

# 2016

## Community Health Needs Assessment EXECUTIVE SUMMARY



Akron Children's Hospital  
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Akron  
Children's  
Hospital



## Community Health Needs Assessment—Akron Campus

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**Community Health Needs Assessment—Akron Campus**

**EXECUTIVE SUMMARY**

Akron Children’s Hospital is one of the largest pediatric hospitals in the U.S. With nearly 780 providers, our medical staff handled nearly 915,000 patient visits in 2015. As an integrated, independent pediatric healthcare delivery system, we have two hospital campuses and 90 primary and subspecialty locations throughout northern Ohio.

In 2013 and 2016, Akron Children’s Hospital partnered with Cleveland Clinic Akron General and Summa Health System to conduct a Community Health Needs Assessment (CHNA). During the CHNA process, epidemiologic data were reviewed for Medina, Portage, Stark, Summit, Wayne, and Richland counties and compared to two peer counties, the state, the nation, and the Healthy People 2020 objectives. Input was also obtained from community leaders and community residents. CHNAs conducted by other community groups were consulted. All of this information was used to develop a list of significant health needs for children in Medina, Portage, Summit, Stark, Wayne, and Richland counties.

The significant health needs for children that were identified across all six counties were:

**Table 1. Significant Health Needs Identified for the Service Area**

**Access to Healthcare**

- Access to dental care
- Dental insurance coverage
- Mental health insurance coverage
- Vision insurance coverage

**Child Lifestyle Factors**

- Food insecurity
- Obesity

**Chronic Disease**

- Asthma
- Diabetes

**Crime & Violence**

- Child abuse and neglect
- Child trafficking

**Environmental Factors**

- Elevated blood lead levels

**Injury**

- Falls
- Motor vehicle crashes

**Maternal & Infant Health**

- Infant mortality
- Low birth weight
- Teen pregnancy

**Mental Health**

- ADHD/Autism
- Geographic access to services
- Self-harm/Teen suicide

**Substance Abuse**

- Opioid/Heroin use and abuse
- Neonatal abstinence syndrome

Detailed charts and data on these significant health needs for our community are included in the Detailed Data Appendix.

## **Community Health Needs Assessment—Akron Campus**

These significant health needs are being used by Akron Children’s Hospital to guide intervention and outreach efforts aimed at improving community health. For the 2016 CHNA, the following priorities were identified by the hospital’s prioritization team on which to focus implementation strategies: chronic disease, maternal and infant health, mental health, and (new in 2016) injuries, both intentional and unintentional. Another priority noted, not easily addressed by the hospital but which is having an oversized effect on the community, was opiate and heroin abuse. The graphics on the following pages highlight the challenges these health issues pose for the hospital’s service area.

### **Chronic Diseases**

Chronic diseases are diseases that a person has for a long time, sometimes indefinitely. People with chronic diseases usually need to see their doctors on a regular basis to monitor the progression of their disease and receive treatment. The prioritized chronic disease health needs for children in our community include **asthma** and **diabetes**.

### **Maternal and Infant Health**

Maternal and infant health includes many factors that affect pregnancy and childbirth. The prioritized maternal and infant health need in our community is **infant mortality**.

### **Mental Health**

Mental health refers to the successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and cope with adversity. Mental health is particularly important for children, since it can affect psychological and emotional development, school performance, family and peer relationships, and physical health. For this reason, **mental health** was identified as a prioritized community health need for children in our community

### **Injury**

This category covers both **intentional** and **unintentional** injuries. Injuries are occurrences where a child was harmed including both intentional and unintentional cases. Intentional injuries include child abuse and neglect, domestic violence and suicide. Examples of unintentional injuries include injuries related to sports and recreational activities, motor vehicle crashes and suffocation. The prioritized injury health need in our community includes both intentional and unintentional injuries.

### **Data and Charts**

Detailed charts and data on these significant health needs for our community are included in the *Detailed Data Appendix*. The graphics shown on the following pages highlight the challenges these health issues pose for the Akron Children’s Hospital service area. Note that if data are not reported for a particular county, it was unavailable.

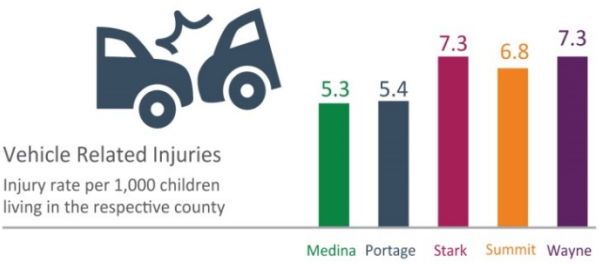
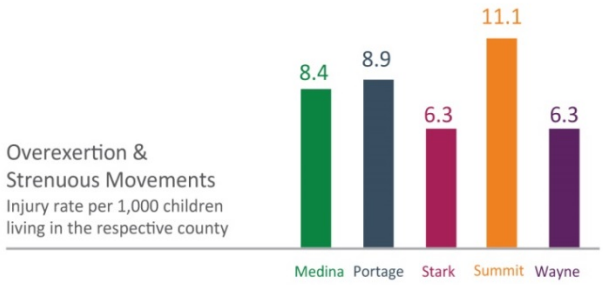
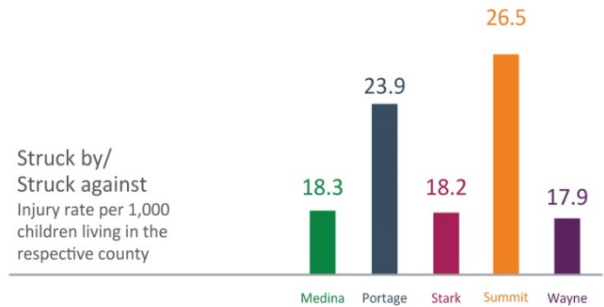
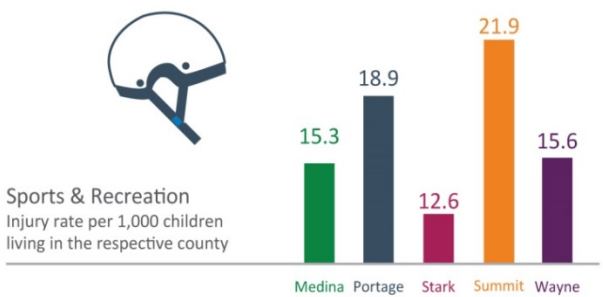
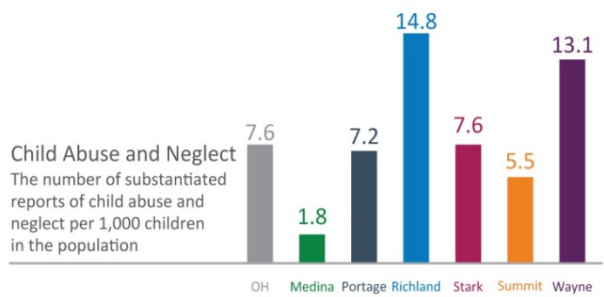
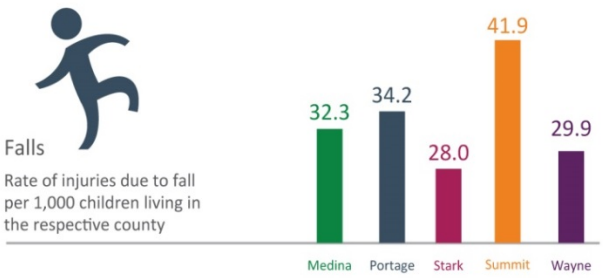
### **Status of Priority Needs Identified in the 2013 CHNA Implementation Plan**

Each implementation team addressing a prioritized health need from the 2013 Community Health Needs Assessment evaluated the impact of their efforts over the past three years. Details regarding their evaluation can be found in the Appendix at the end of this report.

# Injuries

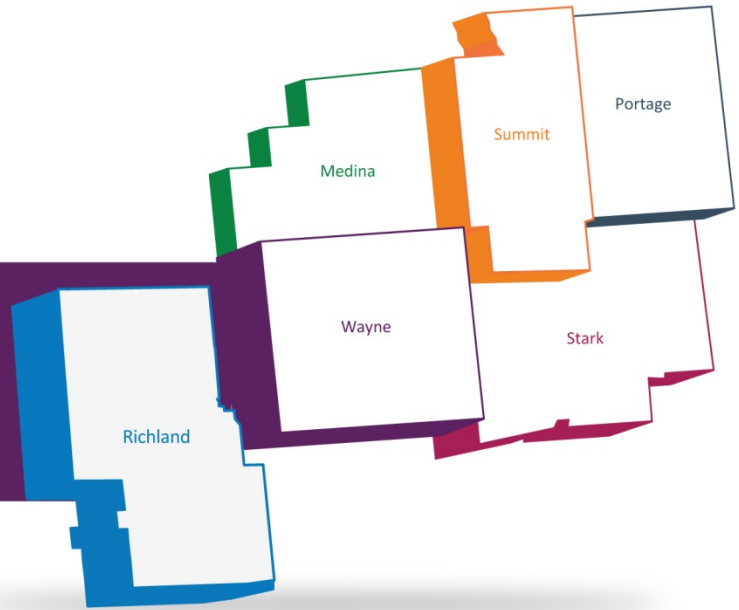


Summit County has the highest rate of fall-related injuries at 41.9 per 1,000 children, as well as the highest injury rates due to sports and recreation; overexertion and strenuous movements; and struck by and against. Stark and Wayne counties have the highest rate of vehicle-related injuries at 7.3 per 1,000 children. In reviewing substantiated reports of child abuse, Richland and Wayne counties have much higher rates than the state.



# Substance Use and Abuse

Focus groups with 178 residents in our service area and telephone interviews with 52 community leaders identified opioid and heroin abuse as critical problems today in our region. The negative repercussions on children and families, especially single family households, for parents using these drugs are a major concern to citizens and social service agencies alike throughout our hospital's service area.

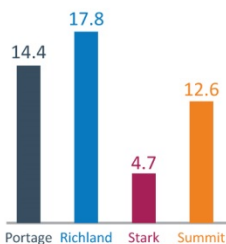


**2 out of 3**

community leaders identified substance abuse as one of the top three health problems throughout the six counties

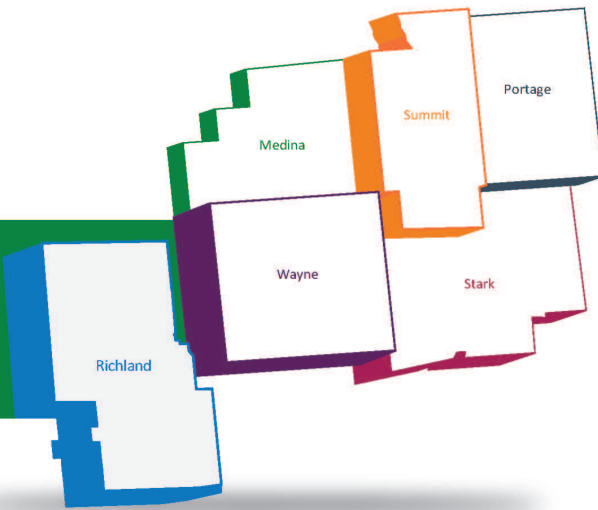
## Neonatal Abstinence Syndrome Rate

Rate of neonates with illicit substance abstinence syndrome; Neonatal abstinence syndrome occurs when babies are born exposed to opiates and experience withdrawal symptoms. (out of 1,000 live births)



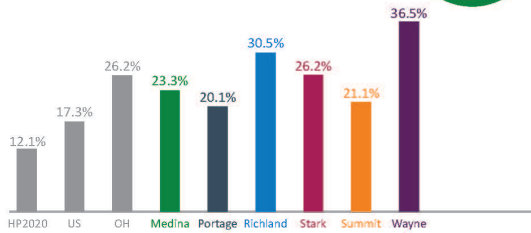
# Maternal and Infant Health

All counties shown here exceed the US rate for women who did not receive prenatal care in their first trimester of pregnancy. Babies born at a low birth rate is a particular problem for Stark and Summit Counties, as is the rate of infant deaths within the first 28 days of birth and before the child's first birthday.



