Memorial Hospital at Gulfport

CHNA Report

September 2019

Approved by the Memorial Hospital at Gulfport Board of Trustees, September 24, 2019

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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 (ACA), 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 that targets the identified health needs in the assessment. This report meets the guidelines of the Internal Revenue Service.

Individual accountability for healthcare has been an integral part of the ACA. To help our community embrace such accountability, Memorial has implemented several care coordination programs. Since 2017, more than 3,000 patients have received medical educational programming through Emmi. These programs educate patients on their upcoming procedures and provide education after care is delivered. Care coordination also allows physicians and healthcare navigators to assist patients with necessary lab monitoring, follow ups with healthcare providers and other elements of their care.

Memorial is currently participating in an existing Accountable Care Organization (ACO) along with other organizations in the state of Mississippi. By joining the Myriad Health Alliance, we will be able to fill healthcare gaps in our patient population and work with these other healthcare organizations to minimize costs by providing patients the right care at the right time and provide integrated healthcare for the betterment of our patients in this state.

To support mental healthcare in our community, Memorial has worked with Harrison County Sheriff Troy Peterson to maintain a Crisis Stabilization Unit (CSU). The CSU works with local law enforcement agencies to provide mental health stabilization services to individuals experiencing acute mental health challenges. Memorial also has an agreement with Arcadian Telepsychiatry to offer telepsychiatry services to patients in the Emergency Room.

Memorial also recently added a provider to treat type 1 diabetes, also known as juvenile diabetes. This nurse practitioner is Board Certified in Advanced Diabetes Management and treats adults and children with type 1 and type 2 diabetes. The provider services Hancock County, bringing a valuable healthcare resource close to home for Coast residents.

This Community Health Needs 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 June through August 2019.

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 media, 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.

Kent Nicaud
President/CEO
Memorial Hospital at Gulfport

ABOUT THE HOSPITAL

MEMORIAL HOSPITAL AT GULFPORT

Memorial Hospital at Gulfport is a public, 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. Memorial is an acute care hospital licensed for 303 beds, including a state-designated Level II Trauma Center, two outpatient surgery centers, satellite diagnostic and rehabilitation centers, a 151-bed nursing center and more than 95 Memorial Physician Clinics. 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: the only Level III Neonatal ICU 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, the only board-certified neurosurgeons in the three lower coastal counties, and the only providers of urology, oncology, vascular, and open-heart services in Harrison and Hancock counties. Memorial is accredited by The Joint Commission, the Commission

on Cancer, the College of American Pathologists and the American College of Radiology. In 2019, Memorial has been recognized by *U.S. News & World Report* as a Best Regional Hospital for Coastal Mississippi and High Performing in abdominal aortic aneurism repair, heart failure, COPD and knee replacement. Memorial also received the 2019 Healthgrades Outstanding Patient Experience Award and Five Star Ratings in carotid procedures and total hip replacement.

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 Hancock, Harrison, Jackson, Pearl River, Stone, and George 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 2016. 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**:** collected by the assessment team directly from the community through conversations, telephone interviews, focus groups and community forums; the most current information available.

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

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

ABOUT THE COMMUNITY

DEMOGRAPHICS

SERVICE AREA

Primary: Harrison, Hancock, Jackson, Pearl River, Stone & George counties

HEALTHCARE PROVIDERS IN THE AREA

Memorial Hospital at Gulfport, Ochsner Medical Center - Hancock, Garden Park Medical Center, Merit Health Biloxi, Keesler AFB Medical Center, VA Gulf Coast Veterans Health Care System, Stone County Hospital & Clinic, George Regional Health Systems, Pearl River County Hospital, Gulfport Behavioral Health System

SIGNIFICANT ENVIRONMENTAL FACTORS

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

MAJOR EMPLOYERS*

Employer	Number of Employees
Keesler Air Force Base	11,276
Naval Construction Battalion Center	5,500
Memorial Hospital at Gulfport	3,780
Beau Rivage Resort & Casino	2,932
Harrison County School District	1,802
VA Gulf Coast Veterans Health Care System	1,605
IP Casino Resort Spa	1,499
Island View Casino Resort	1,293
Golden Nugget Casino	1,148
Hard Rock Hotel & Casino	988
Hancock Whitney Bank	864

Information compiled by Memorial Hospital Marketing Department
** Source: Harrison County Development Commission*

POPULATION AND RACIAL MIX DATA**

HARRISON COUNTY		
Population	200,491	
Racial Mix	White	129,479
	African American	48,160
	Hispanic	10,718
	Asian	5,915
	Two or more races	4,897
	Other	1,322
Median Household Income	$44,684	

HANCOCK COUNTY		
Population	46,277	
Racial Mix	White	39,296
	African American	4,010
	Hispanic	1,740
	Asian	-
	Two or more races	915
	Other	316
Median Household Income	$47,518	

PEARL RIVER COUNTY		
Population	55,049	
Racial Mix	White	45,111
	African American	7,087
	Hispanic	1,635
	Asian	
	Other	1,216
Median Household Income	$44,734	

JACKSON COUNTY		
Population	141,314	
Racial Mix	White	96,478
	African American	30,526
	Hispanic	8,342
	Asian	3,127
	Two or more races	2,213
	Other	628
Median household Income	$50,274	

STONE COUNTY		
Population	17,981	
Racial Mix	White	13,814
	African American	3,458
	Hispanic	345
	Asian	-
	Two or more races	290
	Other	74
Median household Income	$46,283	

GEORGE COUNTY		
Population	23,545	
Racial Mix	White	20,590
	African American	1,818
	Hispanic	636
	Asian	-
	Two or more races	183
	Other	318
Median household Income	$47,640	

Information compiled by Memorial Hospital Marketing Department.
*** Source: U.S. Census Bureau, 2017 estimates*
**** Source: U.S. Census Bureau, 2013-2017 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. Members of the general public were encouraged 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.

2019 Community Health Needs Assessment

1. Have you used any health services offered at Memorial Hospital or Memorial Physician Clinics in the past 12 months?

- ◯ Yes
- ◯ No

2. Do you or a member of your family live with a chronic disease?

- ◯ Yes
- ◯ No

3. If yes, what disease?

Disease or Condition _____
Disease or Condition _____
Disease or Condition _____

4. Where do you go when you're seeking information or education on health related topics? (Check all that apply)

- ☐ Health Websites (WebMD, Mayoclinic.org, etc.)
- ☐ Memorial Hospital Website (www.gulfportmemorial.com)
- ☐ Google and other search engines
- ☐ Television
- ☐ Newspapers and Magazines
- ☐ Other (please specify)

_____

5. If you could name a health or wellness program that would benefit your health or your family's health, what would it be?

_____

6. Is there a health or wellness need that you're aware of in Harrison or Hancock counties?

_____

7. Please list any other comments or information you'd like to share.

_____

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.

HOSPITAL STEERING COMMITTEE

Kent Nicaud, Memorial President/CEO
Mark Wack, Memorial Chief Financial Officer
Belinda Alexander, MD, Memorial Internal Medicine, Memorial Physician Clinics
Hannah Donegan, Memorial Digital Marketing Specialist, Marketing & Communications
Jennifer Dumal, RN, BSN, MPH, Memorial COO-Clinical/CNO
Jeanne Engle, RN, Memorial Access Care Coordinator, Administrative Supervisor
April LaFontaine, Memorial Chief Administrative Officer
Toni Richardson, Community Health Director, Miss. State Department of Health
Katie Schussler, RN, Memorial Program Development Manager, Neurosciences & Orthopedics
Melissa Spiers-Ladner, RD, Memorial Clinical Nutrition Services Manager
Janet Stuart, Memorial Marketing & Communications Manager
Brandy Williams, RN, Memorial Clinical Outcomes and Projects Coordinator

COMMUNITY FOCUS GROUP

A community focus group was held at Memorial Hospital at Gulfport on Friday, July 26, 2019. 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

Kent Nicaud, Memorial President/CEO
Mark Wack, CPA, MBA, Memorial Chief Financial Officer
Julie Appel, Memorial Dietitian
Carlos Bell, Memorial Board of Trustees
Tanya Boose, Office Coordinator for Dr. Belinda Alexander, Memorial Internal Medicine
Carolyn Brashears, Memorial WoundCare Coordinator
Dr. Thad Carter, Memorial Board of Trustees
Darin Corrie, Deputy Commander Gulfport Police Department
Hannah Donegan, Memorial Digital Marketing Specialist, Marketing & Communications
Jennifer Dumal, RN, BSN, MPH, Memorial Chief Operating Officer – Clinical/CNO
Harry Kajdan, Development Officer, Memorial Hospital Foundation
Bill Magnusen, President, Memorial Auxiliary
Meagan A. Parker, Grants Compliance Manager, Coastal Family Health Center
Katherine Richardson, Director / Office of Performance Improvement, MSDH
Toni Richardson, Community Health Director, Mississippi State Department of Health
Katie Schussler, Memorial Program Development Manager, Neurosciences & Orthopedics
Kathy Springer, CEO, United Way of South Mississippi
Janet Stuart, Manager, Memorial Marketing & Communications
Brandy Williams, Clinical Outcomes and Projects Coordinator, Memorial Cardiac Services
Derrick Mason, Consultant, HORNE LLP
Barry Plunkett, Consultant, HORNE LLP

