foods, and promote social interaction and a renewed sense of community in a low-income neighborhood. Over 300 local students and volunteers are involved with the McLaughlin Grows project.

There’s Still Work to Do

There’s no doubt that there has been perceptible progress toward improving the health of our Muskegon, Oceana and Newaygo County populations. Notwithstanding, the ranking of our three counties in health factors and health behaviors is still very low compared to the other 79 counties in 2015 County Rankings (see Appendix 5). Our blessing is that we are among the top ranked counties in quality clinical care. We have some of the best health care resources in the state, but there are some significant challenges to meet as we move ahead toward being “1 in ‘21.” Here are just a few ingredients for achieving that success:

- 1 *Recruiting more primary care physicians, physician assistants, nurse practitioners and specialists, especially to serve the rural areas of Oceana and Newaygo Counties.*
- 2 *Providing 24-hour urgent care services in Oceana County.*



- 3 *Developing affordable transportation services to and from medical facilities in Oceana and Newaygo Counties, as well as door-to-curb transportation service for the elderly and persons with disabilities.*
- 4 *Increasing the number of mental health and behavioral health treatment providers available to low-income residents. Data from 2014 indicates there are 109 mental health providers per 100,000 population in Muskegon County (192 providers); Oceana County has 23 per 100,000 population (6 providers); and Newaygo County has 64 per 100,000 population (31 providers).*
- 5 *Access to dental care. The number of dentists has declined by an average of 25% in all three counties and many do not accept Medicaid patients due to low reimbursement rates.*
- 6 *Enhancing youth and adult health education programs to promote long-term healthy behaviors and personal responsibility in all three counties.*

Many of our communities’ health problems reflected in our poor 2015 County Rankings are related to “social determinants of health,” such as high rates of poverty and unemployment, low educational attainment, poor housing and access to health foods, tobacco use, alcohol and drug abuse. To effectively address these problems will require one- and two-generational strategies to be embraced by all of our public and private institutions in all three counties.

Summary Observations

Introductory Remarks

The 2016 Mercy Health Muskegon *Community Health Needs Assessment* (CHNA) is a joint, collaborative effort by the three health facilities that make up Mercy Health Muskegon: Mercy Campus and Hackley Campus in Muskegon County and Lakeshore Campus in Oceana County. The CHNA identified the health care focus areas for Muskegon, Oceana and Newaygo Counties during the next three years. Recognition of these issues reflects a comprehensive assessment process involving collection, analysis and syntheses of information from the general public, human service and health care providers, as well from standard community and health data reported by local, state and federal agencies.

This section is intended to summarize the combined results of the 2016 *Community Health Needs Assessment* by highlighting the health care issues receiving the highest level of priority by the community stakeholders involved in the assessment at this time. This summary represents areas in which Mercy Health Muskegon, collaborating community organizations, and the general public can make contributions to reduce health disparities, improve quality of care and promote a healthier community during the next three years.

Similar to the 2013 *Community Health Needs Assessment*, the present effort represents the ongoing awareness of what the community perceives as the primary health care issues, problems and concerns impacting the residents of the tri-county area. It is important to note that health care and human service professionals representing most of the health care institutions and service agencies of the tri-county area were an integral part of the process leading up to the development of the current assessment.



Leading Health Care Issues/Concerns

Following are the leading health issues identified for the health system to address for the next three years in the respective communities.

Muskegon County

Seven ranking sessions were held in Muskegon County. The resulting top five and secondary five issues for the health system to take the lead role on are:

Leading Health Care Issues/Concerns: Muskegon County

TOP FIVE

- 1 Care coordination/patient advocacy
- 2 Access to primary care
- 3 Lack of mental health providers
- 4 Diabetes
- 5 Lack of substance abuse providers

SECONDARY FIVE

- 6 Emergency department overuse
- 7 Cardiovascular disease
- 8 Hypertension
- 9 Cultural sensitivity training for providers
- 10 High cholesterol

Oceana/Newaygo Counties

Two ranking sessions were held in Oceana County that included health and human service providers serving the resident and migrant communities in Oceana and Newaygo Counties. The top five and secondary five issues selected for the health system to take the lead role on for Oceana and Newaygo Counties are as follows:

Leading Health Care Issues/Concerns: Oceana/Newaygo Counties

TOP FIVE

- 1 Access to specialty care
- 2 Access to primary care
- 3 Cardiovascular disease
- 4 Hypertension
- 5 Diabetes

SECONDARY FIVE

- 6 Health coverage
- 7 Cancer
- 8 Access to urgent care
- 9 Access to medication
- 10 Patient/provider communication

Additional Concerns

Although not ranked in the top ten health issues for the health system in the community input process, a variety of attendant concerns uniformly surfaced throughout the tri-county area as well. It may be that as our community addresses and progresses with some highly ranked issues from the 2013 CHNA, other health concerns rise to the top ranks for 2016. Obesity, smoking, language services, access to healthy foods, dental care and teen pregnancy may be examples. As reflected in our low ranking in the University of Wisconsin 2015 County Health Rankings, this does not imply that these issues are no longer health concerns in our community.

Arthritis and Asthma

Arthritis and asthma surfaced as issues of concern by relatively large population sectors. Arthritis was commonly attributed to the service area's aging population, but not exclusively so. Recommendations for this health care issue included greater education on the importance of nutrition, exercise and pain management. Unlike arthritis, asthma impacts a greater demographic range, from youth to the elderly. Greater education on ways to manage the condition and reduce the triggers likely to promote asthma symptoms were conveyed as needed.

Vaccinations

Survey findings indicated over one-third of the area's households did not take advantage of flu vaccinations last season and that cost was not an issue in their failure to do so. A majority stated that their aversion to obtaining recommended vaccinations as an element of preventive care was based on factors such as a lack of need, distrust of the medical industry and government, and concern over potential side effects. Many of these households expressed similar concerns over common vaccinations, including those associated with children's immunizations and pneumonia.

Health Disparities

Language barriers impacting access and quality of care received by Hispanic/Latino residents remains a significant issue, particularly in Oceana and Newaygo Counties. However, based on recent findings, noteworthy advances were made over the past three years in reducing the extent of these barriers. Efforts by organizations, such as the Health Care Disparities Reduction Coalition and Mercy Health Language Services in Muskegon resulted in greater awareness of language barriers, fostered an increase in the availability of professional interpreters, prompted the translation and distribution of consumer-oriented health care materials and forms, and promoted adoption of the federal *Culturally and Linguistically Appropriate Standards*. Concerns were also raised about women's reproductive health and addressing the health care needs of LGBT (lesbian, gay, bisexual and transgender) patients.

Health Care Education

As with the past CHNAs, health care education again appeared as an important public need. Of note was the value of providing readily available literature on health care issues in user-friendly formats as low levels of health literacy were cited as an underlying issue experienced among all residents. While the increased use of the Internet was noted as an important venue for the distribution of information on health care matters, many emphasized the value of maintaining traditional methods as well.

Other Significant Community Health Improvement Issues

Several important health issues appeared in the 2016 CHNA process as priority concerns for Public Health and other community agencies to take the lead roles in the next three years. The community sector includes government agencies, schools, and community-based and faith-based organizations.

The top five issues selected for the *Public Health sector* to take the lead role are:

Public Health Sector Leading Health Care Issues/Concerns

MUSKEGON COUNTY

- 1 Teen pregnancy
- 2 Overweight
- 3 Lack of mental health providers
- 4 Low birth weight babies
- 5 Women's reproductive health

OCEANA/NEWAYGO COUNTIES

- 1 Obesity/overweight
- 2 Teen pregnancy
- 3 Health care coverage; STDs/chlamydia (*tied*)
- 4 Low birth weight babies
- 5 Depression/anxiety

The top five issues selected for the *Community sector* to take the lead role are:

Community Sector Leading Health Care Issues/Concerns

MUSKEGON COUNTY

- 1 Transportation
- 2 Depression and social isolation
- 3 Access to healthy food
- 4 Physical fitness
- 5 Senior isolation

OCEANA/NEWAYGO COUNTIES

- 1 Obesity/overweight
- 2 Binge drinking, youth and adults over 65
- 3 Depression/anxiety
- 4 Teen pregnancy
- 5 Transportation

Other Health Care Needs Cited

In addition to the ranked health care issues, a number of other health concerns in all three counties surfaced from the surveys, public forums and health care data. Among these were:

- Hypertension and high cholesterol
- Binge drinking among older teens, young adults, and the elderly
- Substance abuse in general
- Access to vision, dental and hearing care
- Dementia and Alzheimer's care
- Under-use of advance care directives
- Awareness of the value of hospice care
- Long-term care



Community Description:

Basic County Profiles

Muskegon County

Muskegon County is a county ranging from rural to urban in character. The county is located on the eastern shoreline of Lake Michigan, roughly 35 miles west of Grand Rapids. Muskegon County is known for its agricultural production of fruits and vegetables, as a tourism destination and industrial center. The county seat is the City of Muskegon, an urban community of almost 40,000 residents. Interstate I-96 and US-31 connect the county with major metropolitan centers to the east and south. Muskegon is home to the county's major hospital system, Mercy Health, which includes the Mercy, General and Hackley Campuses in Muskegon County and Lakeshore Campus in Oceana County. The county has a total area of 1,459 square miles and a population of 172,188 people and a population density of 334 per square mile.

Muskegon County was established in the 1830s as a lumber settlement that utilized the extensive river and lake networks to transport timber to the larger communities. Muskegon grew rapidly during the lumber era through the early 1900s, when it began its industrial transition. Over the next 60 years, Muskegon's industrial base continued to grow until the 1970s, the community has continued to diversify in order to cope with an ever-changing economy. As noted, the county is a rural and urban mix that is comprised of 7 cities, 3 villages and 16 townships.

Based on the level of employment by industrial classification, the county's highest employment categories include manufacturing (25%); education, health care and social services (22.2%); retail trade (12.2%); and arts, entertainment, recreation and food services (8.3%).

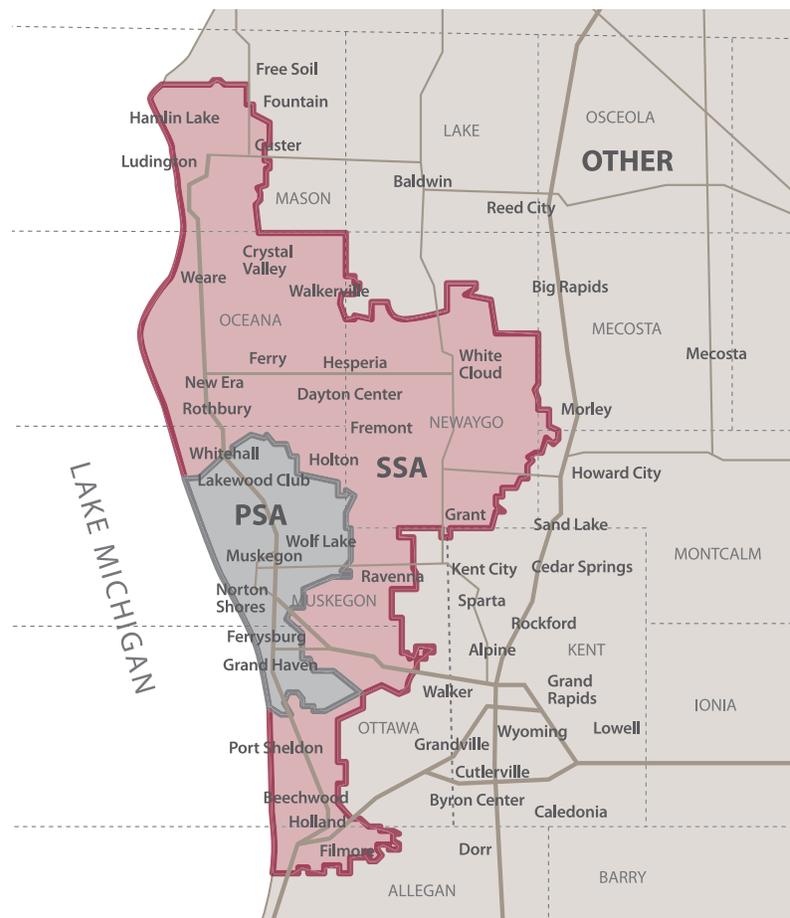
The composition of the county's population includes 81.4% of the residents classified as White, 14.2% African Americans, 5.2% Hispanics, 1% American Indian or Alaska Native and 0.7% Asian. The median family income is \$40,979 and the median household income is \$65,000. The per capita income is \$20,621. About 14% of families and 19.9% of the

population are reported as below the poverty line. Families with female householders, related children under 18 years, and no husband present, experience poverty rates approaching 49%.

Some areas of the county are designated as Federal Enterprise Communities (cities of Muskegon and Muskegon Heights) and Medically Underserved Population (MUP) areas. Within Muskegon County, there are three Entitlement Communities receiving Community Development Block Grant funds. The Entitlement Communities are the cities of Muskegon, Muskegon Heights and Norton Shores. There are also two Federally Qualified Health Clinics located in the City of Muskegon Heights and serving individuals in Muskegon County.

Oceana County

Oceana County is located in West Central Michigan, on the Lake Michigan coastline. The county grew during Michigan's lumbering era. When the lumber boom came to a halt, farmers found the area an excellent place for orchards. Today, it prospers holding the second largest fruit tree acreage in the state. It is also known as the asparagus capital of the world for its high production of the crop. Tourism also plays a vital part of the county's economy due largely to the attraction of the Lake Michigan coastline and





Newaygo County

Newaygo County is located northeast of Muskegon County and north of the Grand Rapids Metropolitan Area. Newaygo County relies on tourism as its main economic support, with agriculture and small manufacturing secondary. The county's proximity to the urban centers of Muskegon and Grand Rapids tend to make it a bedroom community location for those urban centers. A high percentage of the county's residents commute daily to Muskegon and Grand Rapids to take advantage of employment, business, health care, recreational and social opportunities.

This semi-rural county boasts 2 cities, 3 villages and 24 townships. The county has a total area of 862 square miles, a population of 48,460 people, and a population density of approximately 56 people per square mile. Compared to Muskegon County's population density of 334 people per square mile, Newaygo County, similar to Oceana County, is generally considered rural in character.

Based on the level of employment by industrial classification, the county's highest employment categories include manufacturing (20.9%); education, health care and social services (18.6%); retail trade (11.5%); and construction (7.8%).

The composition of the county's population includes 96% of the residents classified as White, 1.2% African American, 5.8% Hispanic, 0.9% American Indian or Alaska Native and 0.4% Asian. The median household income is \$42,571 and the median family income is \$54,252. The per capita income is \$20,623. About 13% of families and 18.6% of the population are reported as below the poverty line. Families with female householders, related children under 18 years, and no husband present experience poverty rates approaching 51%.

The county is designated as a Health Professional Shortage Area (HPSA) and Medically Underserved Population (MUP) area.

associated dunes. This rural county boasts 2 cities, 2 villages and 16 townships. The county has a total area of 1,307 square miles, a population of 26,570 people, and a population of roughly 20 people per square mile. Compared to Muskegon County's population density of 334 people per square mile it is easy to understand why Oceana County is generally considered a rural area.

Based on the level of employment by industrial classification, the county's highest employment categories include education, health care and social services (19.7%); manufacturing (19%); agriculture, forestry, fishing, hunting and mining (12.8%); and retail trade (10.2%).

The composition of the county's population includes 95.9% of the residents classified as White, 0.7% African American, 14.1% Hispanic, 1.5% American Indian or Alaska Native and 0.3% Asian. The median household income is \$40,023 and the median family income is \$47,906. The per capita income is \$18,986. About 12% of families and 19.9% of the population are reported as below the poverty line. Families with female householders, related children under 18 years, and no husband present, experience poverty rates approaching 50%.

Oceana County has been deemed a Health Professional Shortage Area (HPSA) and Medically Underserved Population (MUP) area by the Federal Government.

Information Sources for the 2016 CHNA

Methodology and Community Input Approaches

The *Community Health Needs Assessment* (CHNA) process involves the gathering of two types of data sets: quantitative and qualitative. While much of this data will be health specific, it is also important that the data reflect the impact of the social determinants of health — income, education, employment, insurance, race, ethnicity, gender, etc. When used together, the qualitative data (demographics, health indicators, etc.) and the quantitative data (consumer surveys, community forums, focus groups, interviews) will help health and human service agencies make many short-term and some long-term decisions about allocation of community human and capital resources. Information collected by informal means can be used to validate scientifically gathered quantitative information.

Differences between consumers' and service providers' perceptions and concerns, as well as the discovery of new health issues, make it important to collect information from diverse sources. This approach complies with the letter and spirit of the Affordable Care Act of 2010, which requires all tax-exempt, non-profit hospitals to gather information on health needs from the "broad interest of the community," especially the "medically underserved, low-income and minority populations served by the hospital facility"; this means population segments that experience health disparities or are at risk of not receiving adequate medical care as a result of being uninsured or due to geographic, language, financial or other barriers. Tax-exempt hospitals must direct their community benefit expenditures to addressing the needs revealed in their CHNA.

Mercy Health Muskegon's 2016 CHNA includes the following information elements:

- Demographic information, health and environmental data, and health disparities.
- Consumer survey, administered via paper questionnaires at a variety of community venues and electronic media. Responses to the survey included 2,657 surveys.

- Five community forums, called *Community Conversations* — two in Muskegon County, two in Oceana County and one in Newaygo County with total participation of approximately 150 people.
- Eleven focus groups on different topical areas, including two with physicians and two with teenagers; 150 people participated.

Data Deficiencies

Due to data reporting being based on the ten-year census cycle or mid-cycle reporting, very little new information was available for this CHNA about health issues identified by race and ethnicity. Thus, the Health Disparities Report Card could not be reliably updated for this reason. The original version from the 2013 CHNA can be found in Appendix 4.

It should also be noted that data reporting for most agencies is 12 to 18 months behind the calendar, meaning that much of the data used for this CHNA was actually published between 2013–2014. Census data is updated on a three-, five- or ten-year cycle, meaning large amounts of demographic data are unchanged from the 2013 report.

