2014

FORT HAMILTON HOSPITAL

Community Benefit Plan & Implementation Strategy

TABLE OF CONTENTS

INTRODUCTION

Fort Hamilton Hospital is one of seven hospitals in the Kettering Health Network (KHN). Being part of the KHN allows Fort Hamilton to access Network resources such as a vast network of specialist physicians as well as specialized centers and services.

Fort Hamilton Hospital Service Area

The service area for Fort Hamilton Hospital is Butler County and even more predominantly the City of Hamilton, located in Southwest Ohio. This service area's health care infrastructure is comprised of seven hospitals of which five are short-term acute care general hospitals, one is a short-term acute care hospital, and one is a children's medical center; 22 State licensed nursing homes; 21 State licensed residential care facilities; two hospice centers; three State licensed ambulatory surgery facilities; eight State licensed dialysis centers; and three birthing centers, per the Ohio Department of Health.

Community Health Needs Assessment

In 2013, Fort Hamilton Hospital partnered with member hospitals of the Greater Dayton Area Hospital Association and Wright State University to prepare the Community Health Needs Assessment (CHNA) for the hospital's service area. A community health needs assessment engages community members and partners to collect and analyze health-related data from many sources.

Data Collection

To prepare the CHNA, secondary data was collected from multiple sources to paint a detailed picture of the Fort Hamilton Hospital Service Area. Secondary data is reprocessing and reusing information that has already been collected such as institutional records from sources such as hospitals and the Ohio Department of Health. The CHNA reported previously-gathered data from the AIM for Better Health Care Access Now (2012) Community Health Needs Assessment, as well as from the Greater Cincinnati Community Health Status Survey. Aggregate hospital ICD-9 emergency department and hospital inpatient discharge diagnoses data were obtained from the Ohio Hospital Association via the Greater Dayton Area Hospital Association. Cancer data and vital statistics were obtained from the Ohio Department of Health. Other data were obtained from national sources such as the Health Resources and Services Administration (HRSA), the Bureau of the Census, and the Robert Wood Johnson Foundation; and other State sources such as the Ohio Development Services Agency and the Ohio Department of Job & Family Services.

Using the key findings from the CHNA, key stakeholders identified and prioritized strategic areas of concern for Fort Hamilton's service area that were used to develop the hospital's Implementation Strategy. The following report outlines the process for identifying and prioritizing key strategic issues and the implementation plan that will address these issues.

SELECTION OF COMMUNITY HEALTH PRIORITIES

The following lists present serious health priorities identified by the Fort Hamilton Community Health Needs Assessments (CHNA) ranked according to prevalence. "Serious" health priorities pertain to health issues that lead to hospitalization and/or death.

Top Inpatient Diagnoses

1. Hypertension
2. Non-ischemic heart disease
3. Diabetes
4. Heart attack/ ischemic heart disease
5. Alcohol and drug
6. Complications of pregnancy and childbirth

Top ED Diagnoses

1. Alcohol and drug
2. Hypertension
3. Unintentional injury
4. Abdominal pain
5. Spinal disorders
6. Diabetes

Leading Causes of Death

1. Malignant neoplasms
2. Diseases of heart
3. Chronic lower respiratory diseases
4. Accidents
5. Cerebrovascular disease
6. Alzheimer's Disease

In addition to prevalence, hospitalization, and death, the trends and impact of each health factor were taken into consideration when selecting the top health priorities for the Fort Hamilton Service Area. The full list of criteria used to select the health priorities is:

- ✓ Proportion of population impacted
- ✓ Number of hospitalizations/ ED visits
- ✓ Number of deaths
- ✓ Degree to which the health factor in the local area is more prevalent than in the State and/or Nation
- ✓ Impacts on other health outcomes
- ✓ Rapid increase/decrease of the health factor
- ✓ Trends across contributing factors that affect the health factor

Once all of these criteria were applied, the top five priorities were selected according to the criteria above and the prevalence of their contributing factors. For example, heart disease was chosen as one priority area because heart disease is the number two cause of death in the County, the percentage of County adults with heart disease (via self-reported data) is higher than the State and Nation, and the contributing factors of heart disease (hypertension, smoking, obesity, physical inactivity and excessive use of alcohol) are also of concern in the hospital's service area. Besides heart disease, the other health priorities identified for the hospital's service area are diabetes, breast cancer, chronic lower respiratory disease and cerebrovascular disease.

