HIGHLAND COMMUNITY HOSPITAL

CHNA REPORT

2016

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EXECUTIVE SUMMARY

The purpose of this Community Health Needs Assessment (CHNA) report is to provide Highland Community Hospital (HCH) with a functioning tool to guide the hospital as it works to improve the health of the community it serves. In addition, the report meets the guidelines of the Internal Revenue Service.

The results of the CHNA will guide the development of Highland Community Hospital's community health improvement initiatives and implementation strategies. This is a report that may be used by many of the hospital's collaborative partners in the community.

The assessment was performed and the implementation strategies were created by the Community Health Needs Assessment Steering Committee with assistance from HORNE LLP. The assessment was conducted in November and December 2016.

The main input was provided by previous patients, employees and community representatives. An opportunity to offer input was made available to the entire community through word of mouth plus a published and publicly available survey. Additional information came from public databases, reports, and publications by state and national agencies.

The *response* section of this report describes how the hospital and its collaborative partners worked together to address identified health needs in our community during the past three years. In this report, we also discuss the health priorities that we will focus on over the next three years. The CHNA report is available on the hospital's website www.highlandch.com or a printed copy may be obtained from the hospital's administrative office.

We sincerely appreciate the opportunity to continue to be a part of this community. We look forward to working with you to improve the overall health of those we serve in Picayune and Pearl River County.

Mark Stockstill, RN, BSN
Administrator
Highland Community Hospital

ABOUT THE HOSPITAL

Highland Community Hospital, a 60-bed, full-service facility, serves as Pearl River County's only acute-care medical facility. Highland provides a variety of medical specialties and state-of-the-art technology to our community.

Highland Community Hospital is home to a wide range of services, delivered by expert physicians and nurses. These services include: Radiology/Imaging, Surgical, Medical Surgical, Inpatient Care, Intensive Care Unit, Laboratory, Cardiac Services, Respiratory Services, Physical Therapy, Geriatric Psychiatry, Hospitalist Program, Primary Care and Specialty Physician Clinics such as General and Laparoscopic Surgery and Hattiesburg Clinic's Neurology, Cardiology, Ear Nose and Throat, Plastic Surgery, Dermatology and Spine along with Southern Bone and Joint's Orthopedic Clinic. Highland also offers Women and Children's Services, Virtual Nursery, and an Emergency Department.

The Emergency Department is one of the main gateways to the hospital. It is conveniently located on the west side of the hospital. Highland's professional healthcare team provides efficient and effective care for every type of illness, injury and trauma. A nurse screens patients based on their clinical symptoms and needs. Whether emergent or non-urgent, patients are seen by either a competent, caring physician or nurse practitioner to evaluate their specific needs and direct their personal plan of treatment.

As a member of the statewide trauma system and a member of the Forrest Health family, Highland is able to arrange for complex specialized care in an organized and timely manner. As a dedicated staff of emergency physicians, nurses and allied healthcare professionals, Highland's medical team is trained and ready to respond to meet the unique needs of each patient.

The hospital has been a trusted member of greater Pearl River community for over 50 years. The citizens depend on the hospital to not only provide for their needs when they are ill, but turn to the hospital as a source of health and wellness information. With its convenient, state-of-the-art facility, Highland Community Hospital is taking the lead as the catalyst for better health and living for Pearl River County.

THE COMMUNITY HEALTH NEEDS ASSESSMENT

The Community Health Needs Assessment defines opportunities for healthcare improvement, creates a collaborative community environment to engage multiple change agents and is an open and transparent process to listen and truly understand the health needs of Pearl River County. It also provides an opportunity for the hospital to identify valuable collaborative partners as we try to better serve the community and improve the health of our citizens.

The federal government now requires that non-profit hospitals conduct a community health assessment. These collaborative studies help healthcare providers build stronger relationships with their communities, identify needs, and dedicate funding and other resources toward programs that clearly benefit local residents.

COMMUNITY HEALTH NEEDS ASSESSMENT STEERING COMMITTEE

The Committee is responsible for the oversight, design, and implementation of the CHNA. It will continue to collect information, establish community relationships and oversee the budget and funding sources. Adhering to an agreed upon timeline, the Committee will generate, prioritize, and select approaches to address community health needs.

The hospital's administrator developed a hospital steering committee. The appointed members are listed below. Other members may serve on the Steering Committee as the committee's work progresses.

Mark Stockstill	*Administrator*
Annette Aultman	*Patient Advocate, Patient Safety Coordinator*
Brad Burge	*Director Surgery, Endoscopy, Outpatient Services, Interim ED Director*
Dana Decuir	*Dietician*
John Huck	*Director of Dietary Services*
Chess Johnson	*Social Worker*
Jerel Myers	*Director, Materials Management*
Misty Toruno	*Administrative Assistant*
James Turnage	*Director, Radiology & Cardiology*
Kim Varnado	*Chief Nursing Officer*

THE COMMUNITY HEALTH NEEDS ASSESSMENT

COMMUNITY ENGAGEMENT AND TRANSPARENCY

We are pleased to share with our community the results of our Community Health Needs Assessment. The following pages offer a review of the strategic activities we have undertaken, over the last three years, as we responded to specific health needs we identified in our community. The report also highlights the updated key findings of the assessment. We hope you will take time to review the health needs of our community as the findings impact each and every citizen of our rural Mississippi community. Also, review our activities that were in response to the needs identified in 2013. Hopefully, you will find ways you can personally improve your own health and contribute to creating a healthier community.

DATA COLLECTION

Primary and secondary data was gathered, reviewed, and analyzed so that the most accurate information was available in determining the community's health needs and appropriate implementation process.

Primary Data: Primary data is that which is collected by the assessment team. It is data collected through conversations, telephone interviews, focus groups and community forums. This data was collected directly from the community and is the most current information available.

Secondary Data: Secondary data is that which is collected from sources outside the community and from sources other than the assessment team. This information has already been collected, collated, and analyzed. It provides an accurate look at the overall status of the community.

Secondary data sources included:

The United States Census Bureau
Centers for Disease Control and Prevention
Highland Community Medical Records Department
US Department of Health & Human Services
Mississippi State Department of Health
American Heart Association
Trust for America's Health
Mississippi Center for Obesity Research, University of Mississippi Medical Center
Mississippi State Department of Health, Office of Health Data and Research

COMMUNITY INPUT

COMMUNITY FOCUS GROUP

A community focus group was held at Highland Community Hospital on Thursday, October 27, 2016. The participants in the group were carefully selected because they each represented a specific segment of the populations served. In addition, they can act as a continuous conduit between the community and the leadership of the hospital. These participants contributed to a structured discussion which was impartially facilitated by a healthcare consultant from HORNE LLP of Ridgeland, Mississippi.

This focus group provided a deliberative venue for learning, trust-building, creative problem solving, and information gathering which ultimately served as a valuable resource for the CHNA Steering Committee as it developed the hospital's health priorities for the next three years. Since the focus group was based on open communication and critical deliberation, it will hopefully lead to improved community relations, trust and collaborative partnerships as the hospital strives to improve the overall health of the community.

