



Mississippi Comprehensive Cancer Control

2018-2022 State Plan

Mississippi State Plan for Comprehensive Cancer Control *2018-2022*

The mission of the Mississippi Partnership for Comprehensive Cancer Control (MP3C) shall be to reduce the human suffering and economic burden from cancer for Mississippi citizens by developing, implementing and evaluating a comprehensive cancer prevention and control plan.

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PREFACE

The U.S. Centers for Disease Control and Prevention (CDC) defines comprehensive cancer control as “an integrated and coordinated approach to reducing cancer incidence, morbidity, and mortality through prevention (primary prevention), early detection (secondary prevention), treatment, rehabilitation, and palliation.” The concept is built on the recognition that effective cancer prevention and control planning and programming should address a continuum of services that range from primary prevention and early detection through effective treatment, quality care, and end-of-life issues.

From a cancer control perspective, cancer is best described as “a process that starts in health and progresses through events that cause normal cells to acquire the properties of malignancy...” The process continues from there until remission or death. Cancer control involves fighting this process at every stage from health to death. It means primary prevention, early detection; clinical trials, survivorship, treatment, and helping patients and their families cope with the ravages of disease processes.

The CDC’s goal for Comprehensive Cancer Control (CCC) is to address cancer through integrating and coordinating a complete range of activities to achieve maximal impact on a population’s cancer burden using the limited, available resources to accomplish desired cancer prevention and control outcomes. CCC requires a broad partnership of public and private sector stakeholders whose common mission is to reduce the overall cancer burden within the jurisdiction.

Comprehensive Cancer Control is based on the following principles:

- Scientific data and research are systematically used to identify priorities and direct decision making.
- The full continuum of cancer care is addressed, including primary prevention, early detection, treatment, rehabilitation, pain relief, symptom management, patient and family care, survivorship and end of life.
- Many stakeholders are engaged in cancer prevention and control, including the medical and public health communities, voluntary agencies, insurers, businesses, survivors, government, academia, and advocates. All cancer-related programs and activities are coordinated.
- The activities of many disciplines are integrated when considering comprehensive cancer control activities. Contributing disciplines include administrative science, basic and applied research, evaluation, health education, program development, public policy, surveillance, clinical services, and health communications.

The Mississippi Comprehensive Cancer Control Plan (Plan) provides a framework for action to reduce the burden of cancer in Mississippi using the principles described. Its purpose is to provide an organized approach to cancer prevention and control efforts for the entire state of Mississippi. This Plan is intended for use by individuals and organizations, in all areas of cancer prevention and control, statewide. The goals are broad and directed at all populations in Mississippi. Based on the priorities identified here, this Plan presents recommendations and examples of strategies intended to support a statewide, community-based and community-driven approach to comprehensive cancer control.

In order for the vision of the Plan to be achieved, the strategies must be implemented. This Plan will serve to mobilize individuals, organizations, institutions and communities committed to fighting cancer. These groups can use this Plan to select and implement strategies that are consistent with their own priorities and missions. Effective implementation of these diverse strategies will require an ongoing, coordinated and collaborative effort. All partners must use the Plan to have the greatest impact on cancer prevention and control in Mississippi.

The Mississippi Comprehensive Cancer Control Plan is a product of extensive collaboration by contributing partners. In part, it is adapted from the preceding Plan: *Mississippi Comprehensive Cancer Control 2006-2011 State Plan*. Some of the structure and language of that prior Plan has been retained in this updated document.

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Source: Adapted from the U.S. Centers for Disease Control Prevention (CDC), Framework for Program Evaluation

EXECUTIVE SUMMARY

More than one million people in the United States are diagnosed with cancer each year. As a result of risk reduction, education, early detection advances, and cutting-edge treatments from research, cancer rates are declining nationally for the first time in history. Unfortunately, these advances have not equally reached the state of Mississippi's citizens and much remains to be accomplished to improve the health of all. In cases where healthcare is geographically accessible, barriers related to quality of care still exist. Financial, transportation, cultural and linguistic differences, education of both the patient and provider, lack of insurance and family support continue to contribute to health disparities in cancer.

Mississippi is a predominantly rural state with a population of approximately 2.9 million (U.S. Census Bureau). Almost 55% of Mississippi's population is located in rural areas. Each year, more than 6,000 Mississippi residents die of cancer (MCR). During 2011-2015, cancer was responsible for over 32,000 deaths (MSDH Vital Records). The prevalence of cancer can be reduced by modifying or eliminating associated risk factors.

Comprehensive Cancer Control (CCC) is a collaborative, data-driven, and outcome oriented approach to cancer control. This approach reduces cancer incidence, morbidity, and mortality through prevention, early detection, treatment, palliation, and survivorship.

The Mississippi Partnership for Comprehensive Cancer Control (MP3C) is a group of individuals and organizations joining to make a difference in the lives of Mississippians. In 2005, the Mississippi Comprehensive Cancer Control Program created MP3C to serve as the coordinating body for the implementation of goals and objectives in the Mississippi Comprehensive Cancer Control Plan. The first five-year Plan, the Mississippi Comprehensive Cancer Control Plan, 2006-2011, contains measurable objectives and focuses the members of the MP3C in their work to reduce the cancer burden among all Mississippians.

This plan reflects strategies aimed toward building capacity to address cancer in a coordinated, collaborative approach and to reduce the burden of cancer. The plan's interventions seek to: 1) promote personal healthful behaviors; 2) bring partners together to maximize existing resources and strategize how to effectively impact policy, systems, and environmental changes; 3) implement evidence-based interventions; and 4) determine resources needed to address gaps and barriers that exist for many Mississippians.

The purpose of the Plan is to delineate activities that will prevent cancer, associated risk factors, and promote health. This Plan will also help identify strategies and measurable

outcomes in order to accomplish these goals and identify priorities of stakeholders in addressing the burden.

All aspects of the Mississippi Comprehensive Cancer Control Plan, from defining the burden of cancer and guiding planning, to monitoring changes and evaluating interventions, depend upon the availability of strong and relevant data and surveillance activities. Access to relevant data affords the ability to target intervention strategies and prioritize resource allocation. It is important to assure accuracy and timeliness of data and this can be done through the evaluation or surveillance systems and support of appropriate training of and feedback to data sources.

INTRODUCTION

Mississippi suffers disproportionately from many chronic diseases. Many preventive measures that delay the onset of some chronic illnesses are often overlooked. There are various theories as to why many Mississippians either elect to not have or are not aware of preventive screenings that could reduce premature death and disabilities from several chronic illnesses. Low educational attainment coupled with limited access to health care, high poverty rate, and other social determinants can result in health care disparities.

Mississippi leads the nation in cardiovascular disease mortality rate (314.5 age-adjusted rate per 100,000 population U.S. standard in MS vs. 222.7 per 100,000 nationally in 2015); has the second highest diabetes mortality rate in the nation (32.4 age-adjusted rate per 100,000 U.S. standard population in MS, 21.3 per 100,000 nationally in 2015); ranks third nationally in cancer mortality rate (192.2 age-adjusted rate per 100,000 population in MS vs. 162.9 per 100,000 nationally in 2015) (CDC WONDER); and premature death and disability from various chronic illnesses. Additionally, the financial burden of caring for those diagnosed with chronic diseases is startling, providing the impetus for revamping the healthcare system. The CDC reports that chronic diseases such as heart disease, stroke, cancer, and diabetes are the most prevalent, costly, and preventable causes of death. One of the more costly treatments is cancer. The National Cancer Institute estimates cancer treatment will cost the United States about \$158 billion in 2020, without including the costs associated with lost productivity (NIH).

Cancer is the second leading cause of death in Mississippi, accounting for about one in every five deaths (MSTAHRS). Between 2010 and 2014, there were 17,262 potentially preventable deaths. Among these, there were 9,699 due to lung cancer, the leading cause of cancer deaths in the state. Less, but not least, there were 3,144 due to colorectal cancer, breast cancer took a toll of 2,161 women, prostate cancer stole the life of 1,601 men, melanoma of the skin was the cause of 367 deaths, and cervix uteri took 290 lives (MCR).

Research indicates that certain risk factors increase the chance that a person will develop cancer. The following are the most common risk factors for cancer:

- Aging
- Tobacco use
- Poor diet, lack of physical activity, or being overweight
- Alcohol use
- Exposure to sunlight
- Ionizing radiation
- Exposure to certain chemicals and other substances

- Some viruses and bacteria
- Certain hormones
- Family history of cancer

Many of these risk factors such as alcohol use, unhealthy diet, physical inactivity, prolonged ultraviolet light exposure or smoking can be avoided. However, others such as family history, age, sex, and race are non-modifiable, hence they cannot be avoided. People can help protect themselves by avoiding known risks whenever possible. Over time, several factors may act together to cause normal cells to become cancerous. When thinking about the risk factors associated with developing cancer, the following should be kept in mind:

- Cancer is not caused by an injury, such as bump or bruise.
- Cancer is not contagious. Although certain viruses or bacteria may increase the risk of some types of cancer, no one can “catch” cancer from another person.
- Having one or more risk factors does not mean that you will get cancer. Most people who have risk factors never develop cancer.
- Some people are more sensitive than others to the known risk factors.

Populations at high risk for certain types of cancer depend on the various risk factors for instance; identifiable disparities, obesity, lifestyle, environment, race or genetic makeup. Black men, for example, are more likely than white men to be diagnosed with prostate cancer. Colon cancer occurs mostly in older age groups. Therefore, screening becomes especially important as individuals increase in age. People who believe they are at risk for cancer should discuss concerns with their health care provider.

Most cancers are preventable (60%), with about one-third of cancer deaths linked to modifiable lifestyle factors: diet, physical activity, and weight. Regular screening exams can result in early detection and treatment of cancers of the breast, colon, rectum, cervix, prostate, testes, oral cavity, and skin. Over three quarters of all cancers are diagnosed at age 55 and older.

