# MEMORIAL HOSPITAL AT GULFPORT CHNA REPORT

DECEMBER 2016







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# **EXECUTIVE SUMMARY**

The purpose of this Community Health Needs Assessment (CHNA) report is to provide Memorial Hospital at Gulfport with a functioning tool to guide the hospital as it continues to work to improve the health of the community it serves.

The Affordable Care Act, enacted March 23, 2010, requires all 501(c)(3) hospitals to conduct a CHNA every three years in order to maintain their tax exempt status. The Act also requires 501(c)(3) hospitals to adopt an implementation strategy to meet those health needs identified through the assessment. This report meets the guidelines of the Internal Revenue Service.

Over the past several years, since the Affordable Care Act (ACA) was enacted, Memorial has had a decline in reimbursement from both Medicare and Medicaid. These governmental programs provide healthcare coverage for the elderly, low-income and vulnerable residents of the hospital's service area. Since the ACA was enacted, Memorial has seen a loss of \$23M of inpatient payments from Medicare and \$27M in underpayments from the Medicaid program. These payment reductions are expected to begin impacting the level of service Memorial can provide to the community as we move forward in FY 17 and beyond. A decision was made to restructure post-acute inpatient rehabilitation services. Medicare represents 65 percent of our inpatient rehabilitation business and we will outsource operations with a national rehabilitation provider. After consistent operating losses since 2013, the decision was made to divest Memorial Behavioral Health (MBH). Medicaid represents 65 percent of business at MBH, but payment policies vary by region and ownership status. In order to ensure the long-term availability of mental health services, MBH operations will be transitioned to a freestanding entity.

These changes in these governmental programs will also begin to impact the ability of uninsured residents to access non-emergent services from hospitals as additional payment reductions are implemented. In addition, Memorial continues to assess the viability of its service lines due to the current payment structures of these governmental programs. Memorial will be relying on outside stakeholders, such as federally grant-funded organizations, state agencies, private insurance companies, community health organizations, non-profit partners, and other entities to achieve some of the objectives set out in this report.

The assessment was performed and the implementation strategies were created by the CHNA Steering Committee with assistance from HORNE LLP. The assessment was conducted in September and October, 2016.

The results of the CHNA will guide the development of Memorial's efforts to collaborate with federal and state agencies, as well as, other health related entities, on 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 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, social networking, our website, www.gulfportmemorial.com (community e-forum), paid public notice, and a focus group. Additional information came from public databases, reports, and publications by state and national agencies.

The implementation describes the programs and activities that will address these health priorities over the next three years. The CHNA report is available on the hospital's website www.gulfportmemorial.com or a printed copy may be obtained from the hospital's administrative office.

We sincerely thank those who provided input for this assessment. We look forward to working closely with our community to help improve the overall health of those we serve.

Gary G. Marchand, M.P.H. President/CEO Memorial Hospital at Gulfport



# ABOUT THE HOSPITAL

# MEMORIAL HOSPITAL AT GULFPORT

Memorial is a multi-specialty medical complex, supporting a comprehensive range of health and wellness services.

Memorial is a not-for-profit medical complex in Gulfport, Mississippi, jointly owned by the City of Gulfport and Harrison County. Memorial is one of the most comprehensive healthcare systems in the state, licensed for 445 beds, including satellite outpatient diagnostic and rehabilitation centers and more than 90 Memorial Physician Clinic locations. Memorial offers several of the region's most comprehensive clinical programs, such as emergency medicine; women and children services; orthopedic services; cardiovascular services; neurosciences and oncology. Additionally, Memorial provides medical specialties unique to the coast: Neonatal ICU, state-designated Level II Trauma Center, and Mississippi's first nationally certified Primary Stroke Center. Memorial offers three–dimensional imaging, electronic medical records, advanced surgical techniques, including CyberKnife® and two da Vinci® Xi™ Robotic Assisted Specialty Surgery Systems.

Memorial is accredited by The Joint Commission, the College of Surgeons Commission on Cancer, and the College of American Pathologists.