INVITED BUT UNABLE TO ATTEND

Mike Beyerstedt, Fire Chief, City of Gulfport
Kenneth Casey, Councilman, Gulfport City Council
Kent Jones, District 4 Representative, Harrison County Board of Supervisors
Tish Williams, Executive Director, Hancock County Chamber of Commerce

RURAL HEALTH DISPARITIES

Rural Americans are a population group that experiences significant health disparities. Health disparities are differences in health status when compared to the population overall, often characterized by indicators such as higher incidence of disease and/or disability, increased mortality rates, lower life expectancies, and higher rates of pain and suffering. Rural risk factors for health disparities include geographic isolation, lower socioeconomic status, higher rates of health risk behaviors, limited access to healthcare specialists and subspecialists, and limited job opportunities. This inequality is intensified as rural residents are less likely to have employer-provided health insurance coverage, and if they are poor, often are not covered by Medicaid.

Federal and state agencies, membership organizations, and foundations are working to reduce these disparities and improve the health and overall well-being of rural Americans. Some organizations provide funding, information, and technical assistance to be used at the state, regional, and local level, while others work with policymakers to help them understand the issues affecting population health and healthcare in rural America.

WHAT ARE THE CAUSES OF RURAL HEALTH DISPARITIES?

The origins of health disparities in rural America are numerous and vary by region. Some frequently cited factors underlying rural health disparities include healthcare access, socioeconomic status, health-related behaviors, and chronic conditions.

ACCESS TO HEALTHCARE

Rural populations can experience many barriers to healthcare access, which can contribute to health disparities. A 2019 *JAMA Internal Medicine* article, "Association of Primary Care Physician Supply with Population Mortality in the United States, 2005-2015," found lower mortality was associated with an increase of 10 primary care physicians per 100,000 population. The following factors create challenges or barriers to accessing healthcare services for rural Americans:

- There are higher rates of uninsured individuals residing in rural or nonmetro counties compared to their counterparts in urban or metro counties, as reported by a 2018 CDC report "Health, United States, 2017: With Special Feature on Mortality."
- Healthcare workforce shortages are prevalent throughout rural America. The 2014 National Center for Health Workforce Analysis report, "Distribution of U.S. Health Care Providers Residing in Rural and Urban Areas," found a greater representation of workers with less education and training living in rural areas and highlights data showing less than 8% of all physicians and surgeons choose to practice in rural settings.
- Specialty and subspecialty healthcare services are less likely to be available in rural areas and are less likely to include specialized and highly sophisticated or high-intensity care. This exacerbates problems for rural patients seeking specialized care who are faced with traveling significant distances for treatment.

- Reliable transportation to care can also be a barrier for rural residents due to long distances, poor road conditions, and the limited availability of public transportation options in rural areas. For more information on rural transportation programs and the impact on health of not having transport available in rural communities, see RHIhub's Transportation to Support Rural Healthcare topic guide.

For additional information regarding healthcare access in rural areas and other barriers rural populations face related to access to care, see RHIhub's "Healthcare Access in Rural Communities topic guide."

SOCIOECONOMIC STATUS

According to a 2014 Kaiser Commission on Medicaid and the Uninsured issue brief, "The Affordable Care Act and Insurance Coverage in Rural Areas," rural populations have higher rates of low to moderate income, are less likely to have employer-sponsored health insurance coverage, and are more likely to be a beneficiary of Medicaid or another form of public health insurance. The brief found that rural residents are more likely to be unemployed, have less post-secondary education, and have lower median household incomes compared to urban residents.

HEALTH BEHAVIORS

Whether or not populations adopt positive health behaviors can have an impact on the rates of disparities in their health status and mortality. A 2017 CDC *MMWR*, "Health-Related Behaviors by Urban-Rural County Classification — United States, 2013," examined the prevalence of 5 key health-related behaviors by urban-rural status. Urban residents were more likely to report 4 or 5 of the positive health behaviors.

With all-cause mortality rates higher in rural areas, it is no surprise that mortality related to certain causes are also higher in rural areas. The table below compares several cause-specific mortality rates for rural and urban counties.

Age-Adjusted Death Rates for the Five Leading Causes of Death per 100,000 Population: United States, 2014

Cause of Death	Nonmetro Areas	Metro Areas
Heart Disease	193.5	161.7
Cancer	176.2	158.3
Unintentional injury	54.3	38.2
Chronic lower respiratory disease	54.3	38.0
Stroke	41.5	35.4

Source: Leading Causes of Death in Nonmetropolitan and Metropolitan Areas — United States, 1999–2014, Supplemental Tables, *Morbidity and Mortality Weekly Report*, 66(1), 1-8, January 2017

THE UNHEALTHIEST STATE IN THE UNITED STATES

A list of the top ten unhealthiest states was created. It is based on data compiled by the American Public Health Association and the United Health Foundation, which rank U.S. states on their per-capita rates of obesity, child poverty, smoking, cancer-related deaths, cardiovascular disease, and other risk factors. Read on to see how your state ranks.

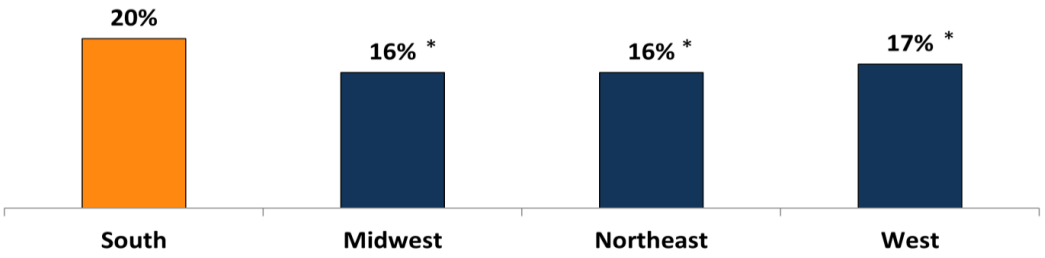
MISSISSIPPI IS NUMBER ONE

Unfortunately, that is not a ranking that we as a state can be proud. Along with having among the highest rates of cardiovascular disease, smoking, and obesity in America, the Magnolia State unfortunately touts the nation's largest percentage (25 percent) of youths living in poverty. All of these factors combined to put Mississippi at the number-one spot fighting an uphill battle against obesity, cancer, and cardiovascular-related deaths.

Being aware of this lifestyle disparity, the Steering Committee was diligent in addressing these chronic illnesses which lead to a disproportionate number of deaths. Also, the quality of life in our state is negatively impacted by these conditions that rob our citizens of the ability to enjoy good health daily.

Figure 4

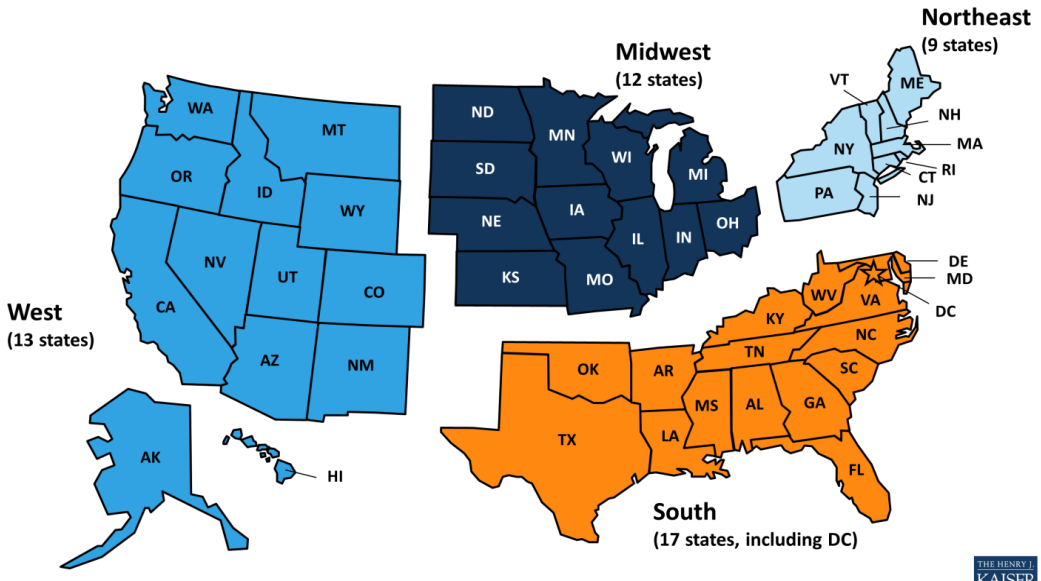
Percent of Adults Reporting Fair or Poor Health Status by Region, 2014



* Indicates a statistically significant difference from the South at p<.05 level.
Source: KCMU analysis of the Centers for Disease Control and Prevention (CDC)'s Behavioral Risk Factor Surveillance System (BRFSS) 2014 Survey Results.