This hospital facility will only address two of the five needs identified through the CHNA, heart disease and diabetes. Appendix A presents tables containing the health data used to select the top two health priorities. The other three health needs will not be addressed by this facility, as they are being addressed by other organizations in the service area. The following sections contain information about how the unaddressed health needs will be met by other organizations.

UNADDRESSED HEALTH PRIORITIES

Using the criteria above, five health priorities were identified for adults in the service area: heart disease, diabetes, chronic lower respiratory disease, breast cancer and cerebrovascular disease. However, only two of these, heart disease and diabetes, will be addressed by the Fort Hamilton Hospital. In its Community Health Needs Assessment (CHNA), Fairfield Hospital identifies the Mercy Fairfield COPD Clinic as addressing Chronic Lower Respiratory Disease and multiple County organizations as addressing breast cancer. Miami Valley Hospital will be addressing cerebrovascular disease through its Prevention and Wellness Program. Please refer to the table below for more information about these programs.

Butler County		
Health Priority	**Organization**	**Action Plan**
Chronic Lower Respiratory Disease (CLRD)	Fairfield Hospital CHNA	The 2013 Fairfield Hospital CHNA identifies The Mercy Fairfield COPD Clinic as an "all-in-one" resource for Chronic Obstructive Pulmonary Disease (COPD) patients living in Butler County. Chronic Lower Respiratory Disease (CLRD) includes both COPD and asthma.
Breast Cancer	Fairfield Hospital CHNA	The Fairfield Hospital 2013 CHNA identified cancer as a health priority that will be addressed in the Fairfield Hospital 2014 Implementation Strategy. It identified hospitals, doctors and clinics in the County that address breast cancer by offering cancer screenings. Also, St. Raphael and Cancer Family Care were identified as addressing cancer in the County through providing support to individuals diagnosed with cancer.
Cerebrovascular Disease	Premier Health Partners	Premier Health Partner (PHP) hospitals offer health screenings, which are free or low-cost for anyone, regardless of ability to pay. As part of that, PHP offers annual stroke screenings during the month of September. Atrium Medical Center is a PHP medical

center that serves Butler County as a core part its service area.

HEALTH NEEDS TO BE ADDRESSED

Fort Hamilton Hospital representatives reviewed the selected health priorities in conjunction with the hospital's services and programs, areas of expertise, resources, and existing community assets to determine which priority areas it could best address. Specialists from Kettering Breast Evaluation Center (KBEC) and the cardiac team, along with representatives from the President's Office, the Hospital Foundation Office, the Marketing Office and the Community Outreach Group came together to determine the health factors that this facility is best positioned to influence during the upcoming planning cycle due to the facility's programs and accessible resources. The health priorities include:

- ✓ Heart Disease
- ✓ Diabetes

IMPLEMENTATION STRATEGY

In support of the 2013 Community Health Needs Assessment and ongoing community benefit initiatives, Fort Hamilton Hospital plans to implement the following strategies to impact and measure community health improvement. As Fort Hamilton moves forward with each initiative, community needs will be continually monitored, and programming and services will be adjusted accordingly.

PRIORITY: Heart Disease

Rationale

Based on self-reported data, 8.7% of Butler/Clinton/Warren county area adults have been told by a medical professional that they have coronary heart disease, which is significantly higher than the State and Nation. From 2004 to 2012, emergency department hospitalization, where heart disease is the primary or secondary discharge diagnosis, has been increasing – from 678.0 in 2004 to 1856.4 in 2011. Inpatient hospitalization has also been increasing over this same period. However, the mortality rate due to ischemic heart disease has decreased over this same period – from 170.3 in 2004 to 140.0 in 2011. Deaths in the County due to non-ischemic heart disease decreased from 2000 to 2006; rates began rising again in 2007 and continued this trend through 2011. Mortality due to heart disease is lower in the County than the State, while hospitalization where ischemic heart disease is the primary diagnosis has been higher since 2009. The maps on the following page present those zip codes in orange where hospitalization (based on primary and secondary diagnoses at time of discharge) or mortality due to heart disease is higher than the State's rate. Refer to the tables below for rates. Interestingly, mortality due to heart disease is lower in seven of the County's fourteen zip codes.