# THE COMMUNITY HEALTH NEEDS ASSESSMENT

The Community Health Needs Assessment defines opportunities for health care 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 Hancock, Harrison, Jackson, and Stone Counties. 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 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

Mississippi State Department of Health American Heart Association

Trust for America's Health Memorial Hospital Medical Records Department Mississippi State Department of Health,

Mississippi Center for Obesity Research University of Mississippi Medical Center



# ABOUT THE COMMUNITY

# **DEMOGRAPHICS**

#### **SERVICE AREA**

**Primary:** Harrison and Hancock counties **Secondary:** Jackson and Stone counties

#### HEALTH CARE PROVIDERS IN THE AREA

Memorial Hospital at Gulfport, Hancock Medical Center, Garden Park Medical Center, Merit Health Biloxi (Formerly Biloxi Regional Medical Center), Keesler AFB Medical Center, VA Gulf Coast Veterans Health Care System, Stone County Hospital & Clinic, Pearl River County Hospital

# SIGNIFICANT ENVIRONMENTAL FACTORS

Tourism, Gaming Industry, Military (Navy and Air Force) bases and Port of Gulfport

#### MAJOR EMPLOYERS\*

Keesler Air Force Base: 11,276 employees

Naval Construction Battalion Center: 5,500 employees

Memorial Hospital at Gulfport: 3,331 employees Beau Rivage Resort & Casino: 2,932 employees Harrison County School District: 1,802 employees

VA Gulf Coast Veterans Health Care System: 1,605 employees

IP Casino Resort Spa: 1,499 employees Island View Casino Resort: 1,293 employees Golden Nugget Casino: 1,148 employees Hard Rock Hotel & Casino: 988 employees

Hancock Bank: 864 employees

Information compiled by Memorial Hospital Marketing Department.

\* Source: Harrison County Development Commission





#### POPULATION AND RACIAL MIX DATA\*\*

#### HARRISON COUNTY

Population: 201,410

Racial Mix:

White: 135,330 African American: 44,251

Asian: 5,675 American Indian and Alaska Native: 613

Native Hawaiian and Other Pacific Islander: 16 Other: 2,105

Two or more races: 2,476

Median Household Income \*\*\*: \$42,285

HANCOCK COUNTY

Population: 46,420

Racial Mix:

White: 39,421 African American: 3,927

Asian: 479 American Indian and Alaska Native: 381

Other: 1,531 Two or more races: 2,496

Median Household Income \*\*\*: \$44,069

JACKSON COUNTY

Population: 141,425

Racial Mix:

White: 102,083 African American: 30,673

Asian: 3,030 American Indian and Alaska Native: 312

Native Hawaiian and Other Pacific Islander: 34 Other: 493

Two or more races: 971

Median Household Income \*\*\*: \$49,149

STONE COUNTY

Population: 18,070

Racial Mix:

White: 14,111 African American: 3,349

Asian: 14 American Indian and Alaska Native: 152

Other: 4 Two or more races: 311

Median Household Income \*\*\*: \$45,141

Information compiled by Memorial Hospital Marketing Department.

\*\* Source: U.S. Census Bureau, 2015 estimates

\*\*\* Source: U.S. Census Bureau/2010-2014 American Community Survey

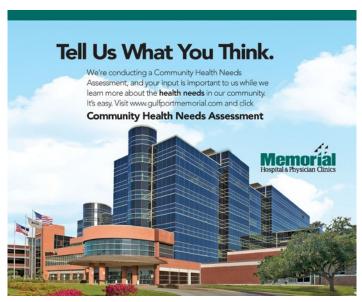


# **COMMUNITY INPUT**

# **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.

A community survey was developed by the hospital. An advertisement was placed in the Sun Herald on Oct 9, 2016, encouraging members of the general public to participate in the online survey. The data collected from the survey was part of the input used by the Steering Committee in establishing priorities.



Sun Herald ad, Oct. 9, 2016.



Gulfport Memorial Facebook page post



www.gulfportmemorial.com slider linked to survey



# **COMMUNITY INPUT**

# 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.

Gary Marchand Memorial President and CEO

Jennifer Dumal, RN, BSN, MPH COO, Clinical

Jeanne Engle, RN Vascular Access Coordinator, Administrative Supervisor

Kent Nicaud COO, Operations

Melissa Spiers-Ladner, RD Clinical Nutrition Services Manager

Jeff Steiner Chief Financial Officer

Janet Stuart Marketing & Communications Manager



# **COMMUNITY INPUT**

# **COMMUNITY FOCUS GROUP**

A community focus group was held at Memorial Hospital at Gulfport on Friday, October 28, 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.