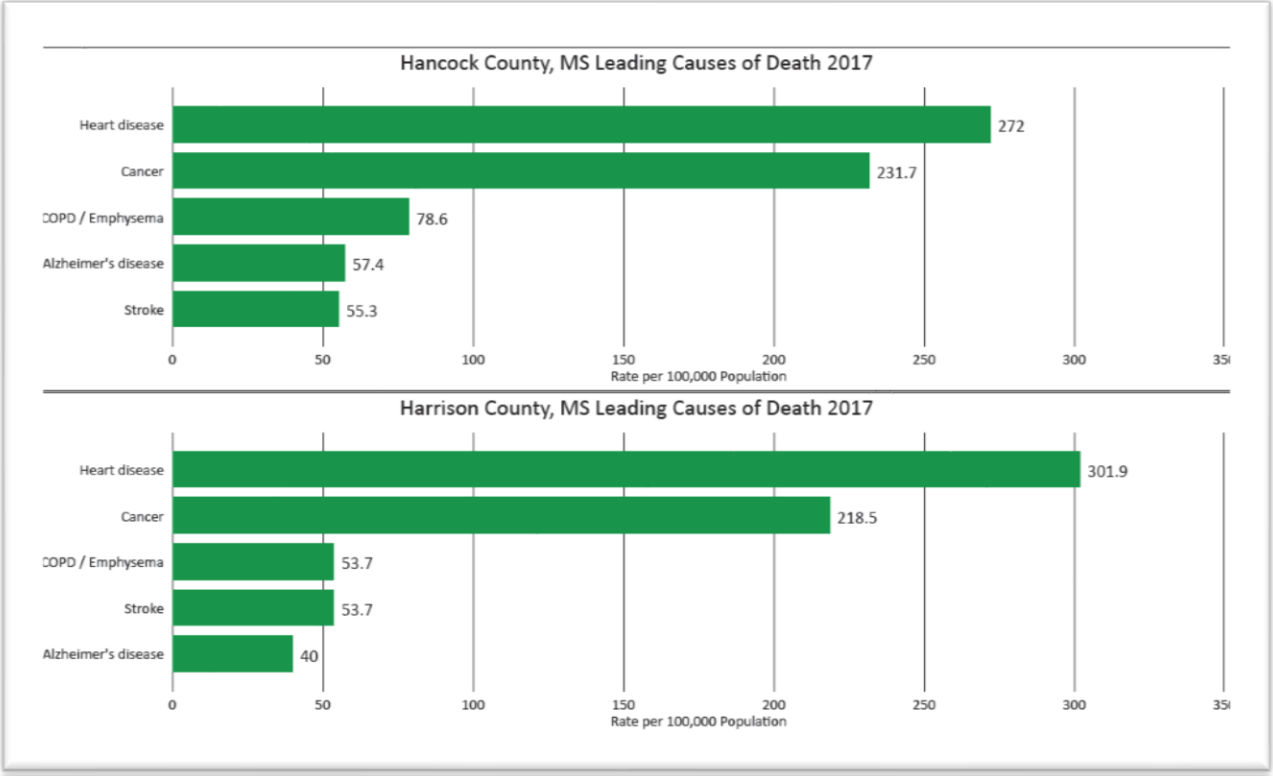
Figure 1

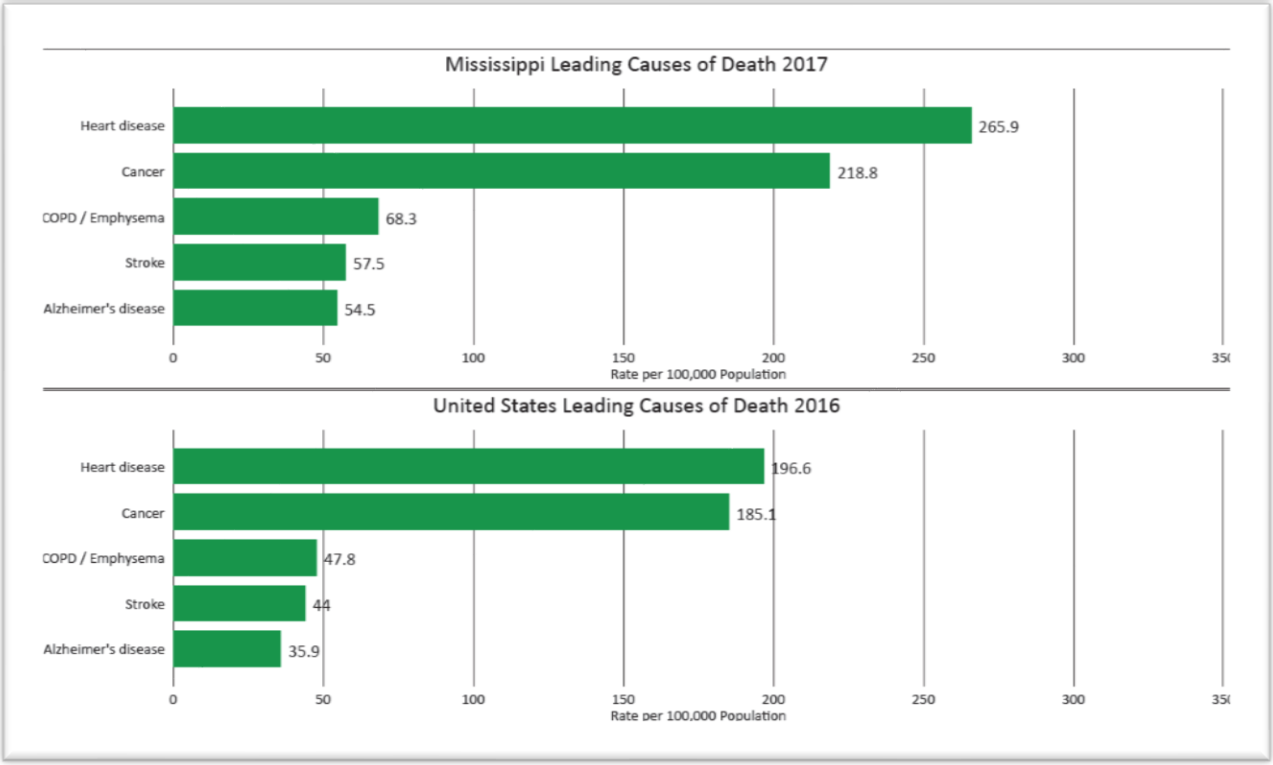
Census Regions and Divisions of the United States