Darlene Adams*	*The Senior Center*
Sarah Castillo	*Greater Picayune Area Chamber of Commerce*
Mark Formby*	*Mississippi House of Representatives*
Donald Hart	*Pearl River County Board of Supervisors*
David Hemeter*	*First National Bank of Picayune*
Angela Hill*	*Mississippi State Senate*
Hensley Lee*	*Hensley R. Lee Contracting, Inc.*
Jameye Martin	*Manna Ministries*
Michael Mitchell, MD*	*Neurologist*
Ed Pinero*	*Pearl River Community College/Mayor, City of Picayune*
Sandy Kane Smith*	*Pearl River County Board of Supervisors*
Derek Turnage	*Pearl River County Coroner*
Ursula Whitehead*	*Stone County School District*

**unable to attend*

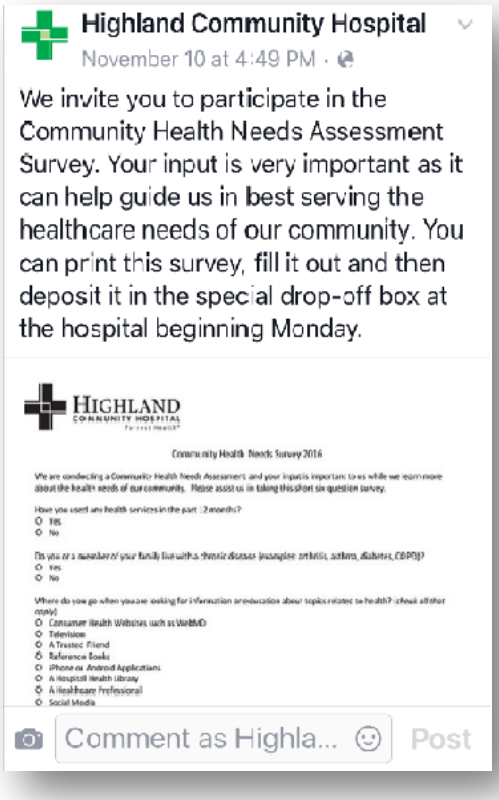
COMMUNITY INPUT

COMMUNITY SURVEY

Community health needs were identified by collecting and analyzing data and information from multiple quantitative and qualitative sources. Considering information from a variety of sources is important when assessing community health needs, to ensure the assessment captures a wide range of facts and perspectives and to assist in identifying the highest-priority health needs. One of the most important sources is to seek input directly from those we serve.

In order to provide citizens of our services area with an opportunity to provide us their valuable insight, a Community Survey was posted on the Highland Community Hospital's Facebook page. Highland Community Hospital posted their survey on November 10, 2016. The Highland Facebook page was one the most efficient ways for people of the community to access the survey and give appropriate feedback on the community's health.

In addition, the survey was made available in public areas of the hospital and distributed through members of the CHNA Focus Group. Collection boxes were available in the hospital's lobbies.



COMMUNITY INPUT

INPUT FROM THE COMMUNITY

Through internal conversations at the hospital, one-on-one interviews with community leaders, and a hospital focus group, much information was gathered which was influential as the CHNA Steering Committee developed the hospital's implementation plan.

There were health needs identified that can be addressed and met by the hospital and others that must be referred to other local organizations or health agencies. Several health improvement opportunities were identified where the hospital will try to act as a community catalyst for action but are not part of the hospital's implementation plan.

The community felt that the adult population of the county was the segment that had the greatest health risks in regards to lifestyle impacted diseases such as heart disease and diabetes. Poor nutritional habits are prevalent in the South, especially in rural communities.

It was felt that the communities in the service area could benefit from educational opportunities emphasizing healthy eating.

The senior population was also recognized as an "at risk" population due to lack of transportation, few senior health opportunities, poor nutritional habits plus limited access to fresh produce, and minimal physical activities.

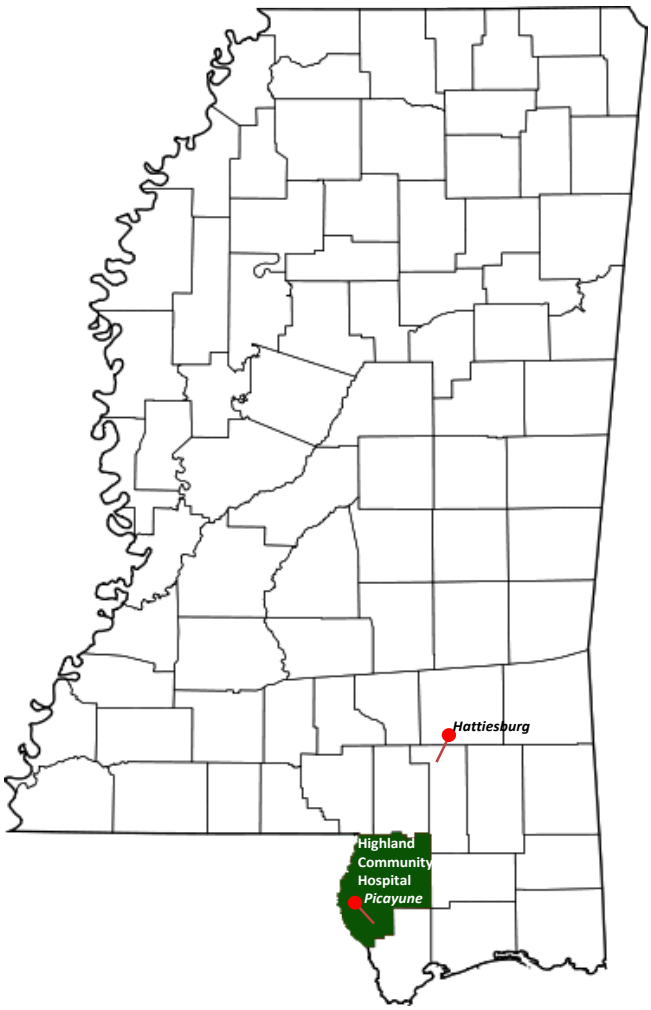
Suggestions included:

- Coordinating group-led health education classes with the local churches, school systems and other local health agencies
- Having more visible health and wellness activities in various locations throughout the county
- Creating a culture of community health and responsibility
- Developing an initiative with all county health providers to empower each member of the community to take individual ownership of his or her health.

ABOUT THE COMMUNITY

Pearl River County is located in south Mississippi on the western border of the state, adjacent to the state of Louisiana. The county seat is Poplarville and Picayune is the county's largest city. The Picayune Micropolitan Statistical Area includes all of Pearl River County, and is a part of the New Orleans-Metairie-Hammond, LA-MS Combined Statistical Area. The county has a total area of 818.91 square miles of which 810.86 square miles (or 99.02%) is land and 8.05 square miles (or 0.98%) is water. There are two incorporated communities: Picayune and Poplarville. In addition there are seven unincorporated communities. Pearl River is predominantly a rural county.

PEARL RIVER COUNTY, MISSISSIPPI



(2007 Census Publications State and County Profiles Mississippi. *USDA Census of Agriculture*, 2007).