#### PARTICIPANTS IN THE COMMUNITY FORUM

Hannah Donegan Memorial Digital Marketing Specialist

Larry Knight COO, Coastal Family Health

Sgt. Robert Lincoln Harrison County Sheriff's Department, Community Relations

Ellen Lindsey Memorial Auxiliary Volunteer

Toni Richardson Mississippi State Department of Health Community Health Director

Lauren SantaCruz Memorial Hospital Foundation

Kathie Short Memorial Board of Trustees Secretary

Cynthia Walker United Way of South Mississippi

Collier Young Memorial Practice Manager, Cancer Services

#### Invited, but unable to attend:

Shelly Foreman Gulf Coast Mental Health, Director

Kent Jones Harrison County Board of Supervisors, District 4

Kenneth Casey Gulfport Councilman

Tish Williams Hancock County Chamber of Commerce

**Gulfport Police Department Representative** 



# CHARACTERISTICS OF THE HEALTH OF THE SOUTHERN RURAL COMMUNITY

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 THE U.S. AND MISSISSIPPI**

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.

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 significant. Obesity contributes to heart disease, stroke, diabetes and a myriad of orthopedic conditions (Coakley, Must, Spadano, 1999). Obesity has become a threat to the health of Mississippians and if left unchecked will continue to impact the health of state residents.

One out of every three adults in Mississippi is considered obese. Obesity predisposes to a whole host of chronic diseases, and it produces 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 the quality of life.

Mississippi has the highest rate of childhood obesity in the nation. Nearly half of Mississippi children are overweight or obese. 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.

The obesity rate for Mississippi's children has stabilized, but adult obesity is on the rise. A recent study shows that by 2030, 67 percent of Mississippi's adults are projected to be obese.



# HEART DISEASE AND STROKE IN MISSISSIPPI

Mississippi has the highest death rate from cardiovascular disease in the country and heart disease is the No. 1 killer in Mississippi. In 2014, 7,539 people in Mississippi died of heart disease. Cardiovascular disease (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.

In Mississippi		In America
26.0%	Adults are current smokers	21.1%
40.0%	Adults participate in 150+ min of aerobic physical activity per week	51.6%
68.9%	Adults who are overweight or obese	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%
15.8%	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 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.

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	<ul> <li>Obesity</li> </ul>	<ul> <li>Improper Nutrition</li> </ul>
•	Abnormal Cholesterol	<ul> <li>Tobacco Use</li> </ul>	<ul> <li>Diabetes</li> </ul>
•	Socio-cultural Factors	<ul> <li>Acute Event</li> </ul>	<ul> <li>Hypertension</li> </ul>



# 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 Harrison and Hancock 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.

The Department of Health is responsible for public health initiatives and a network of federally-funded Federally Qualified Health Centers (FQHC) provide access to primary care services for low income and vulnerable residents. In addition, organizations such as the American Heart Association and United Way support a variety of educational or outreach activities concerning health related issues.

# **HEALTH DISPARITIES AND RANKINGS**

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. 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
Decent and safe housing
Affordable, reliable public transportation
Health insurance

Nutritious food
Culturally sensitive healthcare providers
Clean water and non-polluted air

According to an article published in December 2014 by Business Insider, 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. (Friedman, L., 2014).

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.



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.

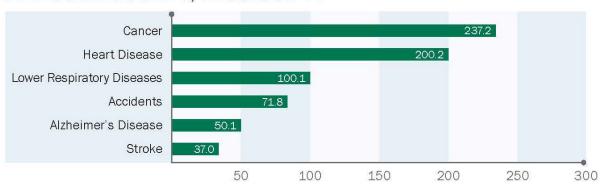
In the past 25 years, there have been some notable changes. Since 1990, there have been major reductions in infant mortality (down 41 percent), death from heart disease (down 38 percent), and premature death (down 20 percent). In 1990, 29.5 percent of Americans smoked; in 2014, 19 percent smoked, though 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 percent 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.