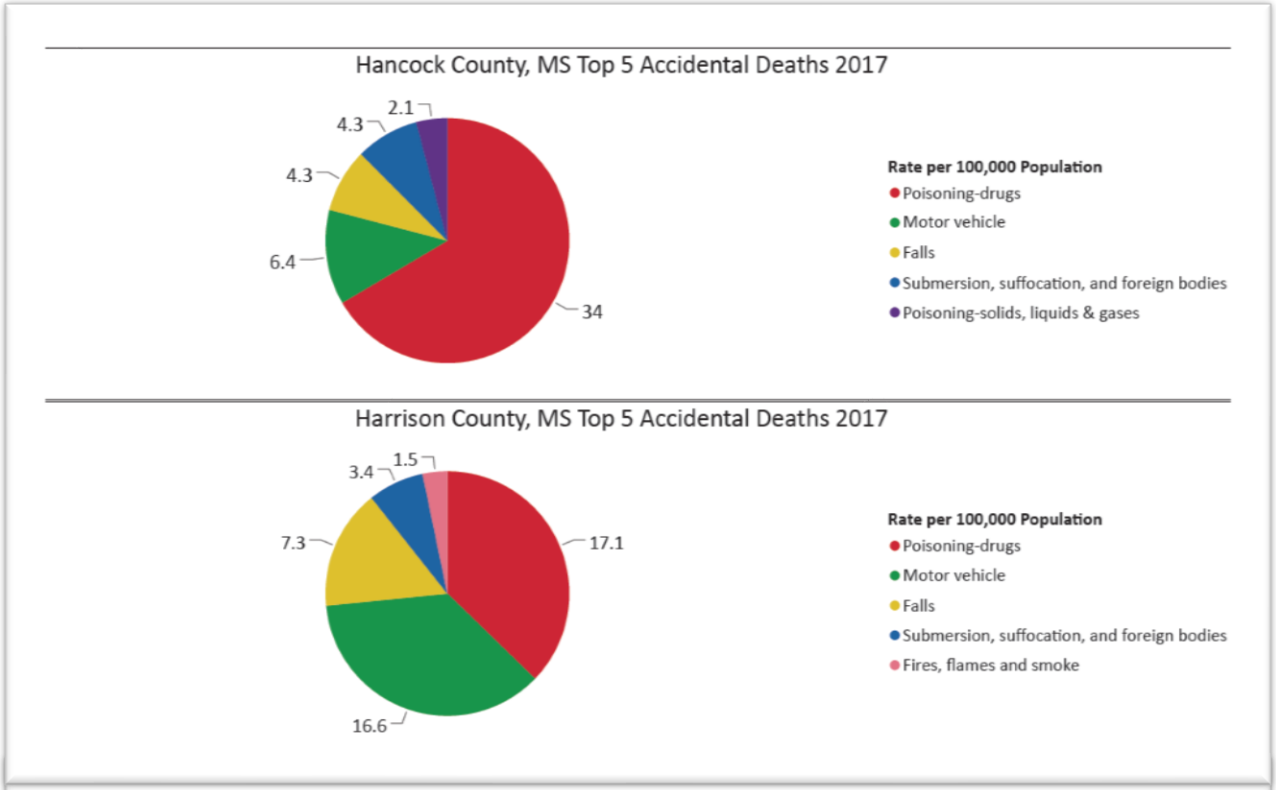
Source: http://www2.census.gov/geo/pdfs/maps-data/maps/reference/us_regdiv.pdf