Extra weight can increase our risk of colon and breast cancers, therefore physical activity and good nutrition are important. A diet high in vegetables and fruits and low in red meat reduces the risk of a broad range of cancers. Colored fruits and vegetables and cruciferous vegetables like broccoli and cauliflower may be especially helpful. Tobacco cessation can have a profound effect on reducing cancer. Mississippi Tobacco Quit Line provides free help for quitting tobacco.

The fight against cancer will not be won without a comprehensive approach to coordinate the many cancer control and prevention efforts across the state. MSDH is building a comprehensive, statewide cancer control plan like that in other states. Its

goal is to have communities' pool resources to encourage healthy lifestyles, promote cancer screenings, and improve cancer care.

Mississippi Demographics (U.S. Census Bureau)

Mississippi, with approximately 46,923 square miles, is the 31st largest state in land area. In 2016, Mississippi had an estimated population of 2.99 million. According to the 2016 U.S. Census estimates, Mississippi's population consisted of 59.3% whites, 37.7% blacks, 3% were of other races, and 3.1% were reported as Hispanic. Females make up 51.5% of the population. Census estimates for 2016 show that 75.9% of Mississippians were 18 and older and those older than 65 represent 14.7% of the population.

Mississippi's per-capita personal yearly income was \$21,057 and the median household income was \$39,665, with 20.8% of the population living below the poverty level.

Health Care Coverage

Uninsured

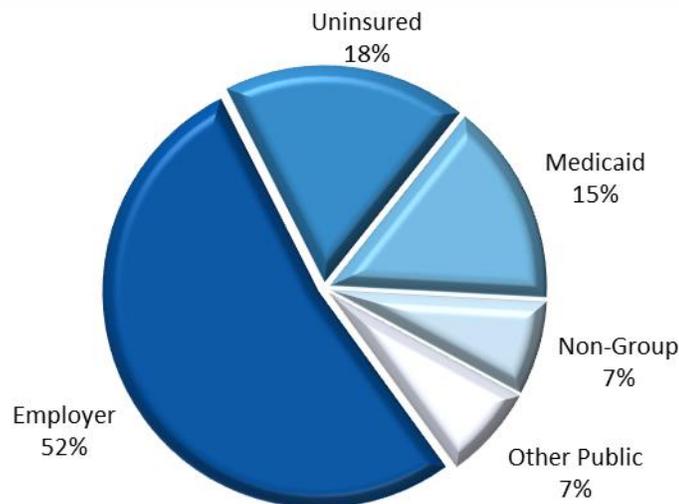
Nearly 14% of Mississippi adult residents¹, under age 65, were uninsured in 2016. Many people have health insurance through their jobs or are covered by a family member's employer-sponsored insurance, but not all employers offer health insurance. With the cost of health insurance premiums continuing to rise, employers are anticipated to increase cost-sharing requirements in employer-sponsored insurance plans.

The Affordable Care Act (ACA) contains substantial new requirements aimed at increasing rates of health insurance coverage. These include a requirement that states develop and run health insurance exchanges through which individuals and small businesses can purchase health care coverage; a requirement that large and mid-sized employers – including state governments – provide qualifying coverage to employees or face the possibility of penalties; and a requirement that most individuals purchase or otherwise obtain coverage. At the time of publication of this Plan it is unknown what the impact of the Patient Protection and Affordable Care Act will be for cancer patients and survivors.

As depicted in Graphic 1, 18% of Mississippi residents between ages 19 and 64 were uninsured in 2016 and 15% received coverage through the Medicaid program. A large portion of adult Mississippians (52%) were enrolled in employer-sponsored insurance plans (Kaiser).

¹ These geographic level of poverty and health estimates are not comparable to other geographic levels of these estimates

Graphic 1: Mississippi Health Insurance Coverage, Ages 19 - 64, 2016



Source: The Henry J. Kaiser Family Foundation, Health Insurance Coverage of Adults 19-64; kff.org

Based on the 2011-2015 American Community Survey data 5-year estimates, 84.2% of Mississippians have health insurance of some kind. Of those younger than age 18, 93.3% have health insurance. Among the uninsured population, 29.1% are young adults age 18 to 24. Approximately 13.7% of the White non-Hispanic population was uninsured compared to 18.2% of Black/African Americans (ACS). Health insurance coverage provides access to the healthcare system and financial protection from associated expenses. A lack in health care stability may cause individuals to miss out on essential preventive services, including recommended health screening.

Medicaid and Medicare

The Mississippi Department of Healthcare and Family Services (HFS) is responsible for providing health care coverage for adults and children who qualify for Medicaid including low-income families lacking health insurance, children who are wards of the state, low-income senior citizens, individuals with disabilities, elderly in nursing facilities, and people struggling with catastrophic medical bills.

Mississippi residents enrolled in Medicare in 2015 represented 19% compared to the national average of 15% (Kaiser). As of July 2017, Mississippi has enrolled 672,073 individuals in Medicaid and CHIP (about 23% of the state's total population, all ages included) was enrolled in Medicaid and CHIP compared to the United States average of 21% (Medicaid).

MISSISSIPPI BURDEN OF CANCER SUMMARY

Among others, the main data sources used to identify the burden of cancer in Mississippi are: The Mississippi Statistically Automated Health Resource System (MSTAHRS)², the Mississippi Cancer Registry (MCR)³, the Cancer Control P.L.A.N.E.T.⁴, and the Behavioral Risk Factor Surveillance System (BRFSS)⁵. MSTAHRS is a web-based query system for Mississippi vital statistics, hosted by the Mississippi State Department of Health. MCR maintains a confidential database of cancer diagnosis, stage and mortality collected and reported, by law, from physicians, hospitals, and other healthcare facilities across the state. MCR's state of the art website provides mortality and incidence cancer rates easily accessible through online queries. The Cancer Control P.L.A.N.E.T. portal provides access to data and resources that can help planners, program staff, and researchers to: design, implement and evaluate evidence -based cancer control programs. The P.L.A.N.E.T. portal is maintained by the Division of Cancer Control and Population Sciences at the National Cancer Institute. BRFSS is the nation's premier system of health-related telephone surveys that collects state data about U.S. residents regarding their health-related risk behaviors, chronic health conditions, and use of preventive services. Collecting and verifying data takes time, for this reason, the "most recent data" sometimes is dated 2015 or 2014 - depending on the data source and if the data corresponds to state or national data.

Burden of Cancer

In Mississippi, cancer was the second leading cause of death and accounted for 20.4% of all deaths in 2015 according to Mississippi Department of Health, Vital Statistics. Every year, more than 15,300 people will be diagnosed with cancer (MCR). In 2015, the overall cancer mortality rate in Mississippi was 188.5 per 100,000 people (age-adjusted to the 2000 U.S. population), and 6,490 Mississippians died from cancer. Of those cancer deaths, 2,880 were among women and 3,610 among men; 4,431 among whites, 2,015 among blacks, 44 among other ethnicities (MSTAHRS).

Lung and Bronchus

In Mississippi, an average of 1,942 deaths and 2,528 new cases are diagnosed with lung cancer each year. Compared with other states, the 2010-2014 age-adjusted mortality rate for lung & bronchus cancer in Mississippi was the 4th highest in the nation (58.8 per 100,000), higher than the U.S. rate (44.7 per 100,000). Likewise, the age-adjusted incidence rate for lung & bronchus cancer in Mississippi was the 5th highest in the

² Mississippi Statistically Automated Health Resource System (MSTAHRS): <http://mstahrs.msdh.ms.gov/>

³ Mississippi Cancer Registry (MCR): <https://www2.umc.edu/mcr/>

⁴ Cancer Control P.L.A.N.E.T.: <https://cancercontrolplanet.cancer.gov/>

⁵ Behavioral Risk Factor Surveillance System (BRFSS). Available at: <https://www.cdc.gov/brfss/>

nation (75.7 per 100,000), higher than the U.S. rate (61.2 per 100,000). When stratifying by gender, Mississippi's (age adjusted) mortality rate becomes the 2nd highest in the nation among men (82.7 deaths per 100,000). Furthermore, age-adjusted mortality rate due to lung & bronchus cancer is 67.2% higher⁶ among men (82.7 versus 41.1) (NCI).

Lung & Bronchus Cancer Age-adjusted Rates per 100,000 persons (2000 US Standard Population) Mississippi vs. United States			
	MS	MS's Rank*	U.S.
Mortality (All)	58.8	4 th	44.7
Mortality (men)	82.7	2 nd	55.9
Mortality (women)	41.1	17 th	36.3
Incidence	75.7	5 th	61.2

Source: State Cancer Profiles, 2010-2014.

Accessed: November 2017

(*) Including District of Columbia

Breast Cancer (Female)

The 2011-2015 age-adjusted female breast cancer mortality rate for Mississippi was 23.5 per 100,000 population. Black women (31.7 per 100,000) had a higher age-adjusted rate than White women (19.7 per 100,000). Breast cancer ranks second among cancer deaths in women in the state (MSTAHRs).

In Mississippi, an average of 429 deaths and 2,021 new cases are diagnosed with female breast cancer each year. Compared with other states, the age-adjusted mortality rate for female breast cancer in Mississippi was the 2nd highest in the nation (23.9 per 100,000), higher than the U.S. rate (21.2 per 100,000). Age-adjusted incidence rate for female breast cancer in Mississippi ranks 41st highest in the nation; it is lower than the U.S. rate (115.5 versus 123.5) (NCI).