Community Data, Health Data and Environmental Data (Appendices 1, 2 & 3)

The indices contained in *Table 1: Community Data* (Appendix 1), *Table 2: Health Data* (Appendix 2) and *Table 3: Environmental Health Data* (Appendix 3) were selected on specific criteria. Community data indices in *Table 1* are those considered standard data sets typically collected by professional city planners for master plans, general community descriptions, economic development and other special reports. The health data is selected based on local and state epidemiological reporting, data from local county agencies, Mercy Health Muskegon's patient registry, and the 2015 Consumer Health Issues Survey. Many of these indices are also included in the University of Wisconsin *County Health Rankings* (Appendix 5) and the Leading Health Indicators listed in *Healthy People 2020* by the U.S. Department of Health and Human Services, which are used for setting national health goals. *Table 3* indices were selected by the staff of Public Health – Muskegon County and District Health Department #10.

Supplemental Information Sources

University of Wisconsin/Population Health Institute 2015 County Health Rankings (Appendix 5)

The University of Wisconsin Population Health Institute's Roadmaps project was launched in 2010 as an effort to provide information on the health of all counties throughout the nation. The rankings evaluate each county according to the measures of health outcomes and health factors. Health outcomes are based on mortality (length of life) and morbidity (quality of life), while health factors are based on social and economic factors, health behaviors, clinical care and physical environment. Together, these offer a perspective on the overall health of a county. These measures were chosen for being significant indicators of health and generally available local, state and national data sets.

Muskegon County

Muskegon County ranked 65th in health outcomes and 66th in health factors among the 82 counties included in the 2015 rankings. It ranked last regarding health behaviors (high rates of smoking, obesity, physical inactivity, drinking, sexually transmitted infections and a high teen birth rate); however, it has come up 16 places in the rankings for physical environment (improving air pollution, access to healthy foods and amount of fast food restaurants). The ranking for social and economic characteristics also improved, climbing 11 places, with the county seeing a marked drop in unemployment, but a consistent level of families living in poverty and single parent households. Notably, Muskegon County ranked very high in clinical care at 7th place (up from 13th in 2012), with a low uninsured population and a low rate of preventable hospital stays.

Oceana County

Oceana County ranked the lowest among the three counties, with a ranking of 67th in health outcomes and 59th in health factors. The low ranking in health outcomes can be primarily attributed to high rates of low birth weight babies and high rates of poor mental health days. However, rates for clinical care and health behaviors have dramatically improved, jumping forward nearly 10 places each. Social and economic factors continue to be very low, with high rates of unemployment and children living in poverty.

Newaygo County

Newaygo County ranked better than both Muskegon and Oceana Counties with 60th place in health outcomes and 45th in health factors. It fared better than both counties in health behaviors (52nd) and social and economic factors (43rd), with numbers very close to state averages. However, Muskegon County still held a higher spot in clinical care, 13th compared to Newaygo County's 49th.

County Rankings Summary

Each of the three counties performed poorly in all the principal categories. To "move the needle" in the rankings, each county needs to focus efforts on the indicators where they ranked poorly and that were most heavily weighted in the ranking computations. For example, reducing low birth weight babies — a quality of life factor that constitutes 20% of this computation — will help move Muskegon County's ranking. Reducing adult smoking and obesity — health behaviors that comprise 10% and 7.5%, respectively, of the health behavior computation — will improve Oceana and Newaygo Counties' ranking in this category. To impact poor scores in social and economic factors, all three counties will have to reduce unemployment and children in poverty, making up 10% each within this category.

Community Access Line of the Lakeshore (CALL 2-1-1) (Appendix 6)

The Community Access Line of the Lakeshore (CALL 2-1-1) information and referral service has been in operation since 2002 and serves 11 counties along the West Michigan shore, including Muskegon, Oceana and Newaygo Counties. Total population of the service area is about 250,000 people. Call volume decreased by 6% from 50,306 calls in 2011 to 47,182 calls in 2014.

Health care ranks 6th among the 17 problem needs areas, representing 5% of all calls. The most frequent requests for assistance from all three counties were prescription drugs, physician referrals, dental care, vision services and counseling services. In 2014, medical care expense assistance and prescription drug expense assistance were the most frequently unmet service requests in the health care category for all three counties.

Fifty-eight percent (58%) of all calls came from Muskegon County, mostly from the 49441, 49442 and 49444 zip codes, which includes the cities of Muskegon, Norton Shores, Roosevelt Park, Muskegon Heights, and Egelston and Muskegon townships. Six percent (6%) of the call requests came from Oceana and Newaygo Counties.

2013–2014 Michigan Profile for Healthy Youth (MiPHY) (Appendix 7)

The Michigan Profile for Healthy Youth (MiPHY) is an online student behavior risk health survey offered by the Michigan Departments of Education and Community Health every two years to support local and regional needs assessment. The MiPHY provides student results on health risk behaviors, including substance use, violence, physical activity, nutrition, sexual behaviors, and emotional health in grades 7, 9 and 11. The survey also measures risk and protective factors most predictive of alcohol, tobacco, and other drug use and violence. The survey is anonymous and parents have the opportunity to excuse their child from participation. All Muskegon County and Newaygo County schools completed the MiPHY in 2012; two schools in Oceana County completed it. Appendix 7 contains a comprehensive summary of results of the MiPHY.

Key findings from the 2013–2014 MiPHY

- One-third of high school students in all three counties report having ever had sexual intercourse, which is slightly lower than the statewide rate at 38%.
- Only half of Muskegon high school students meet the recommended physical activity recommended by the Centers for Disease Control (CDC).
- One-third of high school students in each of the three counties reported experiencing depression symptoms in the past year.
- Although Muskegon County has seen a 46% drop in binge drinking among high school students since 2009, there has been an increase in misuse of marijuana and prescription drugs in all three counties since 2012.
- In all three counties, twice as many high school students were likely to report carrying a gun in the past month, compared to their statewide average of 4%.

- An average 6% of the high-school respondents in the three counties reported that they were forced to have sex when they didn't want to; two-thirds of the respondents were young women.

Muskegon Continuum of Care Point in Time Homeless Count, 2011–2014

The Point in Time Count, conducted by the Muskegon County Continuum of Care on Homelessness, suggests that on any given day there are 179 people residing in emergency shelters or transitional housing in Muskegon County. This represents a 20.5% decrease from 2013, when there were 225, and a 61% decrease from 459 individuals in 2011. The 2014 Oceana County Point-in-Time Count reported 574 individuals as homeless, half of whom were under 18 years old. Seventy-six percent (76%) of the total were family groups. Just under 30% of the total were located in Hart. Similar data for Newaygo County was not available at the time of printing.

Senior Resources of West Michigan 2014 Gap Analysis for Oceana County

In November 2014, Senior Resources of West Michigan convened a group of health and human service professionals in Oceana County to determine the largest service gaps for their patients. The following issues were determined to be of the greatest need for seniors in Oceana County: transportation, assisted living options, caregiver support and access to visiting physicians.

1 in 21 Community Wellness Committee 2014 Healthy Foods Survey

From May to July of 2014, the *1 in 21* community wellness committee of the Muskegon Rotary Club surveyed 447 individuals about their grocery purchasing habits. The survey found that a large majority (80%) of individuals who earned over \$25,000 shopped primarily at Meijer for their groceries; whereas a near majority (49%) of those who earned under \$25,000 did their grocery shopping at Wal-Mart. Farmers Market users also tended to be in the over \$25,000 income bracket. Eighty-two percent (82%) of respondents used their own car to travel to the grocery store. Seventy-two percent (72%) of respondents said the best way to make fresh food more accessible in Muskegon County is to make it more affordable.

Key Community Social and Economic Factors (Appendix 1)

Population Projections

Muskegon County holds 69.7% (172,188) of the three counties' 247,218 total population, with 19.6% residing in Newaygo County (48,460) and 10.7% living in Oceana County (26,570). Between the 2000 and 2010 Census, Muskegon County and Newaygo County each grew by 1.2%; and Oceana County decreased by 1.1%. During the same period, Michigan experienced a 0.6% decline in population. The Michigan Office of the State Demographer projects the three counties will reach 257,500 by 2020. Based on the projection through 2020, Newaygo County will experience population growth estimated at 25.9%, while Muskegon and Oceana Counties will decline at slightly less than 1%.

Primary Ethnic Groups

Muskegon County is the only county with a significant census count of African Americans at 14.2%; with Newaygo County registering only 1.2% and Oceana County at 0.7% African American. Oceana County has the highest percentage of Hispanic or Latino populations at 14.1%, while Muskegon County has 5.2% and Newaygo County 5.8%.

Poverty

Poverty rates in the tri-county area are higher than the state number of 17%. Muskegon County is highest at 19.93%, followed closely by Oceana County at 19.90% and Newaygo County at 18.63%.

Food Stamps Benefit/Supplemental Nutrition Program (SNAP)

Food Stamps/SNAP benefits are received by 23.65% of Muskegon County households, 18.79% of Oceana County households, and 21.78% of Newaygo County households.

Marital Status and Children

The percentage of married households in Muskegon County is 50.1%, Oceana County is 56.6%, and Newaygo County is 56.2%. The percentage of widowed residents in Oceana County is 3.2% for males and 11.4% for females; 2.6% for males in Muskegon County and 9.3% for females; and in Newaygo County, the percentages are 3.1% for males and 10.3% for females. The percentage of

Key Findings from the Data Tables

Appendices 1, 2, 3 & 4

married couples who have divorced in Muskegon County is approximately 13.0%, Newaygo County is approximately 11.0%, and Oceana County is roughly 9.5%. The percentage of households with children under age 18 is 30.4% for Muskegon County, 28.9% for Newaygo County, and 20.1% for Oceana County.

Vehicles Per Household

Muskegon County leads the tri-county area in the percentage of households with no vehicles at 8.2%, followed by Newaygo County at 4.9%, and Oceana County at 4.8%.

Unemployment

As of April 2015, Muskegon County's unemployment rate was at 5.1%, Oceana County's was at 7.8%, and Newaygo County's at 5.2%.

Education

For persons 25 years of age and older, 88.0% of Michigan residents are high school graduates and 25.0% possess a bachelor's degree or higher. This compares to Muskegon County at 87.7% and 16.5%; Oceana County 82.7% and 14.3%; and Newaygo County at 85.2% and 13.2%.

Language Spoken at Home

Oceana County has a higher percentage of population that speaks Spanish, at 11.0%, as compared to the statewide average of 8.9%. The percentages for Muskegon and Newaygo Counties are 4.5% and 5.5%, respectively.

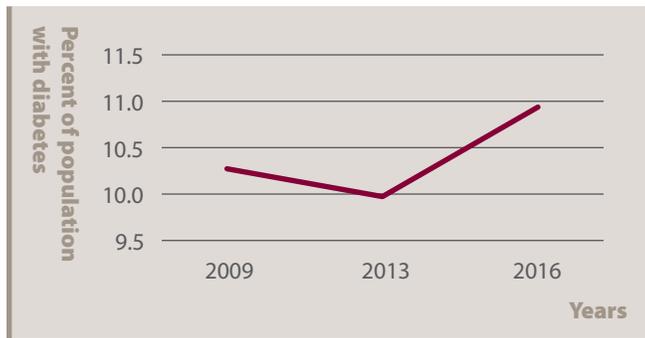
Homelessness

The Point in Time Count from January 2015 suggests that on any given day there are 179 people residing in emergency shelters or transitional housing in Muskegon County. This is a 26.0% decrease from 2013.

Key Community Health Factors (Appendix 2)

Muskegon County

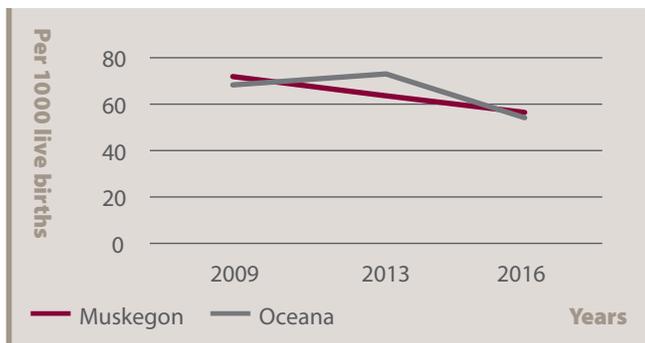
Diabetes



Sexually Transmitted Diseases (STDs) and Teen Pregnancy

STD rates in Muskegon County remain high, but have decreased slightly since 2013, with new cases of gonorrhea dropping from 261 in 2012 to 202 new cases in 2014. Similarly, chlamydia dropped from 1,248 new cases in 2012 to 1,194 new cases in 2014.

Teen Pregnancy



Asthma

Asthma across the population increased dramatically since 2012 from 9.7% to 16.7% of the population having a current diagnosis of asthma.

Emergency Department Overuse

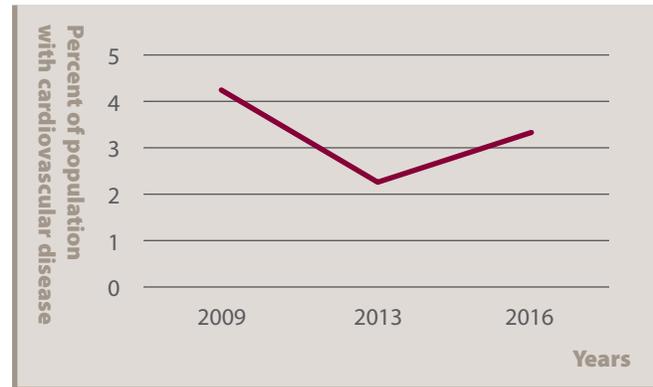
Emergency department overuse continues to be a problem, especially in Muskegon County (Appendix 8: GIS Maps), with nearly 90% emergency department visits being more appropriate for urgent care or primary care utilization. About 10% of the emergency department visits were residents of Oceana County.

Oceana/Newaygo Counties

Asthma

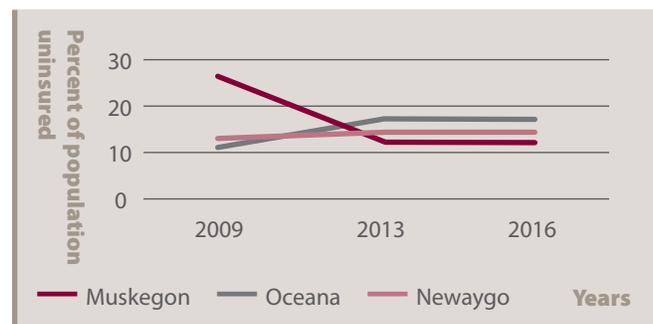
Asthma is a growing trend in Newaygo County as well, with 13.8% of the population having a current diagnosis of asthma in 2012, going up to 17% in 2014.

Cardiovascular Disease

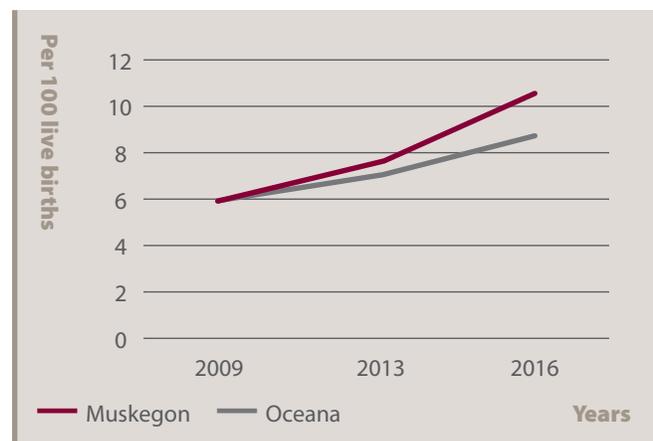


Cross-County Trends

Uninsured Individuals 18–64



Low Birth Weight Babies



Key Environmental Factors (Appendix 3)

Appendix 3 displays various environmental health data for Muskegon, Oceana and Newaygo Counties. State and national data is also included, although the specific environmental data was less available. The majority of these data sets are available through local health departments, including Public Health – Muskegon County and District Health Department #10 (which covers Oceana and Newaygo Counties). A large amount of data was also available through the Michigan Department of Community Health (MDCH) reports and the Community Commons website.

Muskegon County

Unintentional Injury

Death due to unintentional injury rose over the last three years in Muskegon County, from 45 deaths per 100,000 population to 65.6 deaths per 100,000. However, the suicide rate continues to steadily fall in all counties; but most notably in Muskegon County, dropping from 17 per 100,000 deaths in 2012 to 12 per 100,000 deaths.



Oceana County

Unintentional Injury

Death due to unintentional injury also rose dramatically in Oceana County from 45.5 deaths per 100,000 population to 70.3 deaths per 100,000. Newaygo saw similar increases going from 41.1 deaths per 100,000 in 2012 to 68.2 deaths per 100,000. No data was previously available for suicides in Oceana and Newaygo Counties; but in 2014, they were at 14.5 deaths per 100,000 and 13.9 deaths per 100,000, respectively.

Natural Environmental Hazards

Recent data in Community Commons suggests that as much as 18.96% of the population of Oceana County was exposed to unsafe drinking water in 2014.

Health Disparities Data Indicators: Health Disparities Report Card (Appendix 4)

The Health Disparities Reduction Coalition (HDRC) spent much of 2011 and 2012 acquiring data from community, state and national sources to help identify key health disparities in Muskegon and Oceana Counties by race and ethnicity. Specific health indicators were selected as showing significant disparity — low birth weight, poor mental health days, diabetes, STDs and teenage mothers. Also included were several social determinants of health — lack of health care coverage, unemployment, low income, poverty, single parent households and high school graduation rates.

Sources included the 2010 Census; Michigan Department of Community Health reports, including the Behavioral Risk Factor Survey from 2008 to 2010; and the 2012 University of Wisconsin county health rankings. Updated data is not yet available for these indicators by race and ethnicity, as many of these reports are released on five- or ten-year cycles. However, the previous Report Card can be found in Appendix 4, which includes a complete set of the previously collected health disparities data; a set of eleven indicators of health disparity relating to race, ethnicity and language in Muskegon and Oceana Counties.

Key Findings from the Community Input Process

Community Participation and Input

A series of activities and corresponding steps were taken to achieve broad public participation in identifying the health care issues and needs of the community. These included the execution of a detailed consumer health survey, facilitation of a sequence of community conversations and focus groups, and the direct input of Hispanic/Latino residents (year-round and seasonal) generated through a locally arranged forum. The findings are summarized below.

