Population Health Strategic Plan

THE UNIVERSITY OF TEXAS COLLABORATION ON POPULATION HEALTH INNOVATION AND IMPROVEMENT

Updated January 24, 2017

THE UNIVERSITY OF TEXAS
MD Anderson Cancer Center

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Population Health Strategic Plan

Executive Summary

In 2016, The University of Texas System approached eight of their healthcare-related institutions to participate in developing a system-wide Population Health Strategic Plan. Dr. Ernest Hawk, vice president, Cancer Prevention and Population Science, and Dr. Lewis Foxhall, vice president, Health Policy, lead this initiative at MD Anderson. An institutional-wide Steering Committee regularly convenes to provide guidance and consultation for the strategic plan's vision and deliverables. A community needs assessment was also completed with the assistance of community stakeholders such as members of the Cancer Alliance of Texas (CAT) and the Cancer Control subcommittee of the institution's Board of Visitors.

The mission of MD Anderson Cancer Center is to eliminate cancer in Texas, the nation and the world through exceptional programs that integrate patient care, research and prevention. This mission also includes education for undergraduate and graduate students, trainees, professionals, employees and the public. Given our mission and commitment to Texas as the catchment area for our population health strategic plan, we selected the Texas Cancer Plan (2012) as the model for the plan's goals and objectives developed within the PES framework. In the PES framework, **P** stands for policy, **E** stands for Education and **S** stands for the services to be developed, implemented and evaluated in our catchment area which is described in **Section 1**. The vision of the plan is guided by promoting health as it relates to cancer prevention, treatment and control among our employees, patients, students and the community at large.

The strategic planning process identified four key priority areas for the institution's Population Health Strategic Plan. These priority areas are:

- Reducing health disparities
- Increasing cancer-related vaccination rates
- Eliminating tobacco use
- Promoting healthy eating and physical activity

These priority areas are linked to measurable objectives and indicators. The plan will be monitored and planning and implementation changes will be influenced by data analysis for achievement of proposed outcomes.

Section 2 focuses on data related to health outcomes with additional data provided in the Appendices. **Sections 3-5** of the plan detail the identified community needs and priorities, available resources and health priorities. **Sections 6-7** detail the current capacity and gaps in technology and infrastructure and the population health workforce at the institution. **Section 8** documents additional community health needs related to the unique geography of Texas and Hispanic health. The details of our comprehensive goals plan and key priorities areas are covered

in **Section 9**. The potential impact of not implementing the plan upon the population health landscape is summarized in **Section 10**.

In collaboration with other UT system institutions, government agencies, educational and healthcare institutions, community-based organizations and collaborations with the public, we plan to build upon the goals and priorities identified in the plan in furtherance of the goal of Making Cancer History®.

Best regards,

Ronald A. DePinho, M.D.
President
The University of Texas MD Anderson Cancer Center

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SECTION 1 - Catchment Area

The University of Texas MD Anderson Cancer Center (MDACC) is a global leader in cancer patient care, research, prevention, and education. MDACC is a freestanding, NCI-designated comprehensive cancer center within The University of Texas (UT) System. As one of the health institutions within The University of Texas, MD Anderson Cancer Center has selected a catchment area of the entire state of Texas, as this is consistent with our role as a Cancer Center Support Grant (CCSG) entity.

Texas is currently the 2nd most populous state in the country, with approximately 27,469,114 residents, 50.4% of which are female. [1] There are 254 counties in Texas and population distribution varies across the state. Further distinction exists between rural and metropolitan areas and border and non-border counties. Texas is a diverse state, with a racial/ethnic demographic breakdown of 43.0% non-Hispanic White, 38.8% Latino, 12.5% African American, and 4.7% Asian.[1] Texas is more diverse compared to other states, allowing it to serve as a national example in terms of population growth, acculturation, health disparities and cancer care. Texas is currently only one of four states nationwide that is a "majority-minority," where the non-Hispanic white population is below 50%. The United States is not projected to reach this status until 2044. [2] Population density throughout Texas varies depending on geographic region. The diversity and prevalence of frontier, urban, and rural counties contribute to disparate health outcomes and disparities, which will be further explained in sections 2 and 8.

Population growth within Texas has consistently outpaced other states in recent years. The state has led the nation in annual population growth since 2006.[3] Houston and Austin, TX, as well as Orlando, FL, were the only three metropolitan areas nationwide to be in the top 20 among both in population growth and speed of growth between 2014 and 2015.[4] Harris County, which is where MD Anderson is located, actually led the US in countywide population growth by adding approximately 90,000 people from 2014-2015.[4]

In addition to this, five of the nation's 11 fastest growing cities and towns, with at least 50,000 residents, were in Texas.[5] This increasing trend and influx of new residents puts Texas in a very unique position regarding age distribution. Among all states, Texas has the third largest elderly

population (which is expected to double by the year 2030) but still remains relatively younger than most states in the country with respect to its median age of 34.2 years old.[3]

MD Anderson is a performing provider within the Delivery System Reform Incentive Payment (DSRIP) Program created by the Medicaid 1115 Waiver. This is intended to reward hospitals that invest in improving access, quality and patient health for the Medicaid, Medicaid-eligible and uninsured population [1]. The DSRIP program has given the institution the opportunity to implement cancer prevention programs to address health care disparities faced by low-income, uninsured populations within a nine-county region in Texas*[1]. The financial assistance program offered by MD Anderson is also available to state residents if they meet the eligibility requirements pertaining to residency status and financial parameters. In Fiscal Year 2015 (FY15), almost half of patients (46%) reside in the primary 10-county area surrounding the institution. The remaining come from the rest of Texas (27%), the nation (23%) and internationally (4%) as shown in Appendix A (figures 1.1, 1.2). Although MD Anderson is primarily located in Houston on the campus of the Texas Medical Center, our patients come from all regions.

In FY15, more than 135,000 people sought care from MD Anderson and more than 9,400 participants were enrolled in clinical trials exploring innovative treatments, making our clinical trial program one of the largest in the nation. Regional care centers throughout the Greater Houston area have expanded our care model by providing cancer care to Texans in their neighborhoods. Furthermore, the MD Anderson Cancer Network advances the institutional mission of eliminating cancer by collaborating with community hospitals and health systems around the world to provide the highest quality and most advanced cancer care to patients in the communities where they live. In 2017, MD Anderson will expand within Texas, through a collaboration with UT System. Five UT institutions will work collectively in the fight against cancer and to better serve Texans and their families.

*[1] Region 3 consists of nine counties; Austin, Calhoun, Chambers, Colorado, Fort Bend, Harris, Matagorda, Waller, and Wharton.

MD Anderson is committed to discovery and translation of new knowledge about cancer risk and prevention in the laboratory, the clinic and the community. In FY2015, MD Anderson invested more than $780.5 million in research, a 25% increase in the past five years. Prevention is a cornerstone of MD Anderson's approach to eliminating cancer. MD Anderson is a recipient of the Clinical and Translational Sciences Award (CTSA), which is designed to leverage discoveries in the laboratory, clinic or community and develop interventions to improve health of populations within the community. MD Anderson's CTSA catchment areas are focused on Houston and Brownsville and coordinated by The University of Texas School of Public Health in both cities. However, collaboration with other CTSA awardees across the state is ongoing.

From a socioeconomic perspective, Texas is the 2nd largest economy in the country, producing an economic output of $1.65 trillion and has the 2nd fastest job and economic growth rates in the past five years.[6] As of April 2016, Texas has an unemployment rate of 4.4% compared to the national average of 4.9%.[7] Considering its very large population, Texas also does well in education, with a high school graduation rate of 88.0%. It leads the nation in uninsured citizens with 17.1% uninsured throughout the state.[8] The median household income in Texas is $52,576, which is lower than the national average. The state also has the highest child poverty rate and one of the highest overall poverty rates in the country.[1] Based on all of these statistics, one can imagine that large disparities in health status exists by education level. With the rapid increase in population, significant health challenges and widening disparities must be addressed in a strategic manner.

SECTION 2 - Data on Health of the Population (Health Outcomes) and Health Disparities

MD Anderson is universally committed to making cancer history, improving population health, and the health outcomes of its patients. There has been consistent progress in reducing cancer death rates and improving the survival rates of specific cancers. According to 2015 estimates, there were 109,000 new cancer cases and 36,000 cancer deaths in Texas.[9] Cancer costs Texas $28 billion annually in both direct medical care and indirect costs due to lost productivity.[10] Since the 1990s, Texas has experienced consistent declines in incidence and mortality rates of most cancers. The most pronounced progress has occurred among breast cancer in females and prostate cancer among Texas males. A complete graphical representation of historical trend data can be found in Appendix B, figure 2.1.

Overall, cancer is the second most common cause of death in Texas, with lung cancer remaining the leading cause of cancer death. The top three cancers with the highest incidence rates are breast, prostate, and lung, while the three sites with the highest mortality are lung, breast, and colorectal cancers.[9] As mentioned previously, Texas has been experiencing population growth primarily driven by Hispanics. The significant aging population in Texas is also quite concerning since the risk of developing cancer increases with age. Over 95% of cancer deaths occur among Texans who are age 45 years or older.[10] A myriad of statewide data exists on the health of the population and offers insight into the overall status of Texas.

Cancer Rates Among Texas by Race, Ethnicity, and Geographic Region

African Americans in Texas have incidence and mortality rates that are higher than other racial and ethnic groups. This disparity is also mirrored on a national scale. The overall age-adjusted cancer incidence rate for African Americans, Whites, and Hispanics in Texas is 455.4, 449.1, and 347.9 persons per 100,000 population respectively Appendix C, figure 3.3.[11] Although white women have historically had higher breast cancer incidence rates than black women, the two rates converged recently and have become virtually equivalent.[12] Despite this, African Americans still have a 42% higher mortality rate from breast cancer while the median age of both diagnosis and death is younger than non-Hispanic white women.

Rural Texans face different obstacles compared to their urban counterparts. Most Texas counties (approximately 177 out of 254) are rural. The majority are designated as health professional shortage areas.[10] Cancer rates in Texas vary by geographic area based on the population demographics, insurance status, access to care and various risk factors that heavily influence health outcomes. Rural Texans are considered to be an underserved population due to the fact that they have less access to medical care and tend to be older, have lower income, and be less likely to have health insurance.[10] For instance, 35 of the state's 254 counties account for 80% of the total uninsured population.[13] Linkage to care and preventative medicine are both essential but currently lacking in such settings. The lack of access to quality health care often requires significant travel by prospective patients.

Among uninsured Texans, about 16% are African American and approximately 30% are Latino, compared with just 10.8% of non-Hispanic whites.[13] Research has shown that individuals without health insurance are more likely to be diagnosed with late-stage disease requiring special treatment and adversely impacting quality of life and survival outcomes.[14] Recent federal-level efforts to extend health coverage to the uninsured have allowed for a greater emphasis on preventive care and screening.[15] Such advancements in the process of eliminating health disparities can reduce the number of premature deaths and possibly make prevention and risk reduction the norm. The Perryman Group's Analysis estimates that every $1 spent on screening and prevention in Texas saves approximately $1.86 in direct health spending.[16] Cancer research and significant statewide investments in cancer research and prevention are leading to more targeted and less invasive treatment options.

From a population health perspective, a concerted effort must be made towards eliminating existing cancer disparities that might be due in part to factors such as socioeconomic status, income, age, acculturation, education level, insurance status, gender, race/ethnicity, or geography. Poverty also plays a pivotal role in cancer-related health outcomes and population health. The American Cancer Society has produced several reports over the past three decades that have concluded that poverty is the primary contributing factor to cancer disparities between racial and ethnic groups.[14] In Texas, approximately 22% of African Americans and 23% of

Hispanics live in poverty, compared to just 10% of non-Hispanic whites.[15] According to the CDC, higher income and education levels are associated with lower rates of chronic disease, obesity and better overall health. People of a lower socioeconomic status (SES) are more likely to lack health insurance, while those with higher educational attainment are able to earn higher incomes and receive health benefits through their employer. Poorer individuals also tend to not seek cancer screening or the necessary care if they are not able to pay for it.

Obesity, Lifestyle and Behavioral Modifications

Lifestyle modifications, as recommended by the US Department of Health and Human Services, the American Cancer Society, MD Anderson Cancer Center, and others can ultimately lead to an improvement in population health and reduction of cancer incidence across the state of Texas.

A substantial amount of the cancer burden that affects Texans (and Americans in general) can be mitigated through lifestyle modification. Health promotion and weight control remain priorities for cancer control in the near future since obesity rates have consistently increased in both children and adults. According to the National Cancer Institute, the projected health and economic burden of obesity will lead to 500,000 additional cases of cancer in the country by 2030.[17] Approximately 1/3 of all new cancer diagnoses in the United States are related to being overweight, lack of physical activity, and/or nutritional habits.[18] Researchers have identified a strong link between obesity and fourteen devastating cancers, including two of the most common cancers, colorectal and breast cancer (post-menopausal).[18] The risk of cancer in adult life is known to increase in relation to childhood body mass index (BMI).[18] Because cancer risk is cumulative over the lifespan, it is vital to intervene in childhood to decrease lifetime cancer risk. The reduction of sedentary lifestyles and consumption of sugary, energy dense foods diets early in life, can help reduce obesity and the development of metabolic and chronic conditions.

Several studies have reported that adhering to health promotion guidelines for diet, physical activity, and maintenance of a healthy body weight is associated with decreasing cancer incidence and mortality.[19] In order to help individuals and communities achieve healthier lifestyles, nutrition and physical activity guidelines for cancer prevention have been designed by

the US Department of Health and Human Services, as well as with other leading organizations such as the American Cancer Society. These recommendations contribute to improving overall population health and apply to chronic disease prevention in general. Adhering to a set of healthy behaviors can have site specific benefits with respect to cancer. For instance, although smoking status is the strongest risk factor associated with lung cancer, broader-related behaviors such as diet and physical activity may have a significant role in reducing lung cancer risk in men specifically.[19] Maintenance of a healthy weight, being physically active and eating a healthy diet are emerging as indispensable cancer prevention activities.

Tobacco, Cancer Screening, and Primary Prevention

Tobacco use is a significant risk factor for cancer incidence and mortality.[12] In fact, smoking causes almost half (48.5%) of deaths from 12 different kinds of cancer.[20] There have been large strides in smoking cessation on a national scale. Since the Surgeon General's first report in 1964 on the hazards of smoking, smoking prevalence among US adults has decreased more than 50%.[21] In Texas, the incidence of lung cancer has decreased 2.6% in men and 0.8% in women since 1995.[9] The recent uptake of electronic cigarettes (e-cigarettes) as a potential alternative to smoking, can have an adverse effect on smoking cessation efforts. The uncertainty of the chemical properties, increasing popularity, and early adoption of e-cigarettes among the youth is quite concerning from a public health perspective.

Although primary prevention is a priority, screening offers the ability for secondary prevention by detecting cancer early, prior to the emergence of symptoms and metastasis. MD Anderson has a set of carefully reviewed screening guidelines for various types of cancer to educate the general public and encourage a shared decision-making process among patients and providers. Screening for colorectal and cervical cancers can prevent cancer through early detection of precancerous malignancies. Texas ranks 41st out of 50 states in 2014, with only 60.1% of adults over the age of 50 reporting following USPSTF guidelines for colorectal cancer screening.[9] From a nationwide perspective, studies show that US-born individuals get screened for colon cancer at almost twice the rate as persons who have lived in the US for less than 10 years.[14] African Americans in Texas also have the highest incidence and mortality rates of colorectal cancer, with cervical cancer

disproportionately affecting both Hispanic and African American women (see Appendix C, figures 3.5, 3.6 for complete graphical breakdown).

Liver cancer incidence rates are about three times higher in men than in women. From 1995 to 2012, the incidence rate of liver cancer in Texas men doubled from 7.9 to 16.5 per 100,000. [9] Hispanics have the highest liver cancer incidence and mortality compared to any other ethnic group. Chronic Hepatitis B (HBV) or Hepatitis C (HCV) are the most common liver cancer risk factors worldwide. [22] HCV is the most common risk factor here in the United States, so physicians must strive to identify high-risk patients.