Breast Cancer Age-adjusted Rates per 100,000 persons (2000 US Standard Population) Mississippi vs. United States			
Female	MS	MS's Rank*	U.S.
Mortality (All)	23.9	3 rd	21.2
Mortality (Black)	32.5	7 th	29.2
Mortality (White)	19.8	37 th	20.6
Incidence	115.5	42 th	123.5

Source: State Cancer Profiles, 2010-2014

Accessed: November 2017

(*) Including District of Columbia

⁶ Percentage Difference = $|Value1 - Value2| / ((Value1 + Value2) / 2)$

Cervical Cancer (Female)

Based on the 2011-2015 age-adjusted cancer mortality rates in Mississippi, Black Women (5.5 per 100,000 population) have a higher rate of cervical cancer mortality than White Women (2.5 per 100,000 population) (MSTAHRS).

In Mississippi, an average of 58 deaths and 149 new cases are diagnosed with cervical cancer each year. Compared with other states, the age-adjusted mortality rate for cervical cancer in Mississippi was the highest in the nation (3.5 per 100,000), higher than the U.S. rate (2.3 per 100,000). Likewise, the age-adjusted incidence rate for cervical cancer in Mississippi was the 3rd highest in the nation; it was higher than the U.S. rate (9.6 versus 7.5) (NCI).

Cervical Cancer Age-adjusted Rates per 100,000 persons (2000 US Standard Population) Mississippi vs. United States			
Female	MS	MS's Rank*	U.S.
Mortality (All)	3.5	1 st	2.3
Mortality (Black)	5.7	2 nd	3.8
Mortality (White)	2.5	11 th	2.1
Incidence	9.6	4 th	7.5

Source: State Cancer Profiles, 2010-2014.

Accessed: November 2017

(*) Including District of Columbia

Colorectal

In Mississippi, an average of 629 deaths and 1,617 new cases are diagnosed with colorectal cancer each year. Compared with other states, the 2010-2014 age-adjusted mortality rate for colorectal cancer in Mississippi was the highest in the nation (19.4 per 100,000), higher than the U.S. rate (14.8 per 100,000). Likewise, the age-adjusted incidence rate for colorectal cancer in Mississippi was the 2nd highest in the nation (49.1 per 100,000), higher than the U.S. rate (39.8 per 100,000). When stratifying by gender, Mississippi's (age adjusted) mortality rates for men and women stay the highest in the nation for both genders. Mortality rate among men, in Mississippi, is higher than among women (23.7 versus 16.1) (NCI).

Colorectal Cancer Age-adjusted Rates per 100,000 persons (2000 US Standard Population) Mississippi vs. United States			
	MS	MS's Rank*	U.S.
Mortality (All)	19.4	1 st	14.8
Mortality (men)	23.7	1 st	17.7
Mortality (women)	16.1	1 st	12.4
Incidence	49.1	2 nd	39.8

Source: State Cancer Profiles, 2010-2014.

Accessed: November 2017

(*) Including District of Columbia

Prostate (Male)

In Mississippi, an average of 321 deaths and 2,150 new cases are diagnosed with prostate cancer each year. Compared with other states, the 2010-2014 age-adjusted mortality rate for prostate cancer in Mississippi was the highest in the nation (26.2 per 100,000), higher than the U.S. rate (20.1 per 100,000). Likewise, the age-adjusted incidence rate for prostate cancer in Mississippi was the 5th highest in the nation; it was higher than the U.S. rate (135.5 versus 114.8) (NCI).

For reasons that remain unclear, mortality rate is higher in African Americans than among Caucasians. The National Cancer Institute points out that the higher incidence of prostate cancer in African American/Black men compared with men from other racial/ethnic groups prompted the hypothesis that genetic factors might account, in part, for the observed differences (NCI). In Mississippi, the age-adjusted mortality rate (per 100,000 persons) due to prostate cancer is 101.39% higher⁷ among African American/Black men (54.4 versus 17.8); this rate is the highest in the nation (54.4 versus 42.0).

Prostate Cancer Age-adjusted Rates per 100,000 persons (2000 US Standard Population) Mississippi vs. United States			
Male	MS	MS's Rank*	U.S.
Mortality (All)	26.2	2 nd	20.1
Mortality (Black)	54.4	1 st	42.0
Mortality (White)	17.8	44 th	18.7
Incidence	135.5	6 th	114.8

Source: State Cancer Profiles, 2010-2014.

Accessed: November 2017

(*) Including District of Columbia

Pediatric Cancer

Despite childhood cancer's rarity, malignancies are second only to accidents as the leading cause of death in children. The types of cancers that are common in pediatric patients are different than those in adults. Children may tolerate treatments better than adults do, allowing more aggressive treatment. In Mississippi, an average of 12 children younger than 15 lose their battle against cancer and 88 are diagnosed with some type of pediatric cancer each year (NCI).

⁷ Percentage Difference = $|Value1 - Value2| / ((Value1 + Value2) / 2)$

Cancer Disparities

A substantial body of scientific literature documents racial/ethnic and low-income population differences in risk factors and exposures for behavioral, environmental and other factors related to cancer. Access to and delivery of quality health care and differences in cancer screening, follow-up, treatment, palliative care, and pain management are all factors related to racial/ethnic and geographic disparities in cancer rates. These health care factors play a pivotal role in cancer prognosis, stage, survival, mortality and recurrence for minorities and the poor. As on the national level, Mississippi cancer disparities occur in a variety of categories including racial/ethnic, geographic, gender, age, and socioeconomic groups.

Per American Cancer Society, people with lower socioeconomic status (SES) have disproportionately higher cancer death rates than those with higher SES, regardless of demographic factors such as race/ethnicity. Cancer mortality rates among both African American and non-Hispanic white men with 12 or fewer years of education are almost 3 times higher than those of college graduates for all cancers (ACS).

Progress in reducing cancer death rates has been slower in people with lower SES. These disparities occur largely because people with lower SES are at higher risk for cancer and have less favorable outcomes after diagnosis. People with lower SES are more likely to engage in behaviors that increase cancer risk such as tobacco use, physical inactivity, and poor diet. This is in part because of environmental or community factors that provide fewer opportunities for physical activity and less access to fresh fruits and vegetables. Lower SES is associated with personal barriers to health care, including inadequate health insurance, reduced access to recommended preventative care and treatment services, and lower literacy rates. Individuals with no health insurance are more likely to be diagnosed with advanced cancer and less likely to receive standard treatment and survive their disease.

Mississippi is a geographically diverse state of 82 counties with a total land area of nearly 46,923 square miles. The estimated population by the US Census for 2015 was over 2.99 million residents in 290 incorporated cities, towns, and communities. The populations range from 1,406 in Issaquena County to 245,365 in Hinds County. Slightly over 50% of Mississippians live in rural areas. Barriers to cancer prevention, detection, diagnosis, and treatment exist in Mississippi's rural and urban communities. Rural communities have high rates of uninsured residents and have high numbers of elderly residents. Most of rural communities lack public transportation and lack access to primary and specialty health care. Urban areas also have transportation barriers, high Medicaid rates, and cultural and linguistic barriers.

The majority of cancers in the United States occur in people aged 65 and older. Senior citizens (i.e. individuals 65 years and older) comprise 14.7% of Mississippi's estimated population; however 66.1% of all cancer deaths in 2017 were from this age group.

Based on population changes alone, the National Institutes of Health estimates national overall costs for cancer in the year 2020 to be at least \$158 billion (in 2010 dollars). This is greater than 27% higher than costs in 2010. These figures do not include other types of costs, such as lost productivity, which add to the overall financial burden of cancer (NIH).

In 2011, in Mississippi, the average length of stay for hospitalized patients with a primary diagnosis of cancer was 6.9 days, which was higher than the average length of stay of 5.4 days for all other non-cancer-related hospitalizations. The average charges for hospital stays associated with cancer recorded as a primary diagnosis was \$46,660 for Mississippi residents (Staneva).

There is a wide variation in mortality rates between counties. Marked racial disparities exist in the cancer mortality rates throughout the state. Some of the death, illness, and disability due to cancer are preventable, but it will not be prevented unless we take population-based actions to create and maintain healthy environments, policies, and norms. Cancer does not discriminate, so it is imperative that we work together on local, state, and national levels to make a positive impact on the entire spectrum of the disease.

GOAL SUMMARY

Prevention

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- Coordinate and collaborate efforts to reduce risk factors for chronic disease and cancer at the policy, systems, and environmental change level within schools, communities, worksites, faith, and government settings.

Early Detection

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- Define and establish resources and assets required for all cancer sites.

Clinical Trials

Page 23

- Promote awareness of and participation in cancer clinical trials.

Survivorship

Page 25

- Increase the number of survivorship evidence-based strategies implemented.

Treatment

Page 27

- Promote adherence to evidence-based cancer care guidelines in assuring access to quality cancer care in Mississippi.

Policy, Systems, and Environmental Changes (PSE)

Page 29

- Increase the number of PSE strategies throughout the regional MP3C coalitions.

Evaluation and Surveillance

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- Increase the number of evaluation and surveillance plans developed, implemented, and reviewed annually to determine the impact of the program, partnership, and plan.

SURVEILLANCE DATA TERMINOLOGY (SEER)

Cancer Incidence is the number of newly diagnosed cases of cancer during a specific time period.

Cancer Mortality is the number of deaths from cancer during a specific time period.

Age-Adjusted Rates allow comparisons of populations. Age-adjusted rates take into account age-distribution differences between populations. Most incidence and death data in this cancer plan are age-adjusted. Age-adjusting takes the 2000 US population distribution and applies it to other time periods under consideration. This allows comparison across racial groups taking into account differences in age structure of the populations. For example, the average age of many Hispanic/Latino populations is less than that of other racial/ethnic groups. Therefore, it sometimes appears that these groups have lower cancer incidence rates than other groups. However, by adjusting for age, more accurate comparisons can be made.