The consumer survey was conducted from early February through mid-March 2015. It was followed by a series of five “community conversations” in three counties during April 2015. Based on the information obtained from the previous community participation activities, eleven topical focus groups were conducted from late April through mid-May 2015. Seven sessions were held in May and June 2015, in which eleven stakeholder groups ranked and prioritized the health issues raised by the community input process. Section 8 in this report summarizes the results of the stakeholder ranking sessions.

Consumer Health Issues Survey (Appendix 9)

A consumer health survey was prepared incorporating a range of questions focusing on the demographic characteristics and personal well-being of respondents and their household members. The instrument sought feedback on a variety of issues relating to one’s health status, ability to access health care services and the quality of care received. The 2015 survey questionnaire (Appendix 9) incorporated several of the health care questions included on similar surveys conducted for the 2009 and 2013 *Community Health Needs Assessments*. This provided an opportunity to gauge possible changes in the health status of the service area.

Survey methodologies included the circulation of hand-distributed paper questionnaires and an online survey with the use of SurveyMonkey. Paper questionnaires were distributed at a range of locations throughout Muskegon and Oceana Counties. Volunteers assisting in this effort and survey locations included Mercy Health Physician Partners offices, Ravenna United Methodist Church, Hope Lighthouse Ministries Food Pantry, Whitehall High School National Honor Society, Senior Resources, Benson Sav-Mor Pharmacy, Mercy Health McClees Clinic, Muskegon-Oceana Affordable Housing Initiatives, Muskegon County Schools Parent-Teacher Conferences, Mercy Campus and Hackley Campus Emergency Departments and surgical waiting areas, Muskegon Lumberjacks, Hackley Community Care Center and School Based Health Centers, Muskegon Family Care, YMCA and, Muskegon and Shelby offices of the Health Project, Drug Free Camp Pentalouan Muskegon County Coalition, Zion Baptist Church, Corinthians Baptist Church, St. Mary’s Catholic Church – Spanish Services, and the District Health Department #10.

A total of 2,463 completed surveys were received, representing an approximate 18% increase over that of the 2013 *Community Health Needs Assessment* (CHNA) survey returns.

Similar to the survey demographic achieved for the 2013 CHNA, the survey participants of the 2015 effort reflected the population profile of the service area. Although responses to the demographic questions were optional, a majority of respondents completed the demographic section. Survey responses revealed input by all age ranges, ethnicities, income groups, employment status sectors, residency types and household sizes found within the study area. That fact, combined with the quantity of completed surveys, resulted in a relatively high level of confidence that the survey data accurately reflected the community at large. This was subsequently borne out through the input received via the other community feedback procedures. A breakdown of those responding to the demographic questions follows. In some instances, the percentages are less than 100% due to the fact that some respondents did not respond to certain questions. The reasons for this may vary and are open to speculation about how people perceive the purposes and uses of surveys, in general.

Survey Response by Age Range

AGE RANGE	PERCENT OF SURVEYS
18–24	6.00%
25–34	18.30%
35–44	20.00%
45–54	19.70%
55–64	17.00%
65–74	7.50%
75 or above	2.70%
No response	8.80%

Survey Response by Race

RACE	PERCENT OF SURVEYS
Caucasian	72.20%
African American	11.30%
Hispanic/Latino	7.20%
Native American	0.01%
Hawaiian/Pacific Islander	<0.01%
Asian	<0.01%
Other	0.02%
No response	9.25%

Survey Response by Annual Household Income

INCOME	PERCENT OF SURVEYS
Less than \$25,000	23.80%
\$25,000–\$50,000	24.00%
\$51,000–\$75,000	26.80%
Over \$75,000	13.80%
No response	11.60%

Survey Response by Employment Status

EMPLOYMENT STATUS	PERCENT OF SURVEYS
Employed full time	52.70%
Employed part time	11.10%
Laid-off	0.01%
Unemployed	0.14%
Retired	11.80%
Student	0.02%
No response	24.23%

Survey Response by Household Size

PEOPLE IN HOUSEHOLD	PERCENT OF SURVEYS
1	11.20%
2	30.00%
3–4	34.80%
5–6	13.80%
More than 6	3.80%
No response	6.40%

Survey Response by Type of Residency

RESIDENCY STATUS	PERCENT OF SURVEYS
Own or buying home	60.30%
Rent home or apartment	19.70%
Live with family/friends	0.09%
Other	0.02%
No response	19.89%

Summary Observations from the Consumer Health Issues Survey

Survey results provided quantitative information on matters of access to health care services and personal wellness for the population at large and various demographic groups. Survey findings were compared for purposes of identifying the frequency of responses, commonalities among respondents, and variations among demographics. The analyses resulted in the identification of a range of health care issues and themes. The following represents a brief overview of significant findings. In some instances, reference to the health care findings of the 2009 and 2013 *Community Health Needs Assessments* is made for purposes of comparison and recognition of change.

Health Care Insurance

Unlike the 2009 and 2012 survey results indicating that approximately 20% of all households lacked health care insurance coverage, the 2015 survey revealed that 95% of respondents possess health care insurance, including some level of coverage for basic office visits and prescriptions. The greatest percentage (79%) indicates coverage is through their employer. The survey also indicated that slightly less than 2% of respondents participate in a medical savings account.

Difficulty in Obtaining Health Care Services

Notwithstanding the improved levels of health insurance coverage, issues remain for many when attempting to secure health care services. Some of the most significant issues include insurance coverage limitations, high co-pays and high deductibles, existing medical debt, securing the services of a primary care physician and/or specialist, lack of dental and vision insurance, and the lack of transportation to health care agencies.

Cost-Related Missed Medical Care

The survey revealed high percentages of households failing to obtain medical services or prescriptions within the past 12 months due to costs. Eighteen percent (18%) indicated cost was a factor in their failure to obtain needed medical services and 24% indicated cost was a factor in their failure to complete a follow-up visit for health services or to secure a recommended medical test or treatment. Twenty-six percent (26%) failed to fill a prescription because of cost. These percentages closely mirror those of the 2012 survey.

Personal Health

In spite of a number of identified health care issues, the majority of respondents rated their personal health as very good (44%). Overall, approximately 92% rated their health as good to excellent. This represents a marked increase over 2009 and 2012 levels at 66% and 78% respectively.

Leading Health Problems

The leading health problems, reported by 10% or more of survey respondents, included high cholesterol (47%), arthritis (29%), diabetes (23%), heart disease (13%), excess weight (53%), cancer (17%), asthma (22%), vision problems (33%), dental health problems (17%), and hearing problems (16%). These were followed by stroke, lung disease, alcoholism and other addictions.

Mental Health

Similar to the 2009 and 2012 findings, depression was again identified as the most prevalent mental health issue. Approximately 42% of the respondents indicated the receipt of a mental health diagnosis for depression by a physician or other health professional. Of these, roughly 20% failed to seek the follow-up services of a mental health professional due to costs. Other significant mental health issues included anxiety, attention deficient and hyperactivity disorders.

Leading Source of Care

Approximately 90% of all respondents reported a private physician's office or clinic as the leading or primary source of care when seeking medical attention. This is slightly up from the 83% reported in 2012. Approximately 7% reported use of hospital emergency rooms as their primary source of care, up from 6% in 2012. Just over 9% reported use of urgent care facilities as their primary source for medical assistance.

Exercise

Approximately 24% of respondents stated they partake in a physical activity, such as walking or running, for at least 30 minutes 4 to 7 days per week. Roughly 50 percent indicated they never exercise or do so up to one day or less per week. These participation rates show significant reductions in exercise levels based on the 2012 survey findings at 36% and 39% respectively.

Patient and Health Professional Interaction

Ninety-five percent (95%) of respondents stated their physician, pharmacist or other health professional explained their health conditions and treatment needs in understandable terms. Ninety-three percent (93%) stated their physician, pharmacist or other health professional explained the purpose of prescribed medications and the instructions for taking them.

Language

A significant majority (almost 99%) indicates the language they speak has not been a problem in communicating with their physician or other health care professional. Of those indicating language has been an issue, a majority (69%) state that interpreter services were not offered.

Race/Ethnicity

A significant majority (almost 98%) indicate they have never experienced problems with obtaining health care services or with the quality of care received due to their race and/or ethnicity.

Flu Vaccination

Similar to past survey findings, a relatively high number of respondents (38%) indicated non-receipt of a seasonal flu vaccination. Of these, approximately 95% indicated cost was not an issue.

Health Care Directive

A majority of respondents (55%) indicated they had not prepared any type/form of health care directive detailing their health care wishes should they be unable to make personal health care decisions and/or named a person or agent to make such decisions on their behalf.

Community Conversations and Focus Groups

Community Conversations are forum-style discussions which take place in communal settings, with audience members speaking as equals for a period of two to three hours to discuss topics of interest. Depending on the geographic setting and local demographic, conversations were comprised of approximately 20 to 60 people with a facilitator. For this project, the basic goal of the conversations was to give participants a chance to voice their opinions and provide input on

local health care issues and concerns focusing on unmet needs, barriers and problems associated with access to health care and quality of care. Topics and questions used during the conversations were largely developed based on the community survey data previously discussed, as well as health care concerns surfacing from traditional data sources. Toward the end of each session, participants were given opportunity to freely express their thoughts on health care matters not previously addressed. All participants are afforded opportunities to comment throughout.

Five community conversations were held as part of the project — two in Muskegon County, two in Oceana County, and one in Newaygo County. The conversation held in Newaygo County was a first-time occurrence for this geographic sector of the overall service area. Participants included representatives of local health care providers, schools, local governments, civic and faith-based organizations, pharmaceutical companies, human services agencies, business and industry, and the general public. An estimated 90 people attended the community conversations.

Focus groups were small, round-table format assemblies of people selected from a wider population and sampled, via open discussion, for their opinions about a particular subject or area. Focus groups are commonly comprised of 8 to 12 people, also convened with a facilitator. A set series of questions or topics is used by a facilitator as he/she solicits group preferences and opinions. The group participants often represent a target audience demographic, such as senior populations, ethnicities, and young adults. The project included two focus group sessions with area teens and a session comprised solely of Hispanic/Latino residents. The Hispanic/Latino group included a mix of year-round and seasonal residents. This represented the first time these demographics were afforded opportunity to participate as unique target audiences in the *Community Health Needs Assessment* focus group process.

Focus groups produce qualitative data (preferences and beliefs) that may or may not be representative of the general population. However, after conducting a series of focus groups and using a range of demographics, the results showed marked similarity in content, leading to the conclusion that they closely reflect the basic opinions of the area's general population base.

In working with community conversation and focus group participants, several key factors were followed by program facilitators to help obtain high levels of input from all participants and to ensure the validity of the findings. These factors included:

- Facilitators remained neutral throughout the process — neither supporting nor challenging comments.
- Caution was exercised by facilitators to avoid giving the impression a particular message was being sought.
- Facilitators employed interactive discussion techniques to make certain all participants were engaged in the process. At each session, all attendees were afforded opportunity to provide input. In most instances, 100% of participants contributed.
- Significant caution was exercised when analyzing and reporting the information, taking care not to overstate the sentiments expressed, leaving out important themes, reporting comments out of context, rewriting information to make the terminology fit a particular audience likely to review the findings, or draw premature conclusions.
- The information and opinions of all groups were considered to be of equal importance. No weighting was applied to the responses of a particular group.

Community Conversations: Summary of Findings

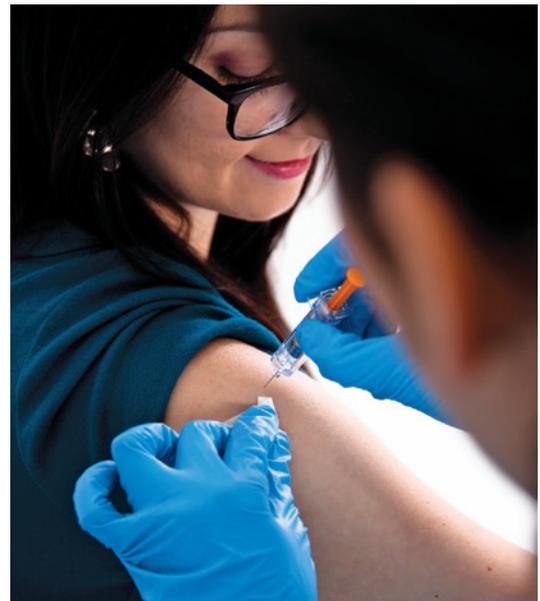
The Community Conversations generated significant feedback on a variety of health care issues and concerns that fell into the range of categories identified below. In some instances, due to their continuing significance, several topics mirrored those found in the 2013 *Community Health Needs Assessment*. Accompanying each category are key findings expressed for the particular topic. The following are grouped based on the conversations held in Muskegon County and those of Oceana and Newaygo Counties. It is important to note that the range of topics discussed at the Muskegon County conversations did not necessarily match those of Oceana and Newaygo Counties. Topical discussion themes were based on the information generated by the public survey and other input techniques. The findings of these processes commonly demonstrated areas of special or unique concern to the populations of the respective geographic areas. The items addressed do not represent a priority of importance.

Community Conversations: Muskegon County

Flu Vaccinations

Cost not being an issue, why are many residents reluctant to obtain flu vaccinations? Does this same disinclination for preventive care apply to other recommended vaccinations as well?

- 1 *People are often not trusting of the health messages originating from health care systems and the government.*
- 2 *There is a somewhat strong disconnect between what the science says and what the general population believes. This disconnect holds true for other recommended vaccinations as well, particularly those for children.*
- 3 *There is a fear and lack of trust of the government and vaccine manufacturers concerning the safety of vaccines.*
- 4 *There is a growing divide between pro-vaccination and anti-vaccination groups. Accordingly, there is a need to create common ground between the two groups.*
- 5 *There are cultural fears by certain ethnicities regarding vaccinations.*
- 6 *There is often a lack of access to vaccinations. Identified were long wait times for appointments to primary care physician offices, lack of sufficient supplies to accommodate need, and a lack of convenient locations at which vaccinations are administered.*
- 7 *Low risk populations and those never experiencing the flu do not perceive vaccinations as necessary.*



Emergency Room Use/Urgent Care

Why do emergency rooms continue to receive high levels of public use for non-emergency situations? Why haven't urgent care offices been able to significantly supplant the use of emergency rooms?

- 1 *Lack of insurance — emergency rooms will always take anyone.*
- 2 *People do not fully understand the purpose/role of urgent care facilities nor the range of services provided.*
- 3 *Urgent care facilities commonly have limited hours of operation.*
- 4 *When a physician's office is called after hours, the caller is commonly directed to the emergency room for treatment.*
- 5 *Historically, hospitals have encouraged the use of emergency rooms through advertising and other means.*

Advance Care Planning/Directives

Why do people commonly avoid advance care planning and the preparation of advance care directives detailing their wishes regarding the receipt of medical treatment should they be unable to communicate those desires to health care providers?

- 1 *Many assume/trust that their spouse, partner, or a close family member is aware of their health care wishes and will carry them out accordingly should the need arise.*
- 2 *Many primary care physicians (physician offices) do not address this matter with patients.*
- 3 *People commonly fail to recognize the need for such planning. Additional education is needed.*
- 4 *The lack of advance care planning is becoming a greater concern for those experiencing dementia, yet are being called upon to make rational health care decisions. This issue becomes compounded when couples, such as a husband and wife, each experience some level of dementia.*

Overweight/Exercise

Survey participants and the data show that excess weight/obesity continue to be a significant health care issue. What are the causes? Why have we been unable to successfully overcome weight issues given the high levels of publicity and education afforded this topic over the past decade?

- 1 *The reduction in physical education classes at our public schools has helped aggravate this issue.*
- 2 *Due to safety concerns (real or perceived), many parents will not allow their children to play outside the confines of their property. As such, physical activity associated with the active use of parks and playgrounds by children is often non-existent or limited.*
- 3 *The consumption of healthy (nutritional) foods is commonly supplanted by foods of lower nutritional value and ones that are likely to be associated with the gaining of weight and other health-related concerns.*
- 4 *Financial restrictions often limit access to physical activities and facilities.*
- 5 *Obesity is a socioeconomic issue. Many times, kids do not have a choice.*
- 6 *Overweight kids correlate to overweight adults.*
- 7 *Weight loss (health care) incentives by insurance companies and employers implemented poorly can be discriminatory. Done right, they can be an excellent motivator while offering cost benefits to all parties. Incentives work much better than penalties.*
- 8 *Fitness locations (i.e., gyms, spas, YMCA) can be intimidating for people who wish to join to lose weight. Care needs to be exercised in making people feel welcome when joining fitness communities. Buddy systems often work.*
- 9 *Physicians are not assertive with patients on obesity.*

High Cholesterol/High Blood Pressure

Survey participants and the data show that high cholesterol and high blood pressure are significant health care issues. Why and what is needed?

- 1 *Poor diets, lack of exercise and stress are prevalent and need to be addressed to help overcome these issues.*
- 2 *Too many people assume that "taking a pill" addresses their problems. As such, they often fail to modify their lifestyles in order to help alleviate these issues.*
- 3 *Additional screening is needed as many people may not realize they experience one or both of these health care concerns. As a result, they are likely to avoid taking action to resolve them.*

Arthritis

Survey participants and the data show that arthritis affects a notable number of people. What programs or steps might be taken to assist people experiencing arthritis?

- 1 *Improve access to health care professionals specializing in pain management.*
- 2 *Improve access to health care professionals specializing in the role nutrition plays in arthritis.*
- 3 *Educate people on the benefits of holistic medicines and practices.*
- 4 *As a consequence of their pain, people experiencing arthritis may fail to participate in physical activities (i.e., walking and other forms of exercise), work in concert with pain management specialists or develop physical activity regimens to reduce the incidence of other health care issues resulting from the avoidance of physical activities.*

Binge Drinking

Survey participants and the data show that binge drinking, as well as other forms of substance abuse, rank relatively high among our residents. Binge drinking is particularly frequent among older teens and young adults and senior adults. Why is binge drinking rather common and what might be done to reduce the incidence of this health care issue?