Comprehensive Approach to Health Disparities

In order to properly ensure a culturally competent workforce, it is necessary to have health care professionals that are both diverse and knowledgeable about the common practices, beliefs, and customs of a wide array of patients and their families. Although African Americans, Hispanics, and American Indian and Alaska Natives cumulatively account for over 26% of the US population, only 6% of physicians are from these minority groups. [14] Physicians and other health care professionals must be cognizant of cultural norms when interacting with patients. Interventions must also cater to the specific needs of the target population, as opposed to a one size fits all approach. Presenting a list of guidelines will not suffice in any cancer prevention efforts. An increased level of commitment must be made in communities where the prevalence, incidence, and mortality of certain cancers are alarmingly high. A comprehensive and targeted community needs assessment will serve as an appropriate guide to the design and implementation of necessary services and assist in leveraging existing resources across the state.

Health disparities remain a persistent challenge in the United States, as well as in Texas. It is especially difficult to identify and define the exact causes of disparities in cancer rates. Despite the downward trends and progress towards eliminating cancer, all segments of the population do not benefit in an equitable manner. Although lack of proficiency in the English language can be a significant barrier to health care utilization and adherence, health literacy plays a pivotal role in the effort to improve the quality of life. Health literacy is defined as the degree to which an individual has the capacity to obtain, communicate, process, and understand health information and services needed to make appropriate health decisions.[23] People with low health literacy are

more likely to report poorer health and are less likely to use preventive services, thus putting them at an increased risk of late-stage cancer diagnosis, hospitalization, and higher healthcare costs. Approximately 14% of US adults over the age of 16 had a below basic level of health literacy, the majority of whom did not graduate high school.[14]

SECTION 3 - Community Needs and Priorities Assessment

Health Priority Assessment

Health priorities were identified primarily through secondary data collection and prioritized with guidance from the MD Anderson Population Health Steering Committee. Given the catchment area of the state of Texas, we have relied on existing health assessments, authoritative reports and available state level data on health outcomes particularly for cancer and associated risk factors. Data sources used include reports developed by the Texas Cancer Registry (TCR), American Cancer Society (ACS), Cancer Prevention Research Institute of Texas (CPRIT), Cancer Alliance of Texas (CAT), health status rankings by the Robert Wood Johnson Foundation (RWJF) among many others. Cancer health outcomes were obtained from the TCR and cancer incidence and mortality data is shown in Appendix C. Data on cancer-associated risk factors for Texas and particular metropolitan statistical areas was obtained from the Behavioral Risk Factor Surveillance System (BRFSS).

Datasets were analyzed and presented at monthly steering committee meetings to familiarize members with the cancer burden across Texas. Committee members helped identify, prioritize and build consensus around the institution's population health strategic plan and ensure alignment with the overall institutional strategic aims. Fourteen goals with corresponding objectives were developed to address identified health priorities. Feedback was obtained via in-person meetings and online qualtrics surveys. Selection criteria was established and adapted for cancer control from prioritization guides developed by the National Association of County and City Health Officials (NACCHO). The steering committee utilized the criteria to select eight goals they perceived as high priority for inclusion in the population health strategic plan. Seventeen committee members responded to the survey and results are shown in figure 1. The goals that obtained the largest consensus for inclusion in the plan are high priority goals and focus areas of this plan. These areas are being presented with greater detail in this report.

Interim Community Needs Assessment

To supplement the analysis of secondary data, an interim needs assessment was conducted to assess cancer control needs across Texas. Due to the large catchment area and timeline, this

approach was utilized to obtain preliminary data on cancer control needs which will be used to design tools for a comprehensive needs assessment in the future and in conjunction with the Commission on Cancer accreditation cycle. Feedback was obtained regarding unmet needs for cancer control from cancer control stakeholders who represent various communities across Texas, and are engaged in the Cancer Alliance of Texas (CAT) or MD Anderson's Board of Visitors, Cancer Control Advisory Group.

The CAT group, formerly known as the Texas Cancer Council, is led by the Texas Department of State Health Services and includes individuals who represent public and private educational, treatment, research and patient support organizations from across the state (See Table 1). The coalition is actively engaged in the development of the Texas Cancer Plan which serves as the blueprint for cancer control in Texas. MD Anderson's Cancer Control Advisory Group consists of members from the Board of Visitors and is charged to advise and prioritize the institution's community outreach in cancer prevention. Both stakeholder groups received a cancer control needs assessment survey via email and were given two weeks to respond. Survey respondents were asked to identify major unmet needs within their communities across cancer control domains of primary prevention, secondary prevention, palliative care and survivorship within their respective communities. Respondents from various counties participated as well as those who serve the entire state of Texas. A total of thirty-two responses were collected, however each question was not required to be answered therefore total number of responses by question varies.

Summary of Cancer Control Needs Survey Results

Primary prevention

Stakeholders identified access to care, tobacco control, vaccine uptake, obesity prevention, and health literacy and education as major areas of unmet needs for primary prevention of cancer (Table 2). Access issues such as lack of health insurance coverage, availability and access to cancer screenings, tobacco cessation resources and to treatment services were described as specific areas that should be addressed. Screening and treatment services for non-citizens was also mentioned as well as issues for uninsured Texans. Approximately one-third of respondents identified health education as an unmet need and suggested an increase of community-oriented health education on health promotion, screening and early detection. Respondents highlighted a

need for increased education on the connection of nutrition and exercise to obesity and risk of cancer. One-fourth of respondents reported tobacco prevention and control as an unmet need. They specifically addressed alternative nicotine delivery systems and e-cigarettes. Several respondents highlighted the need for more effective tobacco prevention and cessation efforts particularly in urban communities and within disparate populations. Awareness of community resources and programs specifically for minority populations, high-risk groups and uninsured populations was also identified as areas that need to be addressed. Respondents identified the need for improved vaccination against the Human Papillomavirus (HPV) especially in children, adolescents and specialized populations such as gay and bisexual males.

Secondary Prevention

Access to care issues, awareness of importance of cancer screenings, and availability of culturally responsive educational resources were identified as unmet needs for secondary prevention and early detection of cancer (Table 2). Screening of HPV-associated anal cancer, colorectal cancer, breast cancer and cervical cancer were reported as areas of interest. Specific services related to accessing care such as encouraging nontraditional clinic hours for screening services, providing transportation options and implementing outreach programs for populations rarely screened for cancer were suggested. Respondents noted screening services must take into account potential clinical care options and cost of detecting and treating cancer as this will impact screening rates and possibly increase motivation for screening. Culturally-competent training for providers and culturally-responsive education for the community were also identified as a need for secondary prevention.

Palliative Care and Survivorship

Lack of services, palliative care education, awareness, provider training and a need for improved coordination across the continuum of care were identified as unmet needs (Table 2). Multiple respondents expressed there are minimal resources for palliative care options in their respective communities. One respondent specifically stated that there are a lack of specialists trained in palliative care in central Texas to support patients. Furthermore, they expressed that palliative care has low integration within the treatment plan from the point of diagnosis and this needs to be addressed. Other respondents echoed this concern and stated provider training is needed to

better equip healthcare providers. Suggestions to address current gaps include developing partners to encourage coordinated patient care, provide cancer navigation and support services and reduce financial limitations of program funding to increase access to palliative care options.

Survivorship care needs include addressing physical and mental health needs of cancer survivors. Respondents identified specific needs listed in Table 2, which include access and awareness of survivorship resources and the need for a system to help navigate patients to survivorship resources and programs. Additional needs include peer support services, an increase in programs which address non-medical needs, tobacco cessation, caregiver training, education and support services.

Table 1. Cancer Alliance of Texas (CAT) Member Institutions

Cancer Alliance of Texas (CAT) Member Institutions		
American Cancer Society	LIVESTRONG Foundation	Texas Medical Association
Breast Cancer Resource Centers of Texas	MHP, Inc. Promovideno Vidas Saludables	Texas Oncology Foundation Inc.
CanCare	Moncrief Cancer Institute	Texas State Cancer Advocacy Movement for Colleges and Outreach
Cancer Foundation for Life	National Breast Cancer Foundation Inc.	Texas Tech Paul L. Foster School of Medicine
Cancer Prevention and Research Institute of Texas	Native American Health Coalition	Texas Tech University Health Science Center
Cancer Services Network	Patient Advocate Foundation	The Leukemia and Lymphoma Society
Cancer Support Community North Texas	Patient Planning Services Inc.	The Rose
CancerForward: The Foundation for Cancer Survivors	Pfizer Pharmaceuticals	The Texas Society of Genetic Counselors
Casting for Recovery Inc.	Seton Medical Center	The University of North Texas Health Science Center
Dia de la Mujer Latina Inc.	Single Jingles Testicular Cancer Foundation	The University of Texas Health Science Center at

		Houston
ePatient Finder	St. David's Healthcare	The University of Texas MD Anderson Cancer Center
Faces of Survivors	Stiletto Stampede	The University of Texas School of Nursing
Hope through Grace	Susan G. Komen for the Cure	The University of Texas School of Social Work
Hospice Austin	Texas A&M Health Science Center	TMF Health Quality Institute
Intercultural Cancer Council	Texas Agrilife Extension Service	U.S. Environmental Protection Agency
Legacy Community Health Services Inc.	Texas Christian University-Center for Oncology Education and Research	The University of Texas Health Science Center at San Antonio
Lesbian Health Initiative	Texas Department of State Health Services	Voices of Survivors

Figure 1. Strategic Plan Goal Prioritization Survey Results

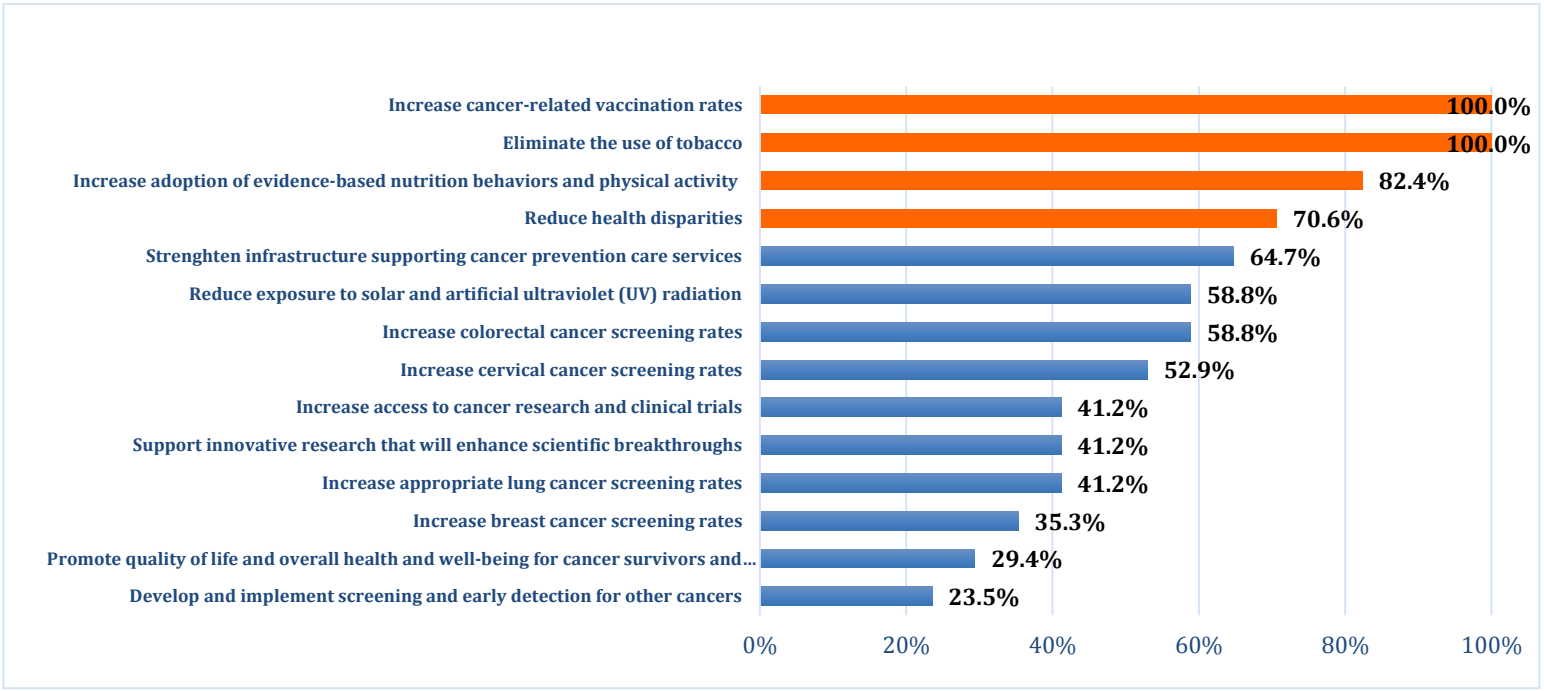


Table 2. Key findings of Community Needs Survey

Cancer Control Domain	Key Findings (identification of unmet needs)
Primary Prevention (N=31)	• Lack of access to care (lack of insurance coverage, barriers to access care, availability of cancer resources, socioeconomic limitations) • Low health literacy • Lack of community-oriented health education on health promotion, screening and early detection • Tobacco prevention and control (policy, systems and environmental change, inclusion of prevention and cessation resources for e-cigarettes, control in disparate populations, lack of financial commitment) • Awareness of available community resources and programs, advocacy of cancer prevention and public education • Vaccine uptake (HPV) • Addressing obesity-related risk factors (education on nutrition and health promotion) • Testing for environmental exposures such as radon in homes • Training on cultural competency for providers • Reduce challenges for reimbursement of counseling
Secondary Prevention (N=30)	• Lack of access to care (lack of insurance coverage) • Address structural barriers to accessing timely screening services (transportation, extended clinic hours) • Lack of awareness of the importance of screening and early detection • Lack of culturally competent education on screening and early detection • Unmet screening needs include: screening for HPV-associated anal cancer, colorectal screening, screening and diagnostic mammograms and pap tests. • Address health disparities
Palliative Care (N=26)	• Lack of access to care (lack of insurance coverage) • Lack of services and resources available • Lack of providers practicing palliative care • Improve training of specialists and care teams on palliative care and pain and symptom control • Improve coordination across continuum of care • Affordability, accessibility and awareness of palliative care options • Lack of support and navigation services
Survivorship Care	• Address physical, mental health needs of cancer survivors

(N=30)	• Lack of non-medical resources/services (financial, nutrition, spiritual, lifestyle changes such as returning to work programs etc.) • Lack of awareness of survivorship care plans, behavioral programs (tobacco cessation, post-event counseling) • Increase access and awareness of existing survivorship programs. Increase peer support services • Lack of caregiver education, training and support services • Inadequate knowledge and understanding of effective survivorship programming • Lack of a system to help navigate survivors to resources and follow-up on utilization of resources • Lack of implementation of survivorship care plans in family practice settings

SECTION 4 - Identified Resources in the Community

MD Anderson's mission is to eliminate cancer in Texas, the nation and the world through exceptional programs that integrate patient care, research and prevention making the institution an invaluable resource in the fight against Cancer.

In FY15, MD Anderson provided expert patient care for 135,000 people and enrolled more than 9,400 participants in clinical trials exploring innovative treatments. In addition to patient care, MD Anderson is devoted to groundbreaking research, education and cancer prevention. At MD Anderson, crucial scientific knowledge gained in the laboratory is rapidly translated into clinical care. The Moon Shots Program is accelerating the pace of converting scientific discoveries into clinical advances that reduce cancer deaths. The Moon Shots leverage cross-cutting industry-like platforms and brings innovative technology and specialized expertise together to help address the burden of cancer. The Cancer Prevention and Control Platform focuses on community-based efforts in cancer prevention, screening, and early detection and survivorship to educate and achieve a measurable reduction in the cancer burden. The platform engages specialized expertise, including community and business partners, to develop and implement cancer prevention and control programs through policy interventions, public and professional education programs and community clinical services.