Heart Disease Adult Emergency Department Hospitalization, 2011

Discharge Diagnoses	Butler County Number	Butler County Rate/100k	Ohio Rate/100k
Ischemic	5,159	1856.4	1590.2
Non-Ischemic	5,730	2061.8	2158.5

Source: Ohio Hospital Association and Greater Dayton Area Hospital Association

Heart Disease Adult Inpatient Hospitalization, 2011

Discharge Diagnoses	Butler County Number	Butler County Rate/100k	Ohio Rate/100k
Ischemic	9,611	3458.3	3634.2
Non-Ischemic	12,504	4499.3	4826.0

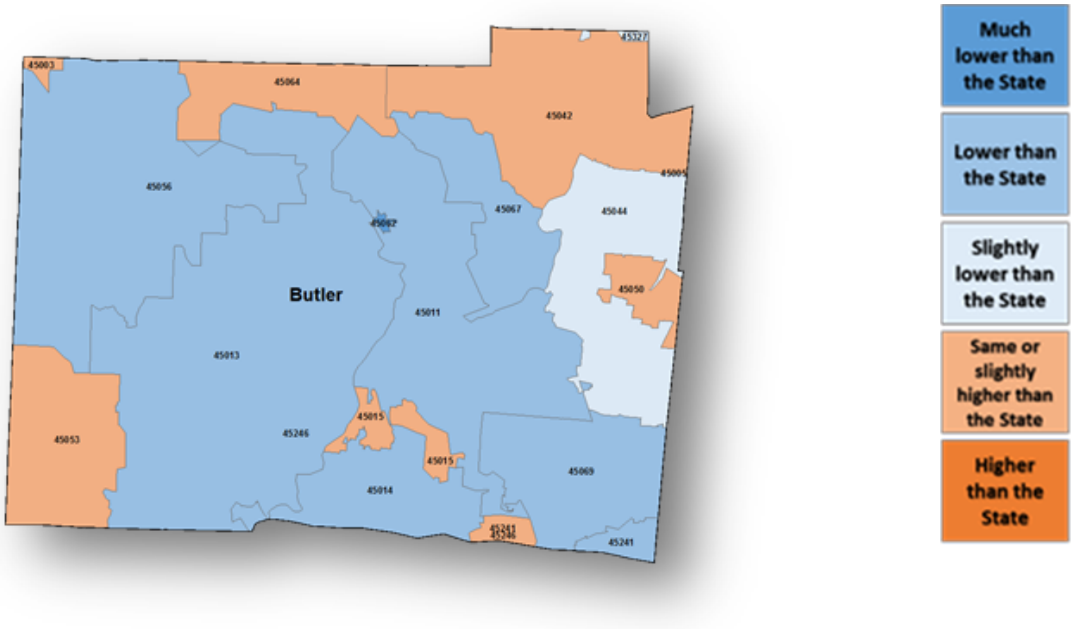
Source: Ohio Hospital Association and Greater Dayton Area Hospital Association

Adult Mortality Due to Heart Disease, 2011

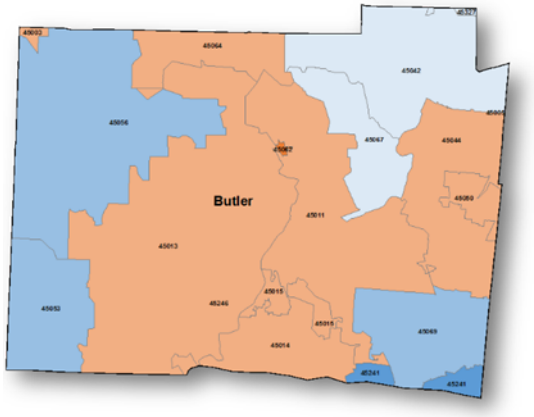
Mortality Heart Disease	Butler County Number	Butler County Rate/100k	Ohio Rate/100k
Ischemic	389	140.0	194.0
Non-Ischemic	195	70.2	87.2

Source: Vital Statistics Program, Ohio Department of Health, 2000-2012.