ABOUT THE COMMUNITY

DEMOGRAPHICS

The county experienced significant growth after Hurricane Katrina in 2005. The influx of residents fleeing Louisiana brought many challenges to the infrastructure of the county and its cities. As life and business returned to normal over the years following Katrina, the County's population stabilized. As of the census of 2010, the population of Pearl River County was 55,834. The 2015 population estimate was 55,191. It is the 13th most populated county in the state (Community Facts, United States Population, 2010).

The largest city is Picayune with a population of 10,675. Less than 25% of the county's population lives in one of the three incorporated cities. The remainder of the population resides in rural areas of the county. There were approximately 20,615 households (2010-2014) out of which 52.4% were married couples living together, 15.0% had a female householder with no husband present, and 28.9% were non-families. The average household size was 2.62 and the average family size was 3.08 (Community Facts, United States Population, 2010).

In the county, the population was spread out with 23.1% under the age of 18, 59.2% from 18 to 64, and 17.7% who were 65 years of age or older. The state percentage of people over 65 is 14.7%. The median age was 40.6 years (Community Facts, United States Population, 2010).

According to 2014 census estimates, the median income for a household in the county was $40,997. The state's median household income was $39,464. About 19.3% of the County's families were below the poverty line, including 33.8% of those under 18 and 10.8% of those age 65 or over. The state percentage was 22.0% (Community Facts, United States Population, 2010).

PATIENT ORIGIN

Approximately 81% of the inpatients seen over the past twelve months reside in Pearl River County, Mississippi. Forty-eight percent of all patients seen reside in Picayune. Of the patients from Pearl River County, 98% are from four cities/communities – Picayune, Carriere, Poplarville, and McNeill. Only 19% percent of the patients came from outside of Pearl River County. Of those from outside the county, 20% came from adjacent parishes in Louisiana.

SERVICE AREA

Since 81% of the inpatients reside in Pearl River County and 98% of those patients reside in four communities, the primary service area is considered Pearl River County with concentration of that patient population centered in Picayune.

CHARACTERISTICS OF THE HEALTH OF THE SOUTHERN RURAL COMMUNITY

All rural areas in the U.S. are unique with extensive geographic and economic variations. When compared to urban populations however, rural populations are often characterized as being older and less educated; more likely to be covered by public health insurance; having higher rates of poverty, chronic disease, suicide, deaths from unintentional injuries and motor vehicle accidents; having little or no access to transportation; and having limited economic diversity. All of these issues create challenges and opportunities to improve the health of those living in the rural South, and they play a role in understanding some of the underlying causes associated with issues related to the rural health workforce, health services, and special populations. These unique population and health issues were taken into consideration as the Steering Committee evaluated health and wellness opportunities to address. Some can be approached through initiatives of the hospital and others will best be approached through a cooperative effort of local government, state agencies, churches, volunteer programs and the hospital.

OBESITY IN MISSISSIPPI

The cost to the state of Mississippi due to obesity in terms of our heart health, quality of life, healthcare costs and life spans is astronomical. Obesity contributes to heart disease, stroke, diabetes and a myriad of orthopedic conditions.

Over the past few decades, obesity has become a serious healthcare issue in the United States. The obesity rate for adults was 13 percent in 1962; it now stands at over two and half times that. Today, 17 percent of children are obese.

As a health condition, it costs the country nearly $150 billion every year. But obesity is not just a health condition anymore, at least according to the American Medical Association. The nation's largest group of doctors voted in June 2013 to classify obesity as a disease.

Obesity has become the greatest threat to the health of Mississippians and if left unchecked will overwhelm our healthcare system. Without action, what is now a ripple effect of negative health consequences will become a tidal wave of disease, disability and premature death.

The uncontrolled epidemic of obesity is wreaking havoc on our state. One out of every three adults in Mississippi is considered obese. Obesity predisposes to a whole host of chronic diseases, and it produces a ripple effect of negative health consequences: hypertension, heart disease, stroke, kidney disease, neurodegenerative disease, diabetes and even cancer. These conditions contribute to the death of many Mississippians each year and, at a minimum, decrease our quality of life.

CHARACTERISTICS OF THE HEALTH OF THE SOUTHERN RURAL COMMUNITY

Obesity is hurting Mississippi's economy. An obese person generates 40 percent more in medical costs per year than a non-obese person. In 2008, Mississippi spent $925 million in healthcare costs directly related to obesity. If the trend continues, obesity related healthcare costs will be $3.9 billion by 2018. Obese adults miss work more often than other workers, impacting productivity. As a result, obesity hurts Mississippi's business competiveness and ability to attract new industry.

Obesity is harming Mississippi's children. Mississippi has the highest rate of childhood obesity in the nation. Nearly half of Mississippi children are overweight or obese, and children as young as eight years old are being treated for Type 2 diabetes and high cholesterol. This was unheard of just a decade ago. The idea that children will be sick and die younger than their parents is not acceptable.

While the obesity rate for Mississippi's children has stabilized, the same cannot be said of adults. A recent study shows that by 2030, 67 percent of Mississippi's adults are projected to be obese. Overweight and obesity are prevalent among all races, all adult age groups and both genders in Mississippi. Although data is not available to determine the number of overweight children living in Mississippi, national data suggests that overweight in children is pervasive and has nearly doubled in the last 30 years.

Overweight and obesity increase the risk of developing coronary heart disease, hypertension, high cholesterol, Type 2 diabetes, and stroke. The relationship between increasing BMI above 25 has been shown to be especially strong for hypertension and Type 2 diabetes (Coakley, Must, Spadano, 1999). Obesity is clearly an independent risk factor for coronary heart disease. For persons with a BMI of 30 or more, mortality from cardiovascular disease is increased by 50-100 percent. Weight loss in overweight and obese adults has been shown to reduce blood pressure levels, improve cholesterol levels, and lower blood glucose levels in those with Type 2 diabetes.

Dietary factors contribute substantially to the burden of cardiovascular disease (CVD) in the nation and in Mississippi. Food and nutrient consumption patterns affect multiple CVD risk factors including high cholesterol, hypertension, diabetes, and obesity. Excessive calorie intake coupled with physical inactivity leads to obesity. Excessive total fat, saturated fat, and cholesterol intake can raise blood cholesterol levels, and a high sodium intake can aggravate hypertension in susceptible persons. Finally, inadequate consumption of fresh fruits, vegetables, and whole grains reduces intake of fiber, potassium and numerous vitamins and minerals associated with reduced risk of heart disease.

CHARACTERISTICS OF THE HEALTH OF THE SOUTHERN RURAL COMMUNITY

HEART DISEASE AND STROKE IN MISSISSIPPI

Mississippi has the highest death rate from cardiovascular disease (CVD) in the country and heart disease is the No. 1 killer in Mississippi. In 2014, 7,539 people in Mississippi died of heart disease. Unfortunately, CVD kills more Mississippians than all forms of cancer combined.

Stroke is the No. 5 killer in Mississippi. In Mississippi, 1,587 people died of stroke in 2014.