- 1 *Binge drinking represents a reaction to the general chaos of the world. People lack hope and wish to escape.*
- 2 *It has become a social norm for Muskegon, especially among young adults.*
- 3 *The outdoor sports flavor of Muskegon includes drinking as a normal part of the outdoor experience.*
- 4 *As a self-medication, alcohol is easier, more acceptable and more easily obtained than prescription medication and other substance abuse products.*
- 5 *The area's lack of employment leads to depression for those wishing/needing to work. Binge drinking helps to self-medicate these individuals.*
- 6 *Drinking is fun, affordable and culturally acceptable! The marked increase in the consumption of wine indicates the acceptance of social drinking, which may lead to excessive alcohol abuse.*

- 7 *Muskegon lacks detoxification facilities and an adequate number of substance abuse counselors. The jail is not the right place for individuals to detoxify.*
- 8 *People lack relationships and turn to drinking and drug use to escape.*
- 9 *Post-traumatic stress disorder among our veterans is an issue and cause of substance abuse.*

Depression and Anxiety

Depression and anxiety continue to represent significant health care concerns for Muskegon County. What are primary causes?

- 1 *The area's poor economy and poverty.*
- 2 *People lack relationships and turn to drinking and drug use to escape.*
- 3 *The social isolation of people.*
- 4 *Stigma to be on medications that may help.*
- 5 *Post-traumatic stress disorder among our veterans is an issue and cause of substance abuse.*
- 6 *Lack of connection between primary care physicians and mental health providers.*
- 7 *Lack of local mental health providers.*
- 8 *Barriers to accessing help, especially for teenagers.*
- 9 *Difficulty in scheduling appointments outside of daytime working hours.*
- 10 *Lack of insurance or other financial assistance.*





Asthma

Asthma surfaced as an important health care issue. What are the primary reasons?

- 1 *Second-hand smoke continues to represent an aggravating factor in the occurrence and management of asthma. An environmental influence associated with products used in homes is also a factor.*

Other Issues

Other health care issues that were identified by attendees as important included:

- 1 *Divergent views on women's reproductive services and care.*
- 2 *Inactivity among an aging population.*
- 3 *Sustaining life via medication without regard to the quality of life.*
- 4 *Youth and the availability of firearms.*
- 5 *Competency and awareness education about the care of bisexual and transgender patients.*
- 6 *Sexually transmitted diseases. We are a highly sexualized society, but commonly avoid discussion surrounding it to educate youth and young people (or parents).*
- 7 *Lack of transportation as a deterrent to the receipt of health care services.*
- 8 *Need for improved use of hospice services. Many patients enter too late.*
- 9 *Low birth weight babies due to addictions.*

- 10 *Community, especially youth, viewing marijuana as acceptable and non-risky.*
- 11 *Long-term care with an increasing elderly population.*

Community Conversations: Oceana and Newaygo Counties

Flu Vaccinations

Cost not being an issue, why are many residents reluctant to obtain flu vaccinations? Does this same disinclination for preventive care apply to other recommended vaccinations as well?

- 1 *People are often not trusting of the health messages originating from health care systems and the government.*
- 2 *There is a somewhat strong disconnect between what the science says and what the general population believes. This disconnect holds true for other recommended vaccinations as well, particularly those for children.*
- 3 *There is a fear and lack of trust in the government and vaccine manufacturers concerning the safety of vaccines.*
- 4 *There is a growing anti-vaccination movement throughout the country.*
- 5 *Some people are concerned that needles are reused for the application of flu vaccinations.*
- 6 *Low risk populations and those never experiencing the flu do not perceive vaccinations as necessary.*

Advance Care Planning/Directives

Why do people commonly avoid advance care planning and the preparation of advance care directives detailing their wishes regarding the receipt of medical treatment should they be unable to communicate those desires to health care providers?

- 1 *Basic day-to-day survival needs are more important than worrying about advance care directives.*
- 2 *People commonly fail to recognize the need for such planning. Many do not wish to address the matter. Additional education is needed.*
- 3 *There is no one in the county addressing or advancing the issue.*

Overweight/Exercise

Survey participants and the data show that excess weight/obesity continue to be a significant health care issue. What are the causes? Why have we been unable to successfully overcome weight issues given the high levels of publicity and education afforded this topic over the past decade?

- 1 *The reduction in physical education classes at our public schools has helped aggravate this issue.*
- 2 *The consumption of healthy (nutritional) foods is commonly supplanted by foods of lower nutritional value and ones that are likely to be associated with the gaining of weight and other health related concerns.*
- 3 *People need to be educated on the importance of healthy foods and on how to prepare them.*
- 4 *Financial restrictions often limit access to physical activities and facilities.*
- 5 *Obesity is a socioeconomic issue — many times kids do not have a choice.*
- 6 *Overweight kids correlate to overweight adults.*
- 7 *Weight loss (health care) incentives by insurance companies and employers implemented poorly can be discriminatory. Done right, they can be an excellent motivator while offering cost benefits to all parties. Incentives work much better than penalties.*
- 8 *Physicians are not assertive with patients on obesity.*
- 9 *This is a community issue and not a hospital issue. However, the hospital can provide needed education on nutrition and weight control matters.*
- 10 *Food donation sites are concerned about “filling stomachs” versus focusing on providing nutritional foods and educating people on the importance of eating healthy.*

High Cholesterol/High Blood Pressure

Survey participants and the data show that high cholesterol and high blood pressure are significant health care issues. Why?

- 1 *The environment, stress, obesity, smoking, anxiety, and lack of exercise are major contributing factors.*
- 2 *Genetics and ethnicity contribute to cholesterol and blood pressure issues.*



Binge Drinking

Survey participants and the data show that binge drinking, as well as other forms of substance abuse, rank relatively high among our residents. Binge drinking is particularly frequent among older teens and young adults and senior adults. Why is binge drinking rather common?

- 1 *As a self-medication, alcohol is easier, more acceptable and more easily obtained than prescription medication and other substance abuse products.*
- 2 *Depression due to loss of employment, family issues, poor health and other matters leads to the excessive use of alcohol and other addictive products.*

Depression and Anxiety

Depression and anxiety represent significant health care concerns for Oceana and Newaygo Counties. What are primary causes?

- 1 *The area's poor economy and poverty.*
- 2 *Stigma to be on medications that may help.*
- 3 *Lack of local mental health providers and services.*
- 4 *Difficult to schedule appointments outside of daytime working hours. This is particularly critical for farm workers who commonly work long hours during the seasonal growing periods.*
- 5 *Presence of a large, undocumented, population who avoid seeking medical assistance.*
- 6 *Lack of insurance or other financial assistance.*

Medications

Participants indicated several concerns regarding the purpose and application of prescribed medications, especially among those lacking literacy in medical matters as well as many non-English speaking patients.

- 1 Many people are not widely literate on medical matters regarding the purpose, use, and side effects of medications. It would be beneficial for these folks to have a patient advocate to assist.
- 2 Some Hispanics/Latinos do not speak English and experience literacy issues regarding the purpose, use and side effects of medications and importance of following through with prescribed treatment regimens. Medications are commonly labeled in English. This can represent an issue for non-English speaking patients. Such patients should be afforded the opportunity to be assisted by a qualified interpreter.
- 3 People who are not symptomatic may not continue with their medications because they are not experiencing symptoms for which the medication and treatment regimes were intended to address. Patient education is needed at the time medications are prescribed.

Vision Care

Vision care was identified as an important issue for the residents of these counties.

- 1 Lack of medical providers.
- 2 Vision is critical to one's ability to drive. Given the lack of public transportation, people experiencing vision issues that restrict them from driving commonly have a difficult time availing themselves of needed medical services. This is particularly acute among our aging population.

Other Issues

Other health care issues identified by attendees as issues of importance included:

- 1 The increase in dementia among a growing elderly population.
- 2 Need for cultural competency within the health care profession.
- 3 Competency and awareness education about the care of bisexual and transgender patients.
- 4 Sexually transmitted diseases among our youth.
- 5 Lack of transportation as a deterrent to the receipt of health care services.
- 6 Smoking.
- 7 Need for dental insurance and dental providers.

Community Focus Groups: Summary of Findings

Based on the responses gained from the community conversations and information collected from the health care surveys and other informational sources, eight focus groups were assembled addressing health care issues for Muskegon, Oceana and Newaygo Counties (See Appendix 10). The groups were charged with reacting to key health care issues of community concern and providing input and direction on each. A physician focus group was also convened. Topics for the focus groups included:

- 1 Fitness and access to healthy foods
- 2 Health care disparities
- 3 Seniors, and persons with disabilities, health issues
- 4 Hispanic/Latino health needs and issues
- 5 Youth and young adult health

Selected findings of the focus groups are briefly identified as follows:

Fitness and Access to Healthy Foods

- 1 Parents feel it is unsafe to allow their children to play outdoors, thus limiting their level of physical exercise and conditioning resulting from outdoor play. The declining use of public parks was given as an example.



- 2 *Parents are afraid of un-chaperoned play away from home due to bullying issues.*
- 3 *The lack of physical education (play and instruction) as a requirement in our public schools is a major contributor to childhood obesity.*
- 4 *Nutrition education is generally not a matter discussed by primary care physicians pursuant to the treatment and care of patients.*
- 5 *The use of “convenience” foods is simply easier than preparing meals, often less expensive, and readily consumed.*
- 6 *Fitness and nutrition education are vital and need to start when children are young.*

Health Care Disparities

- 1 *Improved public transportation systems/methods are needed. The lack of public transportation particularly impacts the opportunity for low and moderate income people, the elderly, and others to conveniently access many services.*
- 2 *Residents new to the area often find it difficult to learn of available health care services.*
- 3 *The area lacks a sufficient number of sign language interpreters.*
- 4 *Health care providers lack adequate experience regarding the care of bisexual and transgender patients.*
- 5 *There is a significant rise in the occurrence of depression among African American and Hispanic/Latino men. Additional efforts need to be employed to address this issue.*
- 6 *Homelessness in the area appears to be increasing. We do not seem to know how to address this problem.*

Seniors, and Persons with Disabilities, Health Issues

- 1 *Improved public transportation systems/methods are needed. The lack of public transportation particularly impacts the opportunity for the elderly and those with physical and/or mental disabilities to conveniently access many health care services.*
- 2 *Depression among seniors is increasing.*

- 3 *Binge drinking among seniors is increasing. Many attributed this to increasing depression among the senior populace.*
- 4 *The presence of dementia and Alzheimer’s among the elderly is on the rise.*
- 5 *Many insurances do not cover durable medical equipment.*
- 6 *Many seniors and those with disabilities lack advance care planning.*

Hispanic/Latino Health Needs and Issues

- 1 *Language is a major barrier in the receipt of health care services.*
- 2 *Securing the services of a medical specialist is very difficult given language barriers, costs and travel distances.*
- 3 *Accessing medical services during normal business hours (for farm workers) often results in a loss of income and/or requires significant pre-notice to the employer of the need to take time off for health care needs.*
- 4 *Women commonly avoid/deter accessing recommended health screenings due to costs, childcare, and related matters.*
- 5 *For seasonal residents, maintaining or accessing medical records can be an issue when seeking medical care.*
- 6 *Depression and substance abuse is on the rise among Hispanic/Latino men.*





Youth and Young Adult Health

- 1 Parents and others fail to educate (talk) to young people about issues such as alcohol, substance abuse, sex and other health care topics of importance.
- 2 The use of marijuana is becoming more prevalent among young people.
- 3 Sex is fun and the consequences are seldom considered.
- 4 Many parents over-structure their children's lives preparing them for adulthood.
- 5 Depressed teens commonly have parents who are similarly experiencing depression.
- 6 Teens and young adults with mental health issues view that as a stigma and will self-medicate with alcohol or drugs versus accessing professional treatment and medications.

Physicians and Office Manager Focus Groups

Two focus groups were held with physicians and office managers of local primary care practices to receive feedback on selected issues that surfaced during the community conversations and other focus group sessions. The topics addressed were: advance care planning, use of hospice services and handling patients experiencing dementia.

Summaries of findings included:

Advance Care Planning

- 1 Time constraints prevent extensive conversations on this matter from generally occurring.
- 2 Physicians and office staff commonly lack education on advance care planning.
- 3 Patient demand for advance care planning education was questioned.
- 4 Typically, we do ask patients if they have an advance care plan.

Hospice

- 1 Primary care providers do try to make referrals early, but the hospitalists/specialists are less likely to do so because there are so many more options for treatment.
- 2 When families get involved, it is common for the timeline to be extended.
- 3 Hospice policies are inconsistent from one facility/organization to another.
- 4 Patients are reluctant. "It's a death sentence" or "My doctor is giving up on me."
- 5 The community needs more education on what hospice is and what it is for.

Dementia

- 1 It is about knowing and connecting with community resources.
- 2 We try to connect with other members of the family, but it can be difficult.
- 3 This is a highly individualized society and we believe in individual choice. At what point do we determine that their decisions are actually harmful to themselves or their spouse?
- 4 We do not have the time or the training.
- 5 It is about knowing and connecting with community resources.
- 6 Care managers should be trained in Five Wishes.
- 7 This is a societal problem. The community needs more education.

Ranking and Prioritizing the Findings

Data analysis and the community input components yielded 26 health issues of concern in Muskegon County and 21 health issues in Oceana and Newaygo Counties. Ranking sessions were held in Muskegon and Oceana Counties, with eleven stakeholder groups, representing health and human service providers, business and consumers. In Muskegon County, these were: 1 in 21/Wellville Committee, United Way Agency Directors, Continuum of Care Case Managers Committee, Muskegon County Health Disparities Reduction Coalition, Mercy Health Mission Services Committee, and the Mercy Health Community Health Needs Assessment Advisory Council (which included representatives from all three counties in the service area).

In Oceana County, these were: District Health Department #10 (includes Oceana and Newaygo Counties), Oceana Health Disparities Reduction Coalition, Oceana County Migrant Resources Council, and the Mercy Health Lakeshore Campus Board of Trustees.

The groups were given a list of un-prioritized health issues raised in the CHNA community input process and asked to categorize each issue according to the service sector they felt should take the *lead* role in addressing the particular issue. Direction was given that these service sectors were not exclusive; on the contrary, most issues cross over into other sectors and require collaborative effort among several organizations. This is especially true of many social determinants of health: social inequality (race, ethnicity, language), economic factors (income, employment, wealth), social and physical environment (housing, social cohesion, transportation, political influence, air/water quality) and individual health behaviors (smoking, alcohol, drug abuse).

The service sector choices given were: the health system, which included the hospitals, physician practices and public clinics; public health, which included the local health departments; and com-

munity, which included schools, mental health and other governmental agencies, community-based and faith-based organizations.

Once sorted by domains, the groups were then asked to rank the issues under each on a scale of 1 to 5, with 5 meaning most significant. The scoring was based on four criteria: (1) *severity*, magnitude or urgency of the health issue; (2) *feasibility*, in terms of resources available and surmountable barriers; (3) *potential impact* on the greatest number of people; and (4) *achievability* within the three years covered by the CHNA. A web-based software, PollEverywhere.com, was used to conduct real-time ranking with immediate feedback.

Final rankings of issues selected for the health system to take the lead role were determined by the Health Project Advisory Board of Directors, which serves as the community benefit ministry for Mercy Health Muskegon; and the Mercy Health Lakeshore Campus Board of Trustees, which provides critical care hospital services to Oceana, Newaygo and northern Muskegon County residents.

Muskegon County Health System Rankings

Seven ranking sessions were held in Muskegon County. The resulting top five and secondary five issues for the health system to take the lead role on are:

Health System Rankings: Muskegon County

TOP FIVE

- 1 Care coordination/patient advocacy
- 2 Access to primary care
- 3 Lack of mental health providers
- 4 Diabetes
- 5 Lack of substance abuse providers

SECONDARY FIVE

- 6 Emergency department overuse
- 7 Cardiovascular disease
- 8 Hypertension
- 9 Cultural sensitivity training for providers
- 10 High cholesterol



Oceana and Newaygo County Health System Rankings

Two ranking sessions were held in Oceana County that included health and human service providers serving the resident and migrant communities in Oceana and Newaygo Counties. The top five and secondary five issues selected for the health system to take the lead role on for Oceana and Newaygo Counties are as follows:

Health System Rankings: Oceana/Newaygo Counties

TOP FIVE

- 1 Access to specialty care
- 2 Access to primary care
- 3 Cardiovascular disease
- 4 Hypertension
- 5 Diabetes

SECONDARY FIVE

- 6 Health coverage
- 7 Cancer
- 8 Access to urgent care
- 9 Access to medication
- 10 Patient/provider communication

Health Issue Rankings for Public Health and Community Sectors

Public Health Sector

The top five issues selected for public health to take the lead role on are:

Health Issue Rankings: Public Health Sector

MUSKEGON COUNTY

- 1 Teen pregnancy
- 2 Overweight
- 3 Lack of mental health providers
- 4 Low birth weight babies
- 5 Women's reproductive health

OCEANA/NEWAYGO COUNTIES

- 1 Obesity/overweight
- 2 Teen pregnancy
- 3 Health care coverage; STDs/chlamydia (*tied*)
- 4 Low birth weight babies
- 5 Depression/anxiety

Community Sector

The top five issues selected for the community to take the lead role on are:

Health Issue Rankings: Community Sector

MUSKEGON COUNTY

- 1 Transportation
- 2 Depression and social isolation
- 3 Access to healthy food
- 4 Physical fitness
- 5 Senior isolation

OCEANA/NEWAYGO COUNTIES

- 1 Obesity/overweight
- 2 Binge drinking, youth and adults over 65
- 3 Depression/anxiety
- 4 Teen pregnancy
- 5 Transportation

Reflections on the CHNA Process and Lessons Learned

General Thoughts

The Affordable Care Act and the IRS' Final Rule on Community Health Needs Assessments emphasizes the need to proactively solicit meaningful input from the "broad interests of the community," especially hard-to-reach population segments, like "members of medically underserved, low income and minority populations or individuals or organizations who represent the interests of such populations."

Moreover, hospital facilities must describe how and when that input was provided. Compliance with this standard requires substantial time and effort to engage all interested sectors and patient populations of the hospital's service area. Fully committed community partners and a variety of outreach techniques are therefore necessary to cast a wide net and accomplish this objective. It also means that considerable time must be devoted to analyzing and synthesizing the range of information received from many different sources.