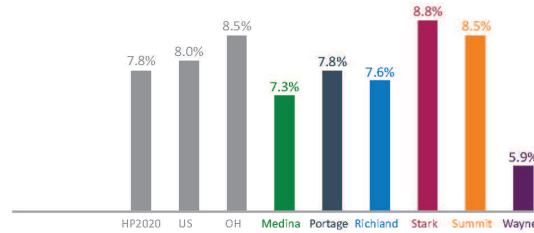
### % Women without 1st Trimester Care

Percentage of women who do not obtain prenatal care during their first trimester of pregnancy



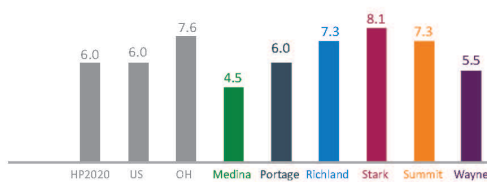
### % Infants with Low Birth Rate

Infants born at low birth weight (Below 5 pounds 8 oz)



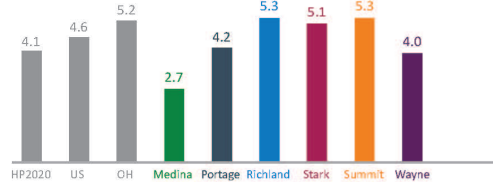
### Infant Death Rate

Number of infants that die prior to their first birthday (per 1,000 live births)



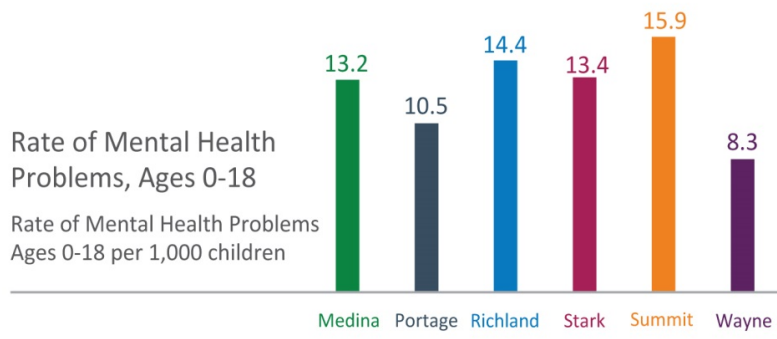
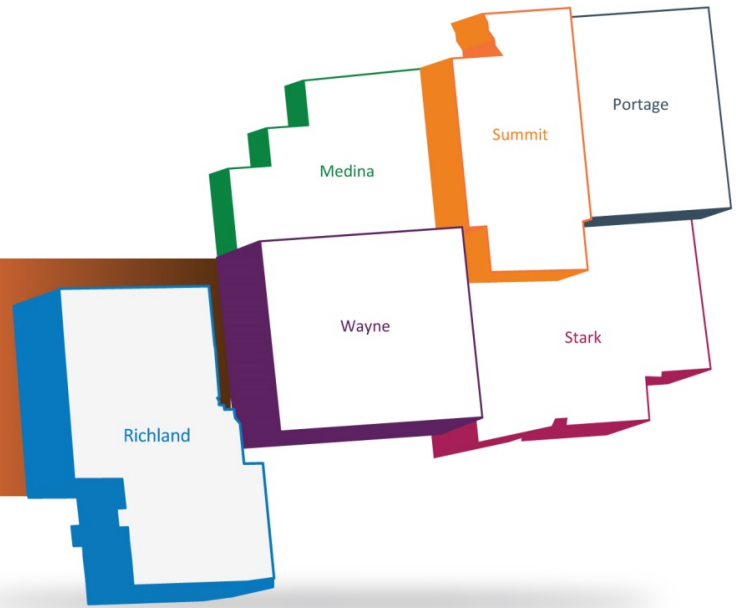
### Infant Death Rate, 0-28 Days

Number of infants that die between their birth and 28th day of life (per 1,000 live births)



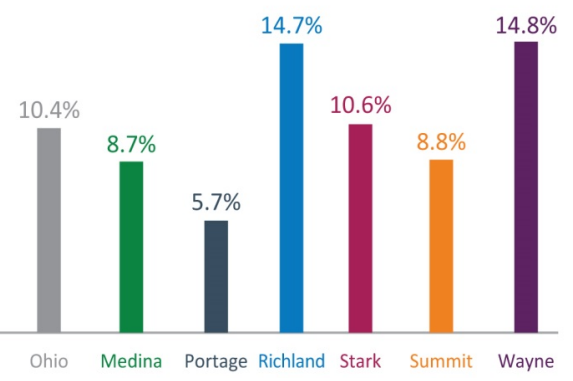
# Mental Health

Summit County exceeds the other counties in our hospital service area in the rate of mental health problems for ages 0-18. Wayne County has the lowest rate. On the other hand, Wayne County has the highest percentage of children in the service area of children under age 18 without mental health coverage at 14.5%.



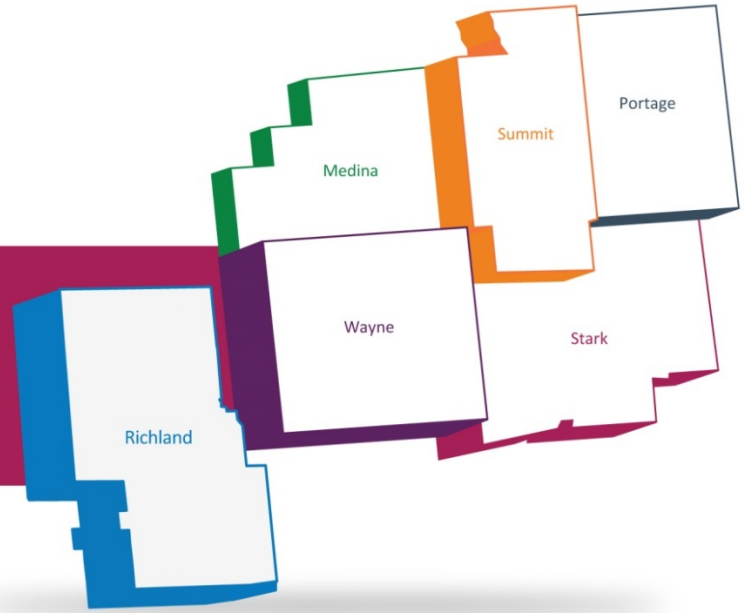
## % Children Without Mental Health Coverage

An estimate of the uninsured rates for children under age 18 for mental health insurance, excluding 1-year-olds

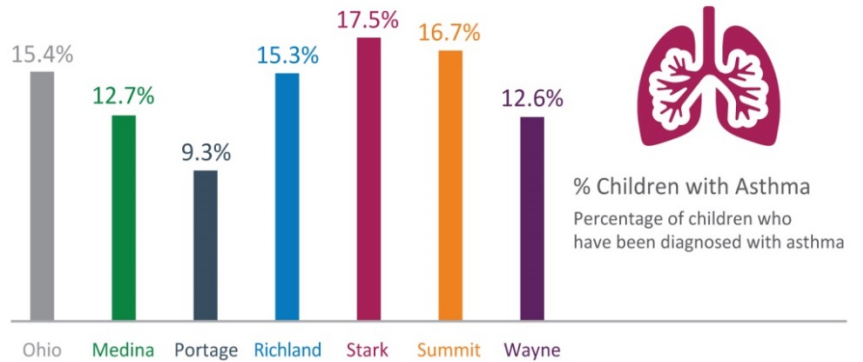
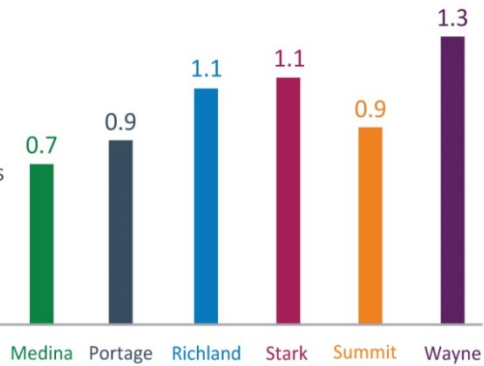


# Chronic Disease

Asthma is a significant problem in our hospital service area. Stark and Summit counties have the highest rates and are above the State of Ohio average. Stark and Wayne counties have the highest rates of Type 1 and Type 2 diabetes per 1,000 children aged 0-18 in this region.



Rate of Type 1 and 2 Diabetes in Children 0-18  
Rate of Type 1 and 2 Diabetes in Children 0-18 out of 1,000 children



% Children with Asthma  
Percentage of children who have been diagnosed with asthma

## Community Health Needs Assessment—Akron Campus

### **CHNA BACKGROUND**

#### **Purpose of the CHNA**

Akron Children’s Hospital, Cleveland Clinic Akron General, and Summa Health System have a long history of collaboration on a wide range of projects aimed at improving community health. Together, the hospitals are collaborating to complete a community health needs assessment (CHNA). Each facility will identify a set of implementation strategies that address the identified community health needs. Our process was guided by past collaboration successes and by new requirements established by the federal government.

In March 2010, the U.S. Congress passed and President Obama signed the Patient Protection and Affordable Care Act (ACA). The ACA contains numerous changes to the U.S. healthcare system, including requiring nonprofit hospitals to conduct CHNAs every three years. The Internal Revenue Service (IRS), the federal agency that is charged with enforcing these new requirements, has issued regulations pertaining to these new reporting requirements of nonprofit hospitals. These regulations require CHNAs to describe:

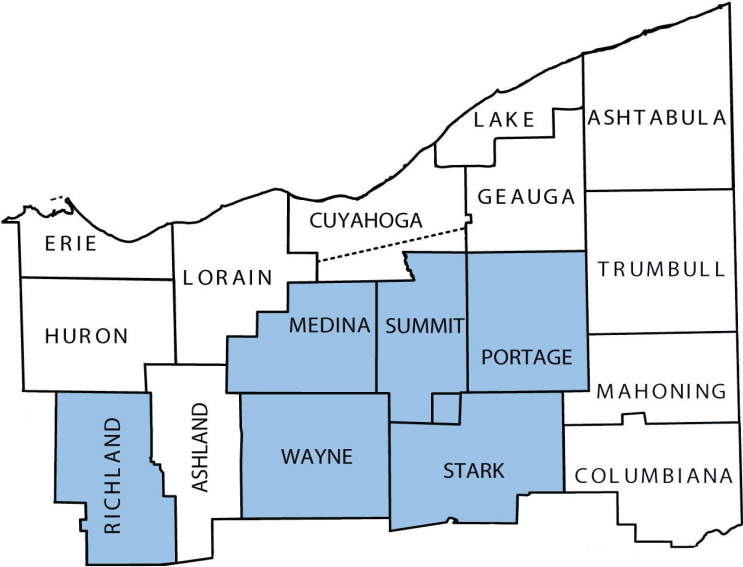
- The community served and how it was defined;
- The process and methods used to conduct the assessment, including the sources and dates of the data and other information used in the assessment and the analytical methods applied to identify community health needs;
- The information gaps that impact the ability to assess health needs;
- Collaborating hospitals and vendors used while conducting the CHNA;
- How input was received from persons who have expertise in public health and from persons who represent the broad interests of the community, including a description of when and how these persons were consulted;
- The prioritized community health needs, including a description of the process and criteria used in prioritizing the health needs;
- Existing healthcare facilities and other resources within the community available to meet the prioritized community health needs;
- The evaluation of the impact of actions taken to address significant health needs identified in previous CHNA(s);

Thus, the purpose of this CHNA is to build upon our history of collaborative efforts aimed at improving community health. The information in this report will also act as a resource for other community groups working toward improving community health. In addition, this report will fulfill the CHNA requirements established by the ACA for the hospital facilities listed.

**Community Health Needs Assessment—Akron Campus**

**Description of Hospital Facility**

Akron Children’s Hospital is one of the largest pediatric hospitals in the U.S. With nearly 780 providers, our medical staff handled nearly 915,000 patient visits in 2015. As an integrated, independent pediatric healthcare delivery system, we have two hospital campuses and 90 primary and subspecialty locations throughout northern Ohio. We are proud to be ranked among the best children’s hospitals in the country for pediatric specialty care and nursing excellence. In addition to providing expert medical care, we’re leading the way to healthier futures for children and communities through prevention and wellness education programs. We are a teaching affiliate of Northeast Ohio Medical University, training a new generation of pediatricians and specialists, and our research institute is advancing pediatric medicine and improving patient care. Akron Children’s has been caring for children since 1890, guided by three promises that we hold sacred: to care for all children as if they were our own, to treat everyone the way we would want to be treated, and to turn no child away for an inability to pay.



**Description of Community Served**

Although Akron Children’s Hospital continues to serve patients and families from many communities across the region, most people who receive services from the hospital live in Medina, Portage, Richland, Stark, Summit, and Wayne counties. Thus, for the purposes of this report, the community identified for this CHNA comprises those counties.