Heart Disease and Stroke Risk Factors in Mississippi

In Mississippi		In America
22.5%	Adults are current smokers	21.1%
37.4%	Adults participate in 150+ min of aerobic physical activity per week	51.6%
70.7%	Adults who are overweight or obese (Up from the last CHNA)	63.5%
5.4%	Adults who have been told that they have had a heart attack	4.4%
4.0%	Adults who have been told that they have had a stroke	2.9%
4.6%	Adults who have been told that they have angina or coronary heart disease	4.1%
69.3%	Population of adults (18-64) who have some kind of healthcare coverage	78.9%
15.4%	High school students who are obese	13.1%

Disability and death from CVD are related to a number of modifiable risk factors, including high blood pressure, high cholesterol, smoking, lack of regular physical activity, diabetes, and being overweight. While it affects persons of all ages in Mississippi, CVD is the leading cause of death for persons age 75 and over.

Seventy-three percent of the population ages 60 to 79 have CVD compared to 40 percent of the population ages 40 to 59 (Older Americans & Cardiovascular Diseases, 2016).

The No. 5 killer in Mississippi and the No. 4 killer in Pearl River County is stroke, another disease greatly impacted by lifestyle. Hypertension, obesity, smoking and lack of exercise are typically associated with the health status of the stroke victim. Unfortunately, these lifestyle habits are prevalent in the rural south.

CHARACTERISTICS OF THE HEALTH OF THE SOUTHERN RURAL COMMUNITY

There are nine areas of lifestyle and disease related problems that are significant factors in the higher levels of heart disease and stroke in Mississippi. They are:

- Physical Inactivity
- Improper Nutrition
- Tobacco Use
- Socio-cultural Factors
- Hypertension
- Obesity
- Abnormal Cholesterol
- Diabetes
- Acute Event

LIFESTYLE AND DISEASE

Modified lifestyle diseases are illnesses that can potentially be prevented by changes in diet, environment, physical activity and other lifestyle factors. These diseases include heart disease, stroke, obesity, diabetes and some types of cancer.

In Pearl River County, the three major diseases that result in the most deaths are lifestyle diseases. They are heart disease, cancer and stroke.

This is why the CHNA Committee has chosen to address educational and lifestyle initiatives to assist in lowering the incidence of these diseases. The initiatives are outlined later in the report under the implementation plan.

CHARACTERISTICS OF THE HEALTH OF THE SOUTHERN RURAL COMMUNITY

RURAL HEALTH DISPARITIES

Although the term *disparities* is often interpreted to mean racial or ethnic disparities, many dimensions of disparity exist in the United States, particularly in health. If a health outcome is seen to a greater or lesser extent between populations, there is disparity. Race or ethnicity, sex, sexual identity, age, disability, socioeconomic status, and geographic location all contribute to an individual's ability to achieve good health. It is important to recognize the impact that social determinants have on health outcomes of specific populations. Healthy People 2020, a federal project of the Office of Disease Prevention and Health Promotion, strives to improve the health of all groups.

Healthy People 2020 defines a *health disparity* as "a particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage. Health disparities adversely affect groups of people who have systematically experienced greater obstacles to health based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion."

Over the years, efforts to eliminate disparities and achieve health equity have focused primarily on diseases or illnesses and on healthcare services. However, the absence of disease does not automatically equate to good health.

Powerful, complex relationships exist between health and biology, genetics, and individual behavior, and between health and health services, socioeconomic status, the physical environment, discrimination, racism, literacy levels, and legislative policies. These factors, which influence an individual's or population's health, are known as *determinants of health*.

For all Americans, other influences on health include the availability of and access to:

- High-quality education
- Nutritious food
- Decent and safe housing
- Affordable, reliable public transportation
- Culturally sensitive healthcare providers
- Health insurance
- Clean water and non-polluted air

CHARACTERISTICS OF THE HEALTH OF THE SOUTHERN RURAL COMMUNITY

According to an article published in December 2014 by *Business Insider* (Friedman, L., 2014), for the third year in a row, America's Health Rankings, an annual accounting of Americans' health, has found that Mississippi is the least healthy state in the U.S.

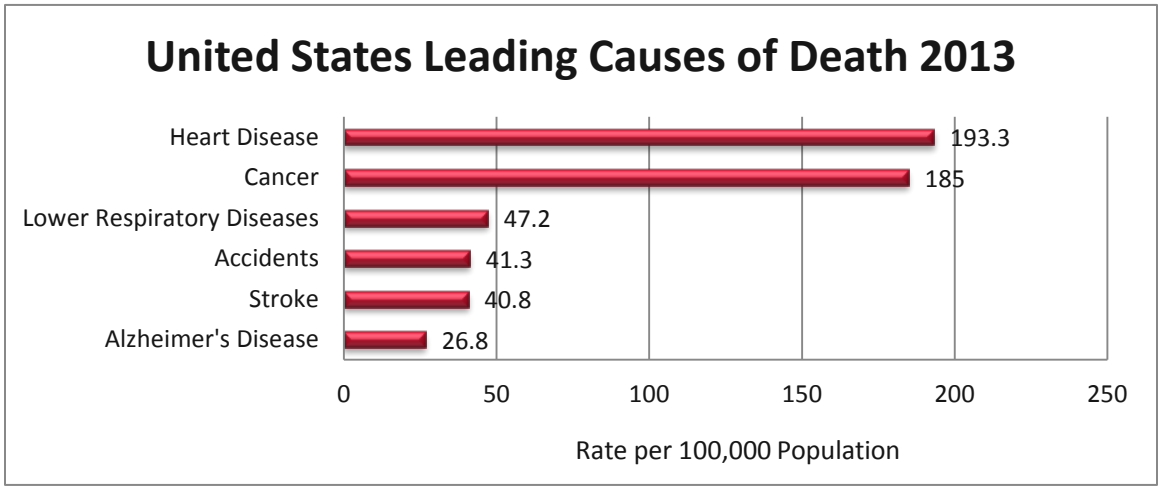
Since the rankings began in 1990, Mississippi — which has high rates of obesity and diabetes, low availability of primary care, and high incidence of infectious disease — has always ranked among the bottom three. Hawaii — which has low rates of obesity, smoking, cancer deaths, and preventable hospitalizations — has always been among the top six.

The rankings are funded by the United Health Foundation and are based on data from the Centers for Disease Control and Prevention, the American Medical Association, the Census Bureau, and other sources. They take into account 27 distinct measures including rates of smoking, obesity, drug deaths, education, violent crime, pollution, childhood poverty, infectious disease, and infant mortality.