Consumer Survey

Conducting a formal, stratified consumer survey that oversamples for minority and other hard-to-reach populations is prohibitively costly and generally unnecessary. On the other hand, an unscientific consumer survey is a valuable source of information when combined with the health and community data available to structured forums, focus groups and interviews around the health issues most relevant to our service area. Online survey techniques are effective in getting information from the more affluent consumers, but the use of paper survey questionnaires remains important to receiving information from population segments that may not commonly access electronic media systems, such as elderly and low-income segments.

This is the second CHNA to use both online and paper surveys to obtain consumer information. Distribution and return of paper survey questionnaires can be challenging and requires assistance from partner agencies. We had many individuals,

public and private organizations known to interact with hard-to-reach population volunteer to administer the survey by hand. Making them part of the CHNA team helped to ensure all "communities" were adequately represented. Our return was respectable, our validation rate was 92.6%, and the demographic summary at the beginning of Section VII indicates a fair representation of our three-county population.

Community Forums and Focus Groups

Again, we found that it takes two to three months to adequately plan, schedule, promote and recruit participation at community forums, town meetings, and focus groups. Since "critical mass" attendance at these events is important to their success, it is wise to consider combining or eliminating some events when it appears there will not be sufficient community participation. This will save time and expense for the process.

Many participants in these events will be repeaters themselves or representatives from organizations that participated in previous CHNA-related sessions. We learned it is important to inform the participants of the CHNA-related achievements realized since their prior involvement. We also realized that we cannot assume all parties are broadly familiar with each other's roles in the community. Experience consistently shows they are not.

Ranking Sessions

For this CHNA, the ranking sessions were changed from paper/pencil format to web-based software, Poll Everywhere. Each participant accessed the software from an internet accessible device (laptop, tablet or smartphone); categorized issues and then ranked them within pre-set parameters. Use of this software cut time spent in the ranking session in half for the participants and decreased the time spent in analysis for staff by over 90%.

Next Steps

1. **Developing an Implementation Strategy** according to the requirement of the Affordable Care Act of 2010, Final Rule, will require the hospital system to develop an action plan to address the health issues identified in the CHNA, which the hospital leadership determines to be significant health issues for the hospital system to address during the next three years. As part of this

document, the hospital system must also provide a rationale for why it is not addressing other identified needs. The ranking and prioritizing results from community stakeholder groups in the CHNA will be most helpful in completing the Implementation Strategy. The decisions will be made by the community benefit, medical providers and financial leaders of Mercy Health Muskegon. The Implementation Strategy will commit hospital system resources for the selected health issues for all three Mercy Health campuses.

2. **Continue working with Public Health Departments** for closer coordination, if not integration, of consumer health needs surveying in the future. We need to explore structuring community input strategies so that the information is useful for both the *Community Health Needs Assessments* required of the hospital system and the Health Improvement Plans required of health departments. This will promote consistency in survey techniques, mitigate redundancy and reduce unnecessary expense to both organizations.
3. **Continue to advance community benefit services in Oceana and Newaygo Counties through the Health Project's satellite office in Shelby, Michigan.** Combined with new community benefit funding in the Lakeshore Campus budget for Fiscal Year 2016 and new Health Project staff added to this office, community benefit programming will be expanded in Oceana and Newaygo Counties. A specific need expressed during the CHNA process was for wider awareness and communication about currently available health and human services. Additional town meetings, community forums and other group presentations were requested on existing services, how to access health care and other support services, as well as improved patient/consumer advocacy.
4. **The newly added Graphic Information System maps** depicting Food Scarcity, Recreation and Fitness Facilities and Emergency Department Use for Primary Care (Appendix 8) suggest that we need to develop a comprehensive plan to widen access to healthy foods, physical fitness opportunities and primary care homes. The GIS maps depict Muskegon County only, since the data needed for mapping Oceana and Newaygo Counties was not available at this time. However, this applies to both rural and urban areas if we expect to affect positive changes in the health of our service population and our standing in future University of Wisconsin County Rankings.

Appendices

The following pages contain supporting documentation on the findings of the Community Health Needs Assessment and provide a useful resource to the community at large.

- Appendix 1** Community Data
- Appendix 2** Health Data
- Appendix 3** Environmental Data
- Appendix 4** Health Disparities Report Card
- Appendix 5** University of Wisconsin Population Health Institute 2015 County Rankings
- Appendix 6** Community Access Line of the Lakeshore (Call 2-1-1): 2014 Requests & Unmet Needs
- Appendix 7** 2013–2014 Michigan Profile for Healthy Youth (MiPHY)
- Appendix 8** Graphic Information System (GIS) Maps for Muskegon County:
Food scarcity
Recreation and fitness facilities
Emergency department use for primary care (low acuity conditions)
- Appendix 9** 2015 Consumer Health Survey Questionnaire
- Appendix 10** 2015 Focus Group Participants

Appendix 1: Community Data

Data Sets*	Muskegon Co.	Oceana Co.	Newaygo Co.	Michigan	United States
Population					
2014 Estimate**	172,344	26,221	47,900	9,909,877	318,857,056
2020 Projection	174,199	26,270	49,053	10,454,700	337,084,113
Gender					
Male	49.70%	50.50%	50.40%	49.10%	49.20%
Female	50.30%	49.50%	49.60%	50.90%	50.80%
Age Range by Percent of Population					
Less than 18 Years***	24.10%	24%	23.50%	22.70%	
18 Years and Over	74.50%	74.60%	74.10%	75.70%	76.00%
21 Years and Over	70.30%	70.90%	70.30%	71.10%	71.60%
62 Years and Over	16.00%	19.80%	17.80%	16.20%	16.20%
65 Years and Over***	14.80%	18.7	17.30%	15.00%	
18 Years and Over by Gender					
Male	49.20%	50.10%	49.90%	48.40%	48.50%
Female	50.80%	49.90%	50.10%	51.60%	51.50%
Age Breakdown (Years) for Total Population					
Under 5	6.70%	6.90%	6.40%	6.20%	6.50%
5 to 9	6.80%	6.50%	6.50%	6.60%	6.60%
10 to 14	7.30%	7.00%	7.80%	7.00%	6.70%
15 to 19	7.60%	7.70%	7.80%	7.60%	7.10%
20 to 24	6.30%	5.10%	5.40%	6.70%	7.00%
25 to 34	12.40%	10.00%	10.30%	11.90%	13.30%
35 to 44	13.00%	11.90%	13.00%	13.60%	13.30%
45 to 54	15.20%	15.30%	15.70%	15.30%	14.65
55 to 59	6.70%	7.10%	6.70%	6.60%	6.40%
60 to 64	5.00%	6.50%	5.80%	5.20%	5.40%
65 to 74	6.80%	9.00%	8.50%	6.90%	7.00%
75 to 84	4.80%	4.80%	4.40%	4.50%	4.20%
84 and Above	1.80%	2.20%	1.80%	1.80%	1.80%
Ethnicity***					
White	77.10%	82.80%	90.70%	77.10%	62.60%
Black or African America	14.20%	0.70%	1.20%	14.20%	13.20%
American Indian and Alaskan Native	0.80%	1.50%	0.80%	0.80%	0.90%
Hispanic or Latino	5.20%	14.10%	5.80%	5.20%	17.10%
Asian	0.50%	0.30%	0.40%	0.70%	5.00%
Native Hawaiian and Other Pacific Islander	0.00%	0.10%	0.00%	0.00%	0.20%
Language Spoken at Home (Population 5 and Over)					
English Only	95.90%	89.00%	94.50%	91.10%	80.40%
Language Other than English***	4.20%	11.50%	5.20%	4.20%	20.70%
Spanish	2.80%	9.50%	3.60%	2.90%	12.20%
Crime (by number of incidents)****					
Burglary	717	287	38	NA	NA
Motor Vehicle Theft	126	53	12	NA	NA
Violent Crimes	336	92	52	NA	NA

*All data from 2010 U.S. Census unless otherwise noted.

**U.S. Census Update, 2014

***U.S. Census Update, 2013

****Data from Federal Bureau of Investigation Reports, 2012

Appendix 2: Health Data

Indicator	Muskegon County	Oceana County	Newaygo County	Michigan	United States	Source
Diabetes						Michigan Department of Health and Human Services, 2013 (MI only)
Incidence per 1,000	11.1	10.3	11.1	10	9.1	Centers for Disease Control and Prevention, 2012 & 2014
Cardiovascular Disease						Centers for Disease Control and Prevention, 2013 (U.S. only)
Ever Told Angina or Coronary Heart Disease	4.70%	1.80%	4.20%	5.01%	11.30%	Michigan Behavior Risk Factor Survey, 2012
Asthma						Centers for Disease Control and Prevention, 2013 (U.S. only)
Current Asthma Prevalance (18+)	16.70%	5.40%	17.00%	15.18%	7%	Michigan Behavior Risk Factor Survey, 2012
Teen Pregnancy						Michigan Department of Health and Human Services, 2013 (MI only)
						U.S. Department of Health and Human Services, 2013 (U.S. only)
Rate per 1,000 live births	59.4	57.8	70.3	38.2	26.5	University of Wisconsin Community Health Ranking, 2015
Low Birth Weight						
Low Birth Weight babies (< 5.6lbs) per 100 live births	8.6	6.3	6.6	8.3		University of Wisconsin Community Health Ranking, 2015
Vaccination						
Flu Vaccination, Annual	77.40%	72.20%	72.20%	66.20%	NA	Michigan Behavior Risk Factor Survey, 2012
STD						
Gonorrhea: New Cases	202	2	3	NA	NA	Centers for Disease Control and Prevention, 2012
Chlamydia: New Cases	1194	64	117	NA	NA	University of Wisconsin Community Health Rankings, 2014
HIV/AIDS						Michigan Department of Health and Human Services, 2014
Prevalance	160	NA	NA	18,800	1,200,000	Centers for Disease Control and Prevention, 2014 (U.S. only)
Cancer						
Annual Deaths from All Cancers/100k of Population	109.9	160.6	200.2	NA	NA	National Vital Statistics System, 2011
Injury						
Deaths from unintentional Injury/100k of population	46.7	52.7	48.6	NA	NA	National Vital Statistics System, 2011
Alcohol Use						
Binge Drinking in the past month (18+)	21.70%	21.60%	17%	17.70%		Michigan Behavior Risk Factor Survey, 2012
Excessive Drinking in the past month (18+)	23.00%	22.20%	19%	18.90%		Michigan Behavior Risk Factor Survey, 2012
Obesity						
Obese (BMI >30)	35.50%	35%	35.30%			University of Wisconsin Community Health Rankings, 2014
Overweight (BMI 26-29)	34.60%	23.70%	30%	34.35%		Michigan Behavior Risk Factor Survey, 2012

Mental Health

2015 Consumer Health Issues Survey: Respondants Reporting Mental Health Illness from 2015 Consumer Health Issues Survey

Diagnosis	# Muskegon Responses	% of Total Muskegon Responses	# Oceana Responses	% of Total Oceana Responses	# Newaygo Responses	% of Total Newaygo Responses	# Total Responses	% of Total Responses
Schizophrenia	46	2.05%	2	0.72%	9	8.82%	60	2.40%
Depression	699	31.18%	139	50.36%	33	32.35%	871	35.40%
Anxiety	385	17.17%	146	52.90%	8	7.84%	739	30.00%
Bi-Polar Disorder	213	9.50%	30	10.90%	16	16.68%	259	10.51%
ADHD	269	12.00%	57	20.65%	14	13.73%	340	13.80%
Autism	45	2.00%	10	3.62%	8	7.84%	63	2.56%
Intellectual and Developmental Disabilities	49	2.19%	7	2.54%	4	3.92%	60	2.40%
Substance Abuse	138	6.16%	16	5.80%	6	5.88%	160	6.49%
PTSD	84	3.75%	24	8.70%	12	11.76%	120	4.87%
Other Mental Health Disorder	66	2.94%	23	8.34%	4	3.92%	93	3.78%

Appendix 3: Environmental Data

Data Set	Muskegon Co.	Oceana Co.	Newaygo Co.	State	U.S	Source
Food/Water/Vector-borne Diseases Diagnosed	48 (Campylobacter, Cryptosporidiosis, E.coli, Giardiasis, Shigellosis, Yersinia, Lyme Disease)	15 (Giardiasis, Cryptosporidiosis, Campylobacter, Salmonellosis, Shiga Toxin E. Coli, Hepatitis A, Norovirus)	20 (Giardiasis, Cryptosporidiosis, Legionellosis, Campylobacter, Salmonellosis, Hepatitis A)	4368 (Hep A & B, Legionellosis, Listeriosis, Lyme Disease, Malaria, Rocky Mt. Spotted Fever, Salmonellosis, Shiga Toxin E. Coli, Shigellosis, Vibriosis (non-cholera), Yersinia enteritis, Amebiasis, Botulism, Campylobacter, Cryptosporidiosis, Dengue Fever, Giardiasis)	NA	PHMC, 2014; DHD #10, 2012 MDCH, 2012
Animal bites/Exposures	371	72	84	NA	NA	PHMC, 2014; DHD #10, 2013
Animals Positive-Rabies w/exposure occurring	1	0	0	42	6,154 (CDC, 2010)	MDCH, 2014
Toxic Chemical Releases (lbs)	1,748,097	7,770	18,933	69,618,166	4,144,950,423	US EPA – TRI Explorer, 2013
Lead Poison Cases/Levels (> age 6)						
10-14 µg/dL	9	0	0	471		
15-19 µg/dL	5	0	0	162	NA	MDCH, 2012
20-44 µg/dL	2	1	0	146		
≥ 45 µg/dL	0	0	0	9		
Lead-High Risk Homes	25.8%	25.8%	19.3%	24.7%	NA	MDCH, 2012
Radon Poison Cases						
Radon At-Risk Homes						
Fatal Injuries: Suicide (per 100,000)	24	3	9	12.7	NA	MDCH, 2012
Motor vehicle accident mortality (per 100,000)	16	9	13	10.9	NA	MDCH, 2012
Fatal Injuries: Other unintentional (per 100,000)	50	8	10	26.9	NA	MDCH, 2012
Failed Septic Systems	125	66	45	NA	NA	PHMC, 2014; DHD #10, 2013

Appendix 4: Health Disparities Report Card



Appendix 4: Health Disparities Report Card

Indicators for Muskegon County

Indicators	Michigan Total	Muskegon County Total	African American ⁽²⁾	Hispanic ⁽²⁾	White ⁽²⁾	Source
Muskegon						
Population	9,888,640	172,188	24,967	8,265	133,101	2010 Census
Health Indicators						
Premature Death: years of potential life lost before age 75 per 100,000 population (age adjusted)	7,273	7,356	NA by race/ethnicity	NA by race/ethnicity	NA by race/ethnicity	2012 UW County Health Rankings
Infant Mortality: ratio of infant deaths per 1,000 live births in specified group	7.5	6.6	N= too small	N= too small	5.9	MDCH, '07-'09
Low Birthweight⁽³⁾: ratio of low weight babies (5.5 lbs) per 1000 live births	84.4 (08-10)	83.4 (08-10)	112.9 (07-09)	Data NA	76.6 (07-09)	MDCH
Poor Mental Health Days: % poor mental health days on at least 14 days in the past month:	10.70%	12.60%	19%	N= too small	13.40%	MiBRFS, '08-'10
Poor Physical Health Days: % reporting poor physical health on at least 14 days in the past month	10.8%	12.3%	15.7%	N= too small	12.7%	MiBRFS, '08-'10
Diabetes: proportion of adults with diabetes	9.5%	10.20%	12.40%	N= too small	9.00%	MiBRFS, '08-'10
STD^(3,4,5): # of reported cases of Chlamydia in 2010	Data NA	1,228	729	Data NA	406	MDCH, 2012
STD^(3,4,5): rate p/100K Identified cases of Chlamydia in 2010	457 ⁽⁶⁾	713.2	2716.0	Data NA	285	MDCH, 2012
Preventable Hospital Stays: rate for ambulatory-care conditions p/1000 Medicare enrollees	74	44	NA by race/ethnicity	NA by race/ethnicity	NA by race/ethnicity	2012 UW County Health Rankings
Teenage Mothers⁽³⁾: Teen birth ratio per 1000 live births in specified groups	100.9	140.2	277.2	121.2	101.9	MDCH, '07-'09
Adults and Children Served at CMH: number of patients served at CMH	NA	4,692	1,232	114	2,981	CMH, 2010
Social Determinates of Health						
No Health Care Coverage: Percent report no healthcare coverage among those aged 18-64	11.7%	12%	11.6%	20.7	11.5%	ACS ⁽⁶⁾ , 2008- 2010
Unemployment: % of population age 16+ unemployment seeking work	13%	16.7%	29.9%	16.5%	14.4%	ACS, 2008- 2010
Household Income: Median Household Income in the past 12 months	\$46,861	\$39,311	\$20,832	\$37,102	\$43,249	ACS, 2008- 2010
Poverty⁽⁷⁾: % of households whose income in the past 12 Months below poverty level	15.7%	19.7%	45.5%	26.9%	14.1%	ACS, 2008- 2010
Single Parent Households⁽⁷⁾: % of male/female householder with no spouse present and children under 18	6.5%	7.6%	16.4%	5.8%	6.2%	ACS, 2008- 2010
Michigan High School Graduation Rate⁽⁸⁾: High School Graduates for all public schools in the state of Michigan	74%	71% ⁽⁹⁾	57%	63%	80%	See Footnote #8
Household Receipt of Food Stamps: with cash public assistance or food stamps/SNAP	550,975	14,356	4141	509	8955	ACS, 2008- 2010

⁽¹⁾ Data Based on most recently published data available including 2010 Census (ACS, 3 year moving average) and BRFS (Including MDCH Reports using 3 year moving averages) unless otherwise noted)

⁽²⁾ Muskegon and Ocean race represented by definitions on U.S. Census

⁽³⁾ Data not available by ethnicity. Hispanics are included as "other" classification

⁽⁴⁾ Michigan Disease Surveillance System, MDCH, Data retrieved 5/25/12

⁽⁵⁾ STD reporting more consistent in public health sector. Data may not accurately represent disparity as private providers may not be reporting to MDCH

⁽⁶⁾ ACS means American Community Survey

⁽⁷⁾ Percent of Population Segment

⁽⁸⁾ Center for Educational Performance and Information, Fall '05 - Fall '11. Local rates not available by race/ethnicity