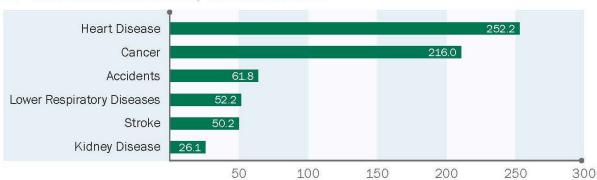
# LEADING CAUSES OF DEATH 2014\*



# HANCOCK COUNTY, MISSISSIPPI



# HARRISON COUNTY, MISSISSIPPI

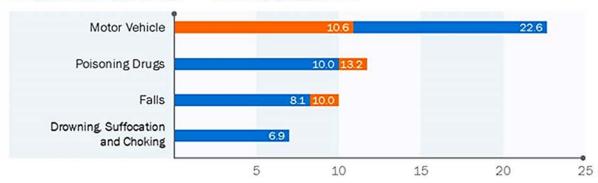


<sup>\*</sup> Rate per 100,000 Population

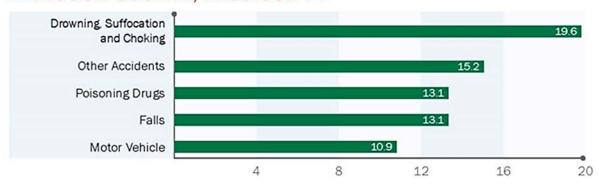


# **ACCIDENTAL DEATHS 2014\***

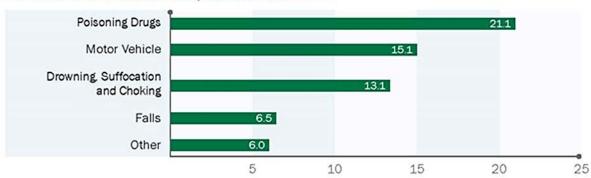




# HANCOCK COUNTY, MISSISSIPPI



# HARRISON COUNTY, MISSISSIPPI



<sup>\*</sup> Rate per 100,000 Population



# CHNA STRATEGIC ACTION RESPONSES

#### **CANCER CARE**

According to the American Cancer Society, "More than one million people in the United States get cancer each year." Cancer is the first highest cause of death in Hancock County and the second highest in Harrison County.

As Memorial Hospital is dedicated to identifying and meeting the needs of the community, the need for a Comprehensive Cancer Center was addressed. As a result, the Cancer Center at Memorial was developed. The Cancer Center at Memorial primarily serves cancer patients of Harrison County Mississippi; with the majority of the total patients seen coming from zip codes for Gulfport, Long Beach, Pass Christian and portions of west Biloxi, to the north end of the county line. Most of the remaining patients come from eastern Harrison County (Biloxi) into western Jackson County (Ocean Springs), eastern Hancock County (Bay St. Louis to Kiln) and southern Stone County.

Memorial is providing awareness activities and screenings for early detection and by participating in a lifesaving research study. Some individuals will be provided in-depth information about specific types of cancer, their risk factors, early detections, and diagnosis and treatment options.

Memorial supports and facilitates a myriad of services designed to make living with cancer easier. These community services not only educate, but they provide resources that cancer patients and families might not otherwise have accessible. These important activities and services provided by Memorial are listed below:

# Centralization of Support Services

Oncology Administration began the process of locating patient education, navigation, financial counseling and clinical trial functions in one location for patient ease of access in 2014. To date, with the exception of nutrition services (centralized to the hospital), the remaining services are located on the first floor of the hospital medical office building in the "cancer center."

# **Nurse Navigation**

Since the inception of the Nurse Navigation program in 2012, there has been consistent growth and expansion of the support services offered by the program. In June of 2015, the program expanded staffing to two full time nurse navigators. Planning is in place to add a third navigator in 2017.

# **Secondary Market Treatment**

Medical Oncology has seen steady growth and market expansion. Annual goals of expanding services in Biloxi were met, including Biloxi (Cedar Lake) growth and implementation of chemotherapy treatment administration. Biloxi (Cedar Lake) expansion included four additional chemotherapy



chairs. Medical Oncology physicians expanded in 2015 and 2016, providing physician services in Hancock County as well.

# Physician Coverage in Radiation Oncology

An additional fulltime physician was successfully recruited in 2015, however, with the departure of one physician in late 2015, recruitment efforts are again in place for an additional fulltime physician in Radiation Oncology.

#### Education

Ongoing education / screening programs continued from 2014 through 2016. These included skin screening, breast screenings and prostate screenings. Public education forums were held in 2014 and 2015. Low dose lung screening program successfully implemented in 2016.

#### Patient Assistance Funds

Continue to seek grants and donations to support cancer patients with their treatment through transportation and bill assistance. Refine grant searches to include funds that assist patients with post screening diagnoses.

# Survivorship Assistance

Survivorship Care Planning program was developed in 2015 and implemented in 2016 by the Nurse Navigation Program and is compliant with accreditation requirements established by the Commission on Cancer.

#### **Collaborative Partners:**

American Cancer Society and Pink Heart Funds



#### DIABETES EDUCATION PROGRAM

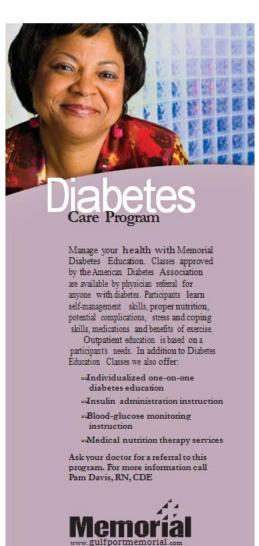
The goal of Memorial's Diabetes Education program is to empower each individual living with diabetes to be an active participant in their own diabetes management. The diabetes educator helps support people with diabetes as they master the knowledge, skills, and behavior changes needed to manage diabetes as a chronic disease.