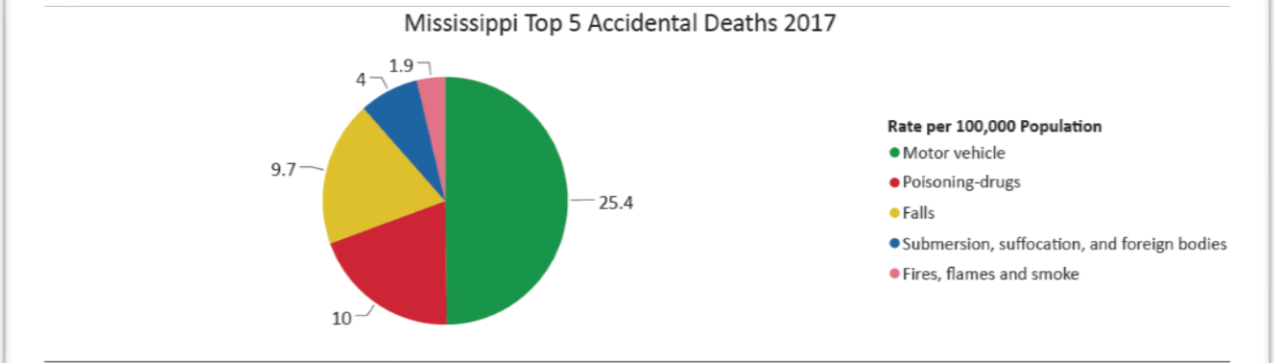
CAUSES OF DEATH

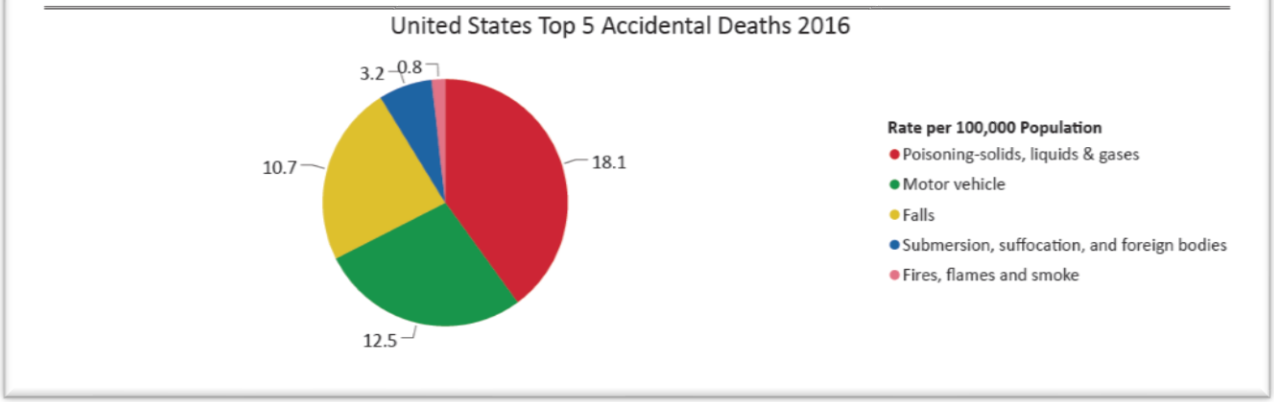




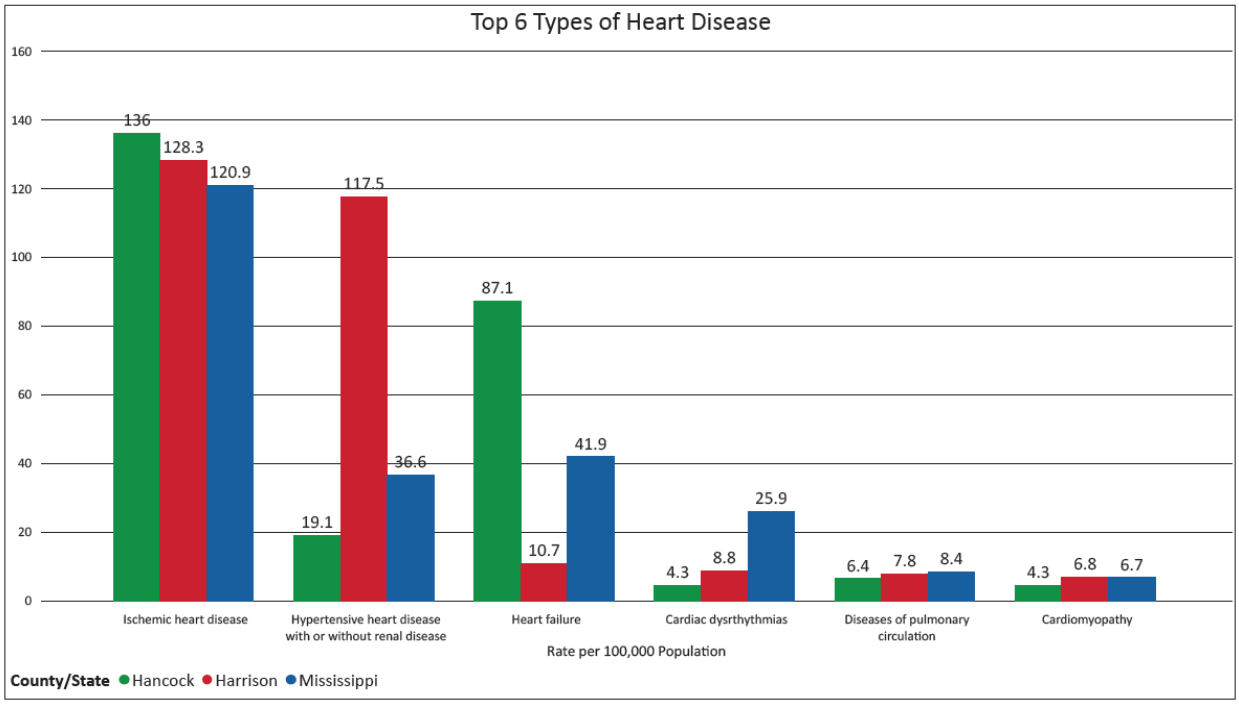
ACCIDENTAL DEATHS

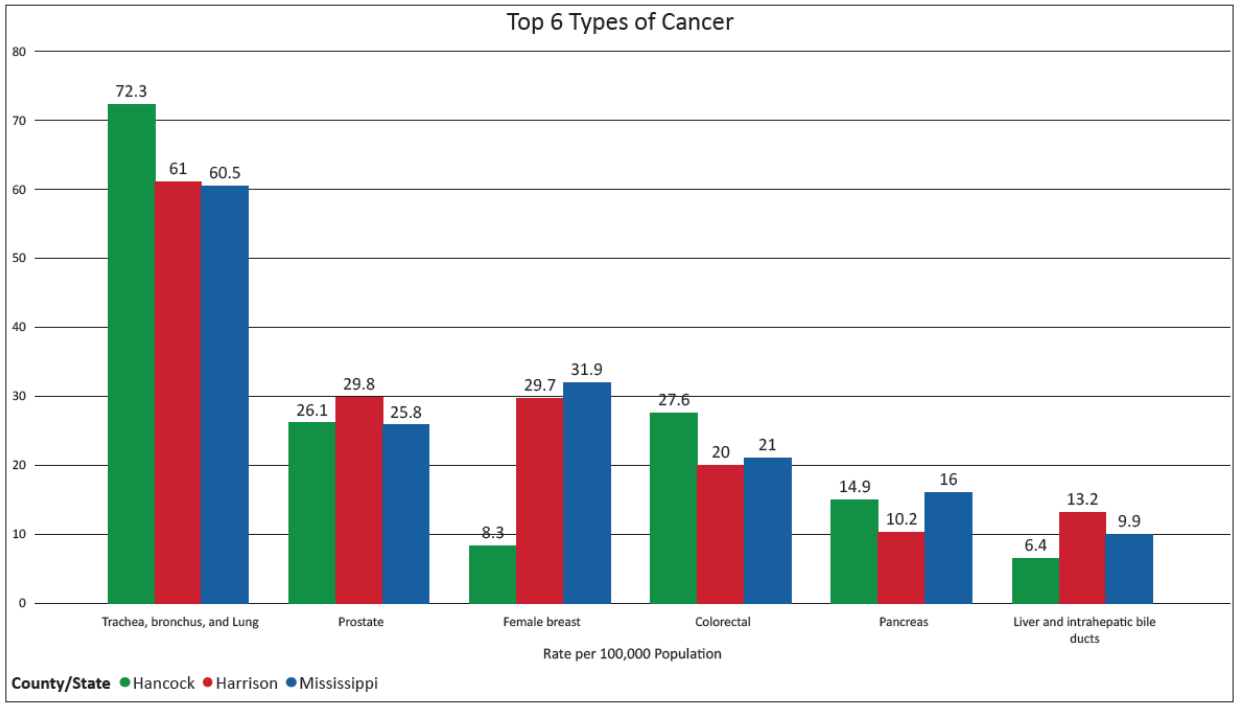






HEART AND CANCER STATISTICS





2016 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; many 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 provides 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. Recently the program expanded staffing to two full time nurse navigators.

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. In 2019 Memorial opened a facility in East Biloxi (on the Merit Health Campus) expanding both chemotherapy and Medical Oncology physician coverage. The Biloxi facility increased our chemotherapy service to a total of thirty-six (36) chairs throughout Harrison County.

PHYSICIAN COVERAGE IN RADIATION ONCOLOGY

An additional fulltime physician was successfully recruited in 2018 bringing additional services to the program. Since then the radiation oncology program has grown by thirty (30) percent.

EDUCATION

We offer education and screening programs annually. These included skin and breast screenings. Public education forums are held annually. Our low dose lung screening program is ongoing since implementation 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

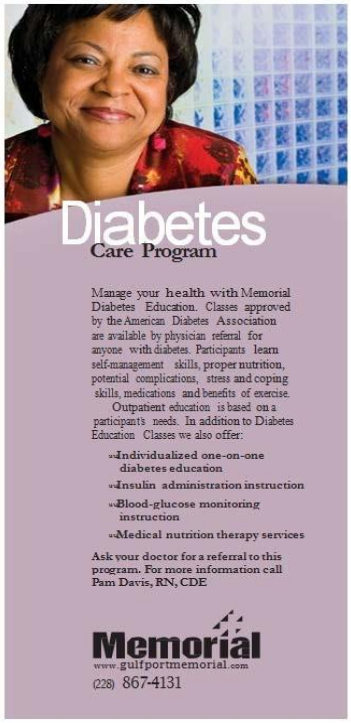
Survivorship Care Planning program was implemented in 2016 by the Nurse Navigation Program and is evaluated annually by the Commission on Cancer.

COLLABORATIVE PARTNERS

American Cancer Society
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 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 also serves 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. 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

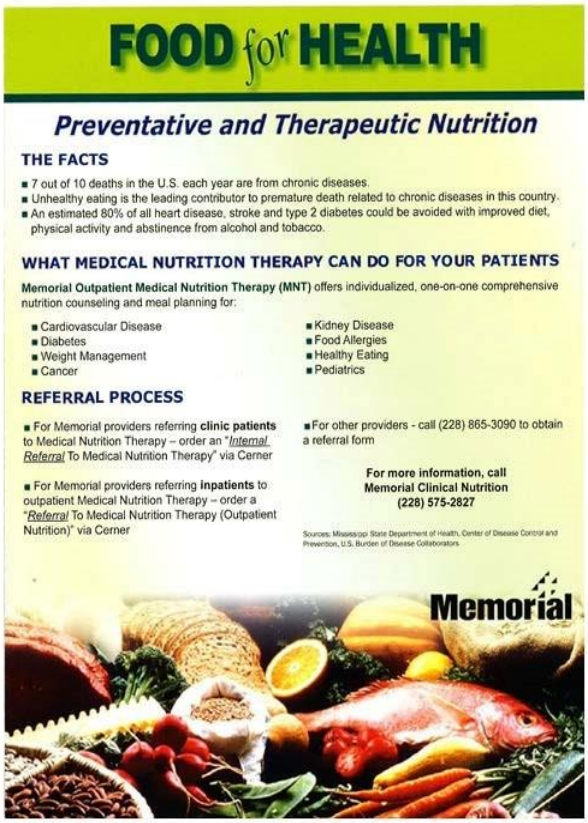
through the ER with no access to diabetes testing supplies and medications. These patients are evaluated by social services and case management. Patients in need of further DSMT are referred to the Mississippi State Department of Health and Coastal Family Health.

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 needed.

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 (2017)

2017 Annual Program Review/Advisory Committee Meeting 2

- Meeting Called 10/30/17 for 2017 Review
- Members: Pam Davis RN, CDE DM Coordinator
  Wayne Ladner community representative
  Wayne Cullinan MHG Social worker (via email)
  Troy Pepperman, practice manager (via email)
- Notice: Next renewal due in December 2017

Review of Program Objectives for 2017

1st Objective: To obtain a minimum score of "3" on the post class evaluation

- Result: 100% (scaled "5" strongly agree to "1" unsatisfactory)
- All recorded scores above "3"
- Discussion: Class evaluation covers all education topics recommended by the ADA
- Action: Continue this objective for 2018

2nd Objective: To increase our patient referrals by 5%

- Not achieved in 2016, due to program hiatus.
- We continued this objective for 2017 with a goal of 5%
- Achieved in 2017; we were able to double referrals with new endocrinology referral base and nurse navigator's suggesting DSMT referrals in PCP setting
- Discussion: In 2017, 41 participants (or 46%) were age 45-64. Many from this younger group were still in the work force (some of our clients 65 or greater were also still working). This age group preferred phone follow up.
- As in previous years, when contacted by phone, patients cited missed work hours, travel, or not wanting to pay additional insurance co-pays as reasons for not returning for a 3-month follow-up appointment.
- The CDE and unit secretaries will continue make new patient appointments.
- We will count follow up calls to spouse as completed follow up if the spouse attended class and/or knows the follow up information requested. We are receiving faxed referrals from physicians outside of the Memorial system. Memorial providers are sending referrals via Cerner. We are still in the process of educating outpatient providers and case management on the new referral process, and hospital Information Services has completed the Cerner referral link for physician referrals.

Population/Target Audience

All adults with type 1 or type 2 diabetes from the communities we serve, including adults with hyperglycemia and comorbidities leading to increased risk for health complications (especially in-patients).

Participants Entering the Program during the Data Period

- 278 total referrals received (Jan to Sept)
- 138 total patients attended an education session (including referrals for insulin instruction and meter use)
- 89 patients completed DSMT class; 49 attended 1:1 sessions
- 70 total referrals lost (20 due to insurance, 50 declined/cancelled/no-show)
  - Note: not all referrals were for DSMT classes
  - 50 patient referrals covered by insurance did not come for appointments due to cancellations, no-shows, declined referrals
  - Transportation, illness and job conflicts given as reasons for lost referrals
- 64 participants or 71.9% had Medicare
- Referrals/patients seen: 0% (Type 1-Diabetes); 100% (Type 2-Diabetes); 0% (Gestational)
- Referral ages: (65 years or over) 38 participants or 42.6%; (45 to 64 years) 41 participants or 46%; (19 to 44 years) 10 participants or 11.2%; (<19 years) 0 participants or 0%
- Gender of referrals: (Male) 37 participants or 41.5%; (Female) 52 participants or 58.4%
- Ethnic breakdown: (White) 75.2%; (Black) 22.4%; (Asian) 0%; (Hispanic) 2.2%
- Oldest patient was 90 years old and appropriate for class

Special Needs

- No special needs identified in 2017; no participant reported inability to obtain diabetes medications
- We have back up wall 02 available in our class room; not needed 2017
- Our facility has wheel chair accommodations and handicap equipped bathroom facilities

Education of Population

- Local census information shows 80.3% of those aged 25 and above were high school graduates; 18.4% had a bachelor's degree or higher.
- Class participants in 2017 education levels ranged from 10th grade to master's level education
  - 3 participants or 3% did not finish high school
  - 66 participants or 74.1% had a GED or high school level education
  - 8 participants or 8.9% had at least one year of college or trade school
  - 6 participants or 6.7% had a bachelor's degree
  - 6 participants or 6.7% reported a master's degree

Program Entry

Waiting time for most patients entering the program was one week or less. Work schedules and transportation issues led some patients to delay appointments.