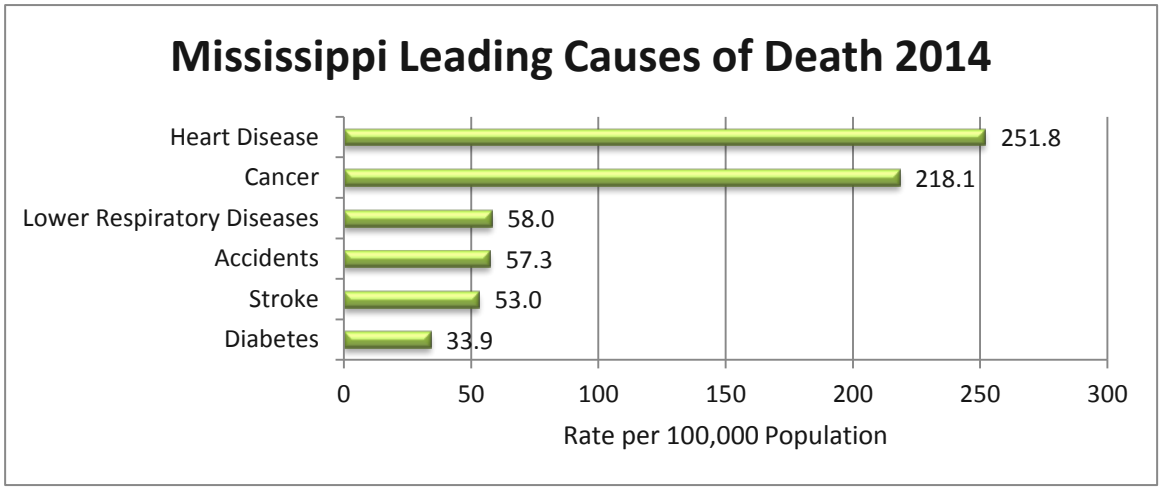
Overall, the rankings showed progress in some areas and not in others. The 2014 analysis found increases from the previous year in obesity and physical inactivity and decreases in infant mortality and smoking rates.

In the past 25 years, there have been some notable changes. Since 1990, there have been major reductions in infant mortality (down 41%), death from heart disease (down 38%), and premature death (down 20%). In 1990, 29.5% of Americans smoked; in 2014, 19% smoked, though smoking remains "the leading cause of preventable death in the country," a press release noted. Unfortunately, in that same time period, rates of diabetes and obesity have more than doubled.

There has also been an 8% decline in cancer mortality since its peak in 1996. Cancer is the second leading cause of death in the U.S. (heart disease is number one), and 2014 saw an estimated 1.6 million new diagnoses.



(Heron, M., 2016)



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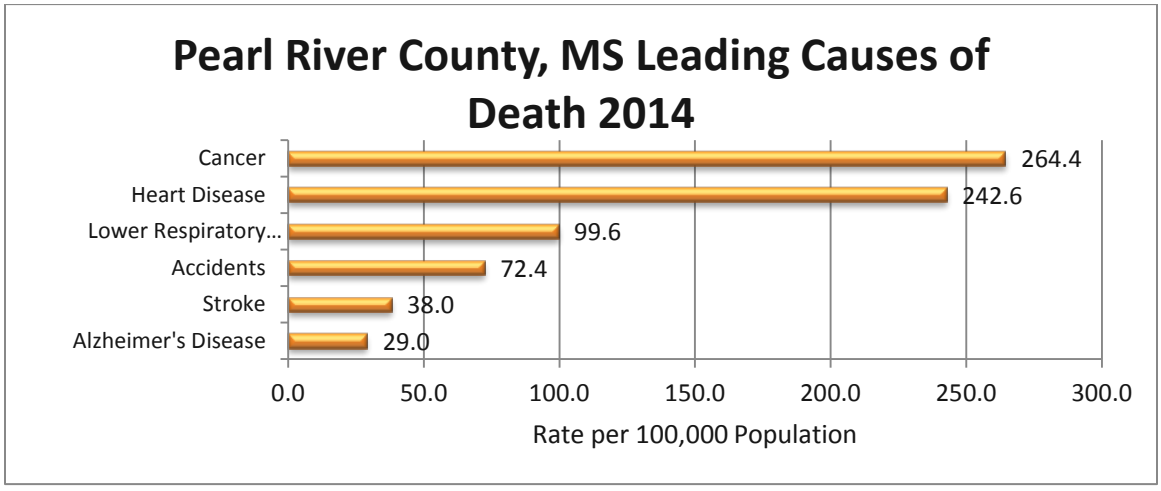

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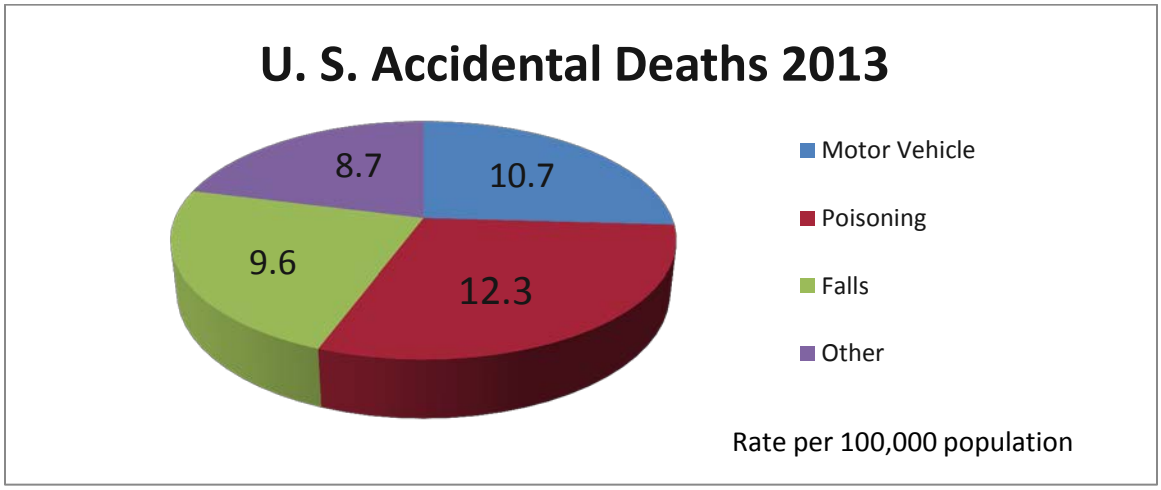

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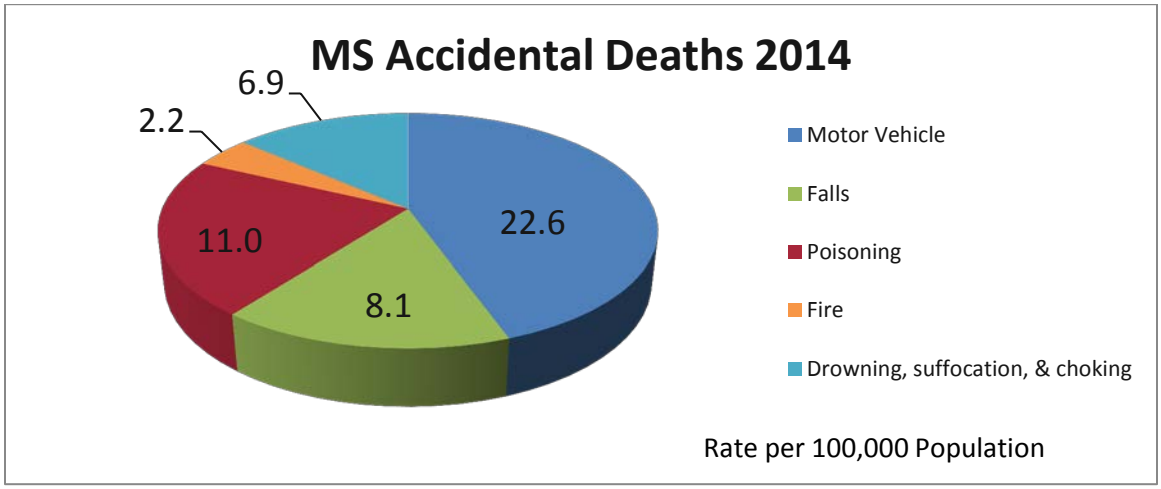