Percentage Change (PC) over a given time interval is estimated as $\text{Percent change} = (\text{Final value} - \text{Initial value}) / \text{Initial value} * 100$. A positive PC corresponds to an increasing trend, a negative PC to a decreasing trend. Percentages used in this document reflect percent change increase or decrease based on this definition.

Further information about incidence, mortality, calculating age-adjusted rates, and percentage change can be found at: <https://seer.cancer.gov/>.

PREVENTION

Definition:

Prevention is defined as the reduction of cancer mortality via reduction in the incidence of cancer. This can be accomplished by avoiding a carcinogen or altering its metabolism; pursuing lifestyle or dietary practices that modify cancer-causing factors or genetic predispositions; medical intervention (e.g., chemoprevention); or early detection strategies that can result in removal of precancerous lesions, such as colonoscopy for colorectal polyps (National Cancer Institute, 2017).

To assure the Plan is successful; the social and physical environments must be improved to make it easier and more convenient for Mississippians to choose healthier alternatives. The interventions selected within this section will support and reinforce healthy choices and healthy behaviors and make it easier for Mississippians to take charge of their health.

Traditional health promotion interventions have focused on changing individual behavior one or two individuals at a time. Changes in public and organizational policies, as well as environmental factors, can provide essential support for influencing both individual behavior and social norms. Because research indicates that improvements in daily physical activity, food choices, and exposure to tobacco and its by-products can produce substantial advances in community health, emphasis is placed on these three behaviors in settings where people live, learn, work, and play.

Goal: Coordinate and collaborate efforts to reduce risk factors for chronic disease and cancer at the policy, systems, and environmental change level within schools, communities, worksites, faith and government settings.

Objective 1: Engage MP3C leadership to identify at least three priority areas for a statewide agenda with a focus on achieving policy, systems, and environmental change at the state, regional, and local levels by June 2019.

Strategies

- Engage MP3C membership to address policy, environmental, and systems priorities and policy implementation.
- Access, inventory, and assess current policies related to cancer and chronic disease risk factors at the state, county, and municipal levels.
- Provide education, training, and technical assistance related to proposed policy and environmental change.
- Promote the adoption of evidence based or best practice interventions addressing physical activity, nutrition standards, and tobacco-free environments at the state, county, and municipal levels.

Objective 2: Increase by 25% the number of Mayoral Health Councils (MHC) established to reduce risk factors for cancer by implementing policies (i.e. smoke free air; access to healthy foods, physical activity, and/or sun shades) by June 2019.

Strategies

- Conduct an environmental scan across the state and implement (where needed) a MHC or Community Health Coalition with local government support.
- Meet with mayors to discuss the need for a MHC and the benefits of having such a council to address cancer prevention from a PSE perspective.
- Partner with mayors to identify hospitals, primary care clinics, civic organizations, local businesses, faith institutions, transportation providers, schools, public safety organizations, recreational officials and non-profit organizations for MHC representation.
- Facilitate the development of MHCs in partnership with the mayors to address cancer prevention at the community level.

EARLY DETECTION

Definition:

Some types of cancer can be found before they cause symptoms. Checking for cancer (or for conditions that may lead to cancer) in people who have no symptoms is called *screening*. Screening can help doctors find and treat some types of cancer early. Generally, cancer treatment is more effective when the disease is found early. However, not all types of cancer have screening tests and some tests are only for people with specific genetic risks.

Screening tests include the following:

- **Physical exam and history:** An exam of the body to check general signs of health, including checking for signs of disease, such as lumps or anything else that seems unusual. A history of the patient's health habits and past illnesses and treatments is also taken.
- **Laboratory tests:** Medical procedures that test samples of tissue, blood, urine, or other substances in the body.
- **Imaging procedures:** Procedures that make pictures of areas inside the body.
- **Genetic tests:** Tests that look for certain gene mutations (changes) that are linked to some types of cancer.

GOAL: Define and establish resources and assets required for all cancer sites.

Objective 1: Partner with at least one (1) community-based organization in each of the five (5) MP3C coalition regions to increase knowledge of men and women with regards to the importance of cancer screenings by December 2020.

Strategies

- Encourage MP3C membership to engage and foster partnerships for the delivery of health education and messaging among the targeted population.
- Work with partners to ensure current cancer education content is culturally appropriate for the targeted population.
- Work with community leaders and organizations to increase the number of patient navigators and/or community health workers trained to increase access to care.
- Promote community awareness about resources for low or no cost cancer screening services for underserved men and women.
- Collaborate with faith and community organizations to conduct comprehensive, culturally appropriate cancer education.

Objective 2: By June 2019, increase the number of Health & Wellness ministries that focus on early detection by 25%.

Strategies

- Conduct an environmental scan across the state to identify current health ministries, faith-related associations and groups, and ministerial alliances.
- Work with faith-based leaders to promote awareness about resources for low or no cost cancer screening services.
- Provide education, training, tools, and resources on early cancer detection.

Objective 3: Strategize and promote at least one (1) system change that will increase cancer screening, particularly for minority, underserved and under/uninsured populations by June 2020.

Strategies

- Establish and/or promote patient navigator and/or community health worker/advocate programs to address specific social barriers to screening.
- Develop professional education for healthcare providers on implementation of reminder/follow-up systems and the use of follow-up plans in practice as well as screening guidelines and procedures.
- Develop regional cancer screening referral lists.

Objective 4: Increase awareness of sun safety by 30% through the use of evidence-based sun-safety materials that target populations for skin cancer prevention by June 2020.

Strategies

- Engage state affiliates of the American Academy of Dermatology, Skin Cancer Foundation, surgical societies, plastic surgeons, UMC, and cancer care providers to share data on sun exposure behaviors, disseminate data collected, provide a synopsis of need, and identify gaps in policy related to skin cancer.
- Develop skin safety awareness campaigns by partnering with the Department of Education, Parks and Tourism, Chambers of Commerce, and colleges and universities to promote skin safety.
- Monitor and measure skin cancer prevention messaging among target populations at MP3C regional levels.

Objective 5: Promote public awareness about colorectal cancer by June 2019.

Strategies

- Assess current colorectal cancer screening practices and capacity in Mississippi.
- Identify, develop, and test culturally appropriate education materials.
- Make available through MSDH educational materials to inform at-risk populations the general public of the prevalence and risk factors related to colorectal cancer.
- Support and promote targeted intervention programs that promote colorectal cancer screening.
- Create an online resource map of CRC screening, diagnostic, therapeutic and survivorship resources in Mississippi.
- Demonstrate to policy makers the importance of including colorectal cancer screening as a mandated, covered benefit under all private insurance and Medicaid/Medicare.
- Encourage implementation of FIT/FOBT screenings in targeted high risk populations.
- Collaborate with Commission on Cancer (CoC) and hospitals to implement strategies to meet CoC standards as it relates to CRC screening guidelines.

CLINICAL TRIALS

Definition:

Clinical research trials are the primary means used to determine new and improved methods to prevent, diagnose, treat, manage symptoms, and support cancer patients. The current standards of care in all of these areas are based on results from clinical trials conducted over the past 30 or more years and have involved active participation among thousands of cancer patients. Increased participation in cancer clinical research trials, particularly among adults, is critical in assuring new advances in cancer care are tested in large enough patient groups, including minorities and underserved, to demonstrate safety and efficacy in new interventions. Multiple factors are involved in the historically low participation rates among adult cancer patients in clinical research trials. MP3C coalition members statewide need to collaborate with and support cancer care providers to improve clinical research trial participation in Mississippi.

Phases of Clinical Trials with objectives:

1. Phase I/II: Earliest stage of research in humans designed to identify safety factors related to an intervention (drug, surgical procedure, radiation treatment, prevention or screening tool) including dose, delivery method/schedule, toxicities/side effects, duration of intervention; begin to establish efficacy of the intervention with specific types of cancers.
2. Phase II/III: Comparison of new intervention or approach with the standard of care for specific types of cancer to determine which is better, improves outcomes and is best tolerated by study participants.
3. Phase III: Compares the new interventions identified in the Phase II trials against the standard of care for a specific patient population to determine which intervention has improved patient outcomes. Quality of life and cancer care delivery outcomes are usually included in the Phase III study objectives to assure patients are able to tolerate new interventions, as well as or better than the current standard of care.
4. Phase IV: Long term safety and efficacy for a new treatment/intervention approved for use for specific cancers.

GOAL: Promote awareness of and participation in cancer clinical trials

Objective 1: On an annual basis, collaborate with the MSDH Breast and Cervical Cancer Program to compile and disseminate information to cancer care professionals and patient advocacy organizations on the availability of clinical trials at the community level.

Strategies

- Encourage MP3C membership to increase education and awareness of innovative clinical cancer control strategies.
- Promote the availability of clinical trials information to cancer care providers throughout the state with emphasis on organizations and facilities with limited or no participation in clinical trials.
- Partner with cancer advocacy organizations to provide educational materials on the value and benefits of clinical trials participation at conferences, via newsletters, websites, and in-service opportunities.
- Provide clinical trial resource information via MSDH website which includes step-by-step, easy to understand instructions on how to find clinical trials to the public and healthcare providers.
- Provide links to www.clinicaltrials.gov and cancer-specific advocacy organizations (American Cancer Association (ACS), Leukemia & Lymphoma Society (LLS), and Susan G. Komen) websites for assistance in locating specific research studies and the facilities/organizations conducting studies in Mississippi.

Objective 2: Promote the development of public and organizational policies that encourage access to and participation in cancer clinical trials at the community level by June 2020.

Strategies

- Partner with cancer advocacy organizations to support insurance payers in Mississippi to cover standard care costs associated with treatment under clinical trials.
- Recruit cancer clinical trial participants to serve as volunteer spokespersons to educate policy makers on the value and benefits of supporting clinical research access locally, including the importance of providing adequate health coverage costs associated with clinical trials.
- Develop and disseminate educational materials that tell patient personal stories to disseminate to policymakers.