Medina County

There are approximately 176,395 people living in Medina County, which is an increase of 2.4% since 2010. There are 3 cities, 6 villages, and 17 townships in Medina County, with the largest being Brunswick and the county seat being the City of Medina. Compared to the State of Ohio, Medina County has a slightly larger proportion of children (under 18 years old) and older adults (65 years and older). In Medina County, 4.2% of the population is non-White, compared to 17.3% in the state. Educational attainment is higher than the State of Ohio, with 93.5% having a high school diploma or higher and 29.9% having a bachelor’s degree or higher. Similarly, annual per capita income in Medina County is higher than the State of Ohio, and the percentage of Medina County residents living in poverty is less than half of that of the State.

Portage County

There are approximately 162,275 people living in Portage County. This number has increased by 0.5% since 2010. Portage County comprises multiple cities, villages, and townships. Compared to the State of Ohio, Portage County has a smaller proportion of children (under 18 years old) and older adults (65 years or older). In Portage County, 8.7% of the population is non-White,

## Community Health Needs Assessment—Akron Campus

compared to 17.3% in the State. Educational attainment is slightly higher in Portage County than in the State of Ohio, with 91% having a high school diploma or higher and 25.5% having a bachelor's degree or higher. Annual per capita income in Portage County is slightly higher than in the State of Ohio, but the percentage of Portage County residents living in poverty is only 1.6% lower than that of the State.

### Richland County

There are approximately 121,707 people living in Richland County, which is a 2.2% decrease from 2010. There are 29 cities, villages, and townships in Richland County, with the largest being Mansfield. Compared to the State of Ohio, Richland County has a smaller proportion of children (under 18 years old) and older adults (65 years and older). In Richland County, 12.6% of the population is non-White, compared to 17.3% in the State. The percentage of residents with a high school diploma or higher is lower in Richland County than in the State overall, as is the percentage of residents with a bachelor's degree or higher. Annual per capita income is lower and the percentage of residents living in poverty in Richland County is higher than the State.

### Stark County

There are approximately 375,165 people living in Stark County, which is a 0.1% decrease from 2010. There are 36 cities, villages, and townships in Stark County, with the largest being the City of Canton. Compared to the State of Ohio, Stark County has a smaller proportion of children (under 18 years old) and a larger proportion of older adults (65 years and older). In Stark County, 11.5% of the population is non-White, compared to 17.3% in the State. The percentage of residents with a high school diploma or higher is slightly higher in Stark County compared to the State, but the percentage of residents with a bachelor's degree or higher is lower than the State. Annual per capita income and percentage of residents living in poverty in Stark County are lower than the State.

### Summit County

There are 541,968 people living in Summit County. Since 2010, the population has increased slightly, by less than a percent. There are 31 cities, villages, and townships in Summit County, with the largest being the City of Akron. Compared to the State of Ohio, Summit County has a slightly smaller proportion of children (under 18 years old) and a slightly larger proportion of older adults (65 years and older). In Summit County, 20.5 % percent of the population is non-White, compared to 17.3% in the State. Educational attainment is slightly higher in Summit County than in the State of Ohio, with 90.7% having a high school diploma or higher and 29.9% having a bachelor's degree or higher. Similarly, annual per capita income in Summit County is slightly higher than the State of Ohio, but the percentage of Summit County residents living in poverty is 2.2% lower than that of the State.

### Wayne County

There are approximately 116,063 people living in Wayne County, which is an increase of 1.4% since 2010. There are 35 cities, villages, townships, and unincorporated communities in Wayne County, with the largest being the City of Wooster. Compared to the State of Ohio, Wayne County has a higher proportion of children (under 18 years old) and older adults (65 years or older). In Wayne County, 4.5% of the population is non-White, compared to 17.3% in the State.

## Community Health Needs Assessment—Akron Campus

Educational attainment is lower in Wayne County compared to the State of Ohio, with 85.2% having a high school diploma or higher and 20.2% having a bachelor’s degree or higher. The annual per capita income in Wayne County is a bit higher than the State of Ohio, and the percentage of Wayne County residents living in poverty is lower than the State.

**Table 2. Demographic Characteristics of Communities Served and the State of Ohio**

	Medina	Portage	Richland	Stark	Summit	Wayne	Ohio
<b>Total population<sup>1</sup></b>	176,395	162,275	121,707	375,165	541,968	116,063	11,613,423
<b>Percent population change<sup>2</sup></b>	2.4	0.5	-2.2	-0.1	-	1.4	0.7
<b>Percent under 18 years old<sup>3</sup></b>	23.2	19.2	21.7	21.8	21.5	2.6	22.6
<b>Percent 65 years and older<sup>3</sup></b>	16.1	15	18.4	18.1	16.6	16.6	15.9
<b>Percent female<sup>3</sup></b>	50.6	51.0	49.1	51.5	51.5	50.4	51.0
<b>Percent non-White<sup>3</sup></b>	4.2	8.7	12.6	11.5	20.5	4.5	17.3
<b>Percent Hispanic or Latino<sup>3</sup></b>	1.7	1.4	1.8	1.9	1.5	1.8	2.9
<b>Percent with high school diploma or higher<sup>4</sup></b>	93.5	91.0	86.7	89.7	90.7	85.2	88.8
<b>Percent with bachelor’s degree or higher<sup>4</sup></b>	29.9	25.5	15.9	21.5	29.9	20.2	25.6
<b>Homeownership rate<sup>5</sup></b>	79.1	69.1	68.9	69.4	67.0	73.2	66.9
<b>Median value of owner-occupied housing units<sup>5</sup></b>	\$180,100	\$149,300	\$102,400	\$121,700	\$133,700	\$135,300	\$129,600
<b>Persons per household<sup>5</sup></b>	2.62	2.54	2.4	2.44	2.41	2.61	2.46
<b>Annual per capita income<sup>5</sup></b>	\$31,291	\$25,926	\$21,959	\$24,821	\$28,389	\$23,151	\$26,520
<b>Median household income<sup>5</sup></b>	\$66,296	\$53,027	\$42,042	\$46,290	\$50,082	\$49,244	\$48,849
<b>Percent living below poverty level<sup>5</sup></b>	7.0	14.3	15.9	14.9	13.4	13.9	15.8

Notes: <sup>1</sup> 2015 estimate, <sup>2</sup> Since 2010, <sup>3</sup> As of 2011, <sup>4</sup> persons age 25+, 2007-2011, <sup>5</sup> 2007-2011

Source: US Census Bureau ([http://quickfacts.census.gov/qfd/maps/ohio\\_map.html](http://quickfacts.census.gov/qfd/maps/ohio_map.html))

## METHODOLOGY

### Approach

The three collaborating hospitals (Akron Children’s Hospital, Cleveland Clinic - Akron General Health System, and Summa Health System) convened meetings and discussed the desire to collaborate, the resources needed to conduct the CHNA, and the latest IRS requirements pertaining to CHNAs. The Kent State University College of Public Health (KSU-CPH) was selected as the contractor to facilitate the development of the CHNA. The hospitals were satisfied with the previous work of KSU-CPH, which had conducted the 2013 CHNAs on behalf of the hospitals.

Meetings were held to identify the process to be used to conduct the CHNA. This was determined primarily by the specific requirements of CHNAs mandated by the IRS. A work plan with anticipated timelines was also created and became part of the contract addendum.

## **Community Health Needs Assessment—Akron Campus**

To conduct the 2016 Community Health Needs Assessment, KSU-CPH followed several recommendations offered by the Catholic Health Association of the United States in its 2015 second edition of *Assessing and Addressing Community Health Needs*. Specifically, KSU-CPH used a comparison benchmarking approach to analyze epidemiologic data. This was supplemented with qualitative data gathered from focus groups with residents throughout the hospital service area and personal interviews with community and organizational leaders knowledgeable about health issues. In addition, other health status reports, such as health department Community Health Improvement Plans (CHIPS), were reviewed. Also included was pediatric data from the Ohio Hospital Association.

After the data were collected and reported to the three hospitals in a group meeting, a series of individual hospital meetings were held to identify the prioritized health needs based on the epidemiologic data, input from community leaders and residents, input from Health Commissioners, and other CHNAs that had been previously been conducted.

Implementation plans were developed that identified the strategies the hospital will undertake to address some of the prioritized health needs identified. The implementation plans will be publicly available at [www.akronchildrens.org](http://www.akronchildrens.org) by May 15, 2017.

### **Epidemiologic Data**

The epidemiologic data used in this report were collected from a variety of sources that report information at the county, state, and national levels. Epidemiologic data were collected on a very wide range of factors that affect community health, such as mortality rates, health behaviors, environmental factors, and healthcare access issues.

#### **Annie E. Casey Foundation**

The Annie E. Casey Foundation runs a program called KIDS COUNT®, which is a national and state-by-state effort to track the well-being of children in the United States. KIDS COUNT® collects and reports county-level data in a variety of areas related to children's health, including demographics, education, economic well-being, health, safety, and risky behaviors, and other indicators. Most of the Ohio data in KIDS COUNT® is supplied by Ohio's Children's Defense Fund and is taken from a variety of sources, including the Ohio Department of Health. For more information about KIDS COUNT®, visit [datacenter.kidscount.org](http://datacenter.kidscount.org).

#### **Community Health Status Indicators**

The Community Health Status Indicators project is a partnership between the Centers for Disease Control and Prevention, the National Institutes of Health/National Library of Medicine, the Health Resources Services Administration, the Public Health Foundation, the Association of State and Territorial Health Officials, the National Association of County and City Health Officials, the National Association of Local Boards of Health, and the Johns Hopkins University School of Public Health. Similar to the County Health Rankings project, the Community Health Status Indicators project collects information on a variety of sources and generates county profiles. Currently, most of the data are from 2015 and contain information not included in the County Health Rankings reports. For more information about the Community Health Status Indicators project, visit [wwwn.cdc.gov/communityhealth](http://wwwn.cdc.gov/communityhealth).

## Community Health Needs Assessment—Akron Campus

### Community Health Needs Assessment Toolkit

The Community Health Needs Assessment Toolkit is a collaborative partnership between Kaiser Permanente; the Institute for People, Place, and Possibility (IP3); the Centers for Disease Control and Prevention; and other partners that seek to make freely available data that can assist hospitals, nonprofit organizations, state and local health departments, financial institutions, and other organizations working to better understand the needs and assets of their communities and to collaborate to make measurable improvements in community health and well-being. Similar to the County Health Rankings program, the Community Health Needs Assessment Toolkit project collects information from a variety of sources and creates county-level profiles for comparison purposes. For more information about the Community Health Needs Assessment Toolkit, visit [assessment.communitycommons.org](http://assessment.communitycommons.org).

### County Health Rankings

The County Health Rankings & Roadmaps program is a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. The program collects county-level information on mortality, morbidity, health behaviors, clinical care, social and economic factors, and physical environment for nearly all counties in the United States. Some data reported are actual counts based on reports (i.e., reported disease diagnoses), some data are estimated based on samples (i.e., the Behavioral Risk Factor Survey), and some data are modeled to obtain a more current estimate (i.e., projected 2014-2015 estimates based on 2010 census data). For more information about the County Health Rankings program, visit [www.countyhealthrankings.org](http://www.countyhealthrankings.org).

### Help Me Grow

Help Me Grow is Ohio's birth-to-three program that provides state and federal funds to county Family and Children First Councils to be used in conjunction with state, local, and other federal funds to implement and maintain a coordinated, community-based infrastructure that promotes trans-disciplinary, family-centered services for expectant parents, newborns, infants, toddlers and their families. The Ohio Department of Health, Bureau of Early Intervention Services is the lead agency administering the Help Me Grow program. Performance data on the Help Me Grow program were used in this CHNA. For more information about the Help Me Grow program, visit [www.ohiohelpmegrow.org](http://www.ohiohelpmegrow.org).

### Northeastern Ohio Regional Trauma Network

The mission of the Northeastern Ohio Regional Trauma Network is to collaboratively develop a regional trauma system and improve trauma care for the communities served, through data evaluation, research, injury prevention and education. The purpose of the network is to collect and analyze pre-hospital and hospital demographic and clinical data for peer review, injury prevention, community-based education and research, submission of data to the State trauma registry, and performance improvement. County-level data that could be compared to peer counties, the state and the nation were obtained through a special data request. For more information on the Northeastern Ohio Regional Trauma Network, visit [arha.technologynow.com/ProgramsServices/NortheasternOhioRegionalTraumaNetwork.aspx](http://arha.technologynow.com/ProgramsServices/NortheasternOhioRegionalTraumaNetwork.aspx).