We conducted an institutional program scan to identify existing programs being offered to the community by MD Anderson. Additionally, we have conducted an environmental scan to help identify cancer prevention programs available for Texans, particularly the uninsured and underserved residents across the state. Both of these scans provide a snapshot of existing programmatic efforts regarding cancer prevention and control efforts.

MD Anderson Programs

An annual survey of the institution's comprehensive cancer and control programs is conducted by contacting Department Chairs and is updated on a rolling basis. The survey engages internal stakeholders to obtain program details and results are compiled into an institutional program inventory which is in Appendix D The results from the Fiscal Year 16 (FY16) institutional inventory includes a total of 84 projects. Approximately 80% (67) of programs have a

community-based focus. Current institutional efforts have been summarized and organized according to domain (focus area) and services such as public education, professional education, policy and screening services. Program focus areas include prevention and screening for colorectal cancer, cervical and HPV-associated cancers, lung cancer, breast cancer, skin cancer, energy balance (nutrition and exercise), cancer survivorship and other identified disease sites. Highlighted in this section are institutional efforts that closely align with the focus areas of the strategic plan and the institution's overall mission and moonshot priorities.

Tobacco-Related Programs

Tobacco use is responsible for one in every three cancers diagnosed in the United States. [24] Programs which reduce the use of tobacco are crucial not only to reduce the burden of tobacco-related cancers but also are instrumental in the reduction of morbidity associated with cardiovascular and metabolic diseases, respiratory diseases and perinatal conditions. [24] The institutional scan identified thirteen programs that focus on tobacco and lung cancer prevention and screening. Activities for these types of programs include tobacco prevention among youth and adults, education on the risk of tobacco use and secondhand smoke, and a web-based Spanish bilingual program targeting adolescents through videos, animation, and interactive methods.

In 2014, the End Tobacco initiative was created and is a statewide, concerted effort to eliminate the use of tobacco. EndTobacco focuses on policy, prevention and cessation services with the goal of ending tobacco use and addiction among our patients, employees, and their families and in organizations and communities across the state and nation. The overarching goals are to reduce smoking among youth, to reduce the proportion of nonsmokers who are exposed to secondhand smoke, and to increase counseling and smoking cessation attempts among those who currently smoke. Key policy initiatives include Smoke Free Laws, improving states comprehensive cessation coverage for Medicaid recipients and Tobacco 21. MD Anderson's leadership and Board of Visitors are currently working with a coalition of advocacy partners to educate stakeholders on the importance of increasing the minimum legal age to purchase tobacco products to 21 years. MD Anderson is also actively engaged in educating the public and policymakers on the harms of secondhand smoke and way to reduce exposure through smoke-free and tobacco-free policies; including e-cigarettes and other nicotine and tobacco products.

EndTobacco is also engaged in a demonstration project to utilize MD Anderson's tobacco cessation program best practices into a variety of health systems, including mental health settings across Texas. MD Anderson has also been an integral part of the University of Texas System Eliminate Tobacco Use Initiative. The project is creating a tobacco-free culture through policy, prevention, and cessation efforts within the UT System which includes: 8 academic institutions, 6 health science centers, and the medical schools encompassing 221,000 students and 100,000 faculty and staff. We are sharing best practices for a tobacco free campus, tobacco free hiring, and other tobacco prevention & cessation strategies.

Obesity Prevention Programs

Due to the prevalence of obesity within our catchment area, it is imperative to have programs dedicated to nutrition and exercise across our institution. A total of eighteen programs are categorized in the domain of energy balance, which focuses on healthy eating and physical activity. One of our priority goals aims to increase the adoption of evidence-based nutrition behaviors and physical activity shown to reduce obesity and cancer risk. Another priority goal is to reduce health disparities. A significant number of these programs specifically target the African American and Hispanic populations in the greater Houston area. Certain programs aim to reduce cancer risk by promoting healthy eating and increasing physical activity.

MD Anderson is a partner of the Coordinated Approach to Children's Health (CATCH) Global Foundation, founded in 2014. CATCH is based on the CDC Whole School, Whole Community, Whole Child model in which health education and the creation of a healthy school environment, and family/community involvement work together to support youth in a healthy lifestyle. CATCH has demonstrated effectiveness in increasing physical activity and healthy eating and reducing overweight and obesity in school-aged children from various backgrounds.

Cancer Screening Programs

Cancer-site specific prevention and screening has always been extremely important and ubiquitous across our institution specifically within the greater Houston community. Seven programs are dedicated to colorectal cancer prevention and screening and are focused on patient and community education. They also have targeted populations including those disproportionately affected by this specific type of cancer such as: African Americans, Hispanic,

and low-income populations. Each program strives to educate the targeted populations regarding the importance of regular colorectal cancer screening exams and provide print materials on preventive behaviors.

Funded by the Medicaid 1115 waiver, the FIT Flu program has been implemented to improve colorectal screening rates among the uninsured and underserved. The program provides asymptomatic uninsured and indigent patients free take-home Fecal Immunochemical Tests (FIT). Individuals that return a positive or abnormal test are referred to a participating clinic that provides them with a free colonoscopy. The program primarily serves residents of a nine-county region as described in *section 1,* however the program model has served as the basis for a similar initiative which has expanded services to East Texas. The Texas Alliance for Colorectal Cancer Testing (TACCT) is funded through CPRIT and primarily serves East Texas residents in the following counties: Brazos, Brazoria, Burleson, Galveston, Grimes, Hardin, Jasper, Jefferson, Leon, Liberty, Madison, Montgomery, Newton, Orange, Polk, Robertson, San Jacinto, Trinity, Tyler, Walker, and Washington. The focus is on populations who have low screening rates and/or are at high-risk for colorectal cancer. The program also provides navigation services to those diagnosed with cancer to treatment programs.

TACCT has convened a statewide coalition of partners to help address low screening rates across Texas by focusing on awareness and education, policy, funding and quality improvement. As of October 2016, TACCT has sixty-four members and represents hospitals, academic institutions, primary care and gastroenterologists providers across Texas. The TACCT program demonstrates the successful adaptation of existing evidence-based programs to the population or catchment area of interest whilst developing collaborative relationships which can facilitate future partnerships.

Additionally, MD Anderson has seven programs that are focused on prevention and screening for cervical and HPV-associated cancers. HPV vaccination efforts are centered on improving access to healthcare, as well as patient education and increasing awareness. In addition to educating women on cervical cancer screening, there are also professional educational programs that connect MD Anderson specialists with providers located in rural and underserved Texas communities to provide telementoring regarding cervical cancer and increasing local capacity in the interest of improved patient outcomes. One such program in the Lower Rio Grande Valley

(LRGV) is comprised of two interventions: 1) Cultivando La Salud to train low-income Hispanic women to act as *promotoras* for cervical cancer screening and 2) Project ECHO (Extension for Community Healthcare Outcomes) to train and support local providers in the evaluation and management of abnormal cervical cancer screening exams.

Three programs focus on breast cancer screening and education and provide diagnostic and follow up costs. Treatment costs are not included. The activities included are mammography and screening exams via a mammography van, in collaboration with local Federally Qualified Health Clinics (FQHCs) and non-profit organizations who serve uninsured or Medicaid eligible patients. The screening services are provided for average risk women between the ages of 40 and 69 years old who are asymptomatic. This utilization of partnerships outside of the institution helps reduce barriers for patients in accessing preventive screenings and allows for a wider geographic reach to potentially improve health outcomes statewide.

Two programs focus on skin cancer. The Sunbeatables program primarily targets young children, their teachers and parents. Children are taught about sun protection through interactive methods such as puppet shows, songs, and science experiments. The other program, called Project Derm, provides skin cancer prevention education and screening for non-Hispanic whites and Hispanics in a culturally-appropriate manner. This program operates in collaboration with local FQHCs and provides biopsies and full body screenings, if needed, as well as patient navigation to cancer treatment.

Twenty one programs in our institutional scan are classified as "other" since they do not have a specific category and are typically cross-cutting and address various cancers or overall health promotion. Each program focuses on general cancer awareness, education, and prevention. Some of the services provided include MD Anderson's participation and partnerships with worksites, retailers, corporate entities and other local organizations to plan events and activities that will increase cancer awareness. One such program is Healthy Communities. This is a long-term program that builds sustainable partnerships between MD Anderson, the Exxon Mobil Oil Corporation, and the city of Baytown, Texas. A similar initiative is ongoing with Shell Oil and the city of Pasadena. The programs will create and foster partnerships in the communities MD Anderson serves and unites all sectors to plan and carry out community-led solutions to facilitate the adoption of healthy lifestyle behaviors.

Other programs include education through online platforms such as the institution's website and informative social media posts. Certain programs are tailored to specific populations through surveys, health fairs and brochures which inform about the benefits of risk reduction and advocate for healthy behaviors and regular screening.

Thirteen programs fall under the domain of cancer survivorship. MD Anderson considers an individual as a cancer survivor from the time of diagnosis through the balance of his or her life. Current programs provide peer-to-peer support services by connecting individuals with others who are endured similar situations. Events are held throughout the year for survivors and their caregivers as well to connect with local professionals and learn about alternate forms of therapy such as music therapy, oncology massage, etc. These unique programs typically provide support services to address the specific psychosocial needs of cancer survivors using integrative treatment.

External Programs

External programs which are not led or funded by MD Anderson but serve the catchment area of Texas, have been identified and are compiled into a cancer prevention program inventory of Texas shown in Appendix E. Similar to the institutional scan these programs have been organized by focus area including tobacco, breast cancer, cervical cancer, colorectal cancer and skin cancer. All programs listed serve uninsured or low-income populations which typically have barriers to accessing preventive care and treatment services. These entities can serve as potential external partners for strategic actions that require stakeholder engagement in certain areas of the state.

SECTION 5 - Identified Health Priorities

MD Anderson Cancer Center has identified an array of health priorities through the methods described in section 3. Please refer to Appendix F for a complete breakdown of risk factors attributable to cancer. Our top three prioritized goals were also in alignment with the findings from the recently published Cancer Progress Report by the American Association for Cancer Research (Appendix F figure 5.1). These factors can be addressed through primary prevention, secondary prevention research, systems and environment change, and are organized within the goal plan in section 9. The five highlighted in this section are tobacco, obesity, health disparities, cancer related infectious diseases, and mental health. These priorities received the highest scores during the prioritization phase. Section 9 delineates the current status of each health priority in Texas, potential measures to track progress and strategic aims to address each priority. Data on behavioral cancer outcomes can be found in detail in Appendix F.

Tobacco and the Cancer Burden in Texas

Tobacco remains the number one leading cause of preventable death in the United States and accounts for about 30% of all cancer deaths and approximately 80% of all lung cancer deaths. [24] Smoking is a modifiable risk factor for several health problems, particularly lung cancer, in addition to cancers of the head and neck, stomach, pancreas, and cervix. [25] Aside from cancers, smoking impacts the development of respiratory diseases, cardiovascular disease, stroke, and metabolic diseases. [26]

According to 2014 Texas BRFSS data, the prevalence of adults who are considered current smokers was highest among non-Hispanic whites at 16.1%, followed by African Americans and Hispanics at 13.9% and 13.1%, respectively (Appendix C, figure 3.12). Texas YRBSS data (Appendix F, figure 5.2) from 2013 highlighted the fact that 14.1% of high school students used cigarettes and 8.1% used smokeless tobacco. Tobacco prevention should stress the importance of decreasing the adoption of smokeless tobacco among adolescents as well. The percentage of adults who use smokeless tobacco daily is more than 3.5 and 4 times higher in non-Hispanic whites than it is among African Americans and Hispanics, respectively (Appendix C, figure 3.13A). In order to further advance tobacco control efforts and reduce exposure, The University

of Texas MD Anderson Cancer Center officially adopted a tobacco-free hiring policy on January 1, 2015. The relatively new policy has been implemented into the standard application process and prevents smokers who test positive from being eligible for immediate employment. MD Anderson has also been an integral part of The University of Texas System Eliminate Tobacco Use Project. The project is creating a tobacco-free culture through policy, prevention, and cessation efforts within the UT System which includes 8 academic institutions, 6 health science centers, and the medical schools encompassing 221,000 students and 100,000 faculty and staff. MDACC is committed to sharing best practices for a tobacco free campus, tobacco free hiring, and other tobacco prevention and cessation strategies. The current burden of lung cancer incidence rates disproportionately affects non-Hispanic whites (64.5 per 100,000) and African Americans (67.9 per 100,000) in Texas, compared with Hispanics (30.7 per 100,000) (Appendix C, figure 3.8A).

Obesity and Associated Risk Factors

Obesity remains a looming threat to the well-being and life expectancy of Americans. Research shows that approximately 20% of all cancers diagnosed in the US are related to obesity. [27] (Appendix F, figure 5.3). A disparity remains in obesity prevalence between non-Hispanic whites and minority populations, as well as among populations with lower SES and lower levels of educational attainment. For instance, nearly 39% of Texans with less than a high school education were obese in 2013, compared with 23% of college graduates. [28] Lifestyle modifications such as increasing physical activity to the recommended level of 150 minutes per week, eating a well-balanced diet, and maintaining a healthy Body Mass Index (BMI) are all necessary to reverse the trend of obesity in Texas. When facing such a complex issue, a population-wide approach is effective and potentially more impactful within the parameters of the proposed strategic plan. Recent data shows that only 48.3% of Texas youth engaged in physical activity for 60 minutes per day for at least 5 or more days per week as recommended (Appendix F, figure 5.4). Texas BRFSS data from 2013 indicates that Texas adults consistently fruits and vegetables ate less than 5 times per day, with less than 15% meeting the recommended intake across all racial/ethnic groups (Appendix C, figure 3.11). Similarly to tobacco, addressing, prioritizing, and decreasing obesity in Texas can curtail the incidence of various types of cancers.

Many risk factors associated with obesity and cancer are also linked to cardiovascular disease, respiratory diseases, and diabetes. Reducing such risk factors through behavioral modification and primary prevention can ease the burden of such health issues. Diabetes, in particular, affects 9.5 percent of US adults age 18 or older and increases an individual's risk of developing liver, pancreatic, and endometrial cancers.[18] In addition, certain types of cancer may lead to an increased risk of both Type 1 and Type 2 diabetes and high blood sugar must be aggressively managed during treatment. Since these diseases share several common risk factors, this strategic plan will take a comprehensive approach to decrease the risk through health promotion such as tobacco prevention and nutritional education. As a large state with rapid population growth and increasing diversity, Texas has a chance to lead the effort of diabetes, obesity, and cancer prevention and management. By focusing on population health and promoting healthy eating and active living across Texas, the future burden of cancer will be mitigated as it relates to obesity and other chronic diseases. The findings and potential research especially highlights the fact that prevention efforts can delay or possibly eliminate a diagnosis and disheartening prognosis.

Infectious Disease and Cancer

The AACR progress report also identified three factors with the highest associated risk of overall cancer. These are tobacco use, obesity, and pathogens. Our final priority is to increase vaccination rate for vaccines shown to reduce the risk of infectious disease related to cancer. This includes HPV vaccination and its role in helping prevent various cancers in both men and women, as well as Chronic Hepatitis B (HBV) or Hepatitis C (HCV) and its strong association with liver cancer. In Texas, liver cancer is on the rise and disproportionately affects Hispanics, who have the highest incidence and mortality rates of any group. Similarly, there is a clear distinction geographically by metropolitan statistical area (MSA). For instance, El Paso and its surrounding areas had the highest incidence and mortality rates in Texas between 2009 and 2013. A complete graphical representation can be found in Appendix C, figure 3.7C.