⁽⁹⁾ 2012 UW County Health Rankings

Appendix 4: Health Disparities Report Card

Indicators for Oceana County

Indicators	Michigan Total	County Total	African American ⁽²⁾	Hispanic ⁽²⁾	White ⁽²⁾	Source
Oceana						
Population	9,888,640	26,570	106	3,629	22,327	2010 Census
Health Indicators						
Premature Death: years of potential life lost before age 75 per 100,000 population (age adjusted)	7,273	8182	NA by race/ethnicity	NA by race/ethnicity	NA by race/ethnicity	2012 UW County Health Rankings
Infant Mortality: ratio of infant deaths per 1,00 live births in specified group	7.5	5.2	NA by race	NA by race	4.9	MDCH, 2009
Low Birthweight: ratio of low weight babies (5.5 lbs) per 1000 live births	84.4 (2010)	85.2 (2010)	N= too small	N= too small	81.8 (2009)	MDCH
Poor Mental Health Days: % poor mental health days on at least 14 days in the past month	10.70%	12.30%	NA by race/ethnicity	NA by race/ethnicity	NA by race/ethnicity	MiBRFS, 2010
Poor Physical Health Days: % reporting poor physical health on at least 14 days in the past month	108%	14.3%	NA by race/ethnicity	NA by race/ethnicity	NA by race/ethnicity	MiBRFS, 2010
Diabetes: proportion of adults with diabetes	9.5%	12.70%	NA by race/ethnicity	NA by race/ethnicity	NA by race/ethnicity	MiBRFS, 2010
STD^(4,5): # of reported cases of Chlamydia in 2010	NA	55	N = too small	N = too small	45	MDCH, 2012
STD^(4,5): rate p/100K Identified cases of Chlamydia in 2010	457 ⁽⁹⁾	207	N = too small	N = too small	173.8	MDCH, 2012
Preventable Hospital Stays: rate for ambulatory-care conditions p/1000 Medicare enrollees	74	69	NA by race	NA by race	NA by race	2012 UW County Health Rankings
Teenage Mothers: Teen birth ratio per 1000 live births in specified groups	100.9	120.9	N= too small	N= too small	128.9	MDCH, 2010
Adults and Children Served at CMH: number of patients served at CMH	NA	2300	85	91	2006	CMH, 2010
Social Determinates of Health						
No Health Care Coverage: Percent report no healthcare coverage among those aged 18-64	11.7%	14.4%	N= too small	36.3%	11.2%	ACS ⁽⁶⁾ , 2008- 2010
Unemployment: % of population age 16+ unemployment seeking work	13%	9.3%	N= too small	N= too small	9.7%	ACS, 2008- 2010
Household Income: Median Household Income in the past 12 months	\$46,861	\$39,043	N= too small	\$27,031	\$39,346	ACS, 2008- 2010
Poverty⁽⁷⁾: % of households whose income in the past 12 Months below poverty level	15.7%	19%	N= too small	50.5%	14.2%	ACS, 2008- 2010
Single Parent Households⁽⁷⁾: % of male/female householder with no spouse present and children under 18	6.5% (08-10)	5% (08-10)	6.6% (07-09)	4.3% (07-09)	3.4% (08-10)	ACS, 2008- 2010
Michigan High School Graduation Rate⁽⁸⁾: High School Graduate for all public schools in the state of Michigan	74%	85% ⁽⁹⁾	57%	63%	80%	See footnote #8
Household Receipt of Food Stamps: with cash public assistance or food stamps/SNAP	550,975	1409	N= too small	N = too small	1,264	ACS, 2008- 2010

⁽¹⁾ Data Based on most recently published data available including 2010 Census (ACS, 3 year moving average) and BRFS (Including MDCH Reports using 3 year moving averages) unless otherwise noted)

⁽²⁾ Muskegon and Ocean race represented by definitions on U.S. Census

⁽³⁾ Data not available by ethnicity. Hispanics are included as "other" classification

⁽⁴⁾ Michigan Disease Surveillance System, MDCH, Data retrieved 5/25/12

⁽⁵⁾ STD reporting more consistent in public health sector. Data may not accurately represent disparity as private providers may not be reporting to MDCH

⁽⁶⁾ ACS means American Community Survey

⁽⁷⁾ Percent of Population Segment

⁽⁸⁾ Center for Educational Performance and Information, Fall '05 - Fall '11. Local rates not available by race/ethnicity

⁽⁹⁾ 2012 UW County Health Rankings

Appendix 5: University of Wisconsin Population Health Institute 2015 County Rankings

Muskegon County



Muskegon (MU)

County Snapshot | [Additional Measures](#)

Areas to Explore ON OFF

	Muskegon County	Trend	Error Margin	Top U.S. Performers*	Michigan	Rank (of 82)
Health Outcomes						65
Length of Life						53
Premature death	7,516		7,048-7,984	5,200	7,218	
Quality of Life						75
Poor or fair health	16%		13-18%	10%	14%	
Poor physical health days	4.6		3.9-5.4	2.5	3.6	
Poor mental health days	4.9		3.9-5.9	2.3	3.7	
Low birthweight	8.6%		8.2-9.1%	5.9%	8.4%	
Health Factors						66
Health Behaviors						82
Adult smoking	27%		23-31%	14%	20%	
Adult obesity	36%		32-40%	25%	32%	
Food environment index	6.3			8.4	7.2	
Physical inactivity	23%		20-27%	20%	23%	
Access to exercise opportunities	67%			92%	83%	
Excessive drinking	22%		19-26%	10%	18%	
Alcohol-impaired driving deaths	41%			14%	31%	
Sexually transmitted infections	797			138	481	
Teen births	47		45-49	20	31	
Clinical Care						7
Uninsured	13%		12-14%	11%	13%	
Primary care physicians	1,406:1			1,045:1	1,246:1	
Dentists	1,839:1			1,377:1	1,485:1	
Mental health providers	640:1			386:1	487:1	
Preventable hospital stays	34		31-37	41	65	
Diabetic monitoring	91%		86-95%	90%	86%	
Mammography screening	74.8%		69.5-80.2%	70.7%	65.6%	
Social & Economic Factors						60
High school graduation	74%				78%	
Some college	57.0%		54.6-59.5%	71.0%	65.6%	
Unemployment	9.0%			4.0%	8.8%	
Children in poverty	28%		24-33%	13%	24%	
Income inequality	4.5		4.3-4.7	3.7	4.7	
Children in single-parent households	40%		37-43%	20%	34%	
Social associations	12.4			22.0	10.2	
Violent crime	472			59	464	
Injury deaths	63		58-69	50	60	
Physical Environment						56
Air pollution - particulate matter	12.0			9.5	11.5	
Drinking water violations	0%			0%	1%	
Severe housing problems	17%		16-18%	9%	17%	
Driving alone to work	84%		83-85%	71%	83%	
Long commute - driving alone	22%		21-24%	15%	32%	

Appendix 5: University of Wisconsin Population Health Institute 2015 County Rankings *Oceana County*

**County Health
Rankings & Roadmaps**
Building a Culture of Health, County by County

A Robert Wood Johnson Foundation program

Oceana (OA)

County Snapshot | [Additional Measures](#)

Areas to Explore ON OFF

	Oceana County	Trend	Error Margin	Top U.S. Performers*	Michigan	Rank (of 82)
Health Outcomes						67
Length of Life						64
Premature death	7,938		6,589-9,283	5,200	7,218	
Quality of Life						70
Poor or fair health	19%		12-29%	10%	14%	
Poor physical health days	4.9		3.4-6.5	2.5	3.6	
Poor mental health days	4.6		2.5-6.7	2.3	3.7	
Low birthweight	7.6%		6.6-8.7%	5.9%	8.4%	
Health Factors						59
Health Behaviors						51
Adult smoking	22%		14-33%	14%	20%	
Adult obesity	33%		26-41%	25%	32%	
Food environment index	7.9			8.4	7.2	
Physical inactivity	23%		17-30%	20%	23%	
Access to exercise opportunities	88%			92%	83%	
Excessive drinking	21%		13-32%	10%	18%	
Alcohol-impaired driving deaths	31%			14%	31%	
Sexually transmitted infections	319			138	481	
Teen births	51		46-56	20	31	
Clinical Care						49
Uninsured	15%		13-16%	11%	13%	
Primary care physicians	2,821:1			1,045:1	1,246:1	
Dentists	2,182:1			1,377:1	1,485:1	
Mental health providers	750:1			386:1	487:1	
Preventable hospital stays	56		49-64	41	65	
Diabetic monitoring	87%		79-94%	90%	86%	
Mammography screening	66.4%		56.8-76.0%	70.7%	65.6%	
Social & Economic Factors						43
High school graduation	75%				78%	
Some college	48.8%		45.6-62.1%	71.0%	65.6%	
Unemployment	8.8%			4.0%	8.8%	
Children in poverty	26%		20-32%	13%	24%	
Income inequality	4.1		3.9-4.4	3.7	4.7	
Children in single-parent households	25%		22-29%	20%	34%	
Social associations	14.8			22.0	10.2	
Violent crime	243			59	464	
Injury deaths	68		57-78	50	60	
Physical Environment						54
Air pollution - particulate matter	11.8			9.5	11.5	
Drinking water violations	1%			0%	1%	
Severe housing problems	16%		15-18%	9%	17%	
Driving alone to work	81%		79-83%	71%	83%	

Appendix 5: University of Wisconsin Population Health Institute 2015 County Rankings

Newaygo County



Newaygo (NE)

County Snapshot | [Additional Measures](#)

Areas to Explore ON OFF

	Newaygo County	Trend	Error Margin	Top U.S. Performers*	Michigan	Rank (of 82)
Health Outcomes						60
Length of Life						69
Premature death	8,346		7,380-9,312	5,200	7,218	
Quality of Life						48
Poor or fair health	16%		11-21%	10%	14%	
Poor physical health days	3.8		2.6-5.0	2.5	3.6	
Poor mental health days	4.4		3.3-5.5	2.3	3.7	
Low birthweight	7.0%		6.2-7.8%	5.9%	8.4%	
Health Factors						45
Health Behaviors						52
Adult smoking	23%		18-30%	14%	20%	
Adult obesity	33%		27-39%	25%	32%	
Food environment index	8.2			8.4	7.2	
Physical inactivity	25%		20-31%	20%	23%	
Access to exercise opportunities	75%			92%	83%	
Excessive drinking	19%		14-26%	10%	18%	
Alcohol-impaired driving deaths	37%			14%	31%	
Sexually transmitted infections	292			138	481	
Teen births	44		40-48	20	31	
Clinical Care						49
Uninsured	15%		13-16%	11%	13%	
Primary care physicians	2,821:1			1,045:1	1,246:1	
Dentists	2,182:1			1,377:1	1,485:1	
Mental health providers	750:1			386:1	487:1	
Preventable hospital stays	56		49-64	41	65	
Diabetic monitoring	87%		79-94%	90%	86%	
Mammography screening	66.4%		56.8-76.0%	70.7%	65.6%	
Social & Economic Factors						43
High school graduation	75%				78%	
Some college	48.8%		45.6-52.1%	71.0%	65.6%	
Unemployment	8.8%			4.0%	8.8%	
Children in poverty	26%		20-32%	13%	24%	
Income inequality	4.1		3.9-4.4	3.7	4.7	
Children in single-parent households	25%		22-29%	20%	34%	
Social associations	14.8			22.0	10.2	
Violent crime	243			59	464	
Injury deaths	68		57-78	50	60	
Physical Environment						54
Air pollution - particulate matter	11.8			9.5	11.5	
Drinking water violations	1%			0%	1%	
Severe housing problems	16%		15-18%	9%	17%	
Driving alone to work	81%		79-83%	71%	83%	

Appendix 6: Community Access Line of the Lakeshore (Call 2-1-1): 2014 Requests & Unmet Needs

Muskegon County

Muskegon County July 2012—April 2015

Top Health Care Service Requests

Prescription Expense Assistance	847
Physician Referrals	562
General Dentistry	376
Community Clinics	301
Prescription Drug Patient Assistance Programs	301
Occasional Medical Equipment/Supplies	278
Medicare Information/Counseling	270
Medical Care Expense Assistance	255
Emergency Dental Care	249
Glasses/Contact Lenses	246

Top Mental Health/Addictions Service Requests

General Counseling Services	249
Central Intake/Assessment for Substance Abuse	216
Mental Health Hotlines	118
Alcohol Dependency Support Groups	78
Substance Abuse Counseling	52
Domestic Violence Hotlines	47
Suicide Prevention Hotlines	44
Detoxification	43
Anger Management	35
Community Mental Health Agencies	31



Appendix 6: Community Access Line of the Lakeshore (Call 2-1-1): 2014 Requests & Unmet Needs

Oceana County

Oceana County July 2012—April 2015

Top Health Care Service Requests

General Dentistry	24
Community Clinics	20
Prescription Expense Assistance	20
Physician Referrals	17
Prescription Drug Patient Assistance Programs	17
Medical Care Expense Assistance	15
Occasional Medical Equipment/Supplies	14
Glasses/Contact Lenses	10
Medicare Information/Counseling	10
Personal Health Care Advocate Services	8

Top Mental Health/Addictions Service Requests

General Counseling Services	18
Alcohol Dependency Support Groups	12
Central Intake/Assessment for Substance Abuse	11
Anger Management	3
Substance Abuse Counseling	3
Community Mental Health Agencies	2
Domestic Violence Hotlines	2
General Crisis Intervention Hotlines	2
Mental Health Hotlines	2
Smoking Cessation	2



Appendix 6: Community Access Line of the Lakeshore (Call 2-1-1): 2014 Requests & Unmet Needs

Newaygo County

Newaygo County July 2012—April 2015

Top Health Care Service Requests

Prescription Expense Assistance	51
General Dentistry	35
Glasses/Contact Lenses	29
Community Clinics	22
Physician Referrals	21
Medical Care Expense Assistance	17
Prescription Drug Patient Assistance Programs	17
Personal Health Care Advocate Services	12
Medicare Information/Counseling	10
Occasional Medical Equipment/Supplies	10

Top Mental Health/Addictions Service Requests

General Counseling Services	17
Adolescent/Youth Counseling	6
Mental Health Hotlines	6
Central Intake/Assessment for Substance Abuse	5
Alcohol Dependency Support Groups	4
Anger Management	4
Substance Abuse Counseling	4
Community Mental Health Agencies	3
Inpatient Substance Abuse Treatment Facilities	3
Substance Abuse Screening	3



Appendix 7: Michigan Profile for Healthy Youth (MiPHY)

Tobacco Use	Muskegon County			Newaygo County			Oceana County		
	7 th Grade	9 th Grade	11 th Grade	7 th Grade	9 th Grade	11 th Grade	7 th Grade	9 th Grade	11 th Grade
Ever smoked a whole cigarette	--	16.3%	27.8%	--	20.4%	28.5%	--	17.1%	17.5%
Smoked cigarette before age 13 (HS) / 11 (MS)	3.2%	7.9%	9.2%	4.8%	9.8%	7.5%	--	10.5%	5.6%
Current cigarette use (past 30 days)	3.9%	7.0%	13.1%	4.8%	10.9%	12.0%	--	6.6%	9.4%
Smoked cigarettes on 20+ days (past 30 days)	0.6%	1.7%	3.3%	0.4%	2.3%	2.7%	--	2.2%	0.6%
Percentage of current smokers who tried to quit smoking (past year)	--	60.7%	54.3%	--	53.2%	38.6%	--	63.6%	46.7%
Current use chewing tobacco, snuff, or dip (past 30 days)	0.8%	1.5%	5.4%	3.1%	5.6%	9.5%	--	1.1%	1.7%
Current use cigars, cigarillos, or little cigars (past 30 days)	1.8%	3.0%	6.4%	2.1%	3.1%	7.1%	--	3.3%	4.0%
Current use of any tobacco (past 30 days)	4.7%	8.6%	17.6%	5.7%	13.6%	19.9%	--	7.8%	10.9%
Alcohol Consumption	Muskegon County			Newaygo County			Oceana County		
	7 th Grade	9 th Grade	11 th Grade	7 th Grade	9 th Grade	11 th Grade	7 th Grade	9 th Grade	11 th Grade
Ever drank alcohol		33.6%	55.9%		37.9%	56.2%	--	39.0%	48.0%
Alcohol use before age 13 (HS) / 11 (MS)	8.2%	14.9%	11.4%	8.8%	17.2%	13.9%	--	18.7%	10.1%
Current alcohol use (past 30 days)	6.0%	13.6%	26.1%	9.0%	18.2%	27.8%	--	13.9%	20.1%
Ever been drunk		18.3%	40.4%		20.5%	41.5%	--	20.9%	32.0%
Drunk before age 13 (HS) / (11) MS	1.0%	4.6%	4.1%	1.9%	5.8%	4.6%	--	4.9%	5.1%
Current binge drinking (past 30 days)	2.0%	5.9%	16.3%	4.2%	10.8%	17.3%	--	3.9%	13.3%
Other Drug Consumption	Muskegon County			Newaygo County			Oceana County		
	7 th Grade	9 th Grade	11 th Grade	7 th Grade	9 th Grade	11 th Grade	7 th Grade	9 th Grade	11 th Grade
Percentage of students who ever tried marijuana		19.6%	40.1%		21.1%	36.9%	--	21.0%	36.0%
Marijuana use before age 13 (HS) / 11 (MS)	1.9%	7.4%	6.7%	1.9%	8.1%	5.7%	--	8.3%	4.5%
Current marijuana use (past 30 days)	4.0%	11.3%	21.0%	5.9%	14.0%	19.1%	--	10.0%	16.9%
Cocaine use (Past 30 days HS / Ever MS)	10.6%	0.5%	1.0%	8.1%	1.4%	2.0%	--		
Current barbiturate use w/out a prescription (past 30 days)	--	1.4%	2.0%	--	2.2%	2.5%	--	0.6%	1.1%
Current heroin use (past 30 days)	--	0.4%	0.4%	--	0.7%	1.1%	--	0.0%	1.1%
Current club drug use (past 30 days)	--	1.1%	3.5%	--	1.8%	2.3%	--	0.6%	3.8%
Current inhalant use (past 30 days)	3.3%	2.2%	1.0%	4.4%	2.3%	1.8%	--	4.9%	1.1%
Methamphetamine use (Past 30 days HS / Ever MS)	9.9%	0.2%	0.9%	7.9%	0.7%	1.1%	--	0.6%	1.1%
Steroid use w/out prescription (Past 30 days HS / Ever MS)	10.7%	0.8%	0.8%	8.4%	1.1%	1.1%	--	0.0%	1.1%
Use of a needle to inject any illegal drug (Past year HS / Ever MS)	10.0%	0.3%	0.4%	7.1%	1.1%	0.9%	--	0.0%	0.5%
Current prescription stimulant use w/out a prescription (such as Ritalin, Adderall, or Xanax past 30 days)	1.8%	3.5%	7.5%	2.1%	4.3%	6.8%	--	4.4%	4.9%
Current prescription painkiller use w/out a prescription (such as OxyContin, Codeine, Vicodin, or Percocet past 30 days)	3.3%	5.2%	7.5%	4.9%	8.8%	6.0%	--	4.4%	6.6%
Offered, sold, or given an illegal drug on school property (past year)	5.7%	14.2%	15.7%	7.1%	15.4%	14.8%	--	25.4%	18.2%