## **Community Health Needs Assessment—Akron Campus**

### **Ohio Department of Education**

The Ohio Department of Education oversees the state’s public education system, which includes public school districts, joint vocational school districts and charter schools. The department also monitors educational service centers, other regional education providers, early learning and childcare programs, and private schools. The Ohio Department of Education publishes annual “report cards” on schools and districts that contain information on the demographics and educational outcomes of students. For more information about data available from the Ohio Department of Education, visit [education.ohio.gov/Topics/Data](http://education.ohio.gov/Topics/Data).

### **Ohio Department of Health**

The Ohio Department of Health is a cabinet-level agency that administers most state-level health programs, including coordination of activities for child and family health services, healthcare quality improvement, services for children with medical handicaps, nutrition services, licensure and regulation of long-term care facilities, environmental health, prevention and control of injuries and diseases, and others. County-level data that could be compared to national statistics were collected in a variety of areas and used in this CHNA. For more information about data available from the Ohio Department of Health, visit [odh.ohio.gov/healthstats/datastats.aspx](http://odh.ohio.gov/healthstats/datastats.aspx).

### **Ohio Hospital Association**

Established in 1915, the Ohio Hospital Association (OHA) is the nation’s first state-level hospital association. OHA collaborates with member hospitals and health systems to meet the healthcare needs of their communities and to create a vision for the future of Ohio’s healthcare environment. OHA, in coordination with member hospitals, has developed new web-based software called *Insight* that allows hospitals to run customized and standard reports for marketing, physician recruiting, business development and benchmarking purposes. Several health indicators were drawn from OHA’s Insight system, with their permission. For more information about OHA Insight, please visit [www.ohanet.org/insight/](http://www.ohanet.org/insight/).

## **Community Leader Interviews**

In addition to examining county-level epidemiologic data, 52 interviews were conducted with community leaders from Akron Children’s six-county service area from March through June 2016. These interviews provided insight on the significant health needs of children in their communities and the factors that affect those health needs. The interviews also discussed other existing community health needs assessments, possible collaboration opportunities, and what the hospitals can do to address the significant health needs identified in the CHNA. These community leaders represent the broad interests of groups served by the hospital facility, including the medically underserved, low-income persons, minority groups, those with chronic disease needs and leaders from local public health agencies and departments who have special knowledge and expertise in public health.

Leaders from the following community organizations were consulted during this CHNA:

- Access, Inc.
- ADM Board
- Akron Metropolitan Housing Authority
- Akron Public Schools
- Akron-Summit County Community Action Agency
- Kent City School District
- Medina County Health Department Commissioner
- Mental Health and Recovery Board of Wayne-Holmes County, Director Open M Ministries
- Ohio State Representative John Bocchieri
- Ohio State Representative Christina Hagan

## Community Health Needs Assessment—Akron Campus

- Akron-Summit County Library
- Aurora City School District
- Brunswick City School District
- Canal Fulton Chamber of Commerce, Director
- Children’s Hospital Community Benefit/Community Health Needs Assessment Steering Committee
- City of Akron, Assistant to the Mayor for Education, Health, and Families
- City of Hudson Mayor
- City of Kent Health Department Commissioner
- City of Massillon Mayor
- City of Medina Mayor
- City of New Franklin Mayor
- City of Orrville Mayor
- City of Rittman Mayor
- City of Stow Mayor
- Cloverleaf Local Schools
- Crestwood Local School District
- Faithful Servants
- Greater Akron Area Chamber of Commerce, Executive Director
- Hudson School District
- International Institute of Akron, Director of Refugee Resettlement
- Kent Chamber of Commerce, Executive Director
- Ohio State Representative Sarah LaTourette
- Oriana House, Inc.
- Portage County Combined General Health District Commissioner
- Portage County Mental Health and Recovery Board, Director and Executive Director
- Rootstown Local Schools
- Stark County Department of Job and Family Services, Director and Deputy Director
- Stark County Health Commissioner
- Summit County Alcohol, Drug Addiction, and Mental Health Board Director
- Summit County Children Services
- Summit County Executive
- Summit County Public Health Commissioner
- Tuslaw Local School District
- United Way of Stark County, Health Impact Counsel Director
- United Way of Summit County
- U.S. Senator Sherrod Brown Legislative Aide
- U.S. Senator Rob Portman Legislative Aide
- Wadsworth Chamber of Commerce, Director
- Wadsworth City School District
- Wayne County Health Department Health Co-Commissioner
- Windham Village Mayor

### Community Resident Focus Groups

In addition to gathering input from community leaders, focus groups were conducted with community residents from April through June 2016 to obtain their input on significant health needs of children in their communities, the factors that affect those needs, the solutions they thought would meet those needs, and what the hospitals and other community groups could do to address those needs. Due to the observed information gap in the epidemiologic data on the health of children, child substance abuse issues, and child mental health issues, several questions were asked to probe more deeply into these issues. In addition, a questionnaire was distributed to focus group participants to gather demographic information and basic perceptions of community health. The discussion guide, questionnaire and protocol were reviewed and approved by the Kent State University Institutional Review Board.

**Table 3. Demographic Characteristics of Community Resident Focus Group Participants (n=178)**

Characteristic	Number	Percent
<b>County of Residence</b>		
Summit County	54	30.3%
Wayne County	11	6.2%
Medina County	22	12.4%
Stark County	39	21.9%
Portage County	24	13.5%
Richland County	28	15.7%
Number of Years Lived in County (average and SD)	31.7	20.2
<b>Racial Background</b>		
African-American (or Black)	36	20.2%
Asian-American	4	2.2%
Caucasian (or White)	130	73.0%
Native Hawaiian or Other Pacific Islander	0	0.0%
American Indian or Alaska Native	3	1.7%
Other/Missing	5	2.8%
<b>Ethnic Background</b>		
Hispanic or Latino/a	3	1.8%
Not Hispanic or Latino/a	156	87.6%
Missing	19	10.7%

**Community Health Needs Assessment—Akron Campus**

Recruitment

Community residents were recruited to participate in the focus groups in several ways. First, local health departments were asked if there were any community events or meetings that could be used for holding a focus group. Then, KSU-CPH looked to conduct focus groups during scheduled community meetings and events, such as advisory groups, and health and wellness center meetings. Finally, community leaders were asked for recommendations on potential focus group locations during their interviews. Sites were selected based on proximity to population areas, ease of access (including free parking and bus lines), and the recommendations from local community leaders. Community residents who participated in the focus groups received a \$50 Visa or MasterCard as a “thank you” to compensate them for their time and expense. A total of 178 people participated in the Community Resident Focus Groups. The following tables show the demographic characteristics of participants in the six county focus groups.

**Demographic Characteristics of Focus Group Participants**

Focus groups were conducted with community residents from April through June 2016 to obtain their input on the significant health needs of children and adults in their communities, the factors that affect those needs, solutions they thought would solve those needs, and what the hospitals and other community groups could do to address those needs. Due to the observed information gap in the epidemiologic data on the health of children, child substance abuse issues and child mental health issues, several questions were asked to probe more deeply into these issues. In addition, a questionnaire was distributed to focus group participants to gather demographic information and basic perceptions of community health. The demographic characteristics of participants in these focus groups follow.

As shown in Table 3 above, diverse participants were drawn from across the region. About 30% of participants were from Summit County, 6.2% from Wayne County, 12.4% from Medina County, 21.9% from Stark County, 13.5% from Portage County and 15.7% from Richland County. The average number of years that participants had lived in their home county was 31.7. Twenty percent of participants were African-American, 73% were Caucasian and 1.8% were Hispanic.

As shown in Table 4 below, participants had diverse household characteristics. Less than 1% lived alone, 16.9% lived with one other person, 39.3% lived with two other people, 15.7% lived with three other people and 13.0% lived with five or more people.

More than 62% of participants had no children in the home, 15.7% had one child, 10.1% had two children, and 10.7% had three or more children in the home.

**Table 4. Household Characteristics of Community Resident Focus Group Participants (n=178)**

Characteristic	Number	Percent
<b>Number of People in Home</b>		
One	30	16.9%
Two	70	39.3%
Three	28	15.7%
Four	24	13.5%
Five or More	23	13.0%
Missing	3	1.7%

Characteristic	Number	Percent
<b>Number of Children in the Home</b>		
None	111	62.4%
One	28	15.7%
Two	18	10.1%
Three or More	19	10.7%
Missing	2	1.1%

## Community Health Needs Assessment—Akron Campus

Table 5 shows the range in terms of income and health insurance status. Eleven point eight percent of participants reported a monthly household income between \$0-\$999, 16.9% between \$1,000-\$1,999, 14.6% between \$2,000-\$2,999, 9.6% between \$3,000-\$3,999, 7.3% between \$4,000-\$4,999, and 18.5% reported monthly household income exceeding \$5,000 per month. In addition, 6.7% reported they had no health insurance, 42.1% had private health insurance, 2.2% had health insurance as a veteran or member of the military, 24.7% had Medicare, and 18.5% had Medicaid.

**Table 5. Income and Insurance Status of Community Resident Focus Group Participants (n=178)**

	Number	Percent
<b>Total Household Monthly Income</b>		
0-\$999	21	11.8%
\$1,000 - \$1,999	30	16.9%
\$2,000 - \$2,999	26	14.6%
\$3,000 - \$3,999	17	9.6%
\$4,000 - \$4,999	13	7.3%
\$5,000 and Higher	33	18.5%
Missing	38	21.3%
<b>Primary Type of Health Insurance</b>		
Uninsured	12	6.7%
Private Health Insurance	75	42.1%
Veterans/Military	4	2.2%
Medicare	44	24.7%
Medicaid	33	18.5%
Other	9	5.1%
Missing	1	0.6%

**Table 6. Healthcare Status and Utilization of Community Resident Focus Group Participants (n=178)**

	Number	Percent
<b>Had Someone in Home Who Did Not Receive Health Care Due to Cost</b>	52	29.2%
<b>Has Someone in Home With a Chronic Disease</b>	89	50.0%
<b>Times Per Year Participant Visits a Doctor</b>		
None	4	2.2%
One	29	16.3%
Two	38	21.3%
Three	25	14.0%
Four	21	11.8%
Five to Nine	19	10.7%
Ten or More	17	9.6%
Missing	25	14.0%
<b>Participant's Description of Current Health</b>		
Excellent	24	13.5%
Very Good	50	28.1%
Good	50	28.1%
Fair	34	19.1%
Poor	6	3.4%
Missing	14	7.9%

**Community Health Needs Assessment—Akron Campus**

As shown in Table 6 on the previous page, participants had diverse healthcare utilization experiences. Nearly 30% stated that someone in their home did not receive healthcare due to the cost, or were unsure, and 48.9% of the focus group participants had someone in their home currently with a chronic disease or condition. Only 2.2% reported that they usually don’t go to a doctor during the year, 16.3% go once per year, 21.3% go twice per year, 14.0% go three times per year, 11.8% go four times per year, 10.7% go five to nine times per year, and 9.6% go ten or more times per year. About 3.4% described their health as poor and another 19.1% describe it as fair. Over 41% described their health as excellent or very good.

Participants were also asked to report the top three health problems facing their community. Many participants did not respond to this question. Among those who did respond, results were diverse, as shown in Table 7. Diabetes (11.6%) was the most commonly cited health problem, followed by substance abuse (11.0%), cardiovascular disease (10.6%), overweight and obesity (9.6%) and cancers (8.4%).

Participants were also asked to report the top three solutions to the health problems in their community. Results are shown in Table 8 below. A large portion of respondents did not know or did not respond, and there were a wide range of recommendations.

The responses that could be reliably classified fell into four primary categories: making services more affordable, accessible, or of higher quality; individual lifestyle changes; policies or legal solutions; and provision of programs or services.