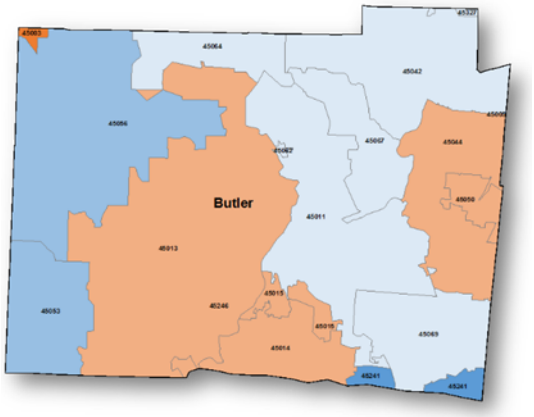
Cause of Death, Adults – Heart Disease, 2011



Emergency Department Adult Primary & Secondary Ischemic Heart Disease Discharge Diagnosis, 2011



Emergency Department Adult Primary & Secondary Non-Ischemic Heart Disease Discharge Diagnosis, 2011



Impact on/by Other Health Issues

Hypertensive heart disease is the No. 1 cause of death associated with high blood pressure; it includes heart failure, ischemic heart disease, hypertensive heart disease, and left ventricular hypertrophy. Hypertension is a leading contributing factor to heart disease, and in Butler County the number one inpatient diagnosis is hypertension. Other contributing factors to heart disease are smoking, obesity, physical inactivity and excessive use of alcohol, all of which are more prevalent in the County than in the State and are higher than the national benchmark.

Objective: Invest in emergency response technology, specifically Automated External Defibrillators (AEDs), and place at least one AED per quarter in a public space to enhance the rate of survival for out-of-hospital cardiac arrest.

Strategy One: Increase Foundation technology investments

Activity: Increase Foundation investment in emergency response technology

1. Provide grants to EMS and local businesses for the purchase of Automated External Defibrillators.
2. Explore the Zoll monitoring system. The Zoll E series is a defibrillator that allows paramedics to determine if a patient is having ST elevation (heart attack) and transmits this EKG tracing to the ED doctor before the patient arrives at the hospital.
3. Explore a tele-medicine program in partnership with the University of Cincinnati that would allow for remote treatment of patients.

Strategy Two: Increase community outreach and education

Activity: Increase community outreach to promote the importance of heart health and preventive vascular screenings.

1. Partner with the Kettering Health Network Joslin Center's new smoking cessation program.

2. Create a web-based service to provide online screening advice.
3. Recruit physicians to deliver monthly community presentations on heart health.
4. Partner with schools and churches to deliver information on heart health.

Strategy Three: Increase vascular screenings

Activity: Increase community partnerships to broaden community education about heart health

1. Partner with senior care facilities to provide congestive heart failure education.
2. Partner with the Butler County YMCA via the hospital's physician office located in the YMCA facility.
3. Conduct blood pressure screenings in accompaniment with the KHN Center for Heart and Vascular Disease.
4. Coordinate vascular screenings with corporations located within the County.
5. Identify opportunities for partnerships within the hospital to advance heart health; e.g. patients obtaining stroke care can provide insights to hypertensive disease that inform the cardiology department, and the data obtained via CT angiograms may inform other activities.

PRIORITY: Diabetes

Rationale

From 2004 to 2010, the incidence of adults newly diagnosed with diabetes in Butler County was stable – from 10.7 per 1,000 in 2004 to 10.8 in 2010. At its peak in 2009, the rate of adults with newly diagnosed cases of diabetes was 13.4 per 1,000 residents. In 4 out of 7 years, the rate of newly diagnosed diabetes cases in Butler County was higher than that of the State. Similarly, diabetes prevalence has also fluctuated, but rising overall from 8.2% of the adult population has been told by a doctor or other medical professional that they have diabetes in 2004 to 10.4% in 2010. These rates are similar to the State of Ohio, but remain slightly lower with the exception of 2009 when prevalence reached its peak at 11.6% in Butler County, which was also higher than the State's rate of 10.8%. Mortality due to diabetes over this same period peaked in 2006 at 35.4 deaths per 100,000 residents declining to 27.7 deaths per 100,000 in 2008 and rising again to 35.6 per 100,000 in 2011. Mortality rates due to diabetes have been consistently lower than the State rate. The maps present those zip codes in orange where hospitalization (based on primary and secondary diagnoses at time of discharge) or mortality due to diabetes is higher than the State's rate. Refer to the tables below. The mortality rate is higher than the State's rate in six of the County's zip codes, while ED hospitalization discharge rates are higher for residents in 7 of the 14 zip codes of the County and in six of the zip codes for Inpatient discharges.