SURVIVORSHIP

Definition:

In cancer, survivorship focuses on the health and life of a person with cancer post treatment until the end of life. It covers the physical, psychosocial, and economic issues of cancer, beyond the diagnosis and treatment phases. Survivorship includes issues related to the ability to get health care and follow-up treatment, late effects of treatment, second cancers, and quality of life. Family members, friends, and caregivers are also considered part of the survivorship experience.

According to the National Coalition for Cancer Survivorship (NCCN) and the NCI office of Cancer Survivorship; “An individual is considered a cancer survivor from the time of cancer diagnosis through the balance of his or her life”. Survivorship includes issues related to all aspects of an individual experiencing a cancer diagnosis. Cancer survivorship starts at diagnosis and continues for the entirety of the individual’s life span.

According to the American Cancer Society, it is estimated that the U.S. population of cancer survivors will increase to almost 9.5 million by the year 2024. After primary, curative treatment ends, most cancer patients transition to the recovery phase of survivorship. Challenges during this time may include difficulty returning to former roles such as parent or employee, anxiety about paying medical bills for cancer treatment, or decisions about which provider to see for the various health care needs that arise. Family and friends who went out of their way to provide support during treatment typically return to more normal levels of engagement and support and the frequency of meetings with the cancer care team generally declines. These issues can make it difficult to smoothly negotiate the transition from treatment to recovery. Regular medical care following primary treatment is particularly important for cancer survivors because of the potential lingering effects of treatment, as well as the risk of recurrence and additional cancer diagnoses.

The overall goals of cancer survivorship include: a. optimizing patient outcomes, b. reduce cost of care, c. and supporting the overall physical and psychosocial well-being of survivors. Specific areas of need include psychological, physical, social, spiritual and economic well-being before, during and after a cancer diagnosis. In addition to incorporating survivorship in all aspects of care, emphasis should also be placed on identifying resources during the acute phase of a diagnosis as well as long term. Other survivorship mandates should include lifetime surveillance for disease recurrence, healthy lifestyle choices and Survivorship care planning.

A Survivorship Care Plan is a summary document compiled after primary treatment is completed, but can be done at any time after a diagnosis of cancer. A survivorship care plan includes a comprehensive summary of treatment(s) received, disease specific follow-up, and identification of resources for on-going/future needs

GOAL: Increase the number of evidence-based survivorship strategies implemented.

Objective 1: Increase by at least three (3) the number of systems implementing the Stanford Chronic Disease Self-Management Program (CDSMP) for cancer survivors (Cancer: Thriving and Surviving Program) by June 2019.

Strategies

- Train at least four (4) current CDSMP Leaders in Thriving and Surviving, the component tailored specifically to cancer survivors.
- Identify systems throughout each region that serve cancer survivors.
- Increase partnership with regional organizations to conduct CDSMP training for cancer survivors throughout each region.
- Monitor, track and provide technical assistance to systems conducting CDSMP training throughout each region.

Objective 2: Increase by four (4) the number of educational opportunities and resources available on issues relevant to cancer survivors by June 2020.

Strategies

- Gather survivorship resource information to be disseminated via MP3C and partner websites.
- Complete and disseminate survivorship “toolkits” of information links and resources such as the UMMC Cancer Institute, public libraries and other venues around the state for public access.
- Identify and promote existing patient navigator and community health advocate tools and systems currently in place in Mississippi.
- Promote the use and development of Survivorship Care Plans for cancer survivors.
- Establish integrated multi-disciplinary teams of health care providers for cancer patients via the Mississippi Quality Improvement Initiative to improve team-based care efforts for cancer survivors.
- Explore policies to establish a paid medical leave program based on best practices of existing programs.
- Engage leadership from schools, pediatric oncologists, and other professionals in MP3C to plan and implement programs for childhood cancer survivors and their families.

- Plan and implement education programs for adults who are cancer survivors to address fertility, long-term and late effects of cancer and cancer treatments.
- Educate oncologists, primary care physicians, and other healthcare providers about long-term survivorship issues.
- Promote the adherence to standardized cancer screening recommendations for cancer survivors throughout their life cycle to monitor for reoccurrence and/or new disease.
- Offer a minimum of 2 educational forums related to cancer survivorship and avenues to meet needs of survivors and caregivers at all stages of the disease (before, during and after)

TREATMENT

Definition:

Cancer treatment encompasses a range of interventions based on the cancer site, tumor characteristics, stage at diagnosis and goal of treatment. Treatment modalities include:

- Surgery for local control
- Radiation therapy for local control and palliation
- Chemotherapy, including biologics, for systemic therapy
- Hormonal and targeted therapies based on tumor characteristics
- Transplantation (stem cell, autologous and allogeneic bone marrow)
- Supportive therapies focused on symptom management

Cancer treatment plans are usually multi-modality and involve treatment planning with a team of cancer care specialists including surgeons, radiation therapists and hematology/medical oncologists with pathologists, radiologists and additional subspecialties involved as appropriate. Treatment delivery involves an expanded cancer care team of nurses, radiation therapists, social workers, dieticians, patient navigators and counselors. Cancer care is patient-centric and involves the care providers whenever possible.

Cancer treatment plans are derived from evidence-based medicine and supported by guidelines approved by credible organizations including the NCCN, ACoS, and oncology specialty organizations.

Goal: Promote adherence to evidence-based cancer care guidelines in assuring access to quality care

Objective 1: By June 2022, the MCCCCP will promote availability of cancer services on five (5) different occasions throughout the state.

Strategies:

- Collaborate with cancer-specific professional organizations in establishing a database of cancer care providers within Mississippi.
- Provide link to resources on MSDH website and share link with cancer advocacy organizations.
- Promote involvement of cancer care providers in cancer clinical trials statewide with emphasis on organizations providing care to minorities and underserved to assure adequate representation in studies.
- Improve health professional knowledge, practice behaviors, and systems support related to use of evidence-based cancer treatment guidelines for their patients.
- Promote awareness and implementation of the National Comprehensive Cancer Network (NCCN) Treatment Guidelines and the Physician Data Query Standards by providers and consumers.
- Collaborate with cancer advocacy organizations to provide educational opportunities for health-care professionals about cancer treatment options, including clinical trials.
- Increase the number of organizations/programs that MCCCCP collaborates with to expand utilization of treatment programs (Oral Health, Delta Coalition, Northeast Coalition, Southern Coalition, BCCP, and PCMH Collaborative)

Objective 2: On at least five (5) occasions, MCCCCP will provide necessary information on resources for the following, but not limited to, transportation lodging and financial assistance that support cancer care from diagnosis through treatment and follow-up by June 2020.

Strategies:

- Support and engage communities, minority health community organizations and those experiencing health inequities in identifying and solving access to care issues.
- Promote and support partnerships to facilitate access to specialty services for rural patients and providers through methods such as telemedicine.
- Promote use of patient access programs providing cancer treatment drugs for those who are medically underserved.
- Partner with cancer related organizations and other public health programs to expand utilization of treatment programs.

POLICY, SYSTEM, AND ENVIRONMENTAL CHANGES

Definition:

Policy includes passing of laws, ordinances, rules, resolutions, or regulations that reduce the risk of cancer or improve the quality of life for cancer survivors.

Government agencies, employers, healthcare institutions, and schools, among others, can impact policy change.

System includes activities that change the rules, or social norms, within an organization in order to address a cancer-related population health issue. System changes are often derived from policy changes.

Environmental includes interventions that change the physical environment in some way to address cancer-related issues.

The Mississippi Comprehensive Cancer Control Plan 2018-2022 includes strategies aimed not only at the individual level change but at the broader policy, system, and environmental change factors that can help reduce and/or eliminate the burden of cancer for the people of Mississippi.

Efforts on implementing these changes are present in all priority areas. Activities among the statewide coalition include: access to smoke-free air; access to healthy nutritious food; access to physical activity/built environment; mandates for insurance coverage for evidence-based early detection techniques; mandates for HPV vaccinations; tanning bed regulations/enforcement; and increased colorectal cancer screenings through the 70x2020 initiative.

Goal: Increase the number of policy, systems and environmental change strategies throughout the regional MP3C coalitions.

Objective 1: Increase the number of municipalities and churches that adopt a PSE change by 25% (smoke-free air, shared -use agreement, nutrition guidelines or recommendations, sun shades) by June 2022.

Strategies

- Strengthen collaborations by partnering with the Office of Tobacco Control and municipalities to implement a smoke-free environment.
- Increase coalition partnerships by providing PSE training to municipalities and churches.
- Increase PSE adoption by providing technical assistance to faith-based health and wellness ministries.
- Increase the number of churches that serve as community access points for cancer education and screening
Engage and provide training to Congregational Health Nurses on implementing cancer control activities.

Objective 2: Increase the number of activities implemented (70x2020 initiative and worksite wellness) to increase CRC screening rates by June 2021.

Strategies

- Partner with the University of Mississippi Medical Center to implement the 70x2020 initiative statewide.
- Collaborate with the MSDH Worksite Wellness Program to increase CRC screening rates among state employees.

Objective 3: Increase the number of regional MP3Cs implementing local PSE change strategies from 1 to 5 by June 2020.

Strategies

- Provide education and training to MP3C members on PSE strategies.
- Provide technical assistance via monthly calls and quarterly site visits.
- Conduct PSE joint training with the Delta Health Collaborative program.
- Increase coalition partnerships by collaborating with local cancer-related associations to determine gaps in cancer related policies, prevention and early detection.
- Compile cancer-related data and statistics and present findings to statewide coalition.