HPV vaccination is approved for both boys and girls, as well as young men and women through age 26. HPV is the most common sexually transmitted infection, with a lifetime risk of acquiring an HPV infection is approximately 80%. [29] The HPV vaccines protect against certain high risk types of HPV that cause cancers such as cervical, oropharyngeal, vulvar, vaginal, penile, and

anal. The uptake of HPV vaccination has remained far below the Healthy People 2020 goal of 80%. The completion rates for the three-part vaccine series in Texas was 33.9% for girls and 17.7% for boys in 2014 (Appendix F, figure 5.6). A complete graph of vaccine uptake can be found by region in Appendix F, figure 5.6. Texas has not passed legislation requiring the HPV vaccine for school entry and the annual HPV-related disease costs for men and women approach $170 million statewide.[30]

Mental Health

Mental health covers a broad scope of conditions and plays a major role in an individual's ability to maintain good physical health. The psychological stress associated with cancer often stems from the physical, emotional, and social effects of the disease. Patients often refer to the specific psychosocial needs that require attention. Those who attempt to manage their stress with risky behaviors such as tobacco use or physical inactivity may have poorer quality of life after cancer treatment. [31] Mental health and mental disorders are also prominently featured in *Healthy People 2020,* with an overarching goal of improving mental health through prevention and by ensuring access to appropriate, quality mental health services. [32] More than 80% of Texas counties are designated as Mental Health Professional Shortage Areas, where there are more than 30,000 residents per clinician. [33, 34] This is one of the primary reasons this issue must be addressed at the population level due to the associated stigma and delayed diagnosis. With respect to cancer, mental health plays an instrumental role in both survivorship and caregiving.

Anxiety and distress can adversely affect the quality of life of patients with cancer and their families, which affects the ability to cope with cancer diagnosis and/or treatment. Nearly half of cancer patients in the United States report having a lot of distress.[31] The complicated factors that increase the risk of anxiety and distress are not always related to the cancer. Since co-occurring anxiety and depression are associated with cancer, mental health professionals must be included in the cancer care continuum of treatment and into survivorship. The potentially negative effects on quality of life and effectiveness of treatment create an urgent need to address both mental and physical well-being of Texans on a macro level.

SECTION 6 - Availability and Gaps in Technology and Infrastructure to Support Population Health at the Health Institution

Technology and infrastructure efforts discussed in this section are those that primarily focus on improving public health data and information systems, and approaches to strengthen capacity in order to improve population health.

Data and Information Systems

Data infrastructure and analytical systems are essential to monitor population health outcomes and measure progress on health indicators. We rely on aggregate health outcome databases, such as the state cancer registry and behavior risk factor surveillance systems to obtain population-level data. As we move forward with a population health approach, streamlined access and enhancement of capacity within existing databases would be valuable to ensure appropriate health outcome data is being collected, analyzed and monitored systematically. At this time, we access state and county-level data through the database's online query tools or by submitting individual data requests directly to the data registries. We use geographic mapping tools to identify geographic areas in need of targeted cancer control interventions. In order to streamline data collection and analysis, a central repository at the institution to consolidate health outcome data would be a potential tool to consider for population health surveillance.

Improving the provision of public health datasets through expanding data capacity to include multi-level data including, state, county, and zip-code data would be helpful. This would allow interventions to be tailored more effectively across communities. Furthermore, establishing a linkage between health outcomes and social, environmental and behavior datasets would be ideal to obtain a comprehensive view of the various factors influencing the health of the community.

MD Anderson has received initial funding from the National Cancer Institute to expand upon population health data collected through the Health Information National Trends Survey (HINTS). MD Anderson will be developing and testing methods to collect local population health data or small area samples which would complement existing national data and survey activities. Public datasets are key to measure population health and we support continued funding to ensure these data reporting activities remain ongoing.

Additionally, patient-reported outcomes resources are accessible through the Patient-Reported Outcomes, Survey & Population Research (PROSPR) core which provides access to patient-reported outcome (PRO), quality of life, psychological and behavioral questionnaires and assessment methods. PROSPR is a shared resource and supports survey construction, dissemination, analysis and interpretation. The core works in partnership with eHealth technologies to facilitate with the development of databases, applications and multimedia platforms.

MD Anderson has recently implemented a new EHR which has increased health IT capacity, and improved integration of patient health information and interoperability with other systems. We also participate in a regional Health Information Exchange (HIE) led by Greater Houston Healthconnect. The HIE will enable all patients and health care and wellness service providers to easily access patient records to improve continuity of care.

Community Capacity-Building

MD Anderson has partnered with community clinics and provider systems to enhance the cancer control infrastructure of individual communities through the utilization of technology. Innovative approaches such as the Project ECHO model and mobile mammography, have been implemented to build capacity and increase access to services across Texas.

The Project ECHO model has been adopted by MD Anderson and tailored for cervical cancer prevention and treatment in low-resource settings. Project ECHO was developed in 2003 by Dr. Sanjeev Arora, a hepatologist at the University of New Mexico (UNM), to improve both provider capacity and access to specialty care for rural and underserved population. The program builds capacity among distant primary care providers via case-based learning and co-management of patients by using videoconferencing technology. Providers receive direct input on case management from MD Anderson specialists and can earn Continuing Medical and Nursing Education (CME and CNE) credits. Community partners for the Cervical Cancer Prevention ECHO include Su Clínica Familiar; a Federally Qualified Health Center (FQHC) in the Rio Grande Valley, Lyndon B. Johnson Hospital in the Greater Houston area, Gateway Community Center and Sisters of Mercy in Laredo. The program has expanded to other areas beyond Cervical Cancer to include Head & Neck Cancer, Tobacco Cessation Programs for mental health facilities nationwide, Breast Cancer, Palliative care and Survivorship ECHO.

These programs partner with clinicians globally and are being implemented in 10 countries in Central and South America, and several countries in Sub Saharan Africa. A similar model has been used to increase capacity and provide training for managing survivorship care across Texas. Collaborating organizations and provider systems include The University of Texas Medical Branch at Galveston, The University of Texas Health Science Center at Tyler, The University of Texas Health Science Center at Houston and Seton Healthcare Family.

MD Anderson's mobile mammography program has increased access to screening services for eligible, asymptomatic women in Harris and Fort Bend Counties. Project VALET (Providing Valuable Area Life-Saving Exams in Town, PV) provides free screening mammograms to low-income, uninsured women in community clinics where patients already seek care. The program reduces barriers associated with cost and transportation by providing services in areas close to patient's home. Programs highlighted in this section currently address health disparities and access to care issues faced by Texans. Potential areas for the development of programs which utilize technology include those that address obesity prevention and vaccination for HPV and HBV.

SECTION 7 - Availability and Gaps in the Population Health Workforce at the Health Institution

Health Workforce in Texas

An adequate supply of trained health professionals is essential to improve the health status of Texans. This is particularly important in rural and underserved areas of Texas, where recruitment and retention of health professionals continues to be a challenge. Most Texas counties are designated as medically underserved areas (MUA) and health professional shortage areas (HPSA) as shown in Appendix G. This highlights two critical needs for cancer control: increased numbers and distribution of public health services, and increased numbers and distribution of well-trained health professionals.[10] Increasing numbers and distribution of a well-trained health professional workforce requires implementing measures that will improve health professional knowledge, practice behaviors, and system support.

The HPSA designation is used to identify areas and population groups within the U.S. that are experiencing a shortage of health professionals in primary care, dental care, and mental health care. The primary factor used to determine a HPSA designation is the number of health professionals relative to the population with consideration of high need. Table 1 below, shows the number of HPSA designations by health discipline and the number of trained professionals required to remove the shortage designation.[35] Shortage designations for specialty care and subspecialties are unavailable but non-primary care workforce supply is tracked and projected periodically by HRSA.

In 2015, there were 19,902 actively licensed primary care (PC) physicians providing direct patient care in Texas, which is a 13.6% increase since 2010.[36] Although the workforce has increased in size, PC physicians are not evenly distributed throughout the state. There is a 40.7% difference between the number of PC physicians in metropolitan and non-metropolitan areas, and a 42% difference between border and non-border areas, even after controlling for population differences.[36]

Along with PC physicians, registered nurses and physicians assistants are integral to the delivery of health. Similar to the PC workforce, registered nurses and physicians assistants are not evenly

distributed throughout the state. In 2015, there were 215,436 actively practicing registered nurses (RNs) in Texas representing a 22.1% increase since 2010 and a 49% increase since 2005. The racial/ethnic makeup of the RN workforce varies from the overall population.[36] In 2015, Whites were over-represented when compared to the demographics of the state. Hispanics made up only 14.1% of the RN workforce, compared to 40% of the overall population.[36] In 2015, there were 7,067 actively licensed physician assistants (PAs) in Texas, representing a 43.0% increase since 2010.[36] There was a 56.7% difference between the number of PAs in metropolitan and non-metropolitan areas, and 27.5% difference between border and non-border areas, even after controlling for population differences.[36] Community health workers (CHW) serve as a bridge between clinicians and their patients, and provide community-based, culturally-responsive services. They support a range of activities such as outreach, community education, informal counseling, social support and advocacy. [36] In 2015, there were 3,457 actively licensed community health workers (CHWs) in Texas.[35]

Mental Health HPSAs are based on a psychiatrist to population ratio of 1:30,000.[35] Although regulations allow mental health HPSA designations to be based on core mental health provider to population ratio, most mental health HPSA designations are currently based on the psychiatrists only to population ratio. Core mental health providers include psychiatrists, clinical psychologists, clinical social workers, psychiatric nurse specialists, and marriage and family therapists. In 2015, there were 2,052 actively licensed psychiatrists in Texas however 185 Texas counties out of 254 did not have a single psychiatrist.[36] Furthermore, 40 counties did not have a licensed clinical social worker. The limited mental health workforce contributes greatly to access to mental healthcare along with challenges associated with reimbursement, care coordination and lack of funding.[36]

Primary drivers of increasing demand of the workforce include population growth, an aging population and demographics. Due to the diversity of the population within Texas, the availability of culturally-competent trained health care professionals among all provider levels is crucial to provide high quality, patient-centered care.

Table 1. Health Professional Shortage Areas in Texas (as of September 8, 2016)

HPSA Shortage Category	Total HPSA designations	Percent of need met	Practitioners needed to remove designation
Primary Care	425	66.43%	572
Mental Health	405	40.24%	251
Dental	306	61.08%	402

Data Source: Kaiser Family Foundation, 2016.

Provider Education and Training

MD Anderson contributes directly to the non-primary care, specialty and subspecialty workforce. Although our institution does not serve as the primary site for training primary, dental or mental health professionals, we do provide education and training to already licensed health professionals and strengthen existing primary care capacity in particular areas of Texas.

The institution sponsors 21 Graduate Medical Education (GME) programs accredited by the Accreditation Council for Graduate Medical Education (ACGME). MD Anderson is the primary teaching facility for 4 ACGME-accredited programs sponsored by UT – Houston. More than 6,600 trainees, including physicians, scientists, nurses, allied health professionals and students, participate in educational programs at MD Anderson each year. Additionally the Graduate Medical Education Committee (GMEC) at MD Anderson oversees 56 non-standard programs recognized by the Texas Medical Board and other oversight specialty boards and societies. In the 2015-2016 Academic Year, nearly 1,500 medical students, residents and fellows participated in rotations primarily from UT – Houston, Baylor College of Medicine and The University of Texas Medical Branch – Galveston. More than 175 trainees participated in 15 Health Professions training programs including physician assistants, ethics fellows, and others each year.

At MD Anderson, approximately 40,000 new patients are evaluated, and more than 120,000 receive their care on an ongoing basis with 7,600 patients enrolled in clinical trials, providing a unique opportunity to help and to learn from individuals with every form of cancer. Given this large training environment, Graduate Medical Education and Health Professionals are moving toward a focus on population health. All trainees learn about prevention of cancers, as well as the

socioeconomic factors and demographics associated with various malignancies. Fellows are required to participate in an institution-wide core curriculum that addresses these areas, and each clinical department provides lectures to its trainees that incorporate elements of population health. Since we have a large numbers of rotating residents, we are able to help disseminate this knowledge through the rotators back to their home institutions. Alternative methods to education such as through a webinar lecture series are also available for health professionals. One specific for HPV and cervical cancer was developed in collaboration with Texas Medical Association and greatly emphasizes strategies to improve vaccination.

Key considerations for workforce training

MD Anderson recently collaborated with institutions across the state to begin to address population health issues in Texas. In February, 2016, we co-sponsored a symposium with the Josiah Macy, Jr. Foundation and supported by The University of Texas System titled "The University of Texas MD Anderson Cancer Center: Developing an Innovative Blueprint to Address Training and Retention of Rural Practitioners, Mental Health Issues, and Interprofessional Education**."** The symposium brought together medical leaders, health professions educators, trainees and other healthcare professionals to showcase innovations and share promising models in graduate medical education in the southwestern region. All University of Texas institutions were represented.

Community engagement, recruitment and retention of practitioners and interprofessional education (IPE) surfaced as areas which need to be addressed to improve training of health professionals across the state. Discussions centered on how best to engage local communities in bringing GME into the community and identify rural communities that might be interested in and benefit from serving as IPE hubs. Furthermore, defining IPE training competencies, career paths for different professions, faculty development were highlighted as needs to create successful IPE programs. Challenges associated with recruiting physicians to rural areas need to be addressed. The development of mechanisms to help support physicians in their transition from training to practice is necessary so they reside in the community long enough to grow roots and remain in these communities permanently. Although the struggles and issues of public health may vary from region to region, solutions fall into the same themes including: funding needs; educational

implications; team-based approaches; community connections; and partnerships with local, state and federal entities.

Much of population-based health is provided in the community by healthcare providers including physicians, nurses, and mid-level providers working together as a team. More emphasis needs to be placed on team training and interprofessional Education (IPE). Healthcare providers must learn to work at the maximum level of licensure in order to optimize resources. Therefore, more education is required to permit mid-level providers to practice at higher levels. This may help alleviate some of the burden on physicians who are experiencing a workforce shortage.

Mental health is a public health issue affecting a growing number of Americans. Approaches should include a mix of universal and targeted prevention programs along with better physician training in mental health outcomes research and prevention. We need to consistently fund psychiatry and mental health education in rural and urban areas and expand training in mental health, not just to psychiatry.

There is a need for new workforce strategies that reach outside the traditional hospital setting and across the continuum of care. When healthcare providers partner with community organizations to emphasize preventative care, population health outcomes can be improved. There are a growing number of programs which serve the community and rely on community partnerships as shown in Appendix D however, internal staff dedicated to community engagement and outreach is limited. Furthermore, when considering the implementation or expansion of the population health programs related to priority goals, program evaluation aspects should be considered. For example, evaluation scientists, especially those with clinical expertise may be valuable to evaluate programs objectively and determine the return on investment on programmatic efforts.