We believe that diabetes self-management training (DSMT) is the foundation for patient centered diabetes care. DSMT will help the person with diabetes (and family/caregivers) acquire the knowledge, self-care skills, confidence, and problem solving abilities they need to manage diabetes.

DSMT is conducted using a pro-active, patient-centered approach based upon the chronic disease management theory. The chronic disease care model emphasizes the patient's role in managing their own health. Chronic health conditions are challenging to manage and good health outcomes depend in part upon the patient's self-care behaviors and decision making skills. We believe that DSMT empowers the patient to become an active member of their diabetes care team.

The nurse educator, the dietitian health care provider, and the patient will interact to develop a patient centered plan of care. This plan of care will be shared with the patient's referring physician. The nursing process of assessment, planning, implementing, and evaluation will be used to guide nursing practice as it relates to diabetes education. Evaluation and follow-up ensure that effective self-management strategies are being employed. The nurse and/or dietitian also serve as a patient advocate and collaborate with other healthcare providers, or community resources when necessary.

Memorial is currently considering applying for certification as a Diabetes Center of Excellence.



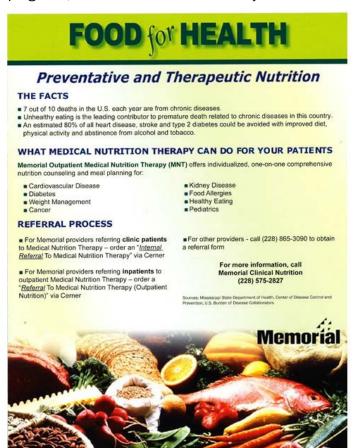
(228) 867-4131



DSMT is offered to adults and adolescents with Type 1 or Type 2 diabetes from the communities we serve, including adults and adolescents with hyperglycemia who are at risk for health complications. The program provides education for at-need inpatients, as well as outpatients. Women with gestational diabetes are seen by the dietitian one-on-one and certified diabetic educator (CDE) as needed. They may attend DSMT class if they had an existing history of diabetes. The program has up to 200 education program graduates yearly. Many other patients are referred for insulin and meter use instructions.

When classroom education is not convenient and/or appropriate for the participant, one-on-one instruction can be provided in the education office. Geriatric patients with learning barriers (i.e. blind, hearing deficits, ambulatory difficulties, etc.) and pediatric patients may be seen individually based on nursing assessment and patient preference.

Some special needs populations have been identified since 2014. The program frequently receives phone calls from diabetics in the community who report the inability to obtain diabetic maintenance supplies. Those requesting assistance were referred to Memorial Social Services, patient assistance programs, and local free or community clinics. We have a significant number of patients coming



needed.

through the ER with no access to diabetes testing supplies and medications. These patients are evaluated by social services and case management. Patients in need of further DSMT are referred to the Gulf Cost Health Educators, Mississippi State Department of Health and Coastal Family Health.

Diabetes Care has purchased education videos, the Life with Diabetes 4th edition text, ADA and AADE resource texts, models, slides, CDs, and several posters with the foundation grant money. We also provided a gestational diabetes video for Women and Children's Services (2011). We ordered additional food models and supplies in 2014.

In addition to ADA handouts, we are providing the ADA/KRAMES Self Care Workbook: Living Well with Diabetes to DSMT participants. Low literacy is addressed on a one-on-one basis as



Classes are held at Memorial Hospital at Gulfport's main campus for a three-month period per class group. Curriculum was updated to add a DVD to exercise and skin care for 2014-2015. Interpreter services are available via the hospital system as needed.

Our program participates in hospital sponsored community health fairs and senior service activities. In 2016, the program coordinator developed a revised Diabetes Care program brochure for use in physician offices, clinics, pharmacies, and for community events. The brochure contains useful information for our service area including diabetes statistics, risk factors for diabetes, signs/symptoms of diabetes, and an A1C chart. Diabetes Care also offers continuing education and speaker events for the diabetic community.

Class participants are given a three-month post class appointment. If the participant is unable to keep the follow-up appointment, the nurse educator or the dietitian will conduct a phone follow-up within two weeks. In 2015, the Diabetes Care Program discontinued quarterly diabetes support groups due to low attendance. Class participants will review their goals during the three-month post class appointment. Post program A1C values will also be reviewed if available.