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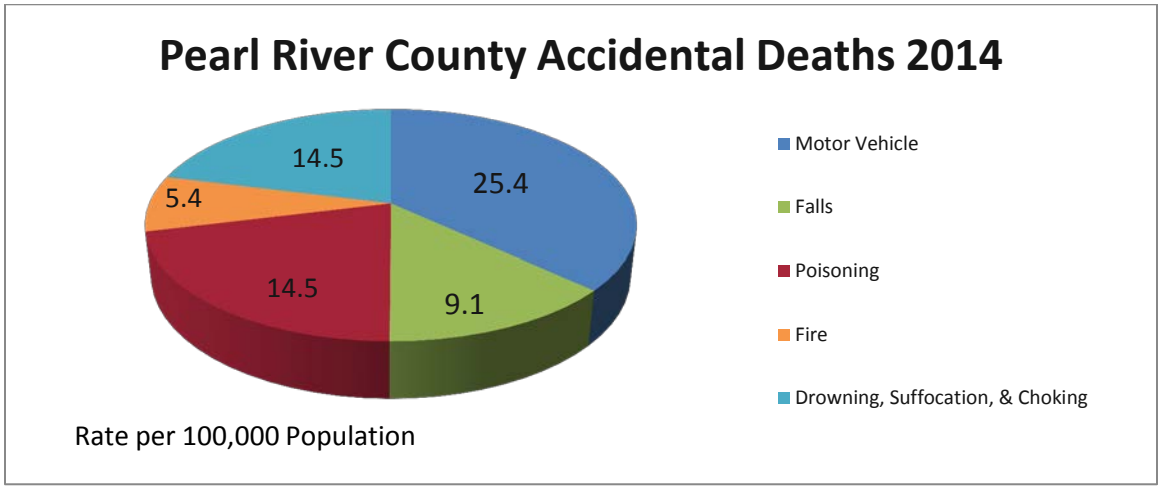

(Generated Statistical Table -MSTAHRS. Pearl River, Unintentional Injury, 2016)

CHNA STRATEGIC ACTION RESPONSES

STRATEGIC ACTION RESPONSES

Access, affordable care, a lack of knowledge about healthy lifestyles and the relationship to chronic diseases, plus a lack of awareness of available health and wellness services contribute to a wide range of healthcare needs among rural communities in Mississippi.

At the conclusion of the 2013 Community Health Needs Assessment conducted by Highland Community Hospital, the CHNA Steering Committee identified critical areas of health needs for the people in our service areas. The group's vision was to improve population health in the area by addressing gaps that prevent access to quality, integrated healthcare and improving access to resources that support a healthy lifestyle.

In support of the 2013 Community Health Needs Assessment, and ongoing community benefit initiatives, Highland Community Hospital implemented the following strategies to positively impact and measure community health improvement.

CHNA STRATEGIC ACTION RESPONSES

RESPONSE:

MENTAL HEALTH-DEMENTIA AWARENESS

Target Population
Adults, senior citizens, caretakers/friends/family of people with dementia, concerned/interested community members

Goal, Desired Outcome
To improve the understanding of challenges and barriers faced by those living with dementia.

Process/Time Frame/Location
- We have provided a Virtual Dementia Tour with Dementia education since 2013 at Highland Community Hospital.
- The Hospital Administrator and the Social Worker provide one to two radio interviews regarding the VDT presentation and information on dementia in general prior to the event.
- The VDT has branched to the local nursing home starting in 2015.

Measure of Success
Community participation, positive feedback from staff and community, requests for additional days of the Virtual Dementia Tour, requests for more information.

Cost/Funding/Human Resource—Other Resources
- Funded through Department of Mental – Alzheimer's Division
- Free advertising through the local radio and newspaper as the hospital is a member of the Chamber of Commerce.
- The hospital and collaborative partners provide volunteers and staff to work the VDT.

Collaborative Partners
Mississippi Department of Mental Health – Alzheimer's Division, Picayune Chamber of Commerce, WRJW (a local radio station), *Picayune Item* (the local newspaper) Amedisys Home Health, Camellia Home Care and Hospice, Forrest General Home Care and Hospice, Kare In Home and Hospice, MS Home Care, Pearl River County Hospital, Pearl River IOP, Covenant Health and Rehab

CHNA STRATEGIC ACTION RESPONSES

RESPONSE:

PUTTIN ON THE PINK

Target Population

The program will focus on reducing disparities in breast healthcare among low-income, medically underserved, uninsured women and men in Pearl River County.

Goal, Desired Outcome

The program focuses on reducing disparities in breast healthcare among low-income, medically underserved, uninsured racial and ethnic minority women and men by providing high-quality, culturally competent outreach, education, screenings, and navigation services.

Our goal was to provide education on Screening Breast Exams and Self-Breast Exams.

Process/Time Frame/Location

Create a speaker's event to be held quarterly to educate the community on self-breast exams. This will include lectures/demonstrations and guest speakers. The goal is to reach 350 community members annually.

Measure of Success

- Over $79,436 was raised to fund these projects from 2013-2016.
- 97 free screening Mammograms were provided from 2013-2016.
- A transportation assistance program was instituted in 2015 to provide funds to cancer treatments.
- A prescription assistance program was instituted in 2016 to help offset the cost of medications.
- Puttin on the Pink hosted an annual Gala with over 175 people in attendance.
- Breast cancer awareness was brought to Pearl River County through the following:
    - Social Media Post
    - Radio Talk shows (WJRW)
    - Newspaper articles
    - Speaking at local Civic clubs

Collaborative Partners

Manna Ministries, Highland Community Hospital, Partners for Leadership of Pearl River County (local physicians and Pearl River Health Department)

RESPONDING TO THE COMMUNITY

CLOSING THE GAP

The information gathered from the community was very uniform and was also consistent with the quantitative data. The most common needs mentioned by the community members were related to chronic diseases, health education, lifestyle improvement and access to emergency care.

Hypertension, heart disease, diabetes, weight loss/obesity and nutrition were all health needs identified by both the community members and healthcare professionals. Community members saw a need for increased education and preventive care in order to eliminate the path to chronic disease.

Prevention is very cost effective compared to the catastrophic treatment needed when a chronic disease is unmanaged and leads to major health problems. Education related to nutrition was emphasized because of the link between obesity and so many chronic health conditions. Other community health needs that were expressed included a need for increased health literacy, and decreased health disparities among socioeconomic and racial groups.