Adult Diabetes, 2010

Self-reported cases	Butler County *Number*	Butler County *Rate*	Ohio ***Percent***
New Adult Cases	2,570	10.8/1,000	11.0/1,000
Total Adult Cases	27,309	10.4%	10.8%

Source: Centers for Disease Control and Prevention: National Diabetes Surveillance System.

Adult Diabetes Hospitalization, 2011

Discharge Diagnoses	Butler County *Number*	Butler County *Percent*	Ohio ***Percent***
Emergency	11,185	4.0%	3.9%
Inpatient	10,383	3.7%	3.8%

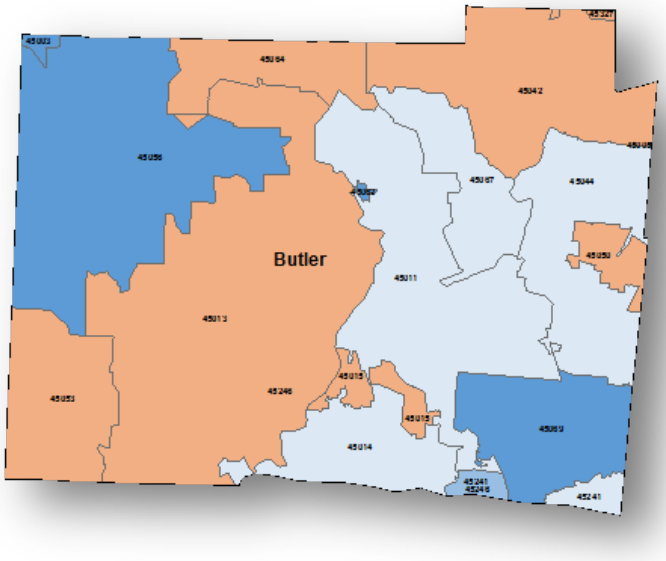
Source: Ohio Hospital Association and Greater Dayton Area Hospital Association

Adult Mortality Due to Diabetes, 2011

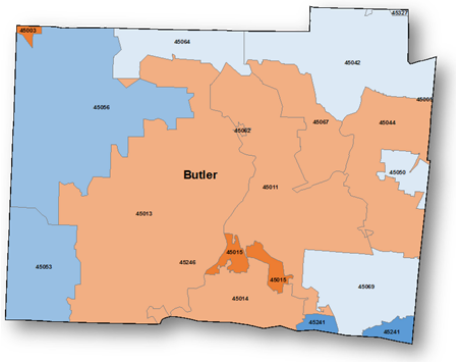
Mortality Diabetes	Butler County *Number*	Butler County *Rate/100k*	Ohio ***Rate/100k***
Butler County	99	35.6	41.7

Source: Vital Statistics Program, Ohio Department of Health, 2000-2012.

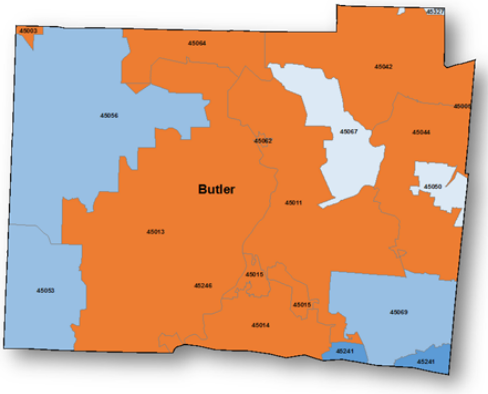
Cause of Death, Diabetes, 2011



Emergency Department Adult Primary & Secondary Diabetes Discharge Diagnosis, 2011



Inpatient Adult Primary & Secondary Diabetes Discharge Diagnosis, 2011



Impact on/by Other Health Issues

According to the CDC, adults with diabetes are 2-4 times more likely to die of heart disease or experience a stroke. The percentage of adults in the County diagnosed with diabetes is higher than the State and Nation, the rate of diabetes screening in Butler County is lower than the national benchmark (85% versus 90%, respectively, and the high incidence of hypertension, obesity and physical activity contribute to this health outcome.