SECTION 8 - Assessment of Additional Needs

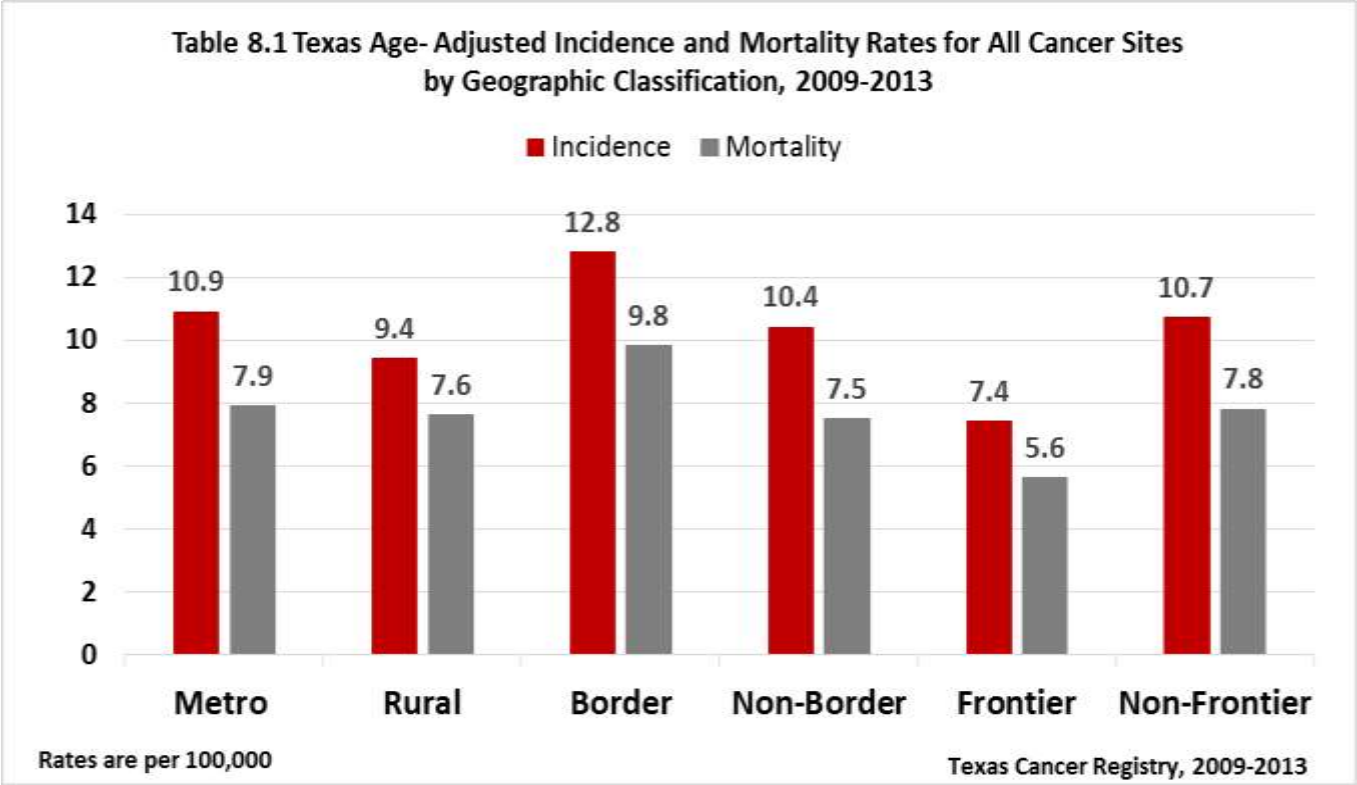
Our Plan's catchment Texas is geographically, linguistically and culturally diverse. Therefore, additional needs with regards to our priority area of reducing health disparities were identified. These disparities include differentials in cancer incidence and mortality in rural and metro areas, frontier and non-frontier counties and border and non-border counties. Also, differentials in cancer incidence and mortality for Hispanic populations are documented.

Rural and Metro

Significant challenges exist for rural areas when compared to metro areas including larger numbers of health-professional shortage areas (HPSAs) particularly for medical specialties and lack of access to care due to larger medically underserved areas (MUAs). [37]

We identified rural and metro areas according to those designated by the Texas State Office of Rural Health (2012) groupings.[38] Of the 254 counties in Texas, 177 have been designated as rural counties.[10] The TSORH designations are by population size, degree of urbanization and proximity to metro areas.

Cancer incidence rates are higher in metro areas than in rural areas of the state with 10.9 per 100,000 compared to 9.4 per 100,000 in the State. Mortality rates for all cancer sites are slightly higher in metro compared to rural areas as demonstrated in Table 8.1.

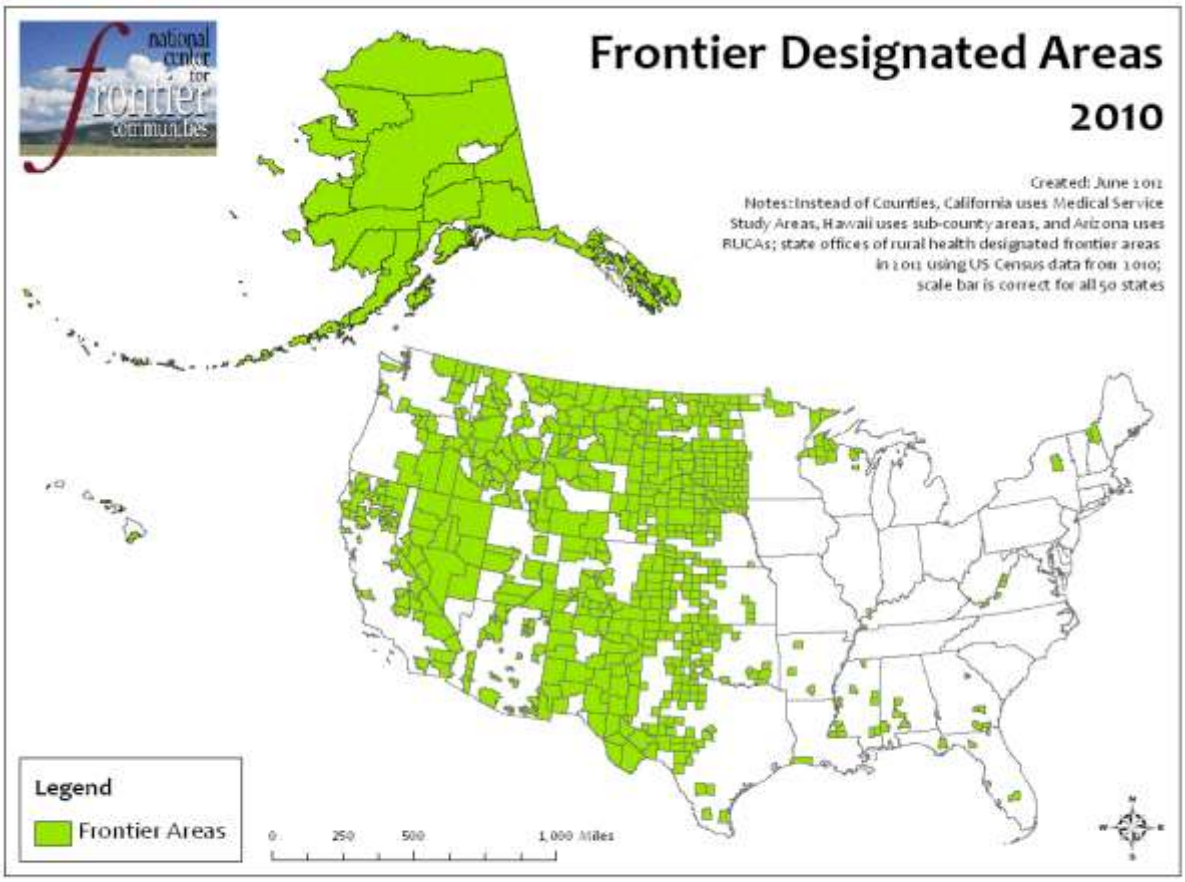


The rural-metro differential is most pronounced for lung cancer with incidence rates of 63.3 compared to 54.8 per 100,000 for rural and metro areas. The lung cancer mortality rate is 48.7 per 100,000 in rural areas compared to 40.6 in metro areas (see figure 8.4 in Appendix H). This differential may be a result of the higher smoking rates that have been found in rural areas.[39] Rates of smokeless tobacco use are also higher in rural than urban areas particularly for those ages 18-49. [40]

Frontier and Non-Frontier Counties

Texas is also unique in the percentage of persons living in frontier areas which is among the highest in the nation.[41] There are 64 counties designated as frontier (less than 7 persons per square mile) in Texas.[42] Frontier areas are sparsely population and tend to be isolated from major population centers and services including healthcare.

Figure 8.1 Frontier Designated Areas 2010



Many of the challenges facing rural counties are also present in frontier counties. This is unsurprising given that 97% of the counties in Texas designated as frontier are also rural ones. These areas typically have poor access to care due to inadequate numbers in their population health workforce. Moreover, only 27% of Critical Access Hospitals are located in frontier areas.[42] Additional concerns for frontier areas are the migration of seasonal workers, residents and tourist who may place a strain on already limited resources at certain times of the year.

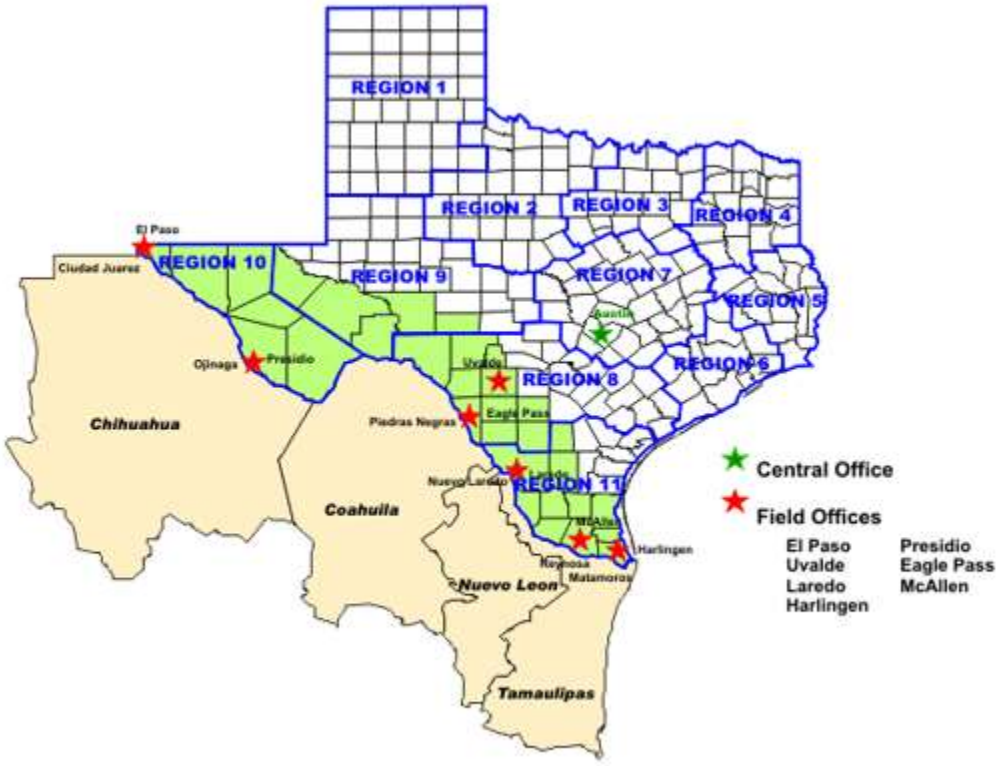
Frontier area residents also tend to be at higher risk for conditions related to limited access to mental health services including suicide and substance abuse. Obesity and cigarette smoking rates are also significantly higher in frontier compared to non-frontier areas.

Some of the initiatives that have been put forth by the Frontier Community Hospital Integration Project include a strengthening of telemedicine, nursing facility care, home health and ambulance services to address these. [43]

Border and Non-Border Counties

Border counties in Texas are those within 100 km of the U.S./Mexico border according to Article 4 of the La Paz Agreement of 1983. There are 32 counties in Texas designated as Border counties. [44]

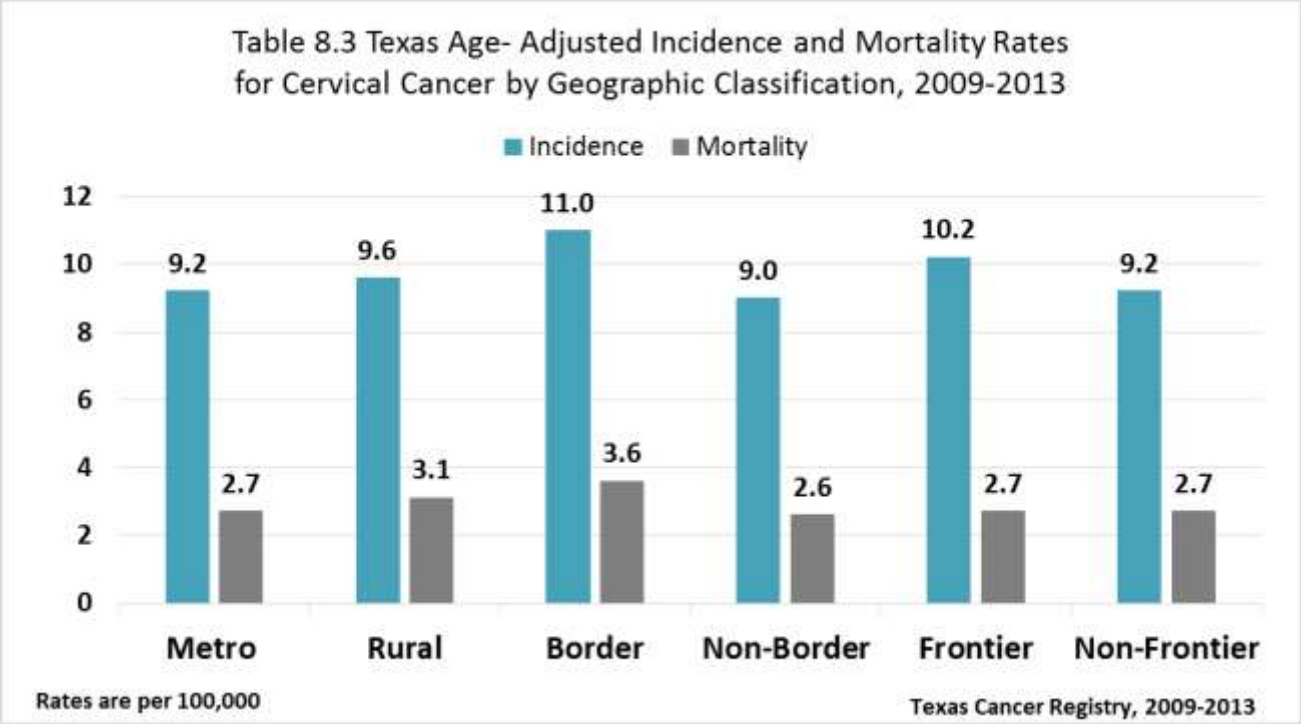
Figure 8.2 Border Counties in Texas



Border counties face some of the same challenges as frontier or rural counties, however rates of poverty and lack of health insurance despite being employed are higher in border counties than in other areas of the state. [45]

Both cancer incidence and mortality rates are higher for border counties than non-border counties (See Table 8.1). In particular, incidence and mortality rates of the highly preventable cervical cancer are higher in border than non-border countries (see Table 8.3). Incidence and mortality rates for liver cancer are also higher in border counties than non-border counties. The liver cancer incidence rate is 12.8 compared to 10.4 per 100,000 from border and non-border

counties. The liver cancer mortality rate is 9.8 for border counties compared to 7.5 for non-border counties (see figure 8.5 in Appendix H).



Hispanic Health

The Hispanic population in Texas is the second largest in the nation, with about 39% of Texas residents reporting Hispanic ethnicity.[1] The Hispanic or Latino population of Texas also includes immigrants from Mexico, Central America, and South America, as well as Tejanos.

The Latino population in Texas has demonstrated needs with regards to access to cancer screening and early detection services when compared to other races/ethnicities in the State. According to the Texas Behavioral Risk Factor Surveillance System (BRFSS) survey for 2014, Hispanics ages 18 to 64 are more likely to report being without health insurance (48.9%) when compared to either non-Hispanic whites (14.0%) or Blacks (26.5%). Hispanic women are also significantly less likely to have ever had a mammogram or Pap test than other ethnic groups.

Some of the access to care challenges facing the Hispanic population in Texas are influenced by socioeconomic factors such as education, income and insurance status. Other barriers to care arise from geographic location (particularly for those Hispanics who live in border, rural or frontier counties) as well as immigrant status, whether one is employed in seasonal work and one's level of English language fluency.

SECTION 9 - Plan and Strategy to Implement Population Health

Strategic Plan

The UT Population Health Strategic Plan is divided into two phases. Phase 1 consists of plan development with a projected end date of January 31, 2017. Phase 2 commences with the development of an overall UT system strategy through collaboration with other UT institutions.

Focus Areas/Community Priorities

In section 9, we identify focus areas, community priorities and present baseline data and targets. Furthermore, we indicate whether these priorities are short-term or long-term targets. Short-term targets have a time horizon of 1-2 years whereas long-term targets are scheduled out 3 or more years. We also identify strategic actions using the **PES** framework (**P**olicy, **E**ducation and Community-based **S**ervices). Please refer to the goal plan (starting on pg. 57 for the full set of primary prevention goals and objectives along with current progress/targets. MD Anderson recognizes target achievement as metrics which meet or exceed Healthy People 2020 goals. The logic models for each focus area present inputs, outputs, short-, medium- and long-terms outcomes.