#### MEASURE OF SUCCESS

#### 2014 PATIENT OUTCOMES

- 1. If post program A1C is available; 75 percent will have lowered their A1C. Hundred percent we had f/u A1C data on 3 patients. Each of these had lowered their A1C from initial visits.
- 2. 80 percent of class participants are following a foot care routine 3 months post class. Hundred percent reported checking feet daily or weekly.
- 3. 80 percent of participants are following a carbohydrate controlled meal plan at least 6 days a week. Ninety-five percent of patients report following a carbohydrate controlled meal plan. Illness remains the major reason for failure to follow the carbohydrate consistent meal plan.



# THINKFIRST BRAIN AND SPINAL CORD INJURY AWARENESS PROGRAM

The ThinkFirst program is specifically targeting high risk groups of children and teenagers. The educational programs are provided to children across the coast in Harrison, Hancock, and Jackson counties. Traumatic Brain Injury (TBI) is an insult/injury to the brain from an external mechanical force. The resulting injury may be temporary or permanent that involves a decreased or altered level of consciousness. Crucial cognitive, physical and/or psychosocial functions may be affected and/or permanently altered/lost as a result. It is important to note that brain injury is not the same as head injury as the latter may not be associated with neurological associated effects. There is no cure for traumatic brain injury. Therefore, prevention is the best approach to minimize the chance of a traumatic brain injury.

Educational programs were developed by the ThinkFirst National Injury Prevention Foundation to decrease overwhelming number of injuries. These programs are specifically targeting the high risk group of children and teenagers. The mission of ThinkFirst is to promote education and research in the prevention of brain, spinal cord/traumatic injuries.

The Memorial Chapter has implemented several creative and interactive programs to engage children to foster learning about brain and spinal cord injury prevention. The Memorial Hospital Foundation ThinkFirst Chapter has partnered with the Mississippi Department of Rehabilitation Services, the Mississippi Department of Marine Resources, and State Farm to provide a variety of safety programs to our local community. These programs include boat and water safety, ATV safety as well as bicycle safety. Children in our area attend safety presentations and walk away with not only the knowledge of why it is so important to practice safe behaviors but, a helmet or lifejacket to take home to execute the behaviors they have learned. These efforts were all aimed at promoting the ThinkFirst mission "Leading injury prevention through education, research and policy."

The Memorial chapter of ThinkFirst was named chapter of the year in 2015 for the message we promote across the Mississippi Gulf Coast.

Future events for the communities are in the planning stages to target children and teenagers regarding ATV, Water and Bicycle safety. These events take place throughout the year. The water safety event typically takes place in the late spring and summer. The ATV safety event is typically held in the fall and the bicycle events happen periodically throughout the year.

We intend to have a water safety event in each coastal county of Jackson, Harrison, and Hancock. The ATV event is held in partnership with the sheriff's department. Bicycle events are along the coast at community events and in elementary schools.



#### MEASURE OF SUCCESS

#### **ELEMENTARY SCHOOL PRESENTATIONS**

- 24 presentations
  - o 1,356 students
  - o 1,009 bicycle helmets

#### **HEALTH FAIRS**

- 4 events
  - o 594 participants/students
  - o 164 bicycle helmets
  - o 330 cell phone holders

#### SAFETY FAIRS

- 6 events
  - o 3 life jacket (564 life jackets/participants)
  - o 2 ATV (186 ATV helmets/participants)
  - o 1 equestrian (100 equestrian helmets/participants)

#### **COLLABORATIVE PARTNERS**

Partners for these events include Mississippi Power, Harrison County Sheriff's Department, the Biloxi Shuckers, and the City of Gulfport Police Department.



#### STROKE CARE AND HEART HEALTH

Memorial Hospital services extend across the three coastal counties (Hancock, Harrison, and Jackson) and north to Stone County. Memorial Hospital serves a large population of low-income, government sponsored and uninsured families.

Stroke continues to be the fifth leading cause of death and the sixth leading cause of hospitalization in Mississippi. Memorial Hospital at Gulfport operates the Memorial Stroke Center which is certified by The Joint Commission, and is the first primary stroke center in Mississippi. Certification by The Joint Commission validates that the Memorial Stroke Center has a detailed stroke care protocol, stroke rapid response team, integrated emergency response system, and a commitment to community education about stroke symptoms, risks, and treatment. Memorial Hospital Stroke Center established a tele-stroke system in 2015 with Stone County Hospital, a critical access hospital, to provide access to acute stroke treatment in a previously under-served population.