Objective: Increase access to diabetes care by establishing an outpatient diabetes clinic in the City of Hamilton, in conjunction with Kettering Health Network. An outpatient diabetes clinic will reduce the cost, travel, and time burden on the low income population in the City of Hamilton, which currently must travel over 30 miles one-way for comparable care.

Strategy One: Increase access to care, especially among the indigent population located in the City of Hamilton

Activity: Increase access to care by establishing an outpatient diabetic clinic in conjunction with the Kettering Health Network to provide local care for patients currently traveling to the Dayton Area for treatment.

1. The clinic will serve as a medical center and an education center.
2. Partnering with KHN resources provides access to network resources and ensures that the new clinic will offer evidence-based standardized care.

Strategy One: Increase diabetes education

Activity: Collaborate with community partners to increase diabetes education.

1. Recruit physicians as educator champions.
2. Work with corporate partners to provide diabetes education to employees and make referrals to services.
3. Collaborate with the Joslin Center to share resources and coordinate joint educational activities.
4. Use community health events/fairs to promote diabetes education.

APPENDIX A: FORT HAMILTON HOSPITAL HEALTH PRIORITIES

Heart Disease

Contributing Factors	Proportion of population impacted	Comparison to State and Nation	Trend	Number of hospitalizations/ ED visits	Number of Deaths	Impacts other health outcomes
Heart Disease	8.7%	Higher than the State (4.3%) and Nation (4.1%)	Inpatient diagnoses rose from 2004 to 2012; ED rose past the state in 2009	Non-ischemic heart disease #2 inpatient discharge diagnosis; heart attack #4 inpatient diagnosis	Ischemic is 140.0 and non-ischemic is 70.2 per 100,000 population; second leading cause of death	Cardiovascular diseases are among the leading causes of disability in the U.S.
Hypertension	33.8%	Higher than the State (31.7%) and the Nation (28.7%)	ED diagnoses have almost tripled from 2004 to 2012	Leading inpatient discharge diagnosis; number 2 ED discharge diagnosis		Heart attack, stroke, and diabetes among others
Adult Smoking	23.0%	Higher than the State (22%) and the national benchmark (17.3%)				Leading predictor of lung & bronchus cancer;~90% of deaths from chronic obstructive lung disease are caused by smoking
Obesity	30.0%	Same as the State (30%) and higher than the national benchmark (25%)	Increased from 2004-2009, but decreased in 2010			CHD, HTN, stroke, type 2 diabetes, abnormal cholesterol, metabolic syndrome, cancer, osteoarthritis, among others
Physical Inactivity	26.0%	Higher than the national nenchmark (21%)	Stable trend		2 million deaths each year are attributed to physical inactivity according to the World Health Organization	Increase all causes of mortality, 2x risk of CVD, diabetes, obesity, increase risk of colon cancer, HTN, osteoporosis, lipid disorders, depression, anxiety
Excessive use of Alcohol	19.0%	Almost three times higher than the national benchmark (7%)	From 2004 to 2012, alcohol and drug dependency syndrome ED discharge diagnosis increased	Alcohol and drug related discharges are the top ED discharge diagnoses in the County		Cardiovascular disease, cirrhosis, breast cancer, gout, HTN, dementia, depression, seizures, and pancreatitus (WebMD)

Diabetes

Contributing Factors	Proportion of population impacted	Comparison to State and Nation	Trend	Number of hospitalizations/ ED visits	Number of Deaths	Impacts other health outcomes
Diabetes	10.4%	Lower than State (10.8%)	ED discharge diagnosis percent change is 130% from 2004 to 2012	3rd most common inpatient discharge diagnosis	35.6 per 100,000 vs. 41.7 for Ohio; mortality rate increased from 2008-2011	CDC says: Adults 2-4x more likely to die of heart disease or experience a stroke
Diabetic Screenings	85.0%	Below national benchmark (90%)				
Hypertension	33.8%	Higher than the State (31.7%) and the Nation (28.7%)	ED diagnoses have almost tripled from 2004 to 2012	Leading inpatient discharge diagnosis; number 2 ED discharge diagnosis		Heart attack, stroke, and diabetes among others
Obesity	30.0%	Same as the State (30%) and higher than the national benchmark (25%)	Increased from 2004-2009, but decreased in 2010			CHD, HTN, stroke, type 2 diabetes, abnormal cholesterol, metabolic syndrome, cancer, osteoarthritis, among others
Physical Inactivity	26.0%	Higher than the national nenchmark (21%)	Stable trend		2 million deaths each year are attributed to physical inactivity according to the World Health Organization	Increase all causes of mortality, 2x risk of CVD, diabetes, obesity, increase risk of colon cancer, HTN, osteoporosis, lipid disorders, depression, anxiety

APPENDIX B: IMPLEMENTATION STRATEGY SYNTHESIS

Heart Disease

Objective: Invest in emergency response technology, specifically Automated External Defibrillators (AEDs), and place one AED per quarter in a public space to enhance the rate of survival for out-of-hospital cardiac arrest.