2017 Program Resources

- We are a single discipline education program as of April 2016.
- We were approved for an ADA recognition extension site at the Memorial Endocrinologist clinic in 2017.
- Pam Davis BSEd, MA, RN-CDE is program coordinator/primary educator.
- Other Resources: Class resource handout was updated in May 2017
- Office has classroom space for 10 class participants; we also have access to classrooms in the LRC and Stennis room
- All areas are handicap accessible and patient escorts are available as needed.
- Supplied in 2014 with new lap top by the wound care department; purchased food models and AV equipment through grant monies provided by the Memorial Auxiliary and Novo Nordisk.
- New classroom furniture and patient resources added in 2010; 2 additional tables purchased in 2011.
- MHG Foundation grant money allowed for continuing education and classroom supplies.
- 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 have also provided a gestational diabetes video for Women and Children's Services (2011); additional food models and supplied were ordered in 2014.

Program Budget

Diabetes Care budget was combined with the Wound Care Department and outpatient physicians' clinics budget. We receive adequate funding for the needs of the Diabetes Care Program.

Discussion

No unmet needs have been identified.

Program Curriculum

- Diabetes Care follows the ADA curriculum.
- Have purchased the ADA's Life with Diabetes 4th edition text; also use the text for PowerPoint lectures and printable handouts for class
- Educational materials are appropriate for our target audience; handouts were reviewed in 2016 and in yearly advisory meetings
- In addition to ADA handouts, we provide the *ADA/KRAMES Self Care Workbook: Living Well with Diabetes* to DSMT participants
- Low literacy is addressed on a 1:1 basis as needed.
- No interpreter was needed in 2017; MHG has interpreter services available if needed.

Marketing

- Our program participates in hospital sponsored community health fairs and senior service activities.
- In 2016 the program coordinator updated program information rack card and brochure for placement in MHG Physicians' offices and for use as a marketing tool.
- Program brochures are still available to anyone visiting MHG facilities; we also distribute our program brochures during community events and lectures; brochure contains useful information for our service area including DM statistics, risk factors for DM, signs/symptoms of DM, and an A1C chart.
- In 2017 Pam Davis made additional visits to MHG physician offices and discussed the DSMT program with Office staff
  brochures during community events and lectures. The brochure contains useful information for our service area including DM statistics, risk factors for DM, signs/symptoms of DM, and an A1C chart. We plan to continue this process in 2018; the program coordinator is also networking with clinic based case management/nurse navigators.

Review of Mission Statement

No changes.

Organizational Structure

Diabetes Care is a part of MHG outpatient services and is housed within the Wound Care Department. Wound care and endocrinology office support staff may help schedule appointments, answer questions, and forward calls.

2017 Participant Outcome Measures

Patient Outcomes:

1. If post program A1C is available; 75% will have lowered their A1C
   a. We were not able to collect this data for 2017, we will continue to compare the pre and post class A1C when available
2. 80% of class participant are following a foot care routine 3 months post class.
   a. 2017 results: 80% of sampled patients reported checking feet weekly- goal met
   b. Discussion: This is an important self-care skill. We will continue this measure for 2018 with wording to include a minimum of bi-weekly foot inspections
   c. Class participants continue to make appointments with the Community Foot Clinic at MHG after receiving information on the program during class.

3. 80% of Participants are following a carbohydrate-controlled meal plan at least 6 days a week:
   a. 2018: 85% met goal met via sampling.
   b. Discussion: Illness and budget remains the major reason for failure to follow the carbohydrate consistent meal plan.

Program Objectives 2018

1. CDE will increase networking with clinic nurse navigators via email in January 2018 to maintain referrals for newly diagnosed DM, or follow up for those with poor BG control.
2. If class participant completes a program evaluation: A satisfaction score of "3" or above- should be reported in each of the 10 core education topics.

2018 Patient Outcome Objectives

1. If post program A1C is available at time of 3 month follow up; 70% will have lowered their A1C
2. 80% of participants following a foot care routine that includes visual examination of foot bi-weekly at time of 3-month follow up
3. 80% of participants are following a carbohydrate-controlled meal plan at least 6 days a week at 3 month follow up

MEASURE OF SUCCESS (2018)

2018 Annual Program Review/Advisory Committee Meeting

Meeting/Notes: 11/16/18
Members: Wayne Ladner, community representative came to program review session
Wayne Cullinan, MHG Social worker (via email)
Linda Dales MD (has since left her position with Memorial Hospital; a member of care coordination was added to committee in 2019
Theresa Cueva NP has been invited to committee for 2019 - pending acceptance
Notice: Next renewal is due in December 2021
Curriculum: Updated 2018 and sent to Troy Pepperman for review/signature

Review of Program Objectives for 2018

1st Objective: To obtain a minimum score of "3" on the post class evaluation
   a. Result: 100% (scaled "5" strongly agree to "1" unsatisfactory)
   b. Discussion: Class evaluation covers all education topics recommended by the ADA
   c. Action: Continue this objective for 2019

2nd Objective: To increase our patient referrals by 5%
   a. Referrals increased but many referrals from the ER did not have insurance
   b. These patients will be referred to Coastal family Health for education and follow up care

Problems Identified in 2018 by Program Coordinator

1. Noted large number of lost referrals in 2018; 90 referrals lost (includes 27% NS)
   a. ER has initiated an automatic OP referral to DSMT
   b. Many of these patients do not have insurance
   c. Discussion: Referrals to Coastal Family health are also given, in addition to MHG referrals. At Coastal, patients can receive follow up care and education on a sliding scale fee. Doubt this will change in 2019.
2. Noted 11/16/18 Patients report no reminder phone call

a. CDE will follow up with IS to identify solution
b. Discussion: Wayne Lander asked if IS can help; coordinator will follow up with IS department. Help for automated calls 11/16/18 (to follow up with Wayne Cullinan MSW and CM)
c. Discussion: 2018 difficulty noted obtaining data for 3 month follow up. As in previous years, when contacted by phone, patients cited missed work hours, travel, or not wanting to pay additional insurance co-pays as reasons for not returning for a 3-month follow up appointment. We will count follow up calls to spouse as completed follow up if the spouse attended class and/or knows the information requested (such as A1c, FBS ranges, foot inspection, meals). We are also receiving faxed referrals from physicians outside of the Memorial system. Outside referrals are not in Cerner Curriculum (updated 2018 and sent to Troy Pepperman for review/signature)

Population/Target Audience

All adults with type 1 or type 2 diabetes from the communities we serve, including adults with hyperglycemia at risk for health complications.

Participants Entering the Program during the Data Period

- 200 total referrals received
- 110 patients attended an education session
- 90 patient referrals did not come for appointments due to cancellations, no-show, insurance or declined referral
  - Transportation, insurance and illness listed as reasons for many lost referrals
- 40 of class participants had Medicare
- Referrals/patients seen: 27% (Type1-Diabetes); 73% (Type 2-Diabetes); 0% (Gestational - all referred to MNT)
- Referral Ages: 39% (65 or over); 51% (45 to 64 years); 9% (19 to 44 years); 0% (19 years or under)
- Gender referrals: 34% (Male); 65% (Female)
- Ethnic breakdown: (White) 68%; (Black) 29%; (Asian) 0%; (Hispanic) 2.7%

Special Needs

- No special needs were identified in 2018 Medication and patient assistance needs are handled by PCP.
- Our facility has WC accommodations and handicap equipped bathroom facilities.

Education of Population

- Local census information shows 80.3% of those aged 25 and above were high school graduates; and 18.4% had a Bachelor's degree or higher.
- Class participants in 2018: Our participant education levels ranged from 8th grade to bachelors level education.
- Program Entry: Waiting time for most patients entering the program was one week or less. Work schedules and Transportation issues led some patients to delay appointments.

2018 Program Resources

- We are a single discipline education program as of April 2016.
- Pam Davis BSEd, MA, RN-CDE is program coordinator/primary educator.