Responses coded as “affordability, accessibility, and quality” were both general in nature (access to healthcare, better healthcare, better insurance options) and included some more specific suggestions, such as transportation, discounted diabetes supplies, insurance coverage of gym memberships and reduction in the cost of healthy food. Individual actions and lifestyle changes were solutions that could be undertaken by individual community members, such as exercise,

**Table 7. Top Community Health Problems Identified by Participants**  
*Respondents Could Identify Multiple Problems*

Problem Identified	Percent Identifying
Chronic Diseases	
Asthma	0.2%
Cancers	8.4%
Cardiovascular	10.6%
Diabetes	11.6%
Other Respiratory	2.0%
Overweight and Obesity	9.6%
Other Disease	3.2%
Environmental Factors	2.0%
Healthcare Access/Cost and Quality	6.0%
Lifestyle Factors	4.2%
Mental Health	7.4%
Substance Abuse	11.0%
Other/Don’t Know/No Response	23.5%

**Table 8. Top Solutions to Community Health Problems Identified by Participants**  
*Respondents Could Identify Multiple Solutions*

Solution Identified	Percent Identifying
Affordability/Accessibility/Quality	11.0%
Individual Action/Lifestyle	19.3%
Policies/Legal	4.0%
Offer Programs and Services	24.7%
Other/Don’t Know/No Response	41.0%

## **Community Health Needs Assessment—Akron Campus**

eating a healthy diet, stopping smoking and focusing on positivity. Policies and legal solutions were those that require macro-level intervention, including cleaner communities, stopping drug suppliers, more control of insurance companies, and reducing chemicals in food and on grass and buildings. Responses coded as “offer programs or services” ranged from general suggestions such as prevention and education to more specific proposed solutions such as pregnancy care services, mentoring, fitness centers and research.

Respondents identified provision of programs or services (24.7%) and individual lifestyle changes (19.3%) as the most desirable solutions for health problems facing the community, followed by making services more affordable, accessible, or of higher quality (11.0%), and developing policies or legal solutions (4%).

### **Method Used to Identify Significant Health Needs**

As previously mentioned, epidemiologic data were collected from a variety of sources. To prioritize these health indicators, data from Medina, Summit, Portage, Stark, Wayne, and Richland counties were compared to two peer counties in Ohio that were demographically similar, to the state, to US averages, and also to the Healthy People 2020 target, if available. The selection of two peer counties in Ohio for each county was determined by the U.S. Department of Health and Human Services for their community health indicators.

At a meeting of the three hospital systems on May 1, 2016, the group agreed that any epidemiologic indicator which deviated in an unfavorable direction on 3 or more benchmarks would be considered a “significant health need.” The list of significant health needs resulting from the epidemiologic analysis was then supplemented with additional health needs identified by community leaders and community residents. An analysis was conducted on the notes and transcripts of community leader interviews and community resident focus groups to identify and quantify themes that consistently emerged.

The health areas listed below were the health needs identified for children by community leaders and residents:

#### **Community Leaders**

- Dental health
- Injuries
- Mental health
- Misuse of alcohol and drugs
- Obesity

#### **Community Residents**

- Diabetes
- Drugs and alcohol
- Mental health
- Obesity

### **Community Resources**

A wide variety of community resources are available to help address the prioritized health needs identified in this CHNA.

## **Community Health Needs Assessment—Akron Campus**

### **Medina County**

- Cleveland Clinic - Akron General
- American Academy of Pediatrics, Ohio Chapter
- American Cancer Society
- American Diabetes Association
- American Heart Association
- American Lung Association
- Birthcare of Medina County
- Children’s Hospital Association
- Community Action of Wayne and Medina Counties
- Cornerstone Wellness Center
- Medina County Board of Mental Health
- Medina County Career Center
- Medina County Drug Abuse Commission
- Medina County Health Department
- Medina County Department of Job and Family Services
- Medina Health Ministry
- Oaks Family Care Center
- Summa Health System
- United Way of Medina County

The Medina County Career Center also maintains a list of community resources at [www.mcjvs.edu/ui/images/company\\_assets/512F1C7F-0D64-4A5E-9D91-785DC064755F/MCCCCommunityResources\\_a4bd.PDF](http://www.mcjvs.edu/ui/images/company_assets/512F1C7F-0D64-4A5E-9D91-785DC064755F/MCCCCommunityResources_a4bd.PDF)

### **Portage County**

- Cleveland Clinic - Akron General
- Axxess Pointe Community Health Center
- American Academy of Pediatrics, Ohio Chapter
- American Cancer Society
- American Diabetes Association
- American Heart Association
- American Lung Association
- Children’s Hospital Association
- City of Kent Health Department
- City of Ravenna Health Department
- Coleman Professional Services
- Community Action Council of Portage County
- Family and Community Services, Inc.
- Mental Health and Recovery Board of Portage County
- Portage County Department of Job and Family Services
- Portage County Family and Children First Council
- Portage County Health Department
- Summa Health System
- Townhall II

**United Way of Portage County also maintains a searchable database of community resources at [www.211portage.org](http://www.211portage.org)**

### **Richland County**

- American Academy of Pediatrics, Ohio Chapter
- American Cancer Society
- American Diabetes Association
- American Heart Association
- American Lung Association
- Catholic Charities
- Center for Individual and Family Services
- Children’s Hospital Association
- Mansfield Metropolitan Housing
- Mansfield UMADAOP
- National Alliance on Mental Illness (NAMI) of Richland County
- Rehab Center
- Richland County Children Services
- Richland County Community Action
- Richland County Department of Health and Human Services
- Richland County Department of Job and Family Services
- Richland County Department of Public Health
- Richland County Mental Health and Recovery Services
- Richland County Youth and Family Council
- Salvation Army
- Summa Health System

**United Way of Richland County also maintains a searchable database of community resources under *Partner Agencies* at <http://www.unitedwayofrichlandcounty.org/partner-agencies>**

## **Community Health Needs Assessment—Akron Campus**

### **Stark County**

- Alliance Health Department
- Cleveland Clinic - Akron General
- American Academy of Pediatrics, Ohio Chapter
- American Cancer Society
- American Diabetes Association
- American Heart Association
- American Lung Association
- Canton City Health Department
- Children's Hospital Association
- Coleman Professional Services
- Community Services of Stark County
- Greater Stark County Urban League
- Massillon Health Department
- Mental Health and Recovery Services Board of Stark County
- Ohio Means Jobs in Stark and Tuscarawas Counties
- Stark County Children Services
- Stark County Department of Job & Family Services
- Stark County Health Department
- Summa Health System
- Western Stark Free Clinic

**United Way of Greater Stark County also maintains a searchable database of community resources at <http://www.referweb.net/uwgsc/>**

### **Summit County**

- Access, Inc.
- Akron-Canton Regional Foodbank
- Akron Community Health Resources
- Akron Metropolitan Housing Authority
- Akron Summit Community Action
- Akron Urban League
- American Academy of Pediatrics, Ohio Chapter
- American Cancer Society
- American Diabetes Association
- American Heart Association
- American Lung Association
- AxessPointe Community Health Center
- Child Guidance & Family Solutions
- Children's Hospital Association
- Cleveland Clinic - Akron General
- Coleman Professional Services
- Community Health Center
- County of Summit Alcohol, Drug Addiction, & Mental Health Services Board
- Faithful Servants Care Center
- Greenleaf Family Services
- Haven of Rest Ministries
- March of Dimes
- National Alliance on Mental Illness
- Open M Ministries
- Portage Path Behavioral Health
- Salvation Army
- Summa Health System
- Summit County Children Services
- Summit County Department of Job and Family Services
- Summit County Public Health
- Summit Family and Children First Council
- United Way of Summit County

**Info Line also maintains a searchable database of community resources at <http://www.211summit.org>**

### **Wayne County**

- Cleveland Clinic - Akron General
- American Academy of Pediatrics, Ohio Chapter
- American Cancer Society
- American Diabetes Association
- American Heart Association
- American Lung Association
- Children's Hospital Association
- Community Action of Wayne and Medina Counties
- Summa Health System
- Viola Startzman Free Clinic
- Wayne-Holmes Mental Health and Recovery Board
- Wayne County Combined General Health District
- Wayne County Department of Children Services
- Wayne County Department of Job and Family Services
- Wayne County Family and Children First Council

**United Way of Wayne and Holmes Counties also maintains a searchable database of community resources at [www.211portage.org](http://www.211portage.org) (includes Wayne County)**

## **Community Health Needs Assessment—Akron Campus**

### **Other Community Health Needs Assessments**

Lastly, community health needs assessments previously conducted in the region were reviewed and helped to inform this CHNA. Some of these CHNAs were known to the hospitals, some were found using Internet searches, and some were sent to us by community leaders.

CHNAs that were reviewed during the preparation of this assessment included:

- CHNAs conducted by the partnering hospitals in 2010 and 2013
- The 2011, 2013, and 2015 Stark County Health Needs Assessments conducted by Aultman Hospital, Mercy Medical Center, and Alliance Community Hospital
- Medina County Community Health Improvement Plan 2013-2018, conducted by the Living Well Medina County collaborative
- Health Profile of Portage County, Results from the 2008 Ohio Family Health Survey conducted by the Health Policy Institute of Ohio, The Center for Community Solutions, and Cleveland State University
- Assessing NE Ohio Community Health Needs Assessments: Standards, Best Practice, and Limitations conducted by The Center for Community Solutions in 2015
- Summit County Community Health Assessment 2011 and the 2015 update conducted by Summit County Public Health
- The 2012 and 2015 Portage County CHNAs

### **To Request Copies and for More Information**

This report is publicly available on our website. A limited number of reports have also been printed. If you would like a copy of this report or if you have any questions about it, please contact:

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The report is available at [www.akronchildrens.org/cms/community-needs-assessment/](http://www.akronchildrens.org/cms/community-needs-assessment/).

## Community Health Needs Assessment—Akron Campus

### Summary of Results

Based on the epidemiologic data and input from community leaders and residents, the significant health needs for children are summarized below by county in our hospital service area.

**Table 9. Significant Health Needs for Children by County**

Indicator	Medina	Portage	Richland	Stark	Summit	Wayne
<b>Access to Healthcare</b>						
Dental	X	X	X	X		X
Health insurance			X	X		X
Lack of vision coverage				X		
Mental health insurance		X	X	X		X
<b>Child Lifestyle Factors</b>						
Food insecurity		X		X		X
Overweight and obesity		X			X	X
<b>Chronic Disease</b>						
Asthma		X		X	X	X
Type 1 and Type 2 diabetes		X		X	X	X
<b>Maternal &amp; Infant Health</b>						
Infant death	X	X	X	X	X	X
Low birth weight	X	X	X	X	X	X
Teen pregnancy			X	X		
<b>Mental Health</b>						
Teen suicide	X	X	X	X	X	X
<b>Crime &amp; Violence</b>						
Child trafficking		X		X		X
Neglect and abuse			X			X
Opioid use and abuse	X	X	X	X	X	X
Teens offered, sold, or using drugs in school	X		X	X	X	X
Substance abuse	X	X	X	X	X	X
<b>Injuries</b>						
Motor vehicle accidents				X	X	X
<b>Environmental Factors</b>						
Elevated blood lead levels	X					X

## **Community Health Needs Assessment—Akron Campus**

### **Acknowledgements**

The Kent State University College of Public Health (KSU-CPH) was hired to conduct this Community Health Needs Assessment under the direction of an Advisory Committee comprised of representatives from Akron Children’s Hospital, Cleveland Clinic - Akron General and Summa Health System.

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# **Akron Children's Hospital Community Health Needs Assessment**

## **Implementation Team Impact Narratives**

**May 2016**



# Implementation Strategy: Asthma

**Global Aim:** In the next 3 years, we aim to substantially reduce the burden of asthma for our patients, their families, and our community.

**Specific Aim:** Between 1/1/14 and 1/1/17, we will reduce hospitalizations for asthma at Akron Children's Hospital by 10% per year (30% total), and reduce ER visits for asthma by 5% per year (15% total) by implementing guideline based care in the primary care setting, hospital setting, and school setting.

## Overview of the efforts of the strategy

Our comprehensive plan to reduce the burden of asthma in our community included workgroups focused on improving care and education for asthmatic patients in the inpatient, primary care and school settings as well as on creating information technology tools for a more accurate picture of our work.

Through these strategies, we have significantly reduced hospitalizations and ER visits for asthma, surpassing our initial goals outlined in our specific aim. In April 2016, the annualized hospitalization rate was 2.55% compare to 3.90% at the same time in 2015. This drop of 1.35% from the registry population of 26,000 represents a decrease of 340 admissions. Similarly, the ER rate dropped from 7.71% to 5.88% over the same period of time, representing a decrease of 424 ER visits. This has occurred during a time that overall ER utilization has markedly increased. The decline in hospitalizations and ER visits for asthma can be seen in Appendix A1.

Asthma was also identified as a priority within Akron Children's, which resulted in the formation of the Asthma Clinical Transformation Initiative (ACTI). Due to the success we have experienced with our framework, all of the strategies outlined below were also adopted as part of the ACTI.