Appendix 7: Michigan Profile for Healthy Youth (MiPHY)

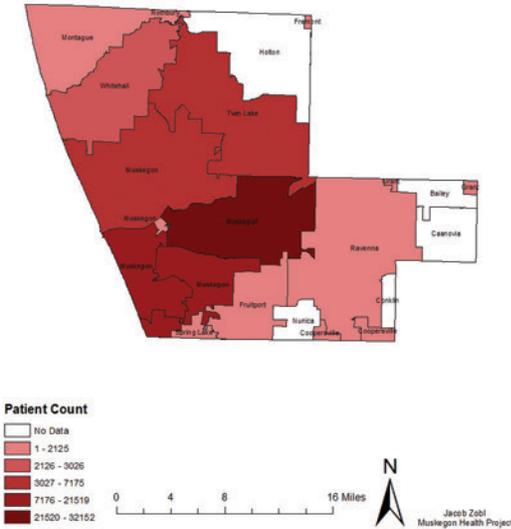
Safety	Muskegon County			Newaygo County			Oceana County		
	7 th Grade	9 th Grade	11 th Grade	7 th Grade	9 th Grade	11 th Grade	7 th Grade	9 th Grade	11 th Grade
Texted or e-mailed while driving a car or other vehicle (past 30 days)	--	24.2%	70.3%	--	37.0%	76.6%	--	33.9%	74.5%
Seatbelt – rarely/never worn	6.7%	8.1%	10.3%	5.1%	9.0%	9.9%	--	7.0%	7.4%
Bicycle helmet – rarely/never worn (past year)	82.9%	90.7%	95.3%	84.2%	91.1%	93.6%	--	92.8%	92.6%
Passenger with DUI driver (Past 30 days HS / Ever MS)	22.0%	12.5%	13.8%	22.3%	14.1%	12.4%	--	14.5%	13.6%
Drove a car after drinking alcohol (past 30 days)	--	2.1%	5.4%	--	2.9%	4.1%	--	1.6%	7.1%
Bullying	Muskegon County			Newaygo County			Oceana County		
	7 th Grade	9 th Grade	11 th Grade	7 th Grade	9 th Grade	11 th Grade	7 th Grade	9 th Grade	11 th Grade
Bullied on school property (past year)	35.4%	26.4%	20.4%	33.5%	32.7%	20.9%	--	34.6%	20.9%
Been electronically bullied (past year)	17.4%	17.7%	17.2% (240)	16.8%	20.5%	15.3%	--	19.6%	14.8%
Danger and Violence	Muskegon County			Newaygo County			Oceana County		
	7 th Grade	9 th Grade	11 th Grade	7 th Grade	9 th Grade	11 th Grade	7 th Grade	9 th Grade	11 th Grade
Carried a weapon such as a gun, knife, or club (past 30 days HS / Ever MS)	35.6%	16.7%	16.8%	60.0%	24.9%	26.1%	--	15.1%	17.9%
Carried a gun (past 30 days)	--	9.3%	7.1%	--	11.3%	9.7%	--	10.8%	7.7%
Carried a weapon on school property (past 30 days)	--	2.5%	3.6%	--	4.2%	8.1%	--	5.9%	6.0%
Did not go to school because felt unsafe (past 30 days)	11.9%	4.6%	4.0%	9.7%	4.9%	1.1%	--	8.1%	1.6%
Been threatened or injured with a weapon on school property (past year)	9.8%	6.5%	5.1%	12.2%	5.5%	3.4%	--	5.9%	3.3%
Property stolen or deliberately damaged on school property (past year)	29.7%	18.4%	14.3%	23.2%	14.4%	12.0%	--	19.6%	18.0%
Physical fight (Past year HS / Ever MS)	47.1%	22.1%	14.8%	43.4%	18.5%	9.3%	--	20.8%	13.0%
Injured in a physical fight and had to be treated (Past year HS / Ever MS)	4.2%	2.1%	2.5%	3.2%	2.7%	1.6%	--	1.7%	1.7%
Physical fight on school property (Past year HS / Ever MS)	30.3%	10.8%	6.2%	24.2%	9.5%	4.3%	--	12.0%	6.5%
Relationship Violence	Muskegon County			Newaygo County			Oceana County		
	7 th Grade	9 th Grade	11 th Grade	7 th Grade	9 th Grade	11 th Grade	7 th Grade	9 th Grade	11 th Grade
Physically hurt on purpose by someone they were dating (past year)	--	8.1%	10.3%	--	7.4%	10.5%	--	10.1%	8.4%
Forced to do sexual things by someone they were dating (past year)	--	8.0%	10.4%	--	10.0%	9.2%	--	11.2%	5.3%
Suicide	Muskegon County			Newaygo County			Oceana County		
	7 th Grade	9 th Grade	11 th Grade	7 th Grade	9 th Grade	11 th Grade	7 th Grade	9 th Grade	11 th Grade
Sad or hopeless almost every day for two+ weeks (past year)	28.0%	31.8%	37.0%	24.7%	33.0%	32.1%	--	38.4%	28.2%
Seriously considered attempting suicide (Past year HS / Ever MS)	22.7%	20.0%	20.5%	23.9%	19.0%	18.7%	--	27.3%	13.6%
Made a suicide plan (Past year HS / Ever MS)	14.6%	16.8%	14.8%	16.9%	16.9%	14.0%	--	19.6%	12.9%
Ever attempted suicide (Past year HS / Ever MS)	9.4%	10.3%	9.0%	8.5%	12.2%	6.9%	--	13.5%	8.6%
Injured in suicide attempt, required treatment (past year)	2.7%	2.6%	3.3%	3.2%	5.8%	2.3%	--	3.8%	1.7%

Appendix 7: Michigan Profile for Healthy Youth (MiPHY)

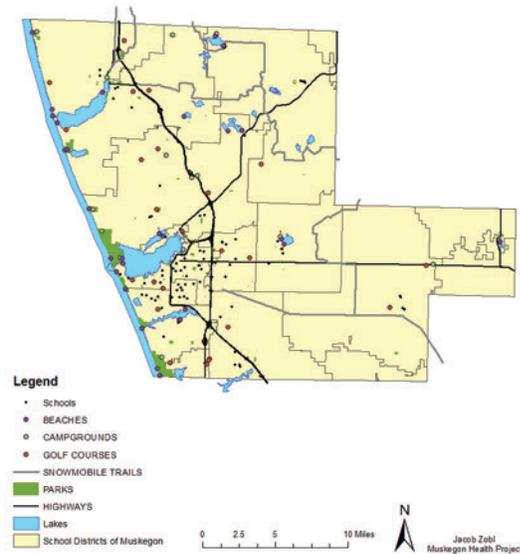
Physical Activity	Muskegon County			Newaygo County			Oceana County		
	7 th Grade	9 th Grade	11 th Grade	7 th Grade	9 th Grade	11 th Grade	7 th Grade	9 th Grade	11 th Grade
Physically active for at least 60 minutes/day on 5+ of past 7 days	50.1%	50.1%	53.6%	64.1%	51.5%	54.1%	--	57.2%	58.5%
Watches 3+hours of TV on an avg school day	34.5%	31.2%	28.7%	29.2%	26.1%	24.3%	--	22.7%	32.0%
Plays video or computer games 3+ hours/day on avg school day	36.1%	35.9%	30.2%	33.7%	30.8%	24.2%	--	32.1%	28.1%
Weight	Muskegon County			Newaygo County			Oceana County		
	7 th Grade	9 th Grade	11 th Grade	7 th Grade	9 th Grade	11 th Grade	7 th Grade	9 th Grade	11 th Grade
Percentage of students who are obese	14.5%	15.5%	17.8%	14.8%	12.2%	15.1%	--	20.9%	17.9%
Percentage of students who are overweight	17.1%	15.8%	15.1%	18.2%	18.4%	16.5%	--	14.7%	18.5%
Described themselves as slightly/very overweight	26.3%	31.7%	24.0%	29.5%	35.0%	30.9%	--	37.4%	34.9%
Trying to lose weight	46.3%	46.6%	32.0%	45.3%	43.3%	41.0%	--	54.1%	45.5%
Gone w/out eating for 24+ hours to lose weight (Past 30 days HS / Ever MS)	15.9%	15.3%	7.7%	17.1%	13.1%	10.1%	--	15.8%	12.9%
Taken diet pills, powders, or liquids to lose weight (Past 30 days HS / Ever MS)	4.1%	7.0%	3.6%	3.6%	4.7%	5.4%		6.5%	4.5%
Vomited or taken laxatives to lose weight (Past 30 days HS / Ever MS)	3.7%	6.4%	2.7%	4.5%	5.5%	3.9%		4.4%	4.5%
Nutrition	Muskegon County			Newaygo County			Oceana County		
	7 th Grade	9 th Grade	11 th Grade	7 th Grade	9 th Grade	11 th Grade	7 th Grade	9 th Grade	11 th Grade
Ate 5+ servings/day of fruits/vegetables (past 7 days)	35.5%	23.2%	26.6%	30.6%	26.1%	22.9%	--	28.8%	30.4%
Drank 3+ glasses per day of milk (past 7 days)	19.6%	14.4%	21.6%	19.7%	19.4%	16.6%	--	21.3%	15.7%
Drank soda or pop 1+per day (past 7 days)	26.0%	24.7%	29.1%	26.9%	27.0%	26.1%	--	26.7%	20.5%
Had breakfast every day (past 7 days)	45.5%	31.9%	40.8%	41.3%	37.1%	37.5%	--	35.0%	38.5%
Did not eat breakfast (past 7 days)	8.1%	14.2%	11.9%	8.3%	11.3%	8.5%	--	9.8%	7.8%
Sexual Behavior	Muskegon County			Newaygo County			Oceana County		
	7 th Grade	9 th Grade	11 th Grade	7 th Grade	9 th Grade	11 th Grade	7 th Grade	9 th Grade	11 th Grade
Ever had sexual intercourse	7.7%	20.4%	47.3%	8.2%	24.5%	53.1%	--	20.9%	43.1%
Had sexual intercourse before age 13 (HS) / 11 (MS)	3.2%	4.7%	3.8%	2.8%	6.8%	3.0%	--	5.1%	2.3%
Sexual intercourse with 4+ partners (HS) / 3+ (MS)	3.2%	5.6%	12.3%	2.0%	5.5%	11.4%	--	1.7%	13.1%
Sexual intercourse in past 3 months	--	14.1%	38.0%	--	17.9%	42.4%	--	12.6%	26.9%
Had sex during last 3 months: used alcohol/drugs	11.4%	21.2%	22.4%	14.8%	19.5%	19.0%	--	27.3%	17.0%
Had sex during last 3 months: used a condom	44.9%	61.1%	56.8%	55.0%	48.7%	61.8%	--	69.6%	60.9%
Had sex during last 3 months: used birth control pills	--	14.1%	24.0%	--	12.3%	22.9%	--	22.7%	20.9%
Ever been pregnant or gotten someone pregnant	--	3.6%	6.7%	--	6.6%	9.0%	--	6.1%	4.7%
Ever been physically forced to have sexual intercourse	--	4.8%	8.3%	--	5.0%	8.7%	--	4.4%	6.7%
Ever had sexual intercourse: 1 st partner 3+ years older	37.1%	20.8%	17.2%	36.8%	21.7%	16.7%	--	19.4%	20.0%
Ever had same sex sexual contact	--	3.6%	5.3%	--	3.7%	4.3%	--	5.1%	1.8%
Identify as gay, lesbian, or bisexual	--	5.5%	6.4%	--	5.5%	4.6%	--	8.9%	2.3%
Physical Health	Muskegon County			Newaygo County			Oceana County		
	7 th Grade	9 th Grade	11 th Grade	7 th Grade	9 th Grade	11 th Grade	7 th Grade	9 th Grade	11 th Grade
Saw a health care provider for a check-up (past year)	--	68.7%	66.1%	--	62.7%	61.4%	--	68.8%	69.1%
Exposed to second hand smoke (past 7 days)	44.4%	50.1%	46.9%	46.1%	55.5%	51.4%	--	39.6%	38.3%
Exposed to second hand smoke daily (past 7 days)	14.7%	13.6%	12.9%	17.8%	17.4%	15.0%	--	10.7%	9.7%
Ever been told by a doctor that they had asthma	19.7%	23.2%	20.0%	20.4%	18.4%	23.1%	--	19.6%	20.5%

Appendix 8: Graphic Information System (GIS) Maps for Muskegon County

ED Visits for Primary Care by Zipcode



Parks and Recreation in Muskegon County



Appendix 9: 2015 Consumer Health Survey Questionnaire

<input type="checkbox"/>	Community Health Needs Assessment Health Survey - 2016	<input type="checkbox"/>																		
<p>Hello, my name is (first name of interviewer) and I'm helping to conduct a health survey on behalf of Mercy Health, the United Way of the Lakeshore, District Health Department #10, and other health providers in Muskegon and Oceana Counties. Mercy Health conducts this needs assessment every three years to help ensure that unmet health needs are addressed by the hospital and its community partners. It also helps us to allocate our resources effectively and to procure new health resources.</p>																				
<p>Are you over the age of 18 years? _____ Yes _____ No [if "No," end interview.]</p>																				
<p>Do you have a few minutes for me to ask you some questions regarding your and your IMMEDIATE family's health and health care?</p>																				
<p>1. In general, how would you say your health is? (Check only one)</p> <p><input type="checkbox"/> Excellent <input type="checkbox"/> Very good <input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor</p>																				
<p>2. Your health care coverage is: (Check all that apply)</p> <table style="width: 100%;"><tr><td><input type="checkbox"/> through an employer</td><td><input type="checkbox"/> bought privately</td><td><input type="checkbox"/> Medical Savings Account</td></tr><tr><td><input type="checkbox"/> Medicaid</td><td><input type="checkbox"/> Medicare</td><td><input type="checkbox"/> Access Health</td></tr><tr><td><input type="checkbox"/> MICHild</td><td><input type="checkbox"/> I do not have coverage</td><td><input type="checkbox"/> Other</td></tr></table> <p>Do you have coverage for prescription drugs?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Does your insurance cover office visits?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>			<input type="checkbox"/> through an employer	<input type="checkbox"/> bought privately	<input type="checkbox"/> Medical Savings Account	<input type="checkbox"/> Medicaid	<input type="checkbox"/> Medicare	<input type="checkbox"/> Access Health	<input type="checkbox"/> MICHild	<input type="checkbox"/> I do not have coverage	<input type="checkbox"/> Other									
<input type="checkbox"/> through an employer	<input type="checkbox"/> bought privately	<input type="checkbox"/> Medical Savings Account																		
<input type="checkbox"/> Medicaid	<input type="checkbox"/> Medicare	<input type="checkbox"/> Access Health																		
<input type="checkbox"/> MICHild	<input type="checkbox"/> I do not have coverage	<input type="checkbox"/> Other																		
<p>3. Do you have trouble getting health care services?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>																				
<p>If "Yes," what are the biggest problems for you or your immediate family? (Check all that apply)</p> <table style="width: 100%;"><tr><td><input type="checkbox"/> Hospital costs/existing medical debt</td><td><input type="checkbox"/> ER waiting time</td></tr><tr><td><input type="checkbox"/> Finding a doctor</td><td><input type="checkbox"/> High co-pay for office visits</td></tr><tr><td><input type="checkbox"/> Insurance limited in coverage</td><td><input type="checkbox"/> No insurance</td></tr><tr><td><input type="checkbox"/> High deductible</td><td><input type="checkbox"/> Dropped for missed appointments</td></tr><tr><td><input type="checkbox"/> Obtaining language services (interpreters)</td><td><input type="checkbox"/> Obtaining Nursing Home and/or Assisted Living Services</td></tr><tr><td><input type="checkbox"/> Obtaining Home Care Services</td><td><input type="checkbox"/> Transportation</td></tr><tr><td><input type="checkbox"/> Lack of child care</td><td><input type="checkbox"/> Medication not covered by insurance</td></tr><tr><td><input type="checkbox"/> Getting specialist care</td><td><input type="checkbox"/> Racial or ethnic prejudice</td></tr></table>			<input type="checkbox"/> Hospital costs/existing medical debt	<input type="checkbox"/> ER waiting time	<input type="checkbox"/> Finding a doctor	<input type="checkbox"/> High co-pay for office visits	<input type="checkbox"/> Insurance limited in coverage	<input type="checkbox"/> No insurance	<input type="checkbox"/> High deductible	<input type="checkbox"/> Dropped for missed appointments	<input type="checkbox"/> Obtaining language services (interpreters)	<input type="checkbox"/> Obtaining Nursing Home and/or Assisted Living Services	<input type="checkbox"/> Obtaining Home Care Services	<input type="checkbox"/> Transportation	<input type="checkbox"/> Lack of child care	<input type="checkbox"/> Medication not covered by insurance	<input type="checkbox"/> Getting specialist care	<input type="checkbox"/> Racial or ethnic prejudice		
<input type="checkbox"/> Hospital costs/existing medical debt	<input type="checkbox"/> ER waiting time																			
<input type="checkbox"/> Finding a doctor	<input type="checkbox"/> High co-pay for office visits																			
<input type="checkbox"/> Insurance limited in coverage	<input type="checkbox"/> No insurance																			
<input type="checkbox"/> High deductible	<input type="checkbox"/> Dropped for missed appointments																			
<input type="checkbox"/> Obtaining language services (interpreters)	<input type="checkbox"/> Obtaining Nursing Home and/or Assisted Living Services																			
<input type="checkbox"/> Obtaining Home Care Services	<input type="checkbox"/> Transportation																			
<input type="checkbox"/> Lack of child care	<input type="checkbox"/> Medication not covered by insurance																			
<input type="checkbox"/> Getting specialist care	<input type="checkbox"/> Racial or ethnic prejudice																			
<p>4. Have you or any member of your immediate family ever been told by a doctor or health professional that you have any of the following? (Check all that apply)</p> <table style="width: 100%;"><tr><td><input type="checkbox"/> High blood pressure</td><td><input type="checkbox"/> High cholesterol</td><td><input type="checkbox"/> Diabetes</td></tr><tr><td><input type="checkbox"/> Being overweight</td><td><input type="checkbox"/> Cancer</td><td><input type="checkbox"/> Asthma</td></tr><tr><td><input type="checkbox"/> Vision problems</td><td><input type="checkbox"/> Hearing problems</td><td><input type="checkbox"/> Chronic pain</td></tr><tr><td><input type="checkbox"/> Arthritis</td><td><input type="checkbox"/> Heart disease or heart attack</td><td><input type="checkbox"/> Stroke</td></tr><tr><td><input type="checkbox"/> Lung disease / COPD</td><td><input type="checkbox"/> Alcoholism or other addiction</td><td><input type="checkbox"/> Dental health problems</td></tr><tr><td><input type="checkbox"/> Other</td><td><input type="checkbox"/> None of the above</td><td></td></tr></table>			<input type="checkbox"/> High blood pressure	<input type="checkbox"/> High cholesterol	<input type="checkbox"/> Diabetes	<input type="checkbox"/> Being overweight	<input type="checkbox"/> Cancer	<input type="checkbox"/> Asthma	<input type="checkbox"/> Vision problems	<input type="checkbox"/> Hearing problems	<input type="checkbox"/> Chronic pain	<input type="checkbox"/> Arthritis	<input type="checkbox"/> Heart disease or heart attack	<input type="checkbox"/> Stroke	<input type="checkbox"/> Lung disease / COPD	<input type="checkbox"/> Alcoholism or other addiction	<input type="checkbox"/> Dental health problems	<input type="checkbox"/> Other	<input type="checkbox"/> None of the above	
<input type="checkbox"/> High blood pressure	<input type="checkbox"/> High cholesterol	<input type="checkbox"/> Diabetes																		
<input type="checkbox"/> Being overweight	<input type="checkbox"/> Cancer	<input type="checkbox"/> Asthma																		
<input type="checkbox"/> Vision problems	<input type="checkbox"/> Hearing problems	<input type="checkbox"/> Chronic pain																		
<input type="checkbox"/> Arthritis	<input type="checkbox"/> Heart disease or heart attack	<input type="checkbox"/> Stroke																		
<input type="checkbox"/> Lung disease / COPD	<input type="checkbox"/> Alcoholism or other addiction	<input type="checkbox"/> Dental health problems																		
<input type="checkbox"/> Other	<input type="checkbox"/> None of the above																			
<input type="checkbox"/> FEF	Page 1	<input type="checkbox"/>																		