PRIORITIZATION

The Steering Committee understood the facts the primary and secondary data communicated in reference to the health of the citizens of primarily Pearl River County:

- The county exceeds the U.S. in rate of deaths from heart disease but not the state.
- The county exceeds the state and U.S. in rate of deaths from cancer.
- The county exceeds the state and U.S. in rate of deaths from lower respiratory disease.
- The county exceeds the state and U.S. in rate of deaths from accidents.

RESPONDING TO THE COMMUNITY

The Steering Committee used the following process to prioritize the identified needs that the hospital would use when creating strategies to help close the gap:

- All the findings and data were read and analyzed for needs and recurring themes within the identified needs.
- Reference was made to the content of the community input and the identified needs from those sources.
- Comparisons were made between the primary and secondary data and then compared to what was the common knowledge and experience of the clinical staff of the hospital.
- Based on what resources could be made available and what initiatives could have the most immediate and significant impact, the strategic initiatives were developed.

Implementation strategies that will address three major health issues were developed. The strategies will seek to leverage valuable partnerships that currently exist and to identify opportunities for synergy within the community. The outcomes and results of these interventions will be followed and reexamined in preparation for the next CHNA.

IMPLEMENTATION PLANS

To be successful in creating a true sense of health in our community, it will be necessary to have collaborative partnerships which will bring together all of the care providers, the citizens, governments, plus business and industry, around an effective plan. Many needs have been identified through this process. Highland Community Hospital is proud to have been the catalyst in this effort. However, addressing some of the needs identified will require expertise and financial resources far beyond what a critical access hospital can provide.

The hospital is aware of many lifestyle issues that face citizens of a rural southern state. Many of the lifestyle habits negatively impact the overall health of our community and are major contributors to several of the leading causes of death in our county. Highland Community Hospital has identified three significant initiatives it will undertake over the next three years. These collaborative projects should help improve the health and overall quality of life in our community. Each project is described in another section of this report.

There are other health and wellness opportunities identified during the research portion of the CHNA. These possibilities will be considered as we develop our strategic action plans over the next three years.

HEALTH AND WELLNESS INITIATIVES

Over the next three years, Highland Community Hospital, in concert with its many community partners will focus its energy in these five areas:

MENTAL HEALTH – DEMENTIA AWARENESS

DEMENTIA EDUCATION

Target Population

Caretakers, friends or family of patients with dementia and concerned/interested citizens 18 years of age or older

Goal/Desired Outcome

The goal is to improve understanding of challenges/barriers faced by persons living with dementia.

Process/Time Frame/Location

HCH will present educational programs which consist of Pre and Post-Tests, an educational video, and a discussion led by a representative of the Mississippi Alzheimer's Division of the Mississippi Department of Mental Health. This presentation will be followed by the Virtual Dementia Tour (VDT).

Measure of Success

Community participation, positive feedback from staff and community, requests to provide more education. The goal is to have 48 attendees participate in each Virtual Dementia Tour.

Collaborative Partners

Mississippi Department of Mental Health – Alzheimer's Division, Amedisys Home Health, Mississippi Home Care, Deaconess Home Care, Camellia Home Care, Kare In Home, Forrest General Home Care, Pearl River County Hospital, Pearl River County IOP, Picayune Chamber of Commerce, WRJW Radio Station, *Picayune Item* Newspaper

HEALTH AND WELLNESS INITIATIVES

MENTAL HEALTH FOR SENIORS

To help address the demand for mental healthcare for seniors in our service area, Highland Community Hospital (HCH) opened a Geriatric Psychiatric Unit (GPU or Geri-Psych Unit) within the hospital on October 1, 2013.

Target Population

Residents primarily of Pearl River County ages 55 and over. The GPU is open to residents of all surrounding counties, i.e., Hancock County, Lamar County, St. Tammany Parish, Louisiana.

Goal/Desired Outcome

The goal of the Geri-Psych Unit is to provide a safe environment for inpatient psychiatric care for elderly residents of the community we serve.

The desired outcomes would be a reputation for world class care and the ability to assist all those who require our services.

Measure of Success

Maintaining an average daily census of 7 is the benchmark for success of this unit.

Collaborative Partner

Pine Grove Recovery Center

HEALTH AND WELLNESS INITIATIVES

HEALTHFUL EATING PROGRAM

Highland Community Hospital feels that incorporating health initiatives into our cafeteria and campus offers healthy options to patients, workers, visitors and guests. In principle, healthy food improvements are associated with higher patient and employee satisfaction. Healthy cafeterias draw in new and repeat customers from the community's surrounding area. Implementing heart healthy hospital initiatives into our hospitals food service setting is critical to ensuring our staff, patients, and surrounding community has the opportunity to learn and practice healthy eating while making an imprint on their long-term eating habits.

Target Population

Hospital staff, patients, workers, visitors, guests, and all members of the community

Goals/Desired Outcome

The desired outcome is that the community becomes more educated in the areas of heart health and exercise and has the opportunity to make healthy food choices while at Highland Community Hospital.

Process/Time Frame/Location

- Offer access to complementary nutrition education fact sheets displayed inside the café dining area.
- Fact sheets on display will adequately provide diet education in the areas of achieving heart health by eating healthy and getting weekly exercise.
- Increase quantity, quality, and variety of fresh fruits and vegetables.
- Improve nutritional and packaging quality of grab-n-go meal and snack options.
- Once a month, provide wellness education fact sheets as a part of our *Meals on Wheels* program.
- Plan and prepare meals with no *trans*-fat, reduced saturated fats, and more healthful fats.
- Expand the offering of high fiber and lean protein options.
- Offer reformulated lower-calorie, sugar, and sodium entrées and snack options.
- Provide accurate nutritional content data at point of the food service (serving line).
- Increase baking and steaming as a cooking method option instead of frying.
- Teach nutrition and weight control for the community – to be taught by a dietitian.

HEALTH AND WELLNESS INITIATIVES

Measure of Success

Healthy hospital advocates believe investments in hospital wellness will help reduce healthcare costs, improve worker productivity, reduce absenteeism, enhance patient satisfaction and health outcomes, and ultimately decrease the number of diet related chronic diseases in the community. Increased consumption of healthful food by café guests.

Collaborative Partners

American Heart Association, local churches, civic groups, radio station, local physicians

HEALTH AND WELLNESS INITIATIVES

PUTTIN ON THE PINK

Cancer is the leading cause of death in Pearl River County. Highland Community Hospital, in an effort to improve access to breast health education and care, will partner with Partners for Leadership of Pearl River County and continue to grow and enhance the *Puttin on the Pink* Foundation. The *Puttin on the Pink* Foundation's Community Collaboration to Battle Breast Cancer, also known as the Mammogram Voucher Program (MVP) will be continued during this report period.

Target Population

The program will focus on reducing disparities in breast healthcare among low-income, medically underserved, uninsured women and men in Pearl River County.

Goal/Desired Outcome

The program will provide free breast screenings to members of the community. The goal is to increase this by 15 percent annually over the next three years. The initiative will also address ways to a resolve the challenges of transportation to the screenings for the underserved population.