## Inpatient: Asthma Pathway

The Asthma Pathway group focused on three major objectives – developing and adopting an asthma pathway, improving processes with the care of asthma patients and standardizing asthma education. The asthma pathway was developed in 2014, with widespread adoption of the pathway by the end of the year. From there, the focus was to improve the percentage of hospitalized patients leaving with an acceptable asthma plan, commonly referred to as an Asthma Treatment Plan (ATP).

Through educational efforts and some improvements of the plan, the Pathway Group was able to increase the percentage of hospitalized patients leaving with an ATP from ~50% to 90-95%.

Considerable effort was also made to standardize asthma education. Videos were produced to help with educational efforts. Asthma education was encouraged for all hospitalized patients and rates of completion went up.

## Information Technology (IT)

The Asthma IT group was charged with the development of the Asthma registry and to build within the EMR the support tools needed to provide asthma care in an efficient and guideline driven manner. By the end of 2014, the Asthma registry was complete and served



as the first rich and accurate source of data regarding the care of patients with asthma for individual providers, as well as practices and the system.

Throughout 2014, the IT team also contributed with the help of various EPIC team members to the building of documentation tools including an asthma HPI template, the Pediatric Asthma Score, the Asthma Control Test (ACT), and most importantly, a broadly available Asthma Treatment Plan (ATP). With the onset of the registry, the primary outcome measures became available and regular automated reports are available for review. Throughout 2015, the Asthma IT group was responsible for the building of a variety of Clarity reports to generate data on a daily, monthly, and yearly basis.

### **Primary Care: Easy Breathing (EZB) and Optimal Care**

Our Easy Breathing (EZB) group has successfully instituted the EZB program throughout the ACHP network. The EZB program consists of a 90-minute education session where the elements of guideline based care are discussed, and the tools of EZB are shared as a way to move toward a higher rate of guideline based care to improve baseline outcome measures. With the onset of CHNA work in 2014, the EZB rollout was accelerated to provide training of all ACHP practices within 2 years. That schedule has been successfully adhered to with a current count of 23 practices trained and using the EZB tools. Other data regarding EZB are as follows:

- Practices Trained: 23
- Providers Trained: 121
- Patients Enrolled: 18702
- Asthma Patients Enrolled: 5365
- New Asthma Patients Identified: 1177
- Guideline Compliance: 96%

The EZB program has also been successful at improving the processes of asthma care. Of the 26,000 children with asthma in the registry, 75% have an ACHP PCP and 20% have been enrolled in EZB. Of those enrolled in EZB, 74% have an ATP, and 60% have an ACT on record. Of those not enrolled in EZB, 27% have an ATP, and 20% have an ACT. With the asthma registry, we have found that children in EZB are 2.7 times more likely to have an ATP, and 3 times more likely to have an ACT.

Optimal Care has been another prime measure used to track care within the primary care practices. Optimal Care is a bundle which includes a flu vaccine, an updated ATP, and performance of an ACT within the last year. The measure is based on a July to June year reflecting the time that the annual flu vaccine shifts to the new year's vaccine. In 2014-5, there were only 2 practices within our system which achieved a threshold of 20% of all patients having received the Optimal Care bundle. In the 2015-6 year, there are now 8 practices above 20%, one of which has exceeded 30%. There was considerable improvement among all practices as demonstrated in Appendices A2 and A3.

### **School Health**

Asthma was and remains the most common reason for calling an ambulance to school. Care of children with asthma in schools consists first of identifying them, then providing for plans of care, and then being able to execute those plans when the need arises. The school efforts have been data challenged from the beginning due to a lack of an electronic database for tracking within the individual schools and within the systems at large. Our school health system is broadly distributed throughout our region. The most significant success of the group has been the standard acceptance of our EMR based ATP. In addition, read access to EPIC has improved availability of the ATP to front line Health Aids.

Treatment of asthma symptoms remains a fundamental priority in schools. Beyond that, School Health has recently qualified for a \$15,000 grant from ODH to improve care coordination. They aim to do this in cooperation with Home Care by identifying patients for home visits designed to provide education, trigger identification and abatement, and patient assessment.



# Implementation Strategy: Behavioral Health



**Global Aim:** To improve access and quality of evidence based behavioral health services for children and adolescents in our community *in order to prevent the need for more costly and disruptive inpatient hospitalization.*

## Overview of the efforts of the strategy

We have improved access and quality of services as evidenced by the three objectives delineated below. During this 3 year time period, innovations in care on the inpatient unit which included parental involvement as advocates resulted in a significant decrease in recidivism to the inpatient unit.

However, Akron Children's Hospital experienced a dramatic increase in the number of diversions and transfers for children and adolescents requiring inpatient hospitalization as depicted in Appendix B1 and B2. This resulted in a senior leadership decision to add another 10 inpatient hospital beds for a total of 24 beds. We were successful in obtaining \$400,000 from the State of Ohio Capital budget funds to support this expansion.



We strongly believe that the efforts of the three objectives will ultimately result in identifying and treating most children on an outpatient basis with evidence based treatment, by expanding the geographic footprint of behavioral health services in our region, making it easier for families to access care, and providing our pediatricians with partners in the office setting.

**Objective #1: Improve access and quality of care by providing an integrated evidence based treatment program, Center for Anxiety and Mood Management (CAMM), through a team based approach.**

We moved our outpatient treatment services to a more evidence based approach, and provided training, consultation and supervision to current therapists in Cognitive Behavioral Therapy, Trauma Focused Cognitive Behavior Therapy, and other treatment models. We focused on treatment for anxiety and depression, and have moved this model to our pediatric practices in order to provide integrated care.

## Accomplishments:

- Intensive 3-day CBT training February 4-6, 2015: Beck Institute, Torrey Creed, Ph.D.
- Trained therapists in suicide assessment on March 31, 2015: Shawn Shea, M.D., Experiential Training in the Chronological Assessment of Suicide Events (included PIRC and Intensive Services)



**Objective # 2: Partner with regional community mental health agencies to expand access to child psychiatric services.**

Initially, our aim was to partner with regional community mental health agencies to expand access to child psychiatric services. We established collaborative models with two community mental health agencies in two separate counties in the hopes they could provide services to our pediatric offices in their locations. This was successful with one agency, and unsuccessful in the second. We identified the challenges in working with mental health agencies to move toward Telemental health, and therefore changed directions to working directly with our own primary care practices in a collaborative care (hub) model. We have actually signed a formal affiliation agreement with the Child Guidance and Family Solutions (CG&FS) to partner with them for the provision of mental health and possibly Telemental health services in our pediatric practices.

Accomplishments:

- Developing a RN Case Manager position to work with a psychiatrist consultant
- Taken steps to create the medical resources for telepsychiatry
- Mental Health therapists located in the below ACHPs: Green, Kent, Warren, Boardman and Wooster (see Appendix B3)
- Telepsychiatry located in the Green ACHP with plans to expand to additional ACHP sites

**Objective #3: Expand Division services to the Akron Children's Hospital Mahoning Valley.**

Although initially it was challenging to staff an outpatient child psychiatry practice in the Mahoning Valley, we began by hiring a full time Clinical Nurse Specialist with prescriptive privileges and then we were successful in attracting a child psychiatrist to that practice. As you can see from the graph in Appendix B4, once the child psychiatrist was added our volume increased substantially. Our next step is to begin with limited psychotherapy services in that office, and to expand a PIRC presence in the Emergency Department. We initially attempted to partner with a local mental health agency for the PIRC presence in the ED in Mahoning Valley, but they were unable to provide the level of service we required.

Accomplishments:

- Hired child psychiatrist
- Hired mental health therapist for Mahoning Valley PIRC



# Implementation Strategy: Diabetes



**Global Aim:** To reduce the disease burden and economic impact of Type 2 Diabetes Mellitus (T2DM) on children and families in our community by the prevention, the early detection, and the reversal of T2DM.

## Overview of the efforts of the strategy

Our project has a very broad scope; what originally began as a focus on T2DM quickly became more than that. We realized that in order to tackle T2DM, we could not ignore one of the leading causes: obesity. This has proven to be a challenging task for our team as we began to unravel the childhood obesity epidemic. As you will see in our accomplishments, we have only scratched the surface of addressing this issue and are excited to continue working closely with our community partners in the next few years.

First and foremost, this project allowed us to capture the magnitude of the obesity crisis in our service area. By developing data collection tools we were able to show the prevalence of childhood overweight and obesity within our pediatric ACHP practices at 28% and within the entire ACH catchment area at 32% (36,860 individual patients). Second, we were able to evaluate the current program offerings, as well as obtain feedback from providers, on how to best address this epidemic. Lastly, we began improving the services offered to patients with T2DM, in an attempt to begin reversing the disease.

## Objective #1: Improve identification and early detection of children, adolescents and young adults at risk for or having pre-diabetes/diabetes

- Prevention, Intervention and Referral Pathway for Weight Management and T2DM
  - Creation of clinical pathway to guide primary care physicians in identifying and screening patients at risk; distributed to every referring provider in 29 counties
  - Resulted in referrals being directed to the correct departments, physicians obtaining correct screening labwork, and identification of new patients with T2DM
- Creation of tools for the electronic medical record to alert primary care physicians to at-risk patients and easily screen and refer
  - Tools included best practice advisories and clinical decision support
- Collaboration with Community Outreach Education and Support Center in Boardman, OH to screen children and adolescents at area health fairs and refer those at-risk for services



## **Objective #2: Improve access to high quality education and programming for children, adolescents and young adults at risk for or having pre-diabetes/diabetes**

- “Examining Provider Perceptions of Overweight/Obesity and Type 2 Diabetes Risk in Pediatric Primary Care” – survey completed in collaboration with Kent State University to explore the current knowledge base, resources available, and comfort level of PCP’s in addressing obesity in their practice setting
  - Distributed to 119 providers with 66% response rate
  - Preliminary results indicated a majority of providers do not have the time or resources to properly address weight management in their patient population
  - Data analyzation continues and results will be used to guide the development of future programming and interventions
- New Philadelphia ACHP Pilot Program
  - Pilot used to trial a healthy habits program in the medical home where patients are asked to come to weekly visits
  - 32 patients had an intake appointment for the program; of those, 21 (66%) returned to begin the program and 18 (56%) have attended three or more appointments
  - All 18 patients who attended three or more appointments stabilized or dropped their BMI
- CATCH Program
  - Akron Children's Hospital participates in a collaborative to offer this program to area after-school programs
  - Over 2000 school-age children in 70 locations participate and receive nutrition and physical activity education
- Healthy Weight Clinic at Akron Children's Hospital
  - Merged existing weight management programs into one comprehensive clinic offering intensive tertiary-level care to patients at highest risk
  - 27% no-show rate for intake appointment; due to variability in labeling missed vs. cancelled appointments exact numbers are not available for program appointments, however general tracking shows most clinics are only 50-75% full
  - This data was used to make changes to the program, including offering nutrition-only appointments, shortening the length of appointments, and screening families prior to scheduling to explain the program and assess for motivation and readiness to make changes

## **Objective 3: Improve health indicators and co-morbidities in patients with Type 2 Diabetes with the ultimate goal of disease reversal**

- Diabetes Disease Registry – created to better track patients and to use as a tool to reach out to families and connect them with needed services
  - We currently have 64 patients with T2DM; with an average of 60% of them seen in a given quarter (standard of care is quarterly appointments)
  - 15 patients have been identified, screened, and newly diagnosed with T2DM in the last two years
- Education Improvements – utilizing a multi-disciplinary team approach at diagnosis and follow-up visits to better educate and engage with families
- “Psychosocial Risks: Examining Diabetes (T2DM) in Children and Teens (PREDICT)” – three year study in collaboration with Kent State University
  - Grant funding acquired in end of 2015, measures have been identified and IRB proposal will be submitted this month

# Implementation Strategy: Infant Mortality

**Global Aim:** Reduce Mahoning County infant mortality rate by 20% from 10.8/1000 in 2012 to 8.6/1000 in 2016.

## Overview of the efforts of the strategy

Our team originally composed of members from Akron Children's Hospital Mahoning Valley (ACH MV), Akron Children's Hospital (ACH) and St. Elizabeth Boardman Hospital (SEBH) identified three specific areas to reduce infant mortality: safe sleep, breastfeeding and progesterone. During the 1<sup>st</sup> year, we formed an additional collaboration with the newly formed Mahoning Youngstown Birth Outcome Equity Team, now known as MY Baby's 1<sup>st</sup>, Mahoning Youngstown Infant Mortality Coalition. This group includes Youngstown City Health Department, Mahoning County Board of Health, Youngstown State University, March of Dimes, Mercy Health, Resource Mothers, Mahoning County Educational Service Center, Mahoning County Continuum of Care, Planned Parenthood, Mahoning County WIC and Safe Kids Coalition. Our hospital team participated actively with MY Baby's 1<sup>st</sup> which provided a footprint for additional agencies and clients receiving our message.