- We were approved for an ADA recognition extension site at the Memorial Endocrinologist clinic in 2017.
- The extension site has insulin pump and CGM instruction available.

Other Resources
Our class resource handout was updated in May 2017. In 2018, Outpatients Diabetes Management was given a new dedicated classroom. My new office has classroom space for 20 participants with addition chairs for prn use. The program has additional resource materials from the ADA, AADE, conversation maps from Merck, insulin display models/tools from BD, Novo and Lilly. We have DM education posters and charts in this classroom. We have storage space. 2018 we purchased a new projector. In 2014 we were supplied with a new a laptop by the wound care department. We have purchased food models and AV equipment through grant monies provided by the Memorial Auxiliary and Novo Nordisk. New classroom furniture and patient resources were added in 2010, and two additional tables were purchased in 2011. MHG Foundation grant money allowed for continuing education and classroom supplies. 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 have ordered additional food models and supplies in 2014.

Program Budget
The Diabetes Care budget is combined with the Wound Care Department and outpatient physicians' clinics budget. The Diabetes Care budget is combined with the Wound Care Department and outpatient physicians' clinics budget. We receive adequate funding for the needs of the Diabetes Care Program.

Discussion
No unmet needs were identified.

Program Curriculum
Reviewed and updated 2018. Diabetes Care follows the ADA curriculum. We have purchased the ADA's Life with Diabetes 4th edition text; we also use the text for power point lectures and printable handouts for class. Educational materials are appropriate for our target audience. In addition to ADA handouts, we are providing the ADA/KRAMES Self Care Workbook: Living Well with Diabetes to DSMT participants. We give other material such as Cornerstones 4 care to supplement post class education. Low literacy -addressed on a 1:1 basis as needed. No special literacy issues 2018. No interpreter needed in 2018. MHG has interpreter services available if needed.

Marketing
Our program participates in hospital sponsored community health fairs and senior service activities.
In 2016, the program coordinator updated the program information rack card and brochure for placement in MHG Physicians' offices and for use as a program marketing tool. Program brochures are still available to anyone visiting MHG facilities. We also distribute our program brochures during community events and lectures. The brochure contains useful information for our service area including DM statistics, risk factors for DM, signs/symptoms of DM, and an A1C chart. In 2017 Pam Davis made additional visits to MHG physician offices and discussed the DSMT program with office staff. The program coordinator is also networking with clinic-based case management/nurse navigators.

Organizational Structure
Diabetes Care is a part of MHG outpatient services and is part of the Wound Care Department. Wound care support staff may help schedule appointments, answer questions, and forward calls.

2018 Participant Outcome Measures
Patient Outcomes:

1. If post program A1C is available; 70% will have lowered their A1C—ACHIEVED at 97% 2018 Obtained followed up A1C data on 30 participants. 29 of these had lowered their A1C from initial visits. In 2019 we will continue to compare the pre and post class A1C when available.
2. 80% of class participant are checking their feet at least weekly. 100% of sampled patients reported checking feet weekly (or family member is checking feet.
    a. Discussion: We agree this is an important self-care outcome and will continue this measure for 2019. Class participants continue to make appointments with the Community Foot Clinic/MHG wound care after receiving information during class.
3. 80% of Participants are following a carbohydrate-controlled meal plan at least 6 days a week: 2018: 85% met goal met via sampling.
    a. Discussion: Illness remains the major reason for failure to follow the carbohydrate consistent meal plan.

Objectives 2019
Program objectives:

1. CDE will continue networking with clinic nurse navigators to increase referrals 2%.
2. If class participant completes a program evaluation: 80% will rate a satisfaction score of "3" or above- in each of the ten-core education topics.

2019 Patient Outcome
If post program A1C is available: 75% will have lowered their A1C.

1. 75% of follow up participants are doing a self-foot exam at least weekly.
2. 75% of follow up participants are following a carbohydrate-controlled meal plan at least 6 days a week.

MEDICAL NUTRITION THERAPY AND DIABETES CARE

Individualized MNT is available for Type I, Type 2, and Gestational Diabetes upon referral. Nutrition intervention should be a collaborative effort between the patient, Registered Dietitian and the primary care provider, focusing on lifestyle factors that optimize overall health, while managing comorbid conditions and preventing complications. The goals of MNT for patients with Diabetes include the promotion of healthy eating patterns, maintaining a healthy weight, attaining individualized glycemic, blood pressure and lipid goals.

In addition to Diabetes, Medical Nutrition Therapy is available for any nutrition related chronic disease, such as heart disease, cancer, pulmonary, renal, obesity and malnutrition. Memorial Registered Dietitians participate in community health fairs, Memorial's Speakers Bureau, Cardiac Rehab, Pulmonary Rehab and CHF Clinic.

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

ThinkFirst Community Health Events 2016 to present

Item Distributed	Number Distributed	Time Frame
Life Jackets	549 830	8/16 to 9/17 5/18 to 6/19
Bike Helmets	937 482 457	2016 2017 2018
ATV Helmets	75 153 95	2017 2018 2019
Equestrian Helmets	56	2018

Event Types and Collaborators

Event Type	Collaborating Group	Participants
ATV Safety Presentation, ATV Helmet Fitting/Distribution	Harrison County Sheriff's Department	Pediatric Community Members
Back to School Health Fair- Bike and Water Safety, Bike Helmets and Life Vest Fitting/Distribution	City of Gulfport	Adult and Pediatric Community Members
Equestrian Helmet Fitting/ Distribution	Harrison County Fair	Pediatric Community Members
Fight Against Crime - Bike Safety, Bike Helmet Fitting/Distribution	Biloxi Police Department	Adult and Pediatric Community Members
Fall Festival - Bike and Water Safety, Bike Helmets and Life Vest Fitting/Distribution	Westminster Presbyterian Church	Adult and Pediatric Community Members
Community Network Series: Living and Loving Life After	Encompass Inpatient Rehabilitation	Geriatric Community Members
Safe Driving Practices, Safe Driving Pledge	West Harrison High School	High School Age Community Members
Water Safety, Life Vest Fitting/Distribution	Coast Conservation Association - Casting for Conservation Fishing Rodeo	Pediatric Community Members

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 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 more than 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 transradialcardial 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 May 10, 2019 at Mississippi Gulf Coast Community College in Gulfport, MS had approximately 200 healthcare professionals attend.

MEASURE OF SUCCESS – STROKE CARE

Stroke Program Community Health Events 2016 to present

2016 Date	Event Type	Topic	Number of Attendees	Participants
Jan-16	Community Education Event	Recognition of Stroke, Emergency Response for Acute Stroke	25	Stone County Hospital Employees
Feb-16	Community Education Event	Recognition of Stroke, Emergency Response for Acute Stroke	100	Bel Aire Elementary School
Mar-16	Community Education Event	Recognition of stroke, Emergency Response for Acute Stroke, stroke risk factors and risk factor modification	40	First Missionary Baptist Church
Oct-16	Conference	Emergency Response for Acute Stroke/Early Management of Acute Stroke, Neurointerventional Treatment of Acute Stroke	210	Regional Healthcare Professionals

MEASURE OF SUCCESS – STROKE CARE (continued)

2017 Date	Event Type	Topic	Number of Attendees	Participants
Apr-17	Health Fair	Recognition of Stroke, Emergency Response for Acute Stroke	50	Adult and Pediatric Community Members
May-17	Social Media	Recognition of Stroke, Emergency Response for Acute Stroke	n/a	Regional Healthcare Consumers
Sep-17	Community Education Event	Recognition of Stroke, Emergency Response for Acute Stroke	20	Adult Community Members
Oct-17	Social Media	Recognition of Stroke, Emergency Response for Acute Stroke	n/a	Regional Healthcare Consumers
Nov-17	Health Fair	Recognition of Stroke, Emergency Response for Acute Stroke, Stroke risk factors	75	Gulf Coast Go Red for Women

2018 Date	Event Type	Topic	Number of Attendees	Participants
Feb-18	Health Fair	Stroke risk assessment, activation of EMS	200	MHG Health Fair
Mar-18	Conference	Emergency Response for Acute Stroke/Early Management of Acute Stroke, Post Stroke Rehabilitation	200	Regional Healthcare Professionals
Apr-18	Community Education Event	Recognition of Stroke, Emergency Response for Acute Stroke	40	AHA Impact Tour
May-18	Community Education Event	Recognition of Stroke, Emergency Response for Acute Stroke	20	D'Iberville Community Center
May-18	Social Media	Recognition of Stroke, Emergency Response for Acute Stroke	n/a	Regional Healthcare Consumers
Oct-18	Stroke Response Education	Advanced Stroke Life Support: Recognition of Stroke, Early Management of Acute Stroke	24	Regional Healthcare Professionals
Oct-18	Social Media	Recognition of Stroke, Emergency Response for Acute Stroke	n/a	Regional Healthcare Consumers
Nov-18	Stroke Response Education	Advanced Stroke Life Support: Recognition of Stroke, Early Management of Acute Stroke	24	Regional Healthcare Professionals
Dec-18	Stroke Response Education	Advanced Stroke Life Support: Recognition of Stroke, Early Management of Acute Stroke	24	Regional Healthcare Professionals