Appendix 9: 2015 Consumer Health Survey Questionnaire

<input type="checkbox"/>	Community Health Needs Assessment Health Survey - 2016	<input type="checkbox"/>
5. Have you or any member of your immediate family ever been told by a doctor or health professional that he/she has any of the following? (Check all that apply)		
<input type="checkbox"/> Schizophrenia	<input type="checkbox"/> Depression	
<input type="checkbox"/> Bi-polar disorder	<input type="checkbox"/> Intellectual and developmental disabilities	
<input type="checkbox"/> Substance abuse	<input type="checkbox"/> Post-traumatic stress disorder	
<input type="checkbox"/> Attention deficit hyperactivity disorder (ADHD)	<input type="checkbox"/> Anxiety	
<input type="checkbox"/> Autism	<input type="checkbox"/> Other	
<input type="checkbox"/> None of the above		
6. Have you or any member of your immediate family ever had a mental health issue but did not see the doctor or counselor because of the cost?		
<input type="checkbox"/> Yes	<input type="checkbox"/> No	
7. Do you have vision insurance?		
<input type="checkbox"/> Yes	<input type="checkbox"/> No	
8. Do you or members of your immediate family have problems receiving quality health care services or treatment due to vision problems?		
<input type="checkbox"/> Yes	<input type="checkbox"/> No	
9. Do you or members of your immediate family have problems with your hearing that contribute to difficulty in getting health care services or effective treatment?		
<input type="checkbox"/> Yes	<input type="checkbox"/> No	
10. Where do you or members of your immediate family usually go when you have a medical health problem? (Check only one)		
<input type="checkbox"/> Emergency room	<input type="checkbox"/> Private doctor's office / clinic	
<input type="checkbox"/> Muskegon Family Care	<input type="checkbox"/> Northwest Michigan Health Services	
<input type="checkbox"/> Muskegon County Health Department	<input type="checkbox"/> Ludington Hospital	
<input type="checkbox"/> Lakeshore Hospital	<input type="checkbox"/> Hackley Community Care Center	
<input type="checkbox"/> Urgent Care or walk-in Medi-center	<input type="checkbox"/> District Health Department #10	
<input type="checkbox"/> VA Center	<input type="checkbox"/> Fremont Hospital	
11. Have you received a seasonal "Flu Shot" in the last 12 months?		
<input type="checkbox"/> Yes	<input type="checkbox"/> No	
If "No," was it because of the cost?		
<input type="checkbox"/> Yes	<input type="checkbox"/> No	
12. Was there a time in the past 12 months when you or any member of your immediate family needed to see a doctor but could not because of the cost?		
<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Did you skip a follow-up visit, medical test or treatment because of the cost?		
<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Was there a time in the past 12 months you did not fill a prescription because of the cost?		
<input type="checkbox"/> Yes	<input type="checkbox"/> No	
<input type="checkbox"/> FEF	Page 2	<input type="checkbox"/>

Appendix 9: 2015 Consumer Health Survey Questionnaire

<input type="checkbox"/>	Community Health Needs Assessment Health Survey - 2016	<input type="checkbox"/>
<p>13. Do you have difficulty filling out medical forms? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>		
<p>14. Does your doctor, health professional or pharmacist explain your health condition in terms you can understand? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Does your doctor, health professional or pharmacist explain the purpose of your medications and the instructions for taking them? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>		
<p>15. In the event you become too sick to make your own health care decisions, does someone else have your written permission to make them for you? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>		
<p>16. Has the language you speak been a problem in communicating with your doctors or health professionals? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If "Yes," have interpreter services been provided to you? <input type="checkbox"/> Always <input type="checkbox"/> Sometimes <input type="checkbox"/> Never</p>		
<p>17. Have you or any member of your immediate family ever experienced problems with obtaining health care services or with the quality of care you received because of your race or ethnic background? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>		
<p>18. During the past month, other than your regular job and housekeeping, how often did you participate in any physical activities or exercises; such as running, calisthenics, gardening, walking, working out in a gym/health club? <input type="checkbox"/> 0 days <input type="checkbox"/> 1 - 5 days <input type="checkbox"/> 6 - 10 days <input type="checkbox"/> 11 - 15 days <input type="checkbox"/> 16 - 20 days <input type="checkbox"/> 20 - 25 days <input type="checkbox"/> 25+ days</p>		
<p>[Now, I would like to ask questions about you that we will use to help us better serve everyone in the community. The information you give is strictly confidential and we will not use this information for any other purpose.]</p>		
<p>19. Your age: <input type="checkbox"/> 18 - 24 years old <input type="checkbox"/> 25 - 34 years old <input type="checkbox"/> 35 - 44 years old <input type="checkbox"/> 45 - 54 years old <input type="checkbox"/> 55 - 64 years old <input type="checkbox"/> 65 - 74 years old <input type="checkbox"/> 75 years old or over</p>		
<p>20. Your race/ethnicity: (Check all that apply) <input type="checkbox"/> Caucasian <input type="checkbox"/> Asian <input type="checkbox"/> African American <input type="checkbox"/> Hispanic <input type="checkbox"/> Native American <input type="checkbox"/> Hawaiian / Pacific Islander <input type="checkbox"/> Other</p>		
<p>21. What is your current employment status? <input type="checkbox"/> Employed full-time <input type="checkbox"/> Employed part-time <input type="checkbox"/> Laid off <input type="checkbox"/> Retired <input type="checkbox"/> Unemployed <input type="checkbox"/> Student</p>		
<p>22. Are you a Veteran? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>		
<input type="checkbox"/>	FEF	Page 3
		<input type="checkbox"/> <input type="checkbox"/>

Appendix 9: 2015 Consumer Health Survey Questionnaire

<input type="checkbox"/>	Community Health Needs Assessment Health Survey - 2016	<input type="checkbox"/>
23. What school district do you LIVE in? (Choose one)		
<input type="checkbox"/> Fremont	<input type="checkbox"/> Fruitport	<input type="checkbox"/> Grant
<input type="checkbox"/> Hesperia	<input type="checkbox"/> Holton	<input type="checkbox"/> Mona Shores
<input type="checkbox"/> Muskegon	<input type="checkbox"/> Muskegon Heights	<input type="checkbox"/> Newaygo
<input type="checkbox"/> Oakridge	<input type="checkbox"/> Orchard View	<input type="checkbox"/> Pentwater
<input type="checkbox"/> Reeths-Puffer	<input type="checkbox"/> Shelby	<input type="checkbox"/> Walkerville
<input type="checkbox"/> Whitehall		<input type="checkbox"/> Hart
		<input type="checkbox"/> Montague
		<input type="checkbox"/> North Muskegon
		<input type="checkbox"/> Ravenna
		<input type="checkbox"/> White Cloud
24. Do you-- (Choose one)		
<input type="checkbox"/> rent your home or apartment?		<input type="checkbox"/> own or are you buying your home?
<input type="checkbox"/> live with family / friends?		<input type="checkbox"/> Other
25. How many people live in your household?		
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3-4
<input type="checkbox"/> 5-6	<input type="checkbox"/> More than 6	
26. Is your annual household income: (Check only one)		
<input type="checkbox"/> less than \$25,000	<input type="checkbox"/> \$25,000 - \$49,999	<input type="checkbox"/> \$50,000 - \$99,999
<input type="checkbox"/> \$100,000 or more		
27. You are:		
<input type="checkbox"/> Male	<input type="checkbox"/> Female	
THANK YOU!		
We will be conducting discussion groups on health care in the coming months. Would you like to participate in one? If so, please provide the interviewer with your contact information or respond to the flyer.		
<input type="checkbox"/>	FEF	Page 4
		<input type="checkbox"/>

Appendix 10: 2015 Focus Group Participants

Hispanic Focus Group

(Conducted in Spanish in cooperation with Oceana Hispanic Center)

Dalila Aleman
Ilsa Y. Anzaldo
Antonio Briones
Rosealba Briones
Alta Contreras
Marianela Comez
Maria Gonzalez
Noemi Gonzalez
Yolanda Gonzalez
David Nielson
Raquel Nielson
Maria D. Ovalle
Regino Ovalle
Lorena Flores, Translator

Access to Healthy Foods

Chris Colley, Kids Food Basket
Don Kalisz, Revel
Lauren Meldrum, HealthWest
Janelle Mair, Community Foundation for Muskegon County
Cynthia Price, Examiner
Lisa Tyler, United Way
Marty Gerencer, Morse Marketing Connections
Kathy Younts, Life Circles
Dan Gorman, 1 in 21, Montague/Whitehall Schools
Cinti Mwangu, Muskegon Public Health
Carla Hines, Health Project
Katherine DeVoursney, McLaughlin Grows
Doug Wood, Orchard View Schools
Helen Shear, HealthWest

Youth and Young Adult Health

Cheryl Schneider, Access Health
Angela Buggs, Health Project
Tim Munn, Disability Network
Curt Babcock, North Muskegon Schools
Jennifer Nelson, Muskegon ISD
Mike Tucker, Michigan Works

Jan Bourgoin, Girl Scouts Council
Joellen Rhyndress, HealthWest
Deb Warren, Pioneer Resources
Ebony Evans, Pathways to Better Health
Ron Rademacher, Mercy Health
Ashley Westerlund, MAISD
Kelly France, HealthWest

Seniors and Persons with Disabilities

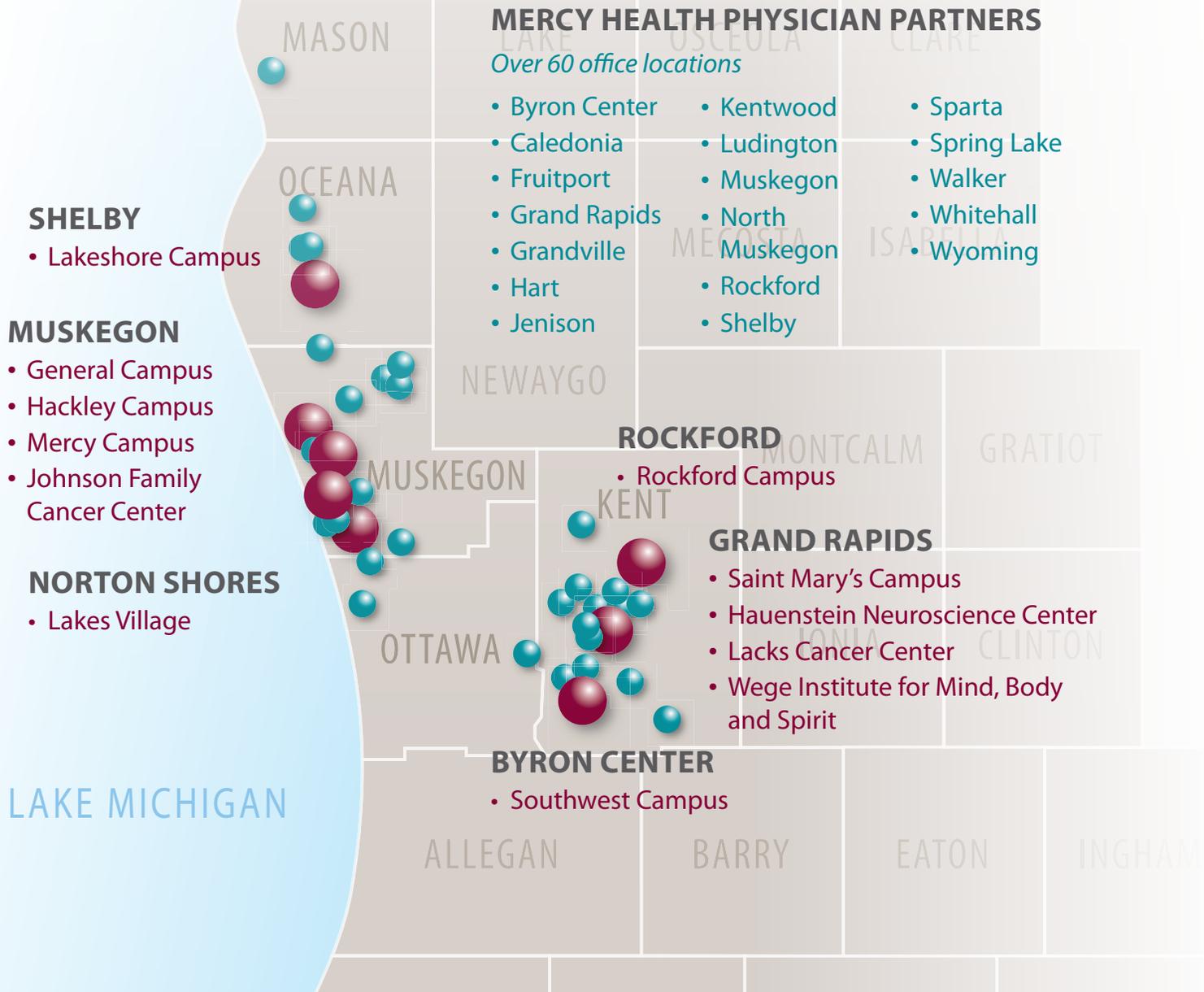
Mary Anne Goreman, Harbor Hospice
Susan Conrad, Pathways MI
Stacie Peterson, HealthWest
John Snyder, Community Member
Robert Hosler, ARC
Amy Pressley, HealthWest
Jason Mahumet, ARC
Zawdie Abiade, Sanctuary at McAuley
ShawnDreka Payne, HealthWest
Pam Curtis, Senior Resources
Damian Omness, Mercy Health
Will Wilson
Tom Munn, Disability Network West Michigan
Deb Warren, Pioneer Resources

Health Disparities

Kathy Moore, Public Health
Eva Pena, Affinia Health Network
Kaslana Hussey, Mercy Health
Marian McDermond, Family Promise
Beth Scheel, Hackley Community Care Center
Damaris Valderrama-Garcia, Muskegon Family Care
Jamie Helson, United Way
Christine Robere, United Way
Holly Hawkins, HealthWest
Helen Shear, HealthWest
Eva Martinez Devorsney
Matt Kaley, Love Inc – Muskegon
Lynda Schmitt, Mercy Health Emergency
Matthew Schelter, HealthWest
Damian Omness, Mercy Health
Rillastine Wilkins, Muskegon County Commissioner
District 1

Find this report online at
[MercyHealthMuskegon.com/CHNA](https://www.mercyhealthmuskegon.com/CHNA)

We are Mercy Health.



For a complete listing of Mercy Health locations, visit [MercyHealth.com](https://www.mercyhealth.com)

MERCY HEALTH GRAND RAPIDS: Saint Mary's | Lacks Cancer Center
Hauenstein Neuroscience Center | Southwest | Rockford | Mercy Health Physician Partners

MERCY HEALTH MUSKEGON: Mercy | Hackley | General | Lakeshore
Johnson Family Cancer Center | Lakes Village | Mercy Health Physician Partners



Your voice. Our expertise.