Background	Strategies and Activities
• Hypertensive heart disease is the No. 1 cause of death associated with high blood pressure • It includes heart failure, ischemic heart disease, hypertensive heart disease, and left ventricular hypertrophy • The prevalence of Hypertension is higher in Butler County than in the State and Nation • It is the number one inpatient diagnosis and hypertension inpatient diagnoses have tripled from 2004 to 2012. • The incidence of Heart Disease in the County is higher than in the State and Nation and is the second most common cause of death in County adults. • Higher rates of smoking, alcohol, physical inactivity and obesity versus national benchmarks contribute to these health outcomes.	1. Increase Hospital/Foundation technology investments. a. Increase Hospital/Foundation investment in emergency response technology. • Provide grants to EMS and local businesses for the purchase of Automated External Defibrillators. • Explore the Zoll monitoring system. The Zoll E series is a defibrillator that allows paramedics to determine if a patient is having ST elevation (heart attack) and transmits this EKG tracing to the ED doctor before the patient arrives at the hospital. • Explore a tele-medicine program in partnership with UC that would allow for remote treatment of patients. 2. Increase community outreach and education. a. Increase community outreach to promote the importance of heart health and preventive vascular screenings. • Partner with the Kettering Health Network Joslin Center's new smoking cessation program. • Create a web-based service to provide online screening advice. • Recruit cardiologists to deliver monthly community presentations on heart health. • Partner with schools and churches to deliver information on heart health. 3. Increase vascular screenings. a. Increase community partnerships to broaden community education about heart health. • Partner with senior care facilities to provide congestive heart failure education. • Partner with the Butler County YMCA via the hospital's physician office located in the YMCA facility. • Conduct blood pressure screenings in accompaniment with the KHN Center for Heart and Vascular Disease. • Coordinate vascular screenings with corporations located within the County. • Identify opportunities for partnerships within the hospital to advance heart health; e.g. patients obtaining stroke care can provide insights to hypertensive disease that inform the cardiology department, and the data obtained via CT angiograms may inform other activities.

Diabetes

Objective: Increase access to diabetes care by establishing an outpatient diabetes clinic in the City of Hamilton, in conjunction with the Kettering Health Network. An outpatient diabetes clinic will reduce the cost, travel, and time burden on the low income population in the City of Hamilton, which currently must travel over 30 miles one-way for comparable care.

Background

- According to the CDC, adults with diabetes are 2-4 times more likely to die of a heart attack or stroke
- Individuals with undiagnosed type II diabetes are at significantly higher risk
- Risk of developing type II diabetes increases with age, obesity and lack of physical activity and is more common in individuals with a family history and in members of certain racial/ethnic groups
- Incidence of diabetes in the County is higher than in the State and Nation
- Diabetes is the third most common inpatient discharge diagnosis and ED discharge diagnoses have more than doubled from 2004 to 2012
- High incidence of hypertension, obesity and physical inactivity in the County contribute to this health outcome

Strategies and Activities

1. Increase access to care, especially among the indigent population located in the City of Hamilton.
    a. Increase access to care by establishing an outpatient diabetic clinic in conjunction with the Kettering Health Network to provide local care for patients currently traveling to the Dayton Area for treatment.
        - The clinic will serve as a medical center and an education center.
        - Partnering with KHN resources provides access to network resources and ensures that the new clinic will offer evidence-based standardized care.
2. Increase diabetes education.
    a. Collaborate with community partners to increase diabetes education.
        - Recruit physicians as educator champions.
        - Work with corporate partners to provide diabetes education to employees and make referrals to services.
        - Collaborate with the Joslin Center to share resources and coordinate joint educational activities.
        - Use community health events/fairs to promote diabetes education.