The Mahoning County infant mortality rate in 2013 improved to 9.1/1000 compared with the Ohio rate of 7.33/1000. Data for 2014 is encouraging and Mahoning County will not be assigned a rate because there were less than 20 infant deaths. The Ohio infant mortality rate dropped to 6.8/1000 in 2014. As seen in Appendix C1, the Ohio prematurity rate in 2013 was 10.3%, compared to national average of 9.6%. Mahoning County rate in 2013 was 14.1%. March of Dimes' goal is to reach 8.1% by 2020. We will continue to track the effect of our efforts on the prematurity rate.

In June 2014, published data for Ohio reflected an increase in infant mortality when birth spacing was less than 12 months. Birth spacing, defined as the time between the birth of a baby and conception of the next baby, was associated with improved birth outcomes when the interval was greater than 18 months. Therefore, birth spacing education was added as objective 4 to the implementation strategy, with a community and hospital education platform.

For our objectives we had multiple outreach activities, lectures, media (print and television), scientific poster presentations and an academic publication. In November 2015, Akron Children's Hospital Mahoning Valley in collaboration with March of Dimes and MY Baby's 1<sup>st</sup> Coalition presented an Infant Mortality Community CME Lecture and dinner which reached 100 healthcare providers.

The collaboration with MY Baby's 1st has led to our message being shared with all these organizations in Mahoning County. We are unable to measure the extent of our message.



MY Baby's 1st Coalition has submitted a proposal to Ohio Medicaid for funding to enhance our team's infant mortality reduction initiatives. Funding has been requested to reduce infant mortality and eliminate racial birth outcome inequities.

We believe that our efforts have resulted in an increase in knowledge for our health care professionals, increase in knowledge for our patients and increase awareness of our community partners and patients.

### **Objective 1: Safe Sleep**

In 2014, we used ODH printed materials as a vehicle to spread the message. In 2015, we developed hospital branded posters and other printed materials. Safe sleep kits and educational binders were distributed to 13 Mahoning and Trumbull County birth hospitals made possible by Akron Children's Hospital Mahoning Valley awarded grants totaling \$43,500. By the end of the second year we met our goal: 100% of MV hospitals that discharge newborns received education on safe sleep and sleep sacks for their patients. Next steps include requesting grant dollars to develop additional safe sleep kits for 2016 to provide to community hospitals. The future focus will be on safe sleep education to day cares in identified hot spot census tracts.

### **Objective 2: Breastfeeding**

We track mothers initiating breast feeding at 4 hospitals in our region. We did not meet our target of 80%. However, we started at an average of 69% and are now approaching 72%. We have identified racial disparities between white and black women initiating breastfeeding. We are implementing programs in the hospitals and are working with our community partners to address racial disparities.

### **Objective 3: Progesterone**

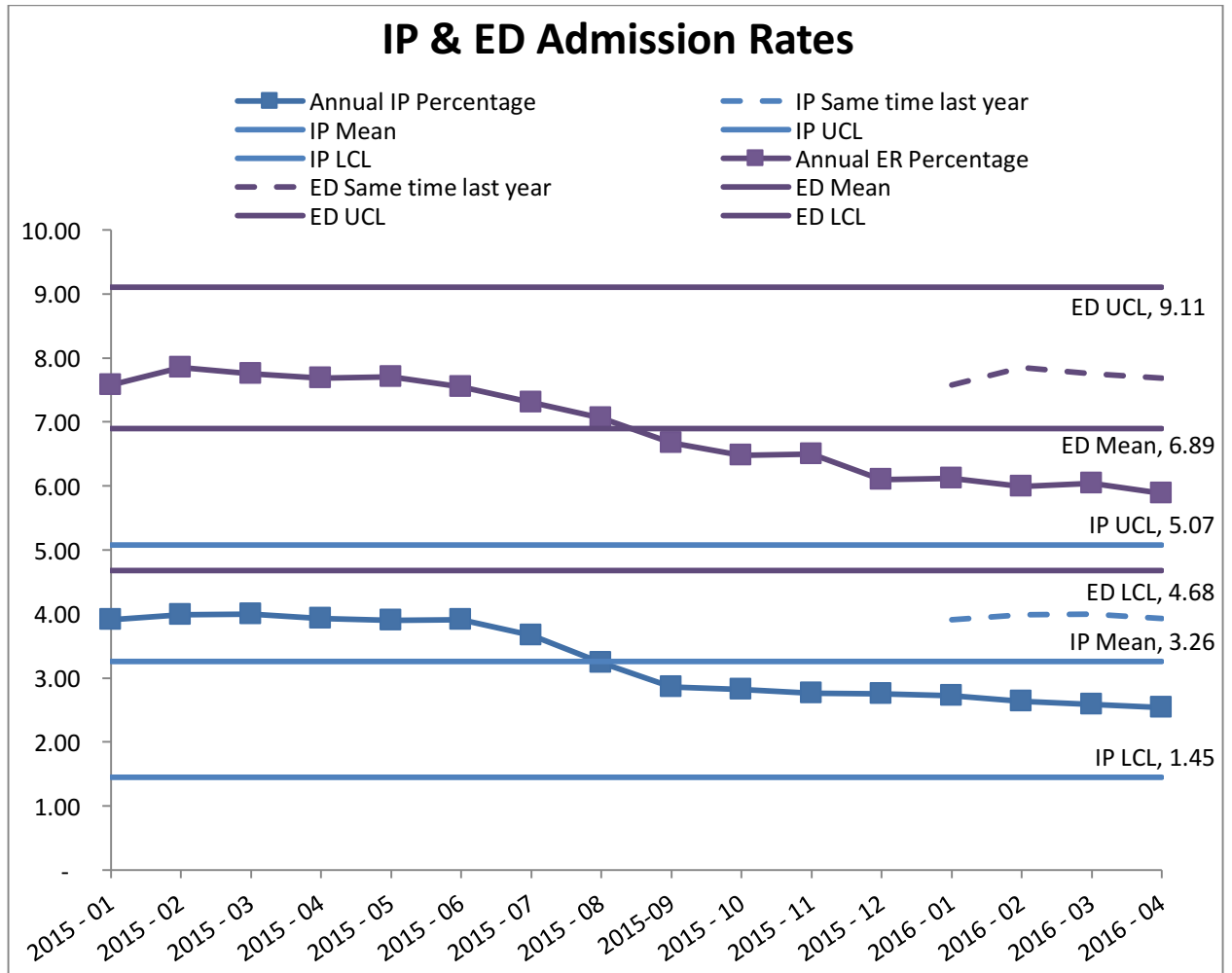
In 2014 we surveyed providers on their Progesterone knowledge to prevent premature birth recurrence and identified knowledge gaps. We had extensive education sessions and printed education materials. In order to evaluate the success of those efforts health care providers will be re-surveyed on their knowledge of Progesterone in May of 2016. We continue to counsel eligible NICU parents prior to discharge. The latest addition to the project is education to the late pre-term infants' mothers in the well nursery in collaboration with OPQC.

### **Objective 4: Birth Spacing**

Birth spacing education has been very successful in the NICU and next steps include our partner birth hospital SEBH initiating birth spacing education with all discharges. In October 2015, in collaboration with My Baby's 1<sup>st</sup>, we surveyed providers and clients of their knowledge of birth spacing and long acting reversible contraceptives. We identified education and next steps needed.

# Appendix

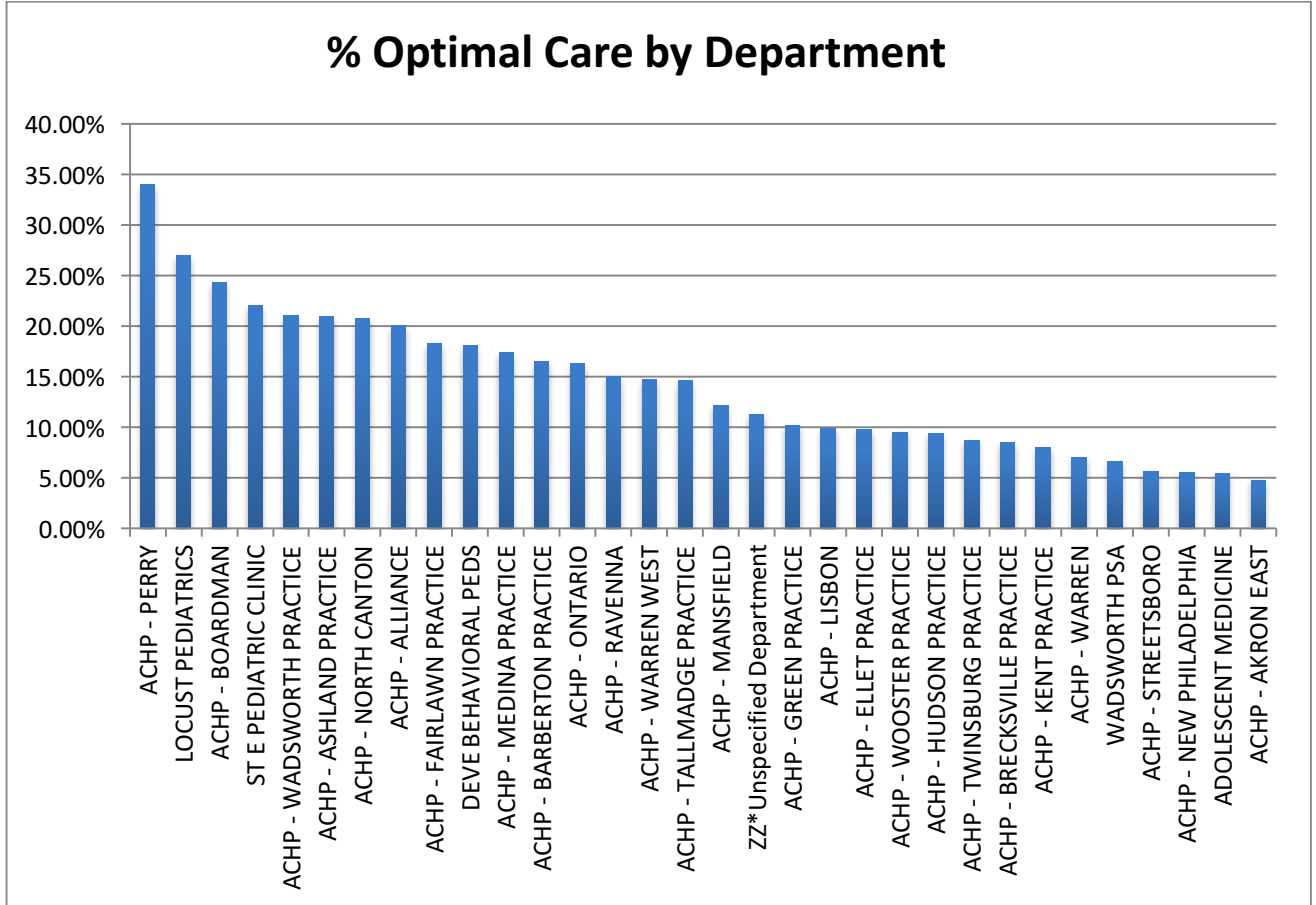
## A1. Inpatient and Emergency Visit Rates at Akron Children's Hospital, January 2015- April 2016



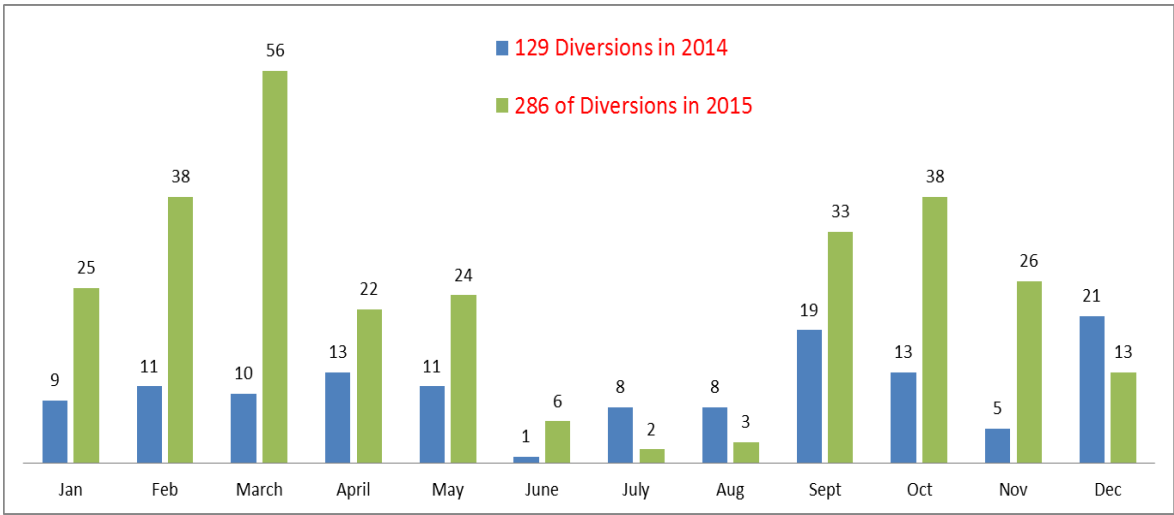
## A2. Optimal Care in Akron Children's Hospital Pediatrics (ACHP) offices as of February 2016