Through the efforts of our MD Anderson Population Health Strategic Plan Steering Committee, we identified three primary focus areas for the institution based on community needs. These are: 1) health disparities 2) low uptake and acceptance of vaccinations that prevent cancer and 3) prevalence of lifestyle/behavioral risk factors that contribute to cancer risk such as unhealthy diets, lack of adequate physical activity and tobacco use.

Focus Area: Reducing Health Disparities

Focus Area 1: Reducing health disparities

This focus area has as its key objectives promoting innovative programs with the goals of 1) reducing health disparities in cancer screening and early detection and 2) developing strategies to identify and screen high risk populations.

Disparities exist in early detection and screening for racial/ethnic minorities and by geography (See Appendix C). Factors that contribute to these disparities are lack of health insurance and socioeconomic status differentials.

There is differential impact for groups such as the incidence of Triple negative breast cancer which is significantly higher among African American women when compared to all other ethnicities. [46] Hispanic and African American women have a much higher incidence of cervical cancer than do white women (See Figure 3.5a in Appendix C). African American men have

higher death rates from prostate cancer than any other racial or ethnic group. [18] Asian Americans, Native Hawaiians and Pacific Islanders (AANHPIs) generally have lower overall cancer rates than non-Hispanic whites although cancer is the leading cause of death for AANHPIs. When considering the most common cancers, AANPHIs are at higher risk for stomach, liver, certain cervical subgroup and infection-associated nasopharyngeal cancers than are non-Hispanic whites.

The Hispanic population in Texas is the second largest in the nation, with about 39% of Texas residents reporting Hispanic ethnicity. The Hispanic or Latino population of Texas also includes immigrants from Mexico, Central America, and South America, as well as Tejanos.

The Latino population in Texas has demonstrated needs with regards to access to cancer screening and early detection services when compared to other races/ethnicities in the State. According to the Texas Behavioral Risk Factor Surveillance System (BRFSS) survey for 2014, Hispanics ages 18 to 64 are more likely to report being without health insurance (48.9%) when compared to either non-Hispanic whites (14.0%) or Blacks (26.5%). Hispanic women are also significantly less likely to have ever had a mammogram or Pap test than other ethnic groups.

The institution is developing and implementing programs for certain high risk groups such as adults at high risk for developing lung cancer, women who are genetically predisposed to breast cancer and those who have other inherited conditions such as Familial adenomatous polyposis

Priority Area for Reducing Disparities	
Cultural, Linguistic, Socioeconomic and/or Geographic Barriers	Develop and disseminate culturally and linguistically appropriate community health education resources and tools (tailored to address cultural, geographic and socioeconomic barriers) [short-term, long-term]
Specialized Populations	Identify and address unmet needs among specialized populations such as cancer survivors, pregnant smokers [long-term]
Mental Health	Develop and implement targeted program services that include mental health facilities and juvenile detention centers [long-term]

(FAP) or Lynch syndrome.

No headline indicators have been selected for this focus area.

Program: **Goal 14: Reduce Health Disparities Model**

Inputs	Outputs		Outcomes -- Impact		
	Activities	*Participation*	*Short*	*Medium*	*Long*
Staff Contracts Community Partners **Teams:** · Center for Community-Engaged Translational Research (CCETR) · Center for Energy Balance in Cancer Prevention and Survivorship · Community Relations & Education · Health Services Research · Office of Health Policy **MD Anderson Resources:** · Behavioral Research and Treatment Ctr. · Cancer Prevention & Population Sciences · Health Disparities · Mano a Mano · PROSPR Chronic Disease Prevention Health Promotion Partners Texas Cancer Plan Resource Plan Evaluation Plan Communication Plan	Access and enhance infrastructure Mobilize support (resources) Build and maintain partnerships Assess burden Collect and Utilize data and research Develop, implement and evaluate Texas Cancer Plan Emphasize primary prevention Support early detection/treatment Address health literacy Implement policy system/environmental changes Promote health equity Demonstrate outcomes through evaluation	Enhance staff and partner capacity MD Anderson partners and resources mobilized to implement and evaluate Diverse network of engaged partners across teams Resources and efforts focused on priorities Integrated and coordinated plan Development and implementation of evidence-based interventions from plan Utilize evaluation results	**Policy changes:** · Increase in prevention and reduction behaviors · Increase in screening/early detection · Access to quality treatment/care · Support for those affected by cancer · Increase patient/provider communication **Environmental/system changes:** · Well-functioning health systems · Increased patient navigation services · Increased physical/ social/economic environments that influence population behaviors · Increased focus on health disparities **Program/ organizational changes** · Sustain collaboration /communication among Community Partners · Increase community capacity · Increase health literacy · Increase decision aides for cancer prevention and care	**Population-based Changes** **Increases in:** · Physical activity · Good nutrition · HPV vaccination utilization · Cancer screening · Informed decision-making re: prostate cancer screening · Pts. receiving care according to ACOS Commission on Cancer standards · Provision of public health needs for cancer survivors · Resources and public health needs of high risk populations · Awareness and utilization of cancer survivorship services · Utilization of health literacy programs · Access to weight management programs **Decreases in:** · Tobacco Use · Alcohol abuse · Exposure to environmental carcinogens · Health disparities	Sustained infrastructure to address cancer prevention and control issues Institutionalized practice of using data and evidence in cancer prevention and control Increased health equity Increased healthy lifestyles Decreased incidence of preventable cancers Increased early detection/early-stage diagnoses Effective education, screening programs Increased quality of life Decreased cancer mortality

Program: Increasing cancer-related vaccination rates Logic Model
Situation: UT Population Health Strategic Plan

Inputs	Outputs		Outcomes -- Impact		
	Activities	*Participation*	*Short*	*Medium*	*Long*
MD Anderson: • HPV Moonshots • Cancer Prevention • Clinical Cancer Prevention • Cancer Control Platform • Office of Health Policy • Community Relations and Education • Government Relations Vaccines for Children program Grant Funding	HPV vaccination Health education promoting HPV vaccination	Targeted groups Parents of age-eligible children Health care providers	Increased provider knowledge about vaccination Increased parental knowledge and motivation around HPV vaccination	Provider practice changes promoting HPV vaccination Improved documentation of HPV dose administration Decreased missed opportunities to vaccinate Increase in HPV vaccine initiation Increase in HPV vaccine series completion	Decreased vaccine-preventable morbidity and mortality

Focus Area 2: Increasing vaccination rate for vaccines shown to reduce the risk of infectious disease related to cancer.

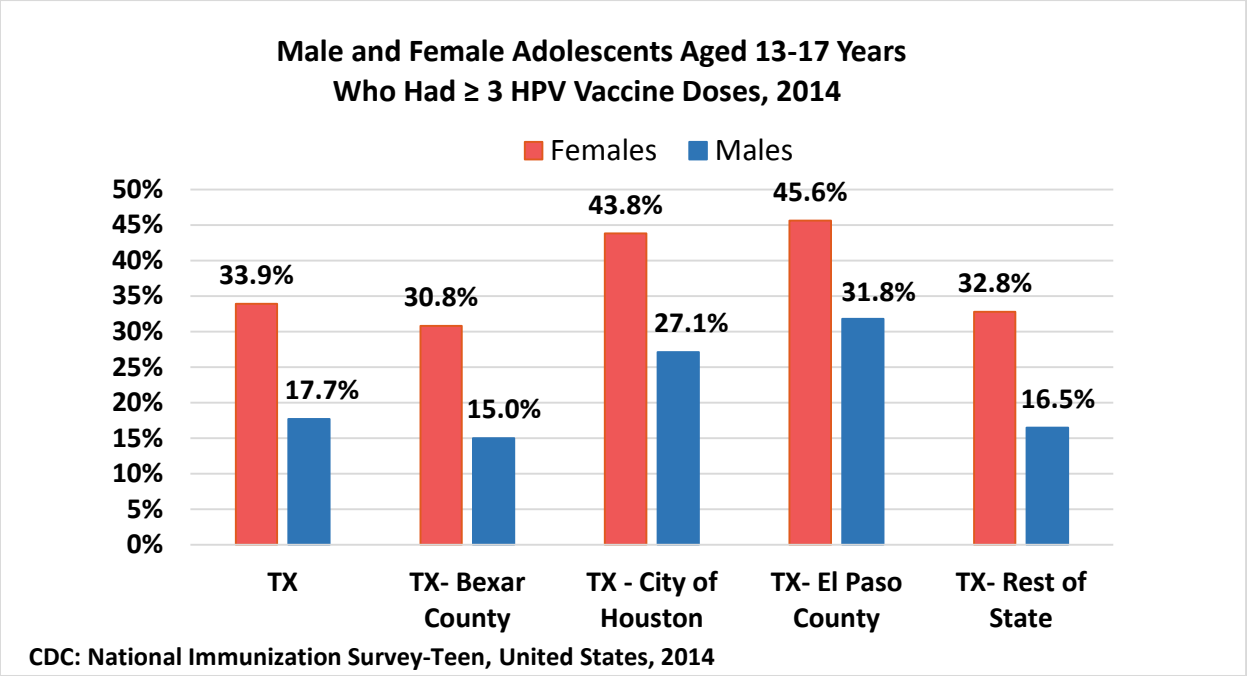
Focus Area: Increasing cancer-related vaccination rates

HPV is the most common sexually transmitted infection (STI).[47] Most people will become infected with HPV at some point in their lives and most infections clear on their own.[47] However, persistent infection is associated with several types of cancer and genital warts. In fact, almost all cervical cancer, 91% of anal cancers, 75% of vaginal cancers and more than 60% of vulvar, penile and cancers at the back of the throat are linked to HPV infection.[48]

HPV vaccination protects against strains of the virus that cause oropharyngeal cancer, cervical cancer and other anogenital cancers. The Advisory Committee on Immunization Practices (2016) has issued new recommendations for the use of a two-dose schedule for girls and boys who initiate the vaccination series between ages 9 and 14 years.[49] The three doses recommendations continue for individuals who initiate the vaccination series during ages 15 through 26 years and for immunocompromised persons. Both males and females in Texas fall short of the Healthy People 2020 goals of 80% HPV vaccinations rates for ages 13-17. Vaccination rates with three or more doses formerly recommended is 33.9% for females and only 17.7% for males (See figure 9.1). In addition to the sex-based differences, there is geographical disparity in HPV vaccination rates with rates for females and males in the city of Houston and El Paso being higher than those in the rest of the State (figure. 9.1).

Current institutional efforts are focused on program targeting providers and parents with education on the benefits of HPV vaccination. The institution also provides on-site vaccination events or eligible employees and the children of employees.

Figure 9.1



Priority Area for Increasing Cancer-Related Vaccination Rates	
Increase percentage of youth and young adults completing the HPV vaccine series	• Support policies that promote HPV vaccination [short-term]. • Collaborate with diverse stakeholders to increase their awareness of infection-related cancers [short-term]. • Provide education to health care providers to increase their knowledge related to infectious diseases and cancer [short-term].

The headline indicator that will be used is percentage of children and adolescents who complete the recommended HPV vaccination series.

Program: Eliminate the use of tobacco and reduce morbidity and mortality from tobacco-related cancers Logic Model
Situation: UT Population Health Strategic Plan

Inputs	Outputs		Outcomes -- Impact		
	Activities	*Participation*	*Short*	*Medium*	*Long*
MD Anderson: • Cancer Prevention and Control Platform • • Office of Health Policy • Community Relations and Education	Demonstration projects focusing on physical activity, nutrition and other areas	Individuals in schools and community-based settings Health care providers	Increased PA levels Healthier diets (increased FV consumption)	Increase in healthy BMI Improved metabolic health	Reduction in incidence and mortality from lifestyle-related diseases such as certain cancers, Type II diabetes and stroke
Schools	PA and Nutrition programs	Students and teachers			
Faith-based institutions		Members			
Community-based organizations		Program participants			
CATCH Global Foundation	Coordinated Approach to Child Health (CATCH) intervention and tools	Elementary and middle school students			
Corporate philanthropy					
Grant funding					
Private Donors					

Assumptions	External Factors
Regular monitoring and feedback on process and outcomes measures	

Focus Area 3: Lifestyle/Behavioral Risk Factors

Creditable scientific evidence exists to support a link between certain lifestyle/behavioral risk factors and cancer. According to the American Association for Cancer Research (AACR), an estimated 33% of cancers are caused by tobacco use and another 20% by overweight and obesity.[26] Both diet and exercise are responsible for an additional 5% each making well-over half of all cancers being caused by lifestyle/behavioral risk factors.

Focus Area: Eliminating Tobacco Use

3a. Eliminating Tobacco Use

This focus area is further segmented into 1) decreasing the percentage of youth who use tobacco, 2) decreasing the percentage of adults who use tobacco 3) reducing exposure to secondhand smoke.

Tobacco is the leading cause of preventable death in Texas. [25] In Texas, youth currently meet the Healthy People 2020 goal of 16% or less for smoking, but not for smokeless tobacco with 8.1% currently using these products (Healthy People 2020 goal is 6.9%). Adults smoking rates are 15.9% and use of smokeless tobacco is 4.3%.[50] Currently 65.8% of U.S. residents is covered by 100% smoke-free local or state laws in restaurants and bars compared to 40.1% of Texans.[51] These figures are for municipalities and states with ordinances or regulations that are currently in effect. Smoke-free means that the establishments do not allow smoking in attached bars or separately ventilated rooms and do not have size, age, or hours exemptions.

Preventing Tobacco Use Initiation

MD Anderson has evidence-based programs designed to prevent tobacco use initiation among children and teens with new partnerships currently being implemented to expand these initiatives.

Decreasing Adult Tobacco Use

MD Anderson's strategic plan for reducing adult tobacco use is a comprehensive program that includes the following components recommended by the Texas Department for State Health Services: 1) statewide and community-level interventions, 2) health communications 3) cessation services 4) surveillance and evaluation and 5) administration and management.

Reducing Exposure to Secondhand Smoke

In addition to the prevention and cessation efforts outlined above, MD Anderson also provides education on the dangers of secondhand smoke and works to promote policies and laws for a tobacco-free environment. These targeted environments include restaurants, bars, workplaces, event venues and campuses. Moreover, MD Anderson instituted tobacco-free hiring in January 2015 which include pre-employment tobacco-used screening, information and referral services. Continuing efforts are modeled on the **MPOWER** Framework which is comprised of **M**onitoring tobacco use and prevention policies, **P**rotecting people from tobacco smoke, **O**ffering help to quit tobacco use, **W**arning about the dangers of tobacco, **E**nforcing bans on tobacco advertising, promotion and sponsorship and **R**aising taxes on tobacco.

Priority Areas for Eliminating the use of Tobacco	
Decrease percentage of youth who use tobacco	• Develop and disseminate educational materials related to tobacco prevention and cessation [short-term]. • Implement evidence-based school and community programs that prevent tobacco-use among youth and adults [short-term]. • Reduce youth adoption of e-cigarette and alternative nicotine delivery systems [long-term].
Decrease percentage of adults who use tobacco	• Promote tobacco-free environmental policies [long-term]. • Develop and disseminate educational materials related to tobacco prevention and cessation [short-term]. • Train HCPs to use best-practices related to increasing the provision of or referral to tobacco cessation services [long-term].
Reduce exposure to second-hand smoke	• Promote tobacco-free environmental policies [long-term].

The headline indicators for this focus area are: 1) Percent of youth reporting smoking cigarettes or using smokeless tobacco in the last 30 days (YRBSS), 2) Percentage of adults who report smoking cigarettes or using smokeless tobacco on one or more of the previous 30 days (BRFSS) and 3) numbers of Texans covered by smoke-free restaurant and bar laws and ordinances (American Nonsmokers' Rights Foundation and institutional policy scans as needed). More detail for this priority area including the EndTobacco program implementation strategy may be found in Figure 5.5 in Appendix F.

Focus Area: Healthy Eating and Physical Activity

3b. Healthy Eating and Physical Activity

Obesity and physical inactivity (PA) are not only related to cancer incidence, they also impact recurrence of tumors, metastasis and cancer patient survival. [25] Hence the need for achieving and maintaining a healthy BMI through energy balance. Energy balance is the relationship between calories taken into the body through food and drink and the calories being expended by our bodies for daily energy requirements. Energy balance is impacted by nutrition and exercise.