EVALUATION and SURVEILLANCE

The strategies and implemented interventions will be continually monitored and evaluated to determine their effectiveness in achieving the plan goals and objectives. The evaluation activities will include both implementation processes and outcomes measurements.

The graphic #2 illustrates the CDC's Framework for Program Evaluation. The CDC developed the evaluation framework and procedures for use as a systematic means to improve and account for public health actions and for achieving measurable outcomes.

Graphic 2: CDC Framework for Program Evaluation



Source: Adapted from the U.S. Centers for Disease Control Prevention (CDC), Framework for Program Evaluation.

The CDC Framework for Program Evaluation summarizes and organizes steps and standards for effective program evaluation as described in the following paragraphs. The steps and standards are used together throughout the evaluation process. For each step, there is a sub-set of standards that are used as criteria for judging the quality of program evaluation efforts in public health.

Step 1: Engage stakeholders. As the framework suggests, it is important to first establish and gain the interest of stakeholders or partners. These organizations or persons have a vested interest in comprehensive cancer control and will be instrumental in the implementation of the outlined strategies. Partnerships increase the credibility and competence of the program.

Step 2: Describe the program. Program descriptions convey the goals and objectives of the program being evaluated. Descriptions should be sufficiently detailed to ensure understanding of program goals and strategies. The description should discuss the program's capacity to effect change, its stage of development and how it fits into the larger organization and community. Program descriptions set the frame of reference for all subsequent decisions in an evaluation.

Step 3: Focus the evaluation design. The evaluation must be focused to assess the issues of greatest concern to stakeholders while using time and resources as efficiently as possible. Not all design options are equally well-suited to meeting the information needs of stakeholders. After data collection begins, changing procedures might be difficult or impossible, even if better methods become obvious. A thorough plan anticipates intended uses and creates an evaluation strategy with the greatest chance of being useful, feasible, ethical and accurate. Articulating an evaluation's purpose or intent will prevent premature decision-making regarding how the evaluation should be conducted.

Step 4: Gather credible evidence. An evaluation should strive to collect information that will convey a well-rounded picture of the program so that the information is seen as credible by the evaluation's primary users. Information or evidence should be perceived by stakeholders as believable and relevant for answering their questions.

Step 5: Justify conclusions. The evaluation conclusions are justified when they are linked to the evidence gathered and judged against agreed-upon values or standards set by the stakeholders. Stakeholders must agree that conclusions are justified before they will use the evaluation results with confidence. Justifying conclusions on the basis of evidence includes standards, analysis and synthesis, interpretation, judgment and recommendations.

Step 6: Ensure use and share lessons learned. Lessons learned in the course of an evaluation do not automatically translate into informed decision-making and appropriate action. Deliberate effort is needed to ensure that the evaluation processes and findings are used and disseminated appropriately. Preparing for use involves strategic thinking and continued vigilance, both of which begin in the earliest stages of stakeholder engagement and continue throughout the evaluation process.

According to the CDC, this “evaluation framework consists of a set of 30 standards that assess the quality of evaluation activities to determine whether a set of evaluative activities are well-designed and working to their potential. These standards, adopted from the Joint Committee on Standards for Educational Evaluation, answer the question, "Will this evaluation be effective?" The standards are recommended as criteria for judging the quality of program evaluation efforts in public health.

The 30 standards are organized into the following four groups:

1. **Utility standards** ensure that an evaluation will serve the information needs of intended users.
2. **Feasibility standards** ensure that an evaluation will be realistic, prudent, diplomatic and frugal.
3. **Propriety standards** ensure that an evaluation will be conducted legally, ethically and with due regard for the welfare of those involved in the evaluation, as well as those affected by its results.
4. **Accuracy standards** ensure that an evaluation will reveal and convey technically adequate information about the features that determine worth or merit of the program being evaluated.²⁹

Implementation

In order to achieve the goals outlined in the Plan, the strategies must be implemented. The plan will serve to mobilize individuals, organizations, institutions and communities committed to fighting cancer. These groups can use this Plan to select strategies for implementation consistent with their missions. Effective implementation of these diverse strategies will require an ongoing, coordinated and collaborative effort. All partners must embrace the Plan to make a true impact on cancer prevention and control in Mississippi.

Plan of Action – Implementation and Sustainability:

- Begin implementation of selected strategies within three months of plan ratification.
- Identify work groups to lead priority areas, goals, recommendations and strategies.
- Identify strategies to be implemented first.
- Develop written inter-organizational linkages.
- Develop an evaluation mechanism.
- Identify, coordinate and secure funding opportunities.
- Expand partnerships and collaborations.
- Continuously review progress by tracking activities and measuring results.
- Develop and implement a resource plan.

Goal: Increase the number of evaluation and surveillance plans developed, implemented and reviewed annually to determine the impact of the program, partnership, and plan.

Objective 1: Increase the number of evaluation capacity activities (training, resources, and identify evaluation stakeholders) from 1 to 3 by June 2020.

Strategies:

- Identify and promote a cancer evaluation stakeholder network within MSDH and with other institutions.
- Provide technical assistance, training and resources among MCCCCP staff, evaluation stakeholders, grantees, coalitions, and partners.

Objective 2: Increase the number of evaluation methodologies identified to evaluate the implementation of the annual objectives from 1 to 2 by June 2020.

Strategies:

- Create data driven resources that can be utilized by grantees to address most prevalent cancer in each coalition region.
- Revise and disseminate training materials for evaluation methods
- Revise and disseminate annual evaluation report.

Objective 3: Maintain the number of surveillance data and methods (hospital discharge data, cancer registry, vital statistics, local interventions and spatial analysis/GIS) for determining the burden of cancer by June 2017.

Strategies:

- Utilize existing data resources in Mississippi pertaining to cancer, tobacco and obesity.
- Collaborate with Tobacco, Breast and Cervical Cancer Program, and Office of Preventive Health and Program epidemiologists and evaluators to utilize data on comprehensive cancer activities.

CANCER CONTROL IN MISSISSIPPI

Mississippi is active in addressing the burden of cancer through the following programs and activities.

Mississippi Comprehensive Cancer Control Program

The Mississippi Comprehensive Cancer Control Program (MCCCP) located within the Mississippi State Department of Health, Office of Preventive Health, integrates and coordinates a wide range of cancer related activities through a broad partnership of public, private and nonprofit sector stakeholders with a common mission to save lives and reduce the overall burden of cancer. Further information can be found at www.HealthyMS.com/cancer.

Mississippi Partnership for Comprehensive Cancer Control

The Mississippi Partnership for Comprehensive Cancer Control (MP3C) is a broad-based, multi-organizational partnership that integrates public, private and nonprofit sectors in a collaborative effort with common goals and objectives that promote cancer prevention, reduce cancer deaths and minimize the burden of cancer for all individuals throughout the state. The mission is to reduce the incidence, morbidity and mortality of cancer and enhance survivorship in Mississippi. The partnership provides leadership and advocacy for:

- Identifying statewide needs for cancer prevention and control.
- Identifying interventions and resources.
- Coordinating activities.
- Promoting the availability of sufficient workforce, equipment and services.
- Seeking financial resources to fund Plan initiatives.
- Supporting efforts to increase awareness and share strategies to reduce the burden of cancer.

Further information can be found at www.HealthyMS.com/cancer.

Mississippi State Department of Health's Comprehensive Cancer Control - Cancer Sub-Grants

Sub-grants are provided to local health departments and regional coalitions to partner with health care providers, citizens, and community and faith-based groups to educate the public on cancer prevention, healthy lifestyle choices, and the importance of cancer screening and early detection. For further information, call 601-206-1559 and ask for the cancer program.

Mississippi Breast and Cervical Cancer Program

The Mississippi Breast and Cervical Cancer Early Detection Program strives for early detection of cancer in those women at highest risk.

Typically, these are the uninsured, the medically underserved, minority, and elderly women. These women are more likely to have advanced disease when symptoms appear, reflecting differences in access to screening and care.

With federal and matching funds, MSDH/BCCP offers Pap exam screening services at selected health department clinics, Community Health Centers and private providers to uninsured women between the ages of 40 and 64.

Mammography screening is available through contracted providers to uninsured women between 50 and 64 years of age and older. Women 40 to 49 are eligible for screening mammograms when special funding is available. Special exceptions are available for those women between the ages of 18 and 39, but they must receive prior approval.

Mississippi State Department of Health's Breast and Cervical Cancer Program offers Pap exam and mammography screening services to uninsured and underinsured women. Call 1-800-721-7222 for qualification requirements. Further information can be found at www.HealthyMS.com/cervical

Mississippi Tobacco Quitline

The Mississippi Department of Health funds the Mississippi Tobacco Quitline (1-800-QUITNOW or 1-800-784-8669), which provides personalized, professional assistance. The Tobacco Quitline is a telephone counseling, information, and tip line that is available for anyone interested in kicking the habit. The Tobacco Quitline is open six days a week: Monday through Thursday from 7 a.m. to 9 p.m., Friday from 7 a.m. to 7 p.m., and on Saturday from 9 a.m. to 5:30 p.m.

Counseling Online is an online version of the Quitline that gives a personalized quit plan and feedback from a professional counselor based on personal information (<http://www.iqhquitline.com>).

70x2020 Colorectal Cancer Screening Initiative

The goal of the 70x2020 Colorectal Cancer Screening Initiative is to ensure that at least 70% of Mississippians are up-to-date with recommended colorectal cancer screening by the year 2020. To reach the 70x2020 goal, all parties with a vested interest in reducing the burden of colorectal cancer in Mississippi shall work as a collaborative partnership. Further information can be found at www.umc.edu/70x2020strategicplan

Acknowledgments

The Mississippi Comprehensive Cancer Control Plan 2018-2022 is the product of a joint effort of Mississippi State Department of Health Comprehensive Cancer Control Program, partner organizations, health professionals, and individuals across the state of Mississippi. Special thanks go to the Mississippi Partnership for Comprehensive Cancer Control Coalition Steering Committee members and volunteers for their dedication. Their input, energy, and expertise have been essential to the development of this Plan.