Process/Time Frame/Location

HCH will create an event to be held quarterly to educate the community on self-breast exams. This will include lectures/demonstrations and guest speakers. The goal is to reach 350 community members annually. In addition, we will provide high-quality, culturally competent outreach, education, screenings, and navigation services.

Measure of Success

Fifteen percent increase of those served, annually. Through educational events, reach more than 350 community members, annually.

Collaborative Partners

Potential key partners include:
Manna Ministries, Partners for Leadership of Pearl River County, local physicians, Pearl River Health Department, Magnolia Cab Company, Medicaid Transport, Mississippi Power (patient navigator)

HEALTH AND WELLNESS INITIATIVES

DARE TO C.A.R.E. – FREE VASCULAR SCREENING PROGRAM

Heart disease is the second leading cause of death of Pearl River County residents. Seeing a need to improve access and information on vascular disease to the public, Highland Community Hospital will continue to host its annual Free Vascular Screening, Dare to C.A.R.E.

Target Population

The program focuses on reducing disparities in vascular disease among low-income, medically underserved, uninsured minority men and women by providing high-quality, culturally competent outreach, education, and screenings.

Goal/Desired Outcome

The program's goal is to educate the community about early detection of vascular disease and to prevent stroke or death caused by vascular disease.

Process/Time Frame/Location

A vascular surgeon will host lectures annually at Highland Community Hospital to educate the community on vascular disease. The event will include lectures/demonstrations, guest speakers and screenings.

Measure of Success

The goal is to reach at least 40 community members annually and to reduce the number of deaths from heart disease in Pearl River County.

Collaborative Partners

Key partners will include:
Mississippi State Department of Health, Forrest General Hospital, Hattiesburg Clinic, local physicians, civic groups, local churches, local radio station, Manna Ministries

THANK YOU

This comprehensive assessment will allow us to better understand the needs and concerns of our community. Highland Community Hospital is proud be part of the Forrest Health System where we truly believe we are “our brother’s keeper.” As always, through this commitment to compassionate and mission-focused healthcare, we are honored to work closely with our collaborative partners in our community to provide outstanding healthcare and create a healthier world for the residents of Pearl River County and surrounding areas.

Thanks to each of you who provided valuable insight into this report. Your participation in the data gathering, discussions and decision making process helped make this a true community effort which will better serve all segments of our population.

REFERENCES

2007 Census Publications State and County Profiles Mississippi. (2007). *USDA Census of Agriculture.* Nov. 2016. Retrieved from: https:/www.agcensus.usda.gov/Publications/2007/Online_Highlights/County_Profiles/Mississippi

Community Facts, United States Population. (2010). *United States Census Bureau American FactFinder*. Nov. 2016. Retrieved from: http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml

Friedman, L.F. (2014, December 10). These are the Unhealthiest States in the US. *Business Insider.* Nov. 2016. Retrieved from: www.businessinsider.com/americas-health-rankings-2014-2014-12

Generated Statistical Table -MSTAHRS. (2016). Pearl River, Cause of Death. Nov. 2016. Retrieved from: http://mstahrs.msdh.ms.gov/table/morttable1.php?level=0&rw=7&cl=0&race=6&sex=2&agep=15&eth=2&yer%5B%5D=2014&geography=1&cnty%5B%5D=54&delta1=0&grp%5B%5D=0&grp%5B%5D=1&grp%5B%5D=2&grp%5B%5D=3&grp%5B%5D=4&grp%5B%5D=5&grp%5B%5D=6&grp%5B%5D=7&grp%5B%5D=8&grp%5B%5D=9&grp%5B%5D=10&grp%5B%5D=11&grp%5B%5D=12&grp%5B%5D=13&grp%5B%5D=14&grp%5B%5D=24&grp%5B%5D=15&grp%5B%5D=16&grp%5B%5D=17&grp%5B%5D=18&grp%5B%5D=19&grp%5B%5D=20&grp%5B%5D=21&grp%5B%5D=22&grp%5B%5D=23&geom=3&standard=2

Generated Statistical Table -MSTAHRS. (2016). Pearl River, Unintentional Injury. Nov. 2016. Retrieved from: http://mstahrs.msdh.ms.gov/table/morttable1.php?level=4&rw=7&cl=0&race=6&sex=2&agep=15&eth=2&yer%5B%5D=2014&geography=1&cnty%5B%5D=54&delta1=0&grp%5B%5D=0&grp%5B%5D=1&grp%5B%5D=2&grp%5B%5D=3&grp%5B%5D=4&grp%5B%5D=5&grp%5B%5D=6&grp%5B%5D=7&grp%5B%5D=8&grp%5B%5D=9&grp%5B%5D=10&geom=3&standard=2

Generated Statistical Table -MSTAHRS. (2016). Mississippi, Unintentional Injury. Nov. 2016. Retrieved from: http://mstahrs.msdh.ms.gov/table/morttable1.php?level=4&rw=7&cl=0&race=6&sex=2&agep=15&eth=2&yer%5B%5D=2014&geography=0&cnty%5B%5D=99&delta1=0&grp%5B%5D=0&grp%5B%5D=1&grp%5B%5D=2&grp%5B%5D=3&grp%5B%5D=4&grp%5B%5D=5&grp%5B%5D=6&grp%5B%5D=7&grp%5B%5D=8&grp%5B%5D=9&grp%5B%5D=10&geom=3&standard=2

Generated Statistical Table –MSTAHRS. Mississippi, Cause of Death. (2016). Nov. 2016. Retrieved from: http://mstahrs.msdh.ms.gov/table/morttable1.php?level=0&rw=7&cl=0&race=6 &sex=2&agep=15&eth=2&yer%5B%5D=2014&geography=0&cnty%5B%5D=99&delta1=0&grp%5B%5D=0&grp%5B%5D=1&grp%5B%5D=2&grp%5B%5D=3&grp%5B%5D=4&grp%5B%5D=5&grp%5B%5D=6&grp%5B%5D=7&grp%5B%5D=8&grp%5B%5D=9&grp%5B%5D=10&grp%5B%5D=11&grp%5B%5D=12&grp%5B%5D=13&grp%5B%5D=14&grp%5B%5D=24&grp%5B%5D=15&grp%5B%5D=16&grp%5B%5D=17&grp%5B%5D=18&grp%5B%5D=19&grp%5B%5D=20&grp%5B%5D=21&grp%5B%5D=22&grp%5B%5D=23&geom=3&standard=2

Heron, Melonie, Ph. D. "National Vital Statistics Reports" *Cdc.gov.* 30 June 2016. Nov. 2016. Retrieved from: https://www.researchgate.net/publication/298707680_Deaths_Leading_ causes_for_2013

Coakley, E., Must, A., Spadano, J. (1999, October 27). The Disease Burden Associated with Overweight and Obesity. *The Jama Network*

Older Americans & Cardiovascular Diseases. (2016). American Heart Association Statistical Fact Sheet 2016 Update. Nov. 2016. Retrieved from: https://www.heart.org/idc/groups/heart-public/@wcm/@sop/@smd/documents/downloadable/ucm_483970.pdf

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