MEASURE OF SUCCESS – STROKE CARE (continued)

2019 Date	Event Type	Topic	Number of Attendees	Participants
Jan-19	Stroke Response Education	Advanced Stroke Life Support: Recognition of Stroke, Early Management of Acute Stroke	16	Regional Healthcare Professionals
Feb-19	Stroke Response Education	Advanced Stroke Life Support: Recognition of Stroke, Early Management of Acute Stroke	16	Regional Healthcare Professionals
Feb-19	Health Fair	Stroke risk assessment, Emergency Response for Acute Stroke	150	MHG Health Fair
Mar-19	Stroke Response Education	Advanced Stroke Life Support: Recognition of Stroke, Early Management of Acute Stroke	16	Regional Healthcare Professionals
May-19	Conference	Neurointerventional Treatment of Acute Stroke	170	Regional Healthcare Professionals
Jul-19	Stroke Response Education	Advanced Stroke Life Support: Recognition of Stroke, Early Management of Acute Stroke	24	Regional Healthcare Professionals

CARDIAC PROGRAM

- Cardiovascular and Neurosciences Care Symposium, May 10, 2019 at the Mississippi Gulf Coast Hospitality Resort Management Center in Biloxi
  - Clinical expertise regarding advances in cardiovascular and neuroscience care with an emphasis on extracorporeal membrane oxygenation treatment, interventional stroke, spinal cord injury, targeted temperature management after cardiac arrest, supportive/palliative care, and dry needling.
  - ~160 healthcare professionals from across the region in attendance
- National High Blood Pressure Education Month, May 2019
  - Dr. Matthew Hann, Memorial Cardiologist, discussed Heart Disease Prevention (exercise, diet choices and portions, and smoking cessation) Facebook campaign
  - Blood Pressure Awareness with CEO, Kent Nicaud and #CheckItGulfCoast Facebook Campaign
  - Walking Wednesday Kick-off for Memorial Hospital employees
- Donate Life Month, Organ Donor Awareness Day, and Hero Dedication, April 24, 2019
  - Donor registration drive held
  - Whitney Sutton, ICU Manager, explained the new process for the *Hero Dedication* process with the raising of the Donate Life flag in honor of our Organ Donors, and Code Hero process
  - ~40 in attendance
- Health Fair at West Harrison High School, April 18, 2019
  - Provided education on body fat percentage and body mass index, infection prevention, back safety, and students signed a *No Text and Drive* pledge (Diana Brodkorb, Cardiac Observation Manager, Anthony Sperance, COBs Coordinator, Tan Nguyen, Acute Therapy Coordinator, and Carlin Necaise, Infection Preventionist)

  - ~ 100 high school students in attendance
- Memorial Employee Health Fair on February 20, 2019 at Memorial Hospital's main campus, February 21, 2019 at Memorial Surgical Center/GI in Ocean Springs, and February 22, 2019 at Biloxi Business Services Annex
  - Heart health screenings and gender specific screenings with lab work, nutritional assessments, body fat analysis, diabetes education, vision screenings, stroke risk assessment, foot care, skin screenings, vascular screenings, and lung cancer screening.
  - Memorial employees, physicians, volunteers and contract staff
- Wear Red Day for Heart Health Awareness, February 1, 2019
  - Increased awareness of heart healthy habits, staff gathered to take photos holding heart healthy messages and given apples
  - ~200 employees participated
- CONNECT-HF, Heart Failure Clinical Trial WLOX segment, February 1, 2019
  - Dr. Mullen, Memorial Cardiologist, discussed the importance of involvement in clinical research and the purpose of the CONNECT-HF trial and a patient shared his experience with heart failure following his heart attack
- Gulf Coast Heart Walk at Jones Park, Gulfport, MS, September 22, 2018
  - Community event focusing on heart health and the benefits of exercise and a healthy diet.
  - ~1,000 in attendance community-wide
- Hands Only CPR at the Downtown Gulfport Rotary Meeting, Fall 2018
  - Laura Albritton, Manager of Cardiac Telemetry and Mike Albritton, retired paramedic for American Medical Response (AMR), provided instruction on how to respond to the sudden collapse of a teen or adult, by calling 911, and pushing hard and fast in the center of the chest at a rate of 100 to 120 compressions per minute.
  - ~50 community leaders in attendance
- Healthy Heart Habits education at the Charles Walker Senior Center in Gulfport, July 31, 2018
  - Dr. John Agnone, Memorial Cardiothoracic Surgeon, discussed heart healthy habits
  - ~50 seniors in attendance
- Healthy Heart Habits education at the MS Power Company Corporate Safety Committee, May 14, 2018
  - Dr. John Agnone, Memorial Cardiothoracic Surgeon, discussed heart healthy habits
  - ~60 staff in attendance
- Cardiovascular and Neurosciences Care Symposium, March 9, 2018
  - Clinical expertise regarding advances in cardiovascular and neuroscience care with an emphasis on mobile stroke units, STEMI and Stroke Systems of Care in Mississippi, Heart Failure, Stroke Rehabilitation, Interventional Stroke, Transfusion Thresholds in Cardiac Patients, Current Drug Therapy in the Treatment and Prevention of Stroke, and Hyperbaric Treatment of Traumatic Brain Injury.
  - ~180 in attendance
- Lizana Elementary Health and Safety Fair, February 16, 2018
  - Candace Mittlesdorf, ICU Education and Skills Coordinator provided hand hygiene education to elementary age students using Glo Germ and UV lamp to show the germs on hands before and then after handwashing.
  - ~100 in attendance

- Wear Red Day for Heart Health Awareness, February 2018
  - Increased awareness of heart healthy habits, staff gathered to take photos holding heart healthy messages and given apples
  - ~200 employees participated
- Coastal Connections Show, January 2018
  - Dr. Bassam Baroudi, Memorial Cardiologist, discussed the impact of the flu on the heart
- Night Out in Red at Lynn Meadows Discovery Center in Gulfport, November 16, 2017
  - Body fat percentage and body mass index screenings and education provided
  - ~200 in attendance
- Dial Don't Drive Campaign via the MS Healthcare Alliance commercials, Fall 2017
  - Initiation dates of September 22, 2017, August 28, 2017
- Congestive Heart Failure (CHF) Classes every Tuesday, July 2017 – July 2018
  - Eileen Leblanc, CHF Clinic nurse, facilitated a support group and education program for CHF patients and their caregivers. The group was concluded due to low number of attendees.
  - Attendance varied from 0 to 3.
- Heart Health Education at St. Mark United Methodist Church, March 29, 2017
  - Dr. John Agnone, Memorial Cardiothoracic Surgeon, provided education on heart health and prevention strategies
  - ~ 40 in attendance
- Executive Impact Tour, March 23, 2017
  - Focused on the importance of timely stroke care and the advanced stroke services provided to the community, from calling 911, emergency room exam, thrombolytic therapy treatment, and interventional stroke therapy provided in our cardiac catheterization lab.
  - ~40 community leaders in attendance
- Abiomed's Impella Mobile Learning Lab and Celebration of Life of an Impella Patient, February 15, 2017
  - Educational event on innovative cardiovascular support technology and the Celebration of Life of a Memorial Hospital patient that benefited from the therapy.
  - ~75 in attendance
- Wear Red Day for Heart Health Awareness, February 2017
  - Increased awareness of heart healthy habits, staff gathered to take photos holding heart healthy messages and given apples
  - ~200 employees participated
- Go Red for Women, Party with a Purpose event at Lynn Meadows in Gulfport, November 17, 2016
  - Wheel of Healthy Portions (Lena Marcus, Brandy Williams, Dietician students) Spin the wheel activity and education on correct portion sizes of healthy foods
  - ~200 in attendance

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 Harrison County, the state and the U.S. in rate of deaths from cancer.
- The county exceeds the state and U.S. in rate of deaths from heart disease.
- 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 the top five accidental deaths.

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 only exceeds the U.S. 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.
- 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.

Memorial will continue the programming identified in CHNA STRATEGIC ACTION REPONSES of 2016 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.

2019 STRATEGIC INITIATIVES

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. For the 2019 Initiatives, Memorial will continue to undertake these significant efforts 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.

THANK YOU

This comprehensive assessment will allow us to better understand the needs and concerns of our community. Memorial Hospital is proud be part of the Mississippi Gulf Coast where we truly believe we are making a difference. 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 Harrison County and surrounding area.

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.

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