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Southern Regional Chair:

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Coastal Regional Chair:

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Delta Regional Chair:

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Northeast Regional Chair:

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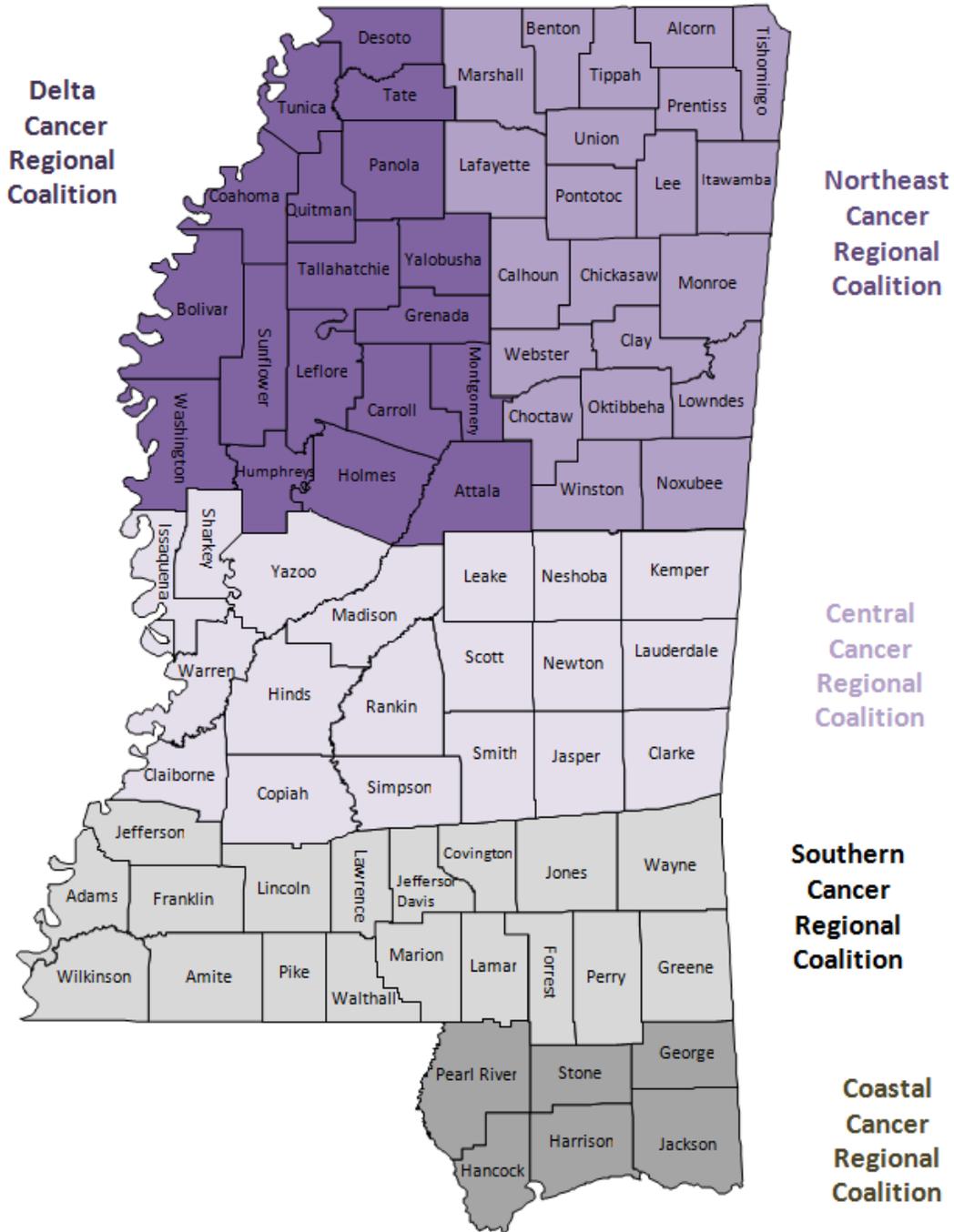
MCCCP Representative

Chigozie Udemgba

Regional Coalitions will be reimbursed quarterly based on completion of the following benchmarks.

A. Coalition Infrastructure and Maintenance	
Tasks	Documentation
1. Quarterly Regional Coalition Meeting	Agenda, Sign-in Sheet, Supporting Documents, Meeting Highlights, Quarterly Events Form, Regional Membership List, and Calendar of Upcoming Events (Whichever method you use from above, not necessarily all these documents)
2. Quarterly MCCCCP Meeting with Regional	
3. Bimonthly Technical Assistance Call	
4. Regional Active Members Assessment and Promotion	
B. Partnership Building	
Tasks	Documentation
1. Regional Tobacco Coalition Meeting	Agenda, Sign-in Sheet, Meeting Highlights,
2. Regional Coalition Recruitment/Partnership Participation	Quarterly Progress Reports, Quarterly Events Form, New Member Form, and Calendar of Upcoming Events
3. Serve as community resource for cancer prevention and control activities within the region	
C. Policy, Systems, and Environmental Change	
Tasks	Documentation
Work plan will be developed in collaboration with MCCCCP. Complete or support at least one of the PSE activities: <ul style="list-style-type: none"> • Access to smoke-free air • Access to healthy nutritious food • Access to physical activity/built environment • Mandates for insurance coverage for evidence-based early detection techniques • Mandates for HPV Vaccinations • Tanning Bed Regulations/Enforcement • 70x2020 Colorectal Cancer Screening Initiative 	Quarterly Progress Reports, Quarterly Events Form, Supporting Documentation, and Calendar of Upcoming Events
D. NCCCCP Priority Area	
Tasks	Documentation
Work plan will be developed in collaboration with MCCCCP. Complete project which promotes at least one of the NCCCCP priority areas: <ul style="list-style-type: none"> • Prevention • Early Detection • Clinical Trials • Survivorship • Treatment 	Quarterly Progress Reports, Event Forms, and Supporting Documentation

Mississippi Partnership for Comprehensive Cancer Control (MP3C) Coalition Regional Map



The following resources are for implementing strategies related to the goals and objectives of the *Mississippi Comprehensive Cancer Control Plan*

The information below is provided with the sole intent to share some resources, pertaining to cancer, available in the internet and do not necessarily indicate endorsement for any or all organizations or web addresses listed nor assume responsibility for content, by those of MSDH or CDC.

The Guide to Community Preventive Services (“The Community Guide”) <http://www.nnphi.org/CMSuploads/MS2013.pdf>

The Guide to Community Preventive Services is a free resource to help you choose programs and policies to improve health and prevent disease in your community. Systematic reviews are used to answer these questions:

- Which program and policy interventions have been proven effective?
- Are there effective interventions that are right for my community?
- What might effective interventions cost; what is the likely return on investment?

Cancer Control P.L.A.N.E.T. (Plan, Link, Act, Network with Evidence-based Tools) <http://cancercontrolplanet.cancer.gov/>

The Cancer Control P.L.A.N.E.T. is a portal that provides access to data and research-tested resources that can help planners, program staff, and researchers to design, implement, and evaluate evidence-based cancer control programs. This site also links to scientific reviews of cancer, comprehensive cancer control plans from other states, and contact information for potential partners.

Agency for Healthcare Research and Quality (AHRQ) <http://www.ahrq.gov>

The Agency’s mission helps achieve improved safety, quality, affordability, accessibility of health care; public health promotion and protection, disease prevention, and emergency preparedness; promote the economic and social well-being of individuals, families, and communities; and advance scientific and biomedical research and development related to health and human services. The Agency has a broad scope that touches on nearly every aspect of health care including:

- Clinical practice
- Outcomes of care and effectiveness
- Evidence-based medicine

- Primary care and care for priority populations
- Health care quality
- Patient safety/medical errors
- Organization and delivery of care and use of health care resources
- Health care costs and financing
- Health care system and public health preparedness
- Health information technology
- Knowledge transfer

Research Tested Intervention Programs (RTIPs)

<http://rtips.cancer.gov/rtips/index.do>

Research-tested Intervention Programs (RTIPs) is a searchable database of cancer control Interventions and program materials and is designed to provide program planners and public health practitioners with easy and immediate access to research-tested materials. Sponsored by the National Cancer Institute (NCI) and the Substance Abuse and Mental Health Services Administration (SAMHSA), the online directory provides a review of programs available for use in a community or clinical setting.

Mississippi State Department of Health

<http://www.healthymms.com>

The Department of Health works with federal, state and local partners to help people in Mississippi stay healthier and safer. Programs and services help prevent illness and injury, promote healthy places to live and work, provide education to help people make good health decisions and ensure our state is prepared for emergencies.