Heart disease is the number one cause of death in the world and the leading cause of death in the United States (U.S.), accounting for 1 in 7 deaths. Heart disease is the number one killer of women. Nearly 635,000 people in the U.S. have their first heart attack each year; approximately 300,000 have a recurrent heart attack. In 2011. over 326,000 people suffered a cardiac arrest outside of the hospital and of those treated by Emergency Medical Services, 10 percent survived. A witnessed cardiac arrest outside of the hospital has approximately a 31 percent survival rate. Cardiovascular disease is the leading global cause of death, with over 17 million deaths every year and increasing.

Memorial Heart Services has served this community for over 30 years with access to advanced technology and comprehensive cardiac care along the continuum. We offer exceptional



emergency treatment in our chest pain emergency department, provide non-invasive diagnostic



studies, interventional treatment in the cardiac catheterization lab including transradial cardial catheterization, cardiothoracic surgery for coronary bypass, valves and vascular conditions, and cardiac rehabilitation.

Our goal, through our community outreach efforts, is to prevent stroke and heart related conditions and/or minimize long term disabilities from the conditions. We provide education to the community about the risk factors related to stroke and heart disease, how to manage their risk factors, the signs and symptoms of a stroke and/or a heart attack. The importance of activating the emergency response system early to improve long term outcomes is emphasized. We strive to decrease the length of stay, improve long term outcomes after discharge and reduce readmissions.

Community leaders and healthcare providers need to be informed about risk factors, prevention, emergency response, and the latest evidence-based standards of care. They also need to be aware of what services are available at Memorial Hospital and the treatment options for the stroke and heart disease. Research shows that a more informed and educated community and patient will reap better outcomes. We want our community to be involved in their healthcare, be knowledgeable about preventive measures, treatment options, and to recognize cardiac and stroke emergencies.

Community education on stroke and cardiac risk factors, prevention, management, and emergency response will occur throughout the year at a variety of community locations through health fairs and civic/community organization speaking engagements, meetings and seminars.

Covering three coastal counties and Stone County, these events will occur throughout the year, upon request, and for standing events.

Our Cardiovascular and Neuroscience Care Symposium on October 21, 2016 at the Island View Casino and Resort, Gulfport, MS, had approximately 200 healthcare professionals attend.

#### MEASURE OF SUCCESS

#### STROKE PROGRAM

- Stroke support group, 2014 through March 2015
  - A support group for stroke survivors and their caregivers. The group provided emotional support and education to participants. The group was concluded in March 2015 due to low numbers of attendees
  - Monthly attendance 0 to 3 participants
- Collaboration is the Name of the Game (Stroke Conference) on January 23, 2015 at the IP Casino and Resort, Biloxi, MS
  - ~300 healthcare professionals from across the region in attendance



- Stroke Systems of Care, Mississippi Public Broadcasting (MPB), February 2, 2015
  - Stroke Program Medical Director, Dr. Lee Voulters, appeared on MPB to provide information on the Stroke System of Care in Mississippi
- Stroke Recognition and Response, AARP Meeting, April 14, 2015
  - Stroke Program Coordinator provided education to a local chapter of AARP on the recognition of stroke and the importance of early treatment
  - o ~10 attendees
- Bel-Aire Elementary Stroke Education, February 19, 2016
  - Education of stroke recognition and response was provided to elementary school students by the Stroke Program Medical Director, Dr. Lee Voulters.
  - ~100 students in attendance
- Stroke Risk Screenings and Stroke Education, First Missionary Baptist Church Gulfport, March 17, 2016
  - Stroke program nurse provided education on recognition and response to stroke and performed stroke risk screenings
  - ~40 attendees