Children, adolescents and adults fall short of Healthy People 2020 guidelines for physical activity and Texas Cancer plan guidelines for fruit and vegetable consumption according to baseline indicators.

The institution has a number of programs promoting physical activity and nutrition among children and adolescents as well as cancer survivors.

Priority Area for Healthy Eating and Physical Activity	
Increase percentage of youth who follow evidence-based PA guidelines	Encourage youth and families to choose lifestyles that promote healthy weight and adequate physical activity [long-term].
Increase the percentage of adults who follow evidence-based PA guidelines	Develop and disseminate educational materials related to healthy behaviors and obesity prevention [short-term].
Increase percentage of youth and adults who follow evidence-based nutrition guidelines	Support environment and policies that promote the adoption of healthy behaviors and reduce barriers to the access of healthy food [long-term].
Expand children's access to evidence-based nutrition and PA programs	Implement evidence-based school, youth and adult community programs that promote nutrition and physical activity [short-term].

The headline indicators for this focus area are percentage of: 1) high school students who were physically active for at least 60 minutes on 5 or more days, 2) adults who were physically active a total of 150 minutes a week, 3) youth and adults who consumed at least 5 FV servings in a day and 4) monitoring number of programs focused on PA for children.

Program: Healthy Eating and Physical Activity Logic Model
Situation: UT Population Health Strategic Plan

Inputs	Outputs		Outcomes -- Impact		
	Activities	*Participation*	*Short*	*Medium*	*Long*
MD Anderson: • Cancer Prevention and Control Platform • • Office of Health Policy • Community Relations and Education	Demonstration projects focusing on physical activity, nutrition and other areas	Individuals in schools and community-based settings Health care providers	Increased PA levels Healthier diets (increased FV consumption)	Increase in healthy BMI Improved metabolic health	Reduction in incidence and mortality from lifestyle-related diseases such as certain cancers, Type II diabetes and stroke
Schools	PA and Nutrition programs	Students and teachers			
Faith-based institutions		Members			
Community-based organizations		Program participants			
CATCH Global Foundation	Coordinated Approach to Child Health (CATCH) intervention and tools	Elementary and middle school students			
Corporate philanthropy					
Grant funding					
Private Donors					

Assumptions
Regular monitoring and feedback on process and outcomes measures

External Factors

PRIMARY PREVENTION GOAL 1

Eliminate the use of tobacco and reduce morbidity and mortality from tobacco-related cancers*

Objectives	Current Progress/Targets
1. **Decrease the percentage of youth who use tobacco**. • Decrease the percentage of youth who report smoking cigarettes or using smokeless tobacco on one or more of the previous 30 days, YRBSS	**Smoking:** **Current:** 14.3% (YRBSS, 2013) **Healthy People 2020:** 16% **Smokeless tobacco:** **Current:** 8.1% (YRBSS, 2013) **Healthy People 2020:** 6.9%
2. Decrease percentage of adults who use tobacco. • Decrease percentage of adults who report smoking cigarettes or using smokeless tobacco on one or more of the previous 30 days ,BRFSS	**Smoking:** **Current:** 15.9% (BRFSS, 2013) **Healthy People 2020:** 12% **Smokeless tobacco:** **Current:** 4.3% (BRFSS, 2013) **Healthy People 2020:** 0.3%
3. Reduce exposure to secondhand smoke • Number of Texans covered by 100% smoke-free restaurant and bar laws ordinances (no-smoke)	**Current:** 40.1% (American Nonsmoker's Rights Foundation, 2016) **Healthy People 2020:** 100%

Policy

- Promote tobacco-free environment policies by collaborating with external stakeholders through regional and statewide initiatives. (ex: tobacco-free campuses, tobacco-free hiring policies, tobacco-free event venues).

Education

- Develop and disseminate community health education resources and tools (tailor resources to address cultural, geographic and socioeconomic barriers)
- Continue to develop and disseminate educational materials related to tobacco prevention, cessation and treatment.
- Train health professionals and promote systems and best practices related to increasing provision of or referral to tobacco cessation services.

Services

- Implement evidence-based school and community programs that prevent tobacco-use among youth and adults.
- Expand access to use of comprehensive tobacco cessation programs and services.
- Implement evidence-based programs to decrease disparities in gender, racial/ethnic populations, and high-risk populations related to incidence and mortality from tobacco-related cancers.

Identified gaps in current efforts

- Specialized populations in need of targeted program services include cancer survivors. Facilities in need of targeted program services include mental health care facilities and juvenile detention centers.

*Reduce youth adoption of e-cigarette and alternative nicotine delivery systems.

PRIMARY PREVENTION GOAL 2

Increase adoption of evidence-based nutrition behaviors and physical activity behaviors shown to reduce obesity and cancer risk

Objectives	Current Progress/Targets
1. Increase the percentage of youth who follow evidence-based physical activity guidelines. • Percentage of high school students who were physically active for at least 60 minutes on 5 or more days, YRBSS	**Current:** 48.3% (YRBSS,2013) **Healthy People 2020 (aerobic physical activity):** 31.6%
2. Increase the percentage of adults who follow evidence-based physical activity guidelines. • Percentage of adults who were physically active for a total of 150 minutes per week , BRFSS)	**Current:** 42.1% (BRFSS,2013) **Healthy People 2020:** 47.9%
3. Increase the percentage of youth and adults who follow evidence-based nutrition guidelines. • 5 fruits and/or veggies/day, YRBSS	**Youth:** **Current:** 22.5% (YRBSS, 2013) **Healthy People 2020:** N/A **Texas Cancer Plan:** 26% **Adults:** **Current:** 14.3% (BRFSS, 2013) **Healthy People 2020:** N/A **Texas Cancer Plan:** 26%
4. Expand children's access to evidence-based nutrition and physical activity programs • Number of programs focused on nutrition and physical activity for children	

Policy

- Support environment and policies that promote the adoption of healthy behaviors and reduce barriers to the access of healthy food.

Education

- Develop, partner and disseminate educational materials related to healthy behaviors and obesity prevention.
- Encourage youth and families to choose lifestyles that promote healthy weight and adequate physical activity.
- Develop and disseminate community health education resources and tools (tailor resources to address cultural, geographic and socioeconomic barriers)

Services

- Implement evidence-based school, youth and adult community programs that promote healthy nutrition and physical activity.

PRMARY PREVENTION GOAL 3 Increase vaccination rate for vaccines shown to reduce the risk of infectious disease related to cancer	
Objectives	**Current Progress/Targets**
1. Increase the percentage of youth and young adults who have completed the recommended HPV vaccine series according to Advisory Committee on Immunization Practices (ACIP) guidelines. • Percentage of adolescents ages 13-17 who completed 3 doses of HPV, National Immunization Teen Survey	**Current:** 33.9% (NIS-Teen, 2014) **Healthy People 2020:** 80%
2. Promote hepatitis B vaccine and adoption of CDC recommendations for hepatitis screening, cancer surveillance and treatment.	
3. Promote screening for hepatitis C, cancer surveillance and treatment.	

Policy

- Support policies that promote HPV and Hepatitis B vaccination and collaborate with diverse stakeholders to increase awareness of infection-related cancers.

Education

- Continue to provide education to health professionals to increase their knowledge related to infectious disease and cancers and reinforce the importance of vaccination as a cancer preventive measure.
- Continue to develop and disseminate community health education resources and tools (tailor resources to address cultural, geographic and socioeconomic barriers)

Identified gaps in current efforts

- Promote demonstration project and research on screening for liver cancer

PRIMARY PREVENTION GOAL 4

Reduce exposure to solar and artificial ultraviolet (UV) radiation to prevent skin cancer

Objectives	Current Progress/Targets
1. Promote skin cancer prevention behavior among youth, adolescents, and adults • Percentage of youth that have had a sunburn in the past year, YRBSS • Percentage of youth and adults that follow protective measures to reduce the risk of skin cancer, YRBSS and National Health Interview Survey (NHIS) • Percentage of adults that have ever received a skin cancer diagnosis, BRFSS	**Current:** • Unavailable for TX, (YRBSS,2013) • Unavailable for TX, (NHIS, 2015) • 4.6% (BRFSS, 2014)
2. Reduce the incidence and mortality from melanoma • Age adjusted incidence and mortality rates from Texas Cancer Registry	**Current melanoma incidence rate:** 12.1 per 100,000 (TCR, 2012) **Healthy People 2020**: N/A **Current melanoma mortality rate:** 2.2 per 100,000 (TCR, 2012) **Healthy People 2020:** 2.4 deaths per 100,000

Policy

- Support policies that promote behaviors that reduce exposure to UV radiation and support an environment that promotes sun safety.
- Provide expertise and tools on the implementation of skin cancer policies in various settings (college campuses, recreational venues etc.)

Education

- Develop and disseminate evidence-based UV protection curriculum.
- Continue to develop and disseminate community health education resources and tools (tailor resources to address cultural, geographic and socioeconomic barriers)

Identified gaps in current efforts

- Populations and facilities in need of skin cancer prevention program and services include rural health facilities and migrant workers.
- Establish additional partnerships with recreational venues, corporate entities as these may be potential settings for educational sessions.

SECONDARY PREVENTION GOAL 5

Increase proportion of early stage diagnosis through screening and early detection to reduce deaths from breast cancer

Objectives	Current Progress/Targets
1. Increase proportion of women who receive breast cancer screening according to MD Anderson guidelines • Percentage of women over age 40 and over who have had a mammogram within the past 2 years, BRFSS	**Current:** 64.8% (BRFSS, 2012) **Healthy People 2020:** 81.1%
2. Reduce the rate of late-stage diagnosis of breast cancer • rate per 100,000 female breast cancer diagnosis, age-adjusted mortality rate female breast cancer, TCR	**Current:** 21.0 deaths per 100,000 (TCR, 2012) **Healthy People 2020:** 20.7 deaths per 100,000
3. Identify high-risk populations based on germline mutations through population-based genomic screening	

Education

- Develop and disseminate educational materials related to breast cancer and screening guidelines.
- Continue to develop and disseminate community health education resources and tools (tailor resources to address cultural, geographic and socioeconomic barriers)

Services

- Implement programs that increase access to genomic screening, breast screening and diagnostic follow-ups for eligible women.
- Increase access and reduce barriers to breast screening services through alternative screening opportunities to reach underserved populations and geographic areas (ex: mobile mammography)

SECONDARY PREVENTION GOAL 6 Increase proportion of early stage diagnosis through screening and early detection to reduce deaths from cervical cancer	
Objectives	**Current Progress/Targets**
1. Increase proportion of women who receive cervical cancer screening according to MD Anderson guidelines • Percentage of women age 18+ who have had a Pap test w/in the past 3 years, BRFSS •	Current: 74.6% (BRFSS, 2010) Healthy People 2020: 93%
2. Reduce rate of invasive cervical cancer • Rate per 100,000 cervical cancer diagnoses at invasive stage and age-adjusted mortality rate cervical cancer, TCR	**Current rate of invasive stage diagnoses:** 9.0 per 100,000 (TCR, 2011) **Texas Cancer Plan:** 7 per 100,000 **Current mortality rate:** 2.8 deaths per 100,000 (TCR, 2011) **Texas Cancer Plan:** 2 deaths per 100,000

Education

- Develop and disseminate community health education resources and tools (tailor resources to address cultural, geographic and socioeconomic barriers)
- Increase health professional knowledge on cervical cancer prevention, best practices and utilization of clinic management tools to improve early detection and access to follow-up services.

Services

- Implement and expand programs that increase access and reduce barriers to cervical cancer screening services.

SECONDARY PREVENTION GOAL 7

Increase proportion of early stage diagnosis through screening and early detection to reduce deaths from colon and rectum cancer

Objectives	Current Progress/Targets
1. Increase proportion of adults who receive colon and rectum cancer screening according to MD Anderson guidelines. • Percentage of adults age 50+ who have had a sigmoidoscopy or colonoscopy, BRFSS	**Current:** 62.6% (BRFSS, 2012) **Texas Cancer Plan:** 75%
2. Reduce the rate of invasive colon and rectum cancer. • Rate per 100,000 colon and rectum cancer diagnoses at invasive stage and age-adjusted mortality rate, TCR	**Current:** 38 per 100,000 (TCR, 2012) **Healthy People:** 38.6 new cases per 100,000 **Current:** 14.6 deaths per 100,000 (TCR, 2012) **Healthy People:** 14.5 new cases per 100,000

Policy

- Establish and mobilize a statewide colorectal cancer coalition to address policy issues such as screening reimbursement and commitment to national screening campaigns. (ex: achievement of 80% screening rate by 2018).

Education

- Develop and disseminate community health education resources and tools (tailor resources to address cultural, geographic and socioeconomic barriers).

Services

- Implement programs that increase access and reduce barriers to colorectal cancer screening and provide appropriate navigation services.

SECONDARY PREVENTION GOAL 8 Increase proportion of early stage diagnosis through screening and early detection to reduce deaths from lung cancer	
Objectives	**Current Progress/Targets**
1. Increase proportion of adults who receive lung cancer screening according to MD Anderson guidelines.	
Education • Increase health professional knowledge on lung cancer prevention, best practices and screening guidelines to improve early detection of lung cancer. ***Services*** • Implement community-based programs that increase access to lung screening for eligible populations.	

SECONDARY PREVENTION GOAL 9 Increase proportion of early stage diagnosis through screening and education to reduce deaths from prostate cancer	
Objectives	**Current Progress/Targets**
1. Promote education and screening for prostate cancer.	
Education • Develop and disseminate community health education resources and tools (tailor resources to address cultural, geographic and socioeconomic barriers).	

SUPPLEMENTAL GOAL 10 Promote quality of life and overall health and well-being for cancer survivors and their caregivers.	
Objectives	**Current Progress/Targets**
1. Increase participation in and access to survivorship programs and services designed to improve quality of life.	**Nationwide**, 65.2% of persons with cancer were living 5 years or longer after diagnosis in 2007. **Healthy People 2020 target:** 71.7%
2. Increase access to smoking cessation resources	
3. Increase the number of community clinicians trained in survivorship care	
Education • Increase health professional knowledge on survivorship care and appropriate resources and tools for cancer survivors.	

SYSTEMS GOAL 11 Develop and strengthen the infrastructure supporting the delivery of the most appropriate cancer prevention care services	
Objectives	**Current Progress/Targets**
1. Increase the number and distribution of quality, accessible, and affordable facilities, equipment, technology, and cancer prevention and care services • Percentage of population uninsured, US Census	**Current:** 22.1% (U.S. Census, 2013) 16.9% uninsured (Rice University, Baker Institute, 2015)
2. Increase the number of well-trained health professionals serving rural, frontier and other health professional shortage areas • Number of counties with health professional shortage areas, HRSA	**Current:** 299 HPSAs 179 MUA (Whole counties) 44 MUA (Partial counties) TX, DSHS
3. Enhance and protect existing cancer data systems, including the Texas Cancer Registry, BRFSS and YBRSS to monitor and support outcome-driven cancer research, prevention and control	
Policy • Support policies that increase access to cancer preventive services and develop an environment of cancer control and prevention. • Support policies which sustain funding for the state cancer registry, behavior risk factor surveillance survey and the immunization registry.	

RESEARCH GOAL 12

Support innovative research that will enhance the potential for medical and scientific breakthroughs in cancer

Objectives	Current Progress/Targets
1. Develop and implement novel methods for cancer prevention and control, screening and early detection, including imaging technologies, genomics, and proteomics	
2. Develop less invasive treatment and screening options for cervical cancer	

Policy

- Support and collaborate with public and private stakeholders to expand research capabilities and accelerate translation of research into community-based practice.

RESEARCH GOAL 13

Increase opportunities to access and participate in cancer research and clinical trials

Objectives	Current Progress/Targets
1. Increase awareness, participation, and retention of eligible patients, including those from diverse and under-represented populations in cancer clinical trials • Percentage of adults who participated in a cancer clinical trial as part of their treatment, BRFSS	**Current:** 3.3% (BRFSS, 2010) **Healthy People 2020:** None **Texas Cancer Plan:** 5%

Policy

- Support policies which promote community-based participatory research (CPBR).