	2016 % Optimal Care	2015 % Optimal Care	Net Change	% Improvement
ACHP - ALLIANCE	17.15%	13.76%	3.39%	24.67%
ACHP - ASHLAND PRACTICE	18.97%	9.17%	9.80%	106.81%
ACHP - BARBERTON PRACTICE	15.43%	17.23%	-1.80%	-10.46%
ACHP - BOARDMAN	21.98%	19.96%	2.02%	10.13%
ACHP - BRECKSVILLE PRACTICE	7.32%	3.14%	4.17%	132.68%
ACHP - AKRON EAST ADOLESCENT MEDICINE	4.07%	2.67%	1.40%	52.44%
	5.23%	1.75%	3.48%	198.26%
LOCUST PEDIATRICS	20.94%	17.41%	3.53%	20.27%
ACHP - NEW PHILADELPHIA	3.81%	1.61%	2.21%	137.28%
ACHP - ELLET PRACTICE	8.81%	5.14%	3.67%	71.45%
ACHP - FAIRLAWN PRACTICE	17.77%	6.65%	11.12%	167.27%
ACHP - GREEN PRACTICE	9.36%	3.59%	5.77%	160.96%
ACHP - HUDSON PRACTICE	8.08%	3.74%	4.34%	116.18%
ACHP - KENT PRACTICE	7.35%	5.19%	2.15%	41.40%
ACHP - ONTARIO	16.16%			
ACHP - MEDINA PRACTICE	14.61%	7.88%	6.73%	85.32%
ACHP - NORTH CANTON	19.33%	15.40%	3.93%	25.52%
ACHP - PERRY	28.47%	7.39%	21.09%	285.49%
ACHP - RAVENNA	13.76%	7.46%	6.30%	84.42%
ST E PEDIATRIC CLINIC	19.35%	1.85%	17.50%	945.16%
ACHP - STREETSBORO	0.90%	2.42%	-1.51%	-62.53%
ACHP - TALLMADGE PRACTICE	14.68%	4.89%	9.80%	200.47%
ACHP - TWINSBURG PRACTICE	7.94%	1.27%	6.67%	527.22%
ACHP - WADSWORTH PRACTICE	18.49%	9.14%	9.35%	102.33%
ACHP - WARREN	6.10%	1.70%	4.40%	258.43%
ACHP - WARREN WEST	10.10%			
ACHP - WOOSTER PRACTICE	7.95%	0.93%	7.02%	756.60%
Total	11.78%			

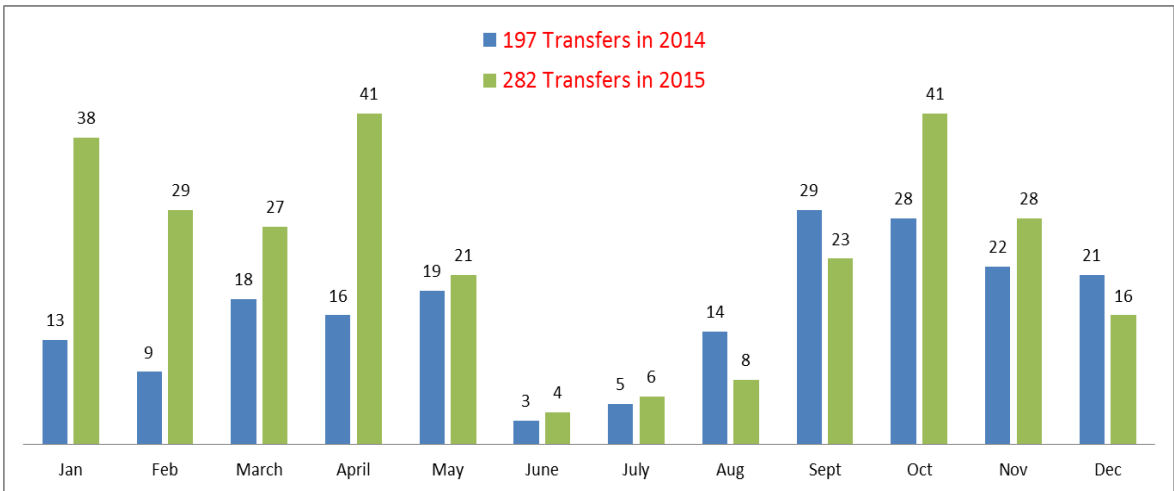
### A3. Optimal Care by Department as of April 2016



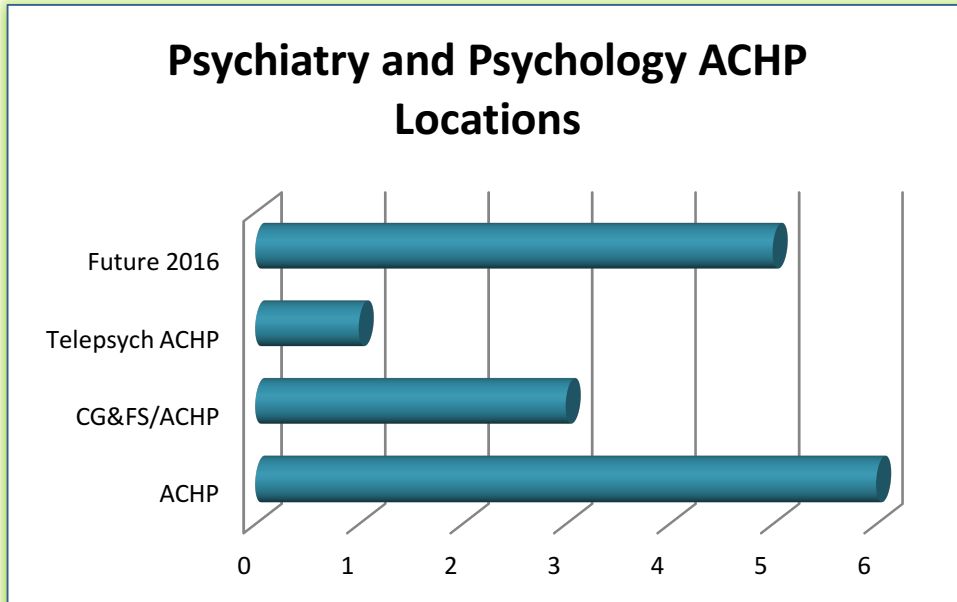
## B1. Behavioral Health Diversions, 2014-2015



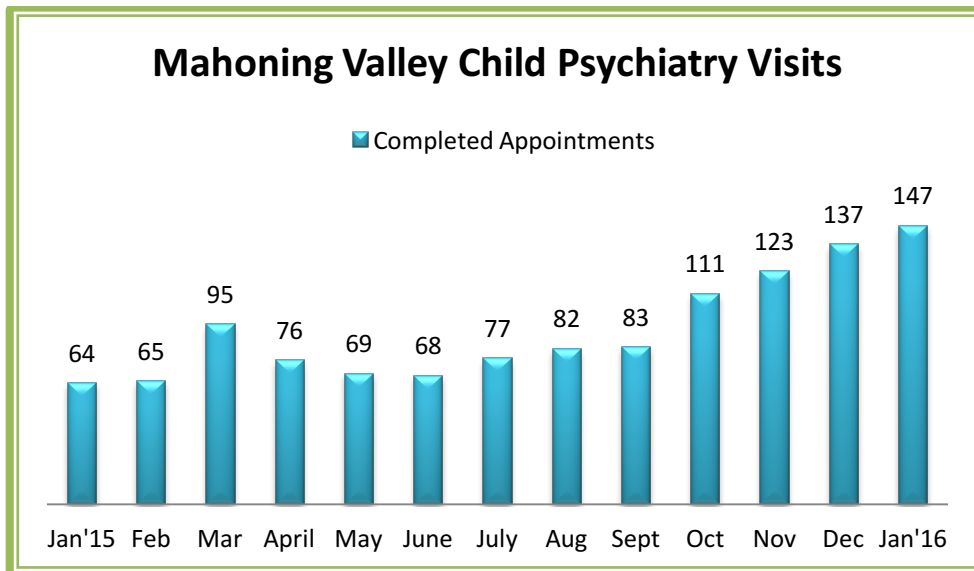
## B2. Behavioral Health Transfers, 2014-2015



**B3. Psychiatry and Psychology Akron Children's Hospital Pediatrics (ACHP) locations**

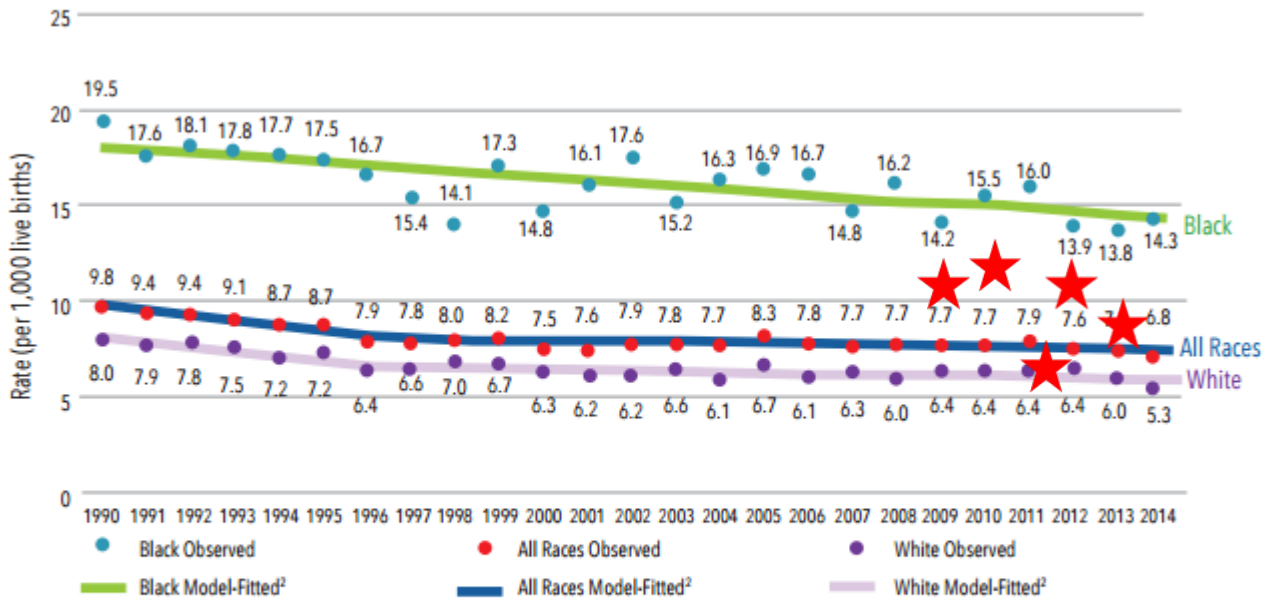


**B4. Mahoning Valley Child Psychiatry Visits, January 2015- January 2016**



# C1. Ohio Infant Mortality Rates by Race, 1990-2014

Figure 1: Ohio Infant Mortality Rates, by Race (1990-2014)



Source: Vital Statistics birth and mortality files, Ohio Department of Health

<sup>2</sup> "Model-Fitted" Definition - Joinpoint software models were used to test whether an apparent change in trend was statistically significant using a Monte Carlo permutation method. The same methods were used to assess all races, Black, and White infant mortality trends. In all cases, the best fitting line for the observed data is presented

## Mahoning County overall

- 2009 10.86/1000
- 2010 11.58/1000
- 2011 6.94/1000
- 2012 10.8/1000
- 2013 9.1/1000
- 2014 No rate