#### CARDIAC PROGRAM

- Memorial Employee Health Fair on February 10, 2016 at Memorial Hospital's main campus and February 11, 2016 at Memorial Behavioral Health
  - Heart health screenings with lab work for thyroid, diabetes and heart (cholesterol, triglycerides, HDL/LDL, glucose), blood pressure, height and weight, H&H for women and PSA for men, body fat analysis, diabetes risk assessment and education, bone density screenings, vision screenings, smoking cessation information and foot care information
  - Memorial employees, physicians, volunteers, and contract staff
- Go Red for Women on February 19, 2016 at the Biloxi Civic Center
  - Performed body fat percentage and body mass index health screenings for participants. We also provided education on heart disease, risk factors, screenings, prevention, signs and symptoms of a heart attack, emergency response for heart attack, and information about services available in the community.
  - o ~200 in attendance
- Gulf Coast Businessmen's Club Heart Disease and Arrhythmia Management education in February 2016 and March 2016 in Biloxi, MS at Mary Mahoney's restaurant. Dr. John Agnone discussed heart disease in February and Dr. Sam Owen discussed arrhythmia management in March.
  - o ~ 50 community businessmen in attendance
- Delta Kappa Gamma (retired educator group) Heart Disease in Women education on April 9, 2016 at Gateway United Methodist Church in Gulfport, MS
  - Cardiac & Critical Care Clinical Outcomes and Projects Coordinator provided heart disease education specific to women
  - ~40 in attendance
- West Harrison High School Health Fair in May 2016
  - Cardiac Observation Manager provided heart disease education to high school students
  - o ~100 in attendance
- Bay Cove Men's Senior Group on June 16, 2016 in Biloxi, MS
  - o Dr. John Agnone provided education on heart disease
  - o ~30 in attendance
- TOPS Weight Management Group on July 26, 2016 in Biloxi, MS
  - Cardiac and Critical Care Services Director provided education to the community on stroke and heart disease.
  - o ~60 in attendance
- STEMI Systems of Care, Mississippi Public Broadcasting (MPB), February 2, 2015 to present
  - Cardiology Medical Director, Dr. Paul Mullen, appeared on MPB to provide information on the STEMI System of Care in Mississippi, promoting the "Dial Don't Drive" campaign.



#### JOINT EFFORTS

- AHA Impact Tour on May 19, 2016 at Memorial Hospital
  - Demonstrated how we work together to provide lifesaving cardiovascular care for patients that arrive at our ED with heart attack symptoms. We started with EMS, then the emergency department and end in the cardiac catheterization lab.
  - ~30 community leaders in attendance
- Heart Walk on October 1, 2016 at Jones Park, Gulfport, MS
  - Community event focusing on heart health and the benefits of exercise and a healthy diet.
  - o ~750 in attendance
- Memorial Hospital's Patients Ask Me segments on health related topics hosted by stroke and cardiac healthcare providers
  - These segments include: Is a Cardiac Arrhythmia Dangerous?, Subcutaneous ICD, Mitral Valve Disease, Heart Failure, Treatment of Brain Aneurysms, Why Do I Need a Cardiologist?, Angioplasty, and Inpatient Rehab.
    - WLOX viewers
- EMMI web-based patient education and/or follow-up phone calls that are provided preprocedure, pre-surgical, and following discharge. The web-based application provides interactive patient education on a variety of topics. The methods of education include written education, videos with audio and closed captioning, and phone surveys.

#### **COLLABORATIVE PARTNERS**

Partners for these events include the American Heart Association, Mississippi Health Care Alliance, Mississippi State Department of Health, and Memorial Hospital Foundation.



# 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 care.

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

Prevention can be 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 Hancock and Harrison Counties:

#### HANCOCK COUNTY

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

#### HARRISON COUNTY

- The county exceeds the state, the U.S., and Hancock County in rate of deaths from heart disease.
- The county exceeds the U.S. in rate of deaths from cancer.
- The county exceeds the U.S. in rate of deaths from lower respiratory diseases.
- The county exceeds the U.S. and the state in rate of deaths from accidents.



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.
- o Reference was made to the content of the community input and the identified needs from those sources.
- o 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.
- o Based on what resources could be made available and what initiatives could have the most immediate and significant impact, the strategic initiatives were developed.

Memorial will continue the programming identified in CHNA STRATEGIC ACTION REPONSES and monitor measurements of success, including stroke care, heart health, diabetes education, and brain and spinal cord injury.

Memorial will continue 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. Memorial 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 the hospital can provide.

The hospital is aware of many lifestyle issues that face citizens of Mississippi. 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 service area. Memorial will continue to undertake these significant initiatives over the next three years:

- DIABETES EDUCATION PROGRAM
- THINKFIRST BRAIN AND SPINAL CORD INJURY AWARENESS PROGRAM
- STROKE CARE AND HEART HEALTH
- CANCER CARE

In addition, during 2016 Memorial started a Community Health Initiative (CHI) that focuses on the management of chronic care conditions including hypertension, A1C, high cholesterol, etc. The CHI includes vaccines, preventive screenings, diagnostic testing, and patient education surrounding diet, nutrition, and diabetes. The CHI is initially targeted at the elderly (65 and older) with expansion plans under consideration.



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