All-Cancers Websites (URL)

American Cancer Society (ACS)	www.cancer.org
American College of Surgeons (ACoS)	www.facs.org
American Society of Clinical Oncology	www.cancer.net/survivorship
Cancer Care	www.cancercare.org
National Cancer Institute (NCI)	www.cancer.gov
National Children’s Cancer Society	www.children-cancer.org
U.S. Centers for Disease Control and Prevention (CDC)	www.cdc.gov/cancer

Cancer Specific Websites (Mississippi's top selected cancers)

Breast Cancer

Susan G. Komen for the Cure
National Breast Cancer Foundation
abcd®: after breast cancer diagnosis

www.komen.org
www.nationalbreastcancer.org
www.y-me.org

Cervical Cancer

Foundation for Women's Cancer

www.foundationforwomenscancer.org

Colon Cancer

Susan Cohan Colon Cancer Foundation

www.coloncancerfoundation.org

Kidney Cancer

Kidney Cancer Association

www.kidneycancer.org

Leukemia and Lymphoma

Leukemia and Lymphoma Society

www.lls.org

Lung Cancer

Lung Cancer Alliance
lungCANCER.org

www.lungcanceralliance.org
www.lungcancer.org

Myeloma Cancer

Leukemia and Lymphoma Society
International Myeloma Foundation

www.lls.org
www.myeloma.org

Oral Cancer

National Institute of Dental and
Craniofacial Research
Oral Cancer Foundation

www.nidcr.nih.gov
www.oralcancerfoundation.org

Ovarian Cancer

National Ovarian Cancer Coalition
Ovarian Cancer Research Fund Alliance
Foundation for Women's Cancer

www.ovarian.org
www.ovariancancer.org
www.foundationforwomenscancer.org

Pancreatic Cancer

Pancreatic Cancer Action Network

www.pancan.org

Prostate Cancer

Us TOO International
Prostate Cancer Foundation

www.ustoo.com
www.pcf.org

Skin Cancer

Skin Cancer Foundation

www.skincancer.org

Testicular Cancer

Testicular Cancer Resource Center

<http://tcr.acor.org/>

Cancer Survivors Websites

American Cancer Society (ACS)

www.cancer.org

American College of Surgeons:

Commission on Cancer

www.coc@facs.org

American Society of Clinical Oncology
(ASCO)

www.cancer.net/patient/survivorship

Cancer Support Community

www.cancersupportcommunity.org

Journey Forward

www.journeyforward.org

Live Strong

www.livestrong.org

National Coalition for Cancer Survivorship

www.canceradvocacy.org

National Accreditation Program

for Breast Cancer

www.napbc@facs.org

Oncology Roundtable,

Delivering Sustainable Survivorship Care

www.advisory.com

Patient Resource Cancer Guide

www.patientresource.net

Planet Cancer (young adults age 15-39)

www.planetcancer.org

Survivorship A to Z

www.survivorshipatoz.org/cancer

Financial Assistance Websites

American Cancer Society (ACS)

www.cancer.org

Cancer Care

www.cancercare.org/financial

Leukemia and Lymphoma Society

www.lls.org

National Children's Cancer Society

www.children-cancer.org

Partnership for Prescription Assistance

www.pparx.org

Insurance Assistance Websites

Patient Advocate Foundation-The

www.patientadvocate.org

National Underinsured Resource

Directory

Cancer Screening Websites

Guidelines for the Early Detection of Cancer

(ACS)

www.cancer.org

Screening and Testing to Detect Cancer (NCI)

www.cancer.gov/cancertopics/screening

U.S. Preventive Services Task Force

www.uspreventiveservicestaskforce.org/

State and National Data Resources Pertaining to Cancer, Population, Tobacco, Chronic Disease, and Health Prevention

National:

- ❖ American Cancer Society: www.cancer.org
- ❖ Behavioral Risk Factor Surveillance System: www.cdc.gov/brfss
- ❖ Cancer Control P.L.A.N.E.T: <http://cancercontrolplanet.cancer.gov>
- ❖ CDC Division of Cancer Prevention and Control: www.cdc.gov/cancer
- ❖ Healthy People 2020: www.healthypeople.gov
- ❖ Morbidity and Mortality Weekly Report (MMWR): <http://www.cdc.gov/mmwr/>
- ❖ National Cancer Institute (NCI): www.cancer.gov
- ❖ National Program of Cancer Registries: <http://www.cdc.gov/cancer/npcr/>
- ❖ State Cancer Profiles: www.statecancerprofiles.cancer.gov
- ❖ Surveillance, Epidemiology, and End Results Program (SEER), National Cancer Institute: <http://seer.cancer.gov/>

Mississippi:

- ❖ MSDH Health Data and Statistics <http://msdh.ms.gov/msdhsite/index.cfm/31,html>
- ❖ MS Cancer Registry (cancer data) <https://www.cancer-rates.info/>
- ❖ MS Tobacco Data <http://mstobaccodata.org/>
- ❖ State Health Facts <http://kff.org/statedata/>
- ❖ Mississippi Statistically Automated Health Resource System (MSTAHRS) <http://mstahrs.msdh.ms.gov/>
- ❖ Mississippi Comprehensive Cancer Control Program: <http://healthymms.com/cancer>

Further information

ACT Center for Tobacco Treatment	601-815-1180
American Cancer Society – Cancer Helpline	1-800-227-2345
American Lung Association – Helpline	1-800-LUNGUSA
Komen’s National Breast Care Helpline	1-877-GOKOMEN (1-877-465-6636)
Leukemia & Lymphoma Society	1-800-955-4572
National Coalition for Cancer Survivorship	1-877-622-7937

PARTNERS

- A Comprehensive Tobacco Center (ACT) University of Mississippi Cancer Institute
- Abundant Living Community Organization
- Advocates for Breast Cancer Awareness
- American Cancer Society (ACS)
- American Lung Association (ALA)
- Asian Americans for Change (AAC)
- Baptist Centers for Cancer Care
- Baptist Health Systems
- Beautiful U Mastectomy Boutique
- Biloxi Radiation Oncology Center
- Caffee, Caffee & Associates PHF, Inc
- Catholic Charities Incorporated Diocese of Jackson
- Center for Mississippi Health Policy
- Central Mississippi Planning and Development District (CMPDD)
- Children's of Mississippi – Mississippi Safe Kids
- Choctaw County Medical Center
- Clarion Ledger
- Cleveland Medical Clinic
- Comfort Care Nursing
- Deep South Network for Cancer Control – Community Health Advisor
- Dell, Inc – Business Development
- Delta Alliance for Congregational Health
- Delta Health Alliance
- Divine Health Ministries
- Family Health Care Clinic, Inc.
- Family Life Assembly of God Church
- Fannie Lou Hamer Cancer Foundation, Inc.
- First Baptist Church of Jackson
- Forrest General Hospital
- Friendship Missionary Baptist Church
- Friendship Connection, The
- Greater Fairview Baptist Church
- Greenwood Clinic
- Hancock Women's Center
- Hicks Associates
- Information & Quality Healthcare (IQH)
- Jackson Convention Visitors Bureau
- Jackson State University (JSU), School of Health Sciences
- JSU, Center for Excellence in Minority Health
- JSU, School of Public Health, Department of Epidemiology
- Jackson-Hinds Comprehensive Health Center
- Jefferson Medical Associates, South Central Regional Medical Center
- Kare-In-Home Hospice
- Leukemia and Lymphoma Society
- Lights Jewelry/Pink Ribbon Fund
- Living Faith Temple Church
- Louisiana-Mississippi Hospice and Palliative Care Organization
- Magnolia Health Plan
- Mallory Community Health Center
- Merit Health
- Mid Delta Family Practice Clinic
- Mississippi Comprehensive Cancer Control Program (MCCCP)
- Mississippi Department of Insurance (MID)
- Mississippi Department of Education (MDE)
- Mississippi Division of Medicaid
- Mississippi Gulf Coast Community College (MGCCC), Nursing
- Mississippi Hospital Association
- Mississippi House of Representatives
- Mississippi Insurance Department (MID)
- Mississippi Nurses Association
- Mississippi Nurses Foundation
- Mississippi Oncology Society
- Mississippi Partnership for Comprehensive Cancer Control (MP3C)
- Mississippi Public Broadcasting (MPB)
- Mississippi Rural Health Association (MSRHA)
- Mississippi State Department of Health (MSDH), Breast and Cervical Cancer
- MSDH, Community Health Directors
- MSDH, Delta Health Collaborative

- MSDH, Districts Disease Intervention Specialists
- MSDH, District Health Educators
- MSDH, Office of Child Care Licensure
- MSDH, Office of Communications
- MSDH, Office of Health Data and Research
- MSDH, Office of Health Services
- MSDH, Office of Oral Health
- MSDH, Office of Preventive Health
- MSDH, Office of Tobacco Control
- MSDH, Policy and Planning
- MSDH, Regional Oral Health Consultants
- MSDH, STD/HIV Office
- Mississippi State University (MSU)
- Mississippi State University Extension Service
- Mississippi Tobacco-Free Coalition
- Mississippi Tobacco Quitline
- Mississippi University for Women, Division of Health and Kinesiology
- Mississippi University for Women, Nursing Program
- Mississippi Valley State University (MVSU)
- My Brother's Keeper
- New Horizon Church
- New Jerusalem Church
- Newton Health Care Center
- North Mississippi Medical Center - Cancer Center
- Partnership for a Healthy Mississippi
- Pine Belt Mental Healthcare Resources
- Singing River Health System
- Southeast Mississippi Rural Health Initiative
- Samuel Chapel United Methodist Church
- Samuel Chapel Missionary Baptist Church
- South Central Regional Medical Center - Cancer Center
- Southeast Mississippi Rural Health Initiative (SMRHI)
- St. Dominic Hospital
- St. Dominic's Hospital Cancer Center
- St. Peter Missionary Baptist Church
- Sta-Home Health and Hospice Quality Improvement
- State Board of Physical Therapy
- State of Mississippi Policy Advisor
- Surgery Consultants of Oxford
- Susan G. Komen Foundation
- University of Mississippi (Ole Miss), Health Promotion
- University of Mississippi Medical Center (UMMC), Cancer Institute
- UMMC, Department of Hospital Education
- UMMC, Department of Radiology
- UMMC, School of Pharmacy
- University of Southern Mississippi (USM), Campus Ministry
- USM, Institute for Disability Studies
- U.S. Postal Service/Occupational Health
- Veterans Administration Medical Center
- Zeta Phi Beta Sorority, Inc.
- 70x2020 Colorectal Cancer Screening (CRC) Initiative

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