Education

- Facilitate and guide the development and dissemination of culturally and linguistically appropriate recruitment materials.

Services

- Guide research stakeholders with the recruitment and enrollment of under-represented populations in cancer-related clinical trials.

CROSS-CUTTING GOAL 14 Reduce health disparities.	
Objectives	**Current Progress/Targets**
1. Promote innovative programs with the goal of reducing health disparities in cancer screening and early detection for vulnerable populations such as racial/ethnic minorities, the socioeconomically disadvantaged, linguistically and geographically diverse groups.	
2. Develop strategies to identify and screen high risk populations	

Policy

- Support policies which promote health equity.
- Promote diversity in networks of community partners.

Education

- Continue to develop and disseminate culturally and linguistically appropriate community health education resources.
- Increase health literacy in programs, policies, strategic plans, and research activities.

Services

- Support policies and programs that increase health care professionals' awareness and use of culturally competent care techniques.

SECTION 10 - Environmental Impact Assessment

MD Anderson believes that inaction is not an option in its educational, research and patient care efforts towards Making Cancer History®. As the #1 ranked cancer hospital for cancer care, we would be amiss if we did not contribute to the development of healthy lifestyle habits and encouraging all Texans to get regular screening exams in order to greatly reduce the risk for some types of cancers. The devastating toll of cancer is predicted to increase unless more effective strategies for cancer prevention, early detection, and treatment are developed. Between 2010 and 2020, the number of new cancer cases in the US is predicted to increase by about 24% in men and 21% in women.[52]

As mentioned in section 1, Texas is becoming increasingly diverse and its population is consistently growing at a rapid pace. The older population is growing faster in Texas than in the nation. By 2030, just under one in five people in Texas will be over 64 years of age.[3] Cancer will become increasingly important to address as it is primarily a disease of aging. The social determinants of health play a large role in health care disparities and access to healthcare, prevention services, access to nutritional food, and overall lifestyle. Texas has a high poverty rate and uninsured rate so services are needed to address the health issues unique to each region and its residents particularly for cancer prevention, screening, and research.

Approximately 50% of cancer cases are preventable through lifestyle and behavior modifications or through implementation of public education and policy initiatives that educate individuals on how to reduce their cancer risk (see section 2). Many cancer risk factors (shown in appendix F) are also risk factors for other chronic diseases, such as cardiovascular disease, respiratory diseases, and diabetes. Therefore, addressing the risk factors discussed in this plan such as obesity, unhealthy diets, physical inactivity, tobacco use and exposure to pathogens can potentially reduce the disease burden beyond cancer. The proposed population health strategic plan intends to accelerate the progress that has been made statewide and ultimately end cancer. According to the most recent data, Texas ranks 10th nationwide among states in adult obesity prevalence and 13th in diabetes prevalence.[53] Current estimates project that nearly 75% of Texans will be overweight or obese by the year 2040. By 2030, there is a projected increase of over

482,000 cases of obesity-related cancers and approximately 4.5 times as many cases of heart disease in Texas as there are currently.[53] If current trends continue, associated costs will nearly quadruple from $10.5 billion in 2001 to as much as $39 billion by 2040.[54] Tobacco use has declined significantly since the U.S. Surgeon General's Report was released in 1964, however many youth and adults continue to smoke and remain at risk for tobacco-related disease. Use of novel tobacco products such as electronic cigarettes has increased and presents a new challenge in tobacco prevention and control. Annual healthcare costs caused directly by tobacco use in Texas amount to $8.85 billion.[55]

The proposed plan emphasizes cancer screening to improve early detection of cancer thus improving treatment outcomes, quality of life and reduce cancer health disparities. Also emphasized throughout the plan, is primary prevention to help mitigate exposure to cancer risk factors through promotion of behavior change and health promotion. Without a concerted and statewide effort, the future health of Texans and the state economy could be in jeopardy.

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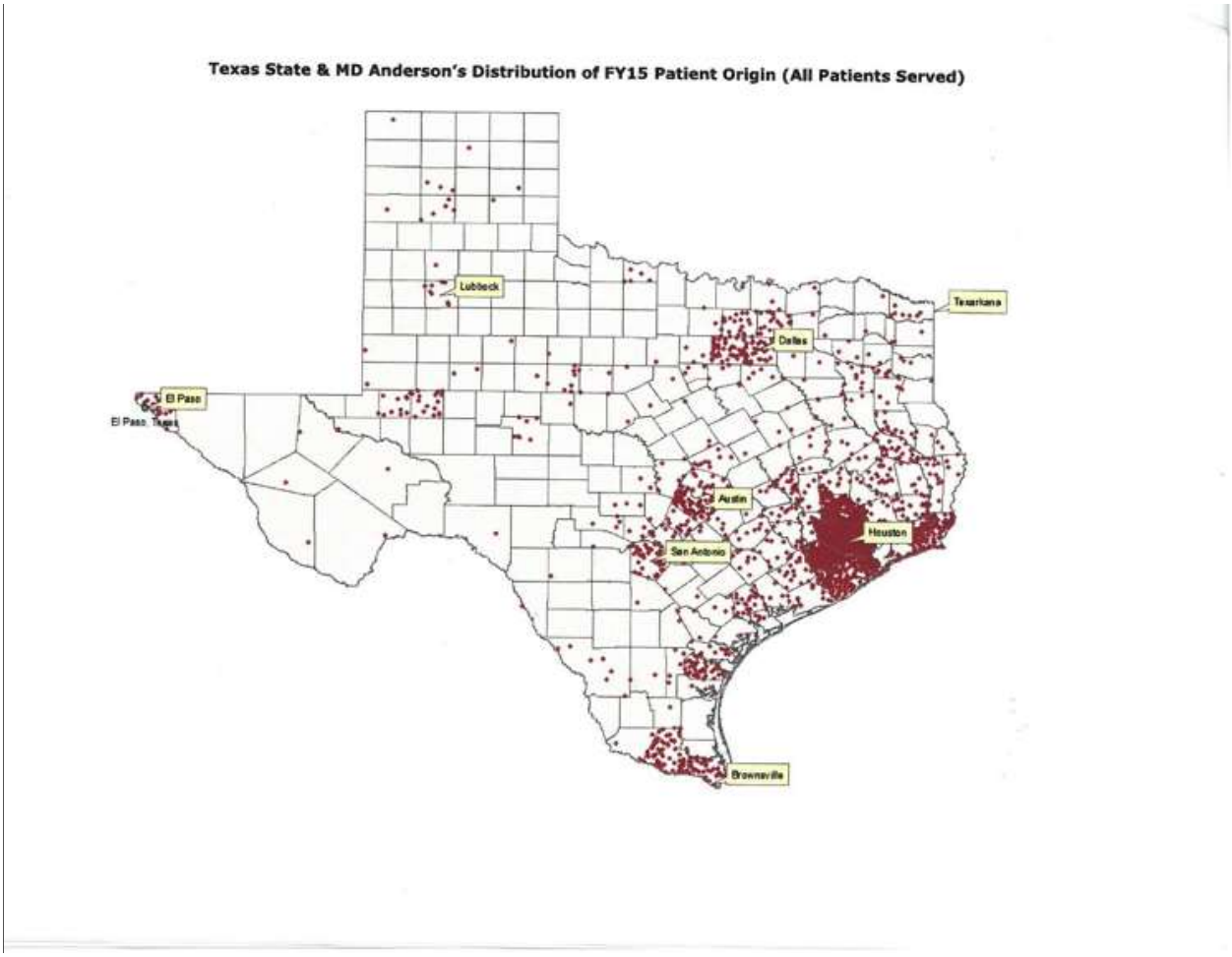
Appendix A

Table 1. Distribution of 80% of FY15 Patients Served Origin By County: Texas

County	Metropolitan Statistical Area (MSA)	Count	Percentage
Harris	Houston-Sugarland-Baytown	39,814	40.22%
Fort Bend	Houston-Sugarland-Baytown	7,376	7.45%
Montgomery	Houston-Sugarland-Baytown	5,315	5.37%
Brazoria	Houston-Sugarland-Baytown	4,118	4.16%
Galveston	Houston-Sugarland-Baytown	4,064	4.11%
Jefferson	Beaumont-Port Arthur	3,210	3.24%
Travis	Austin-Round Rock-San Marcos	2,093	2.11%
Hidalgo	McAllen-Edinburg-Mission	1,808	1.83%
Nueces	Corpus Christi	1,420	1.43%
Cameron	Brownsville-Harlingen	1,392	1.41%
Bexar	San Antonio-New Braunfels	1,261	1.27%
Dallas	Dallas-Fort Worth-Arlington	1,236	1.25%
Tarrant	Dallas-Fort Worth-Arlington	1,222	1.23%
Orange	Beaumont-Port Arthur	1,175	1.19%
Williamson	Austin-Round Rock-San Marcos	871	0.88%
Brazos	College Station-Bryan	835	0.84%
El Paso	El Paso	805	0.81%

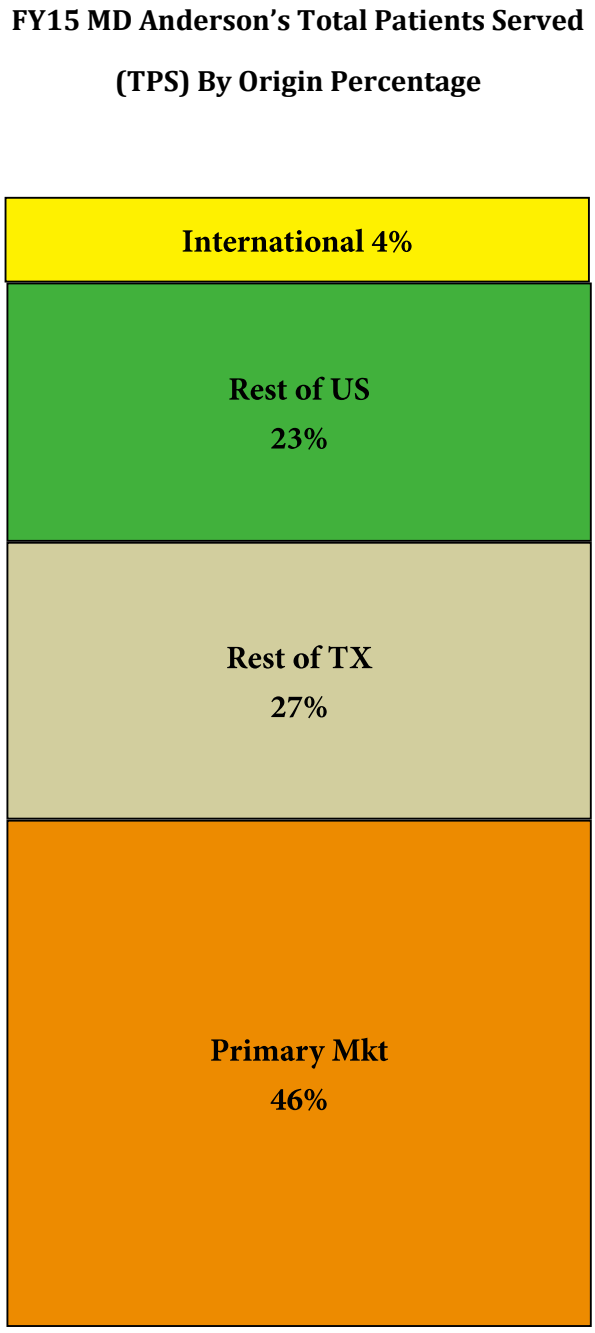
Victoria	Victoria	767	0.77%
Hardin	Beaumont - Port Arthur	695	0.70%
Total		**79,477**	**80.29%**

Figure 1.1 MD Anderson FY15 Patient Origin Distribution



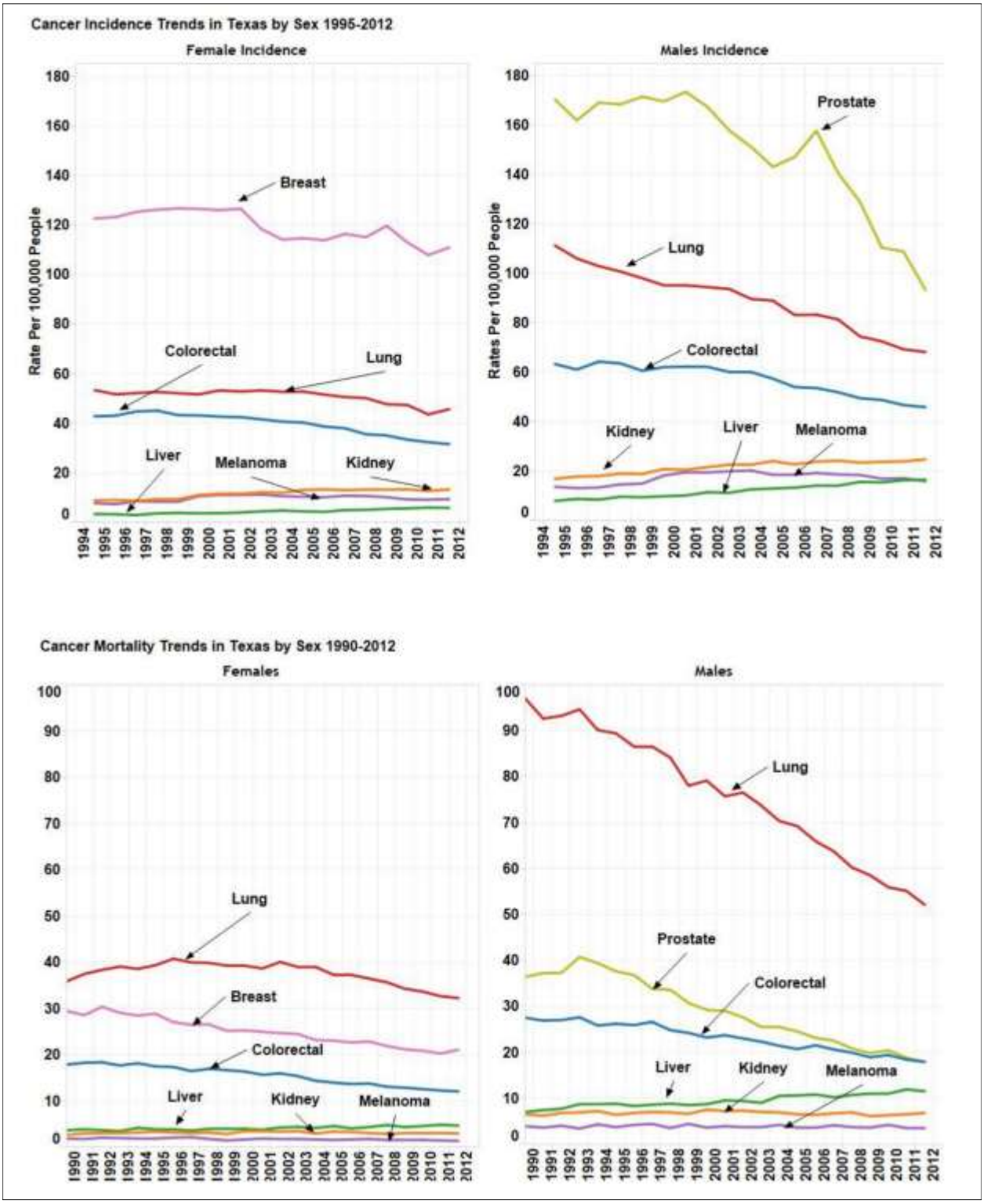
*All patients assigned a medical record number during a patient visit are captured in this distribution. This includes patients who have received screening services, treatment and follow-up care from any MD Anderson clinic.

Figure 1.1 MD Anderson FY15 Patient Origin Distribution



Appendix B

Figure 2.1 Cancer Incidence and Mortality Trends in Texas.



Appendix C

Figure 3.1. Leading New Cancer Cases in Texas by Sex, 2015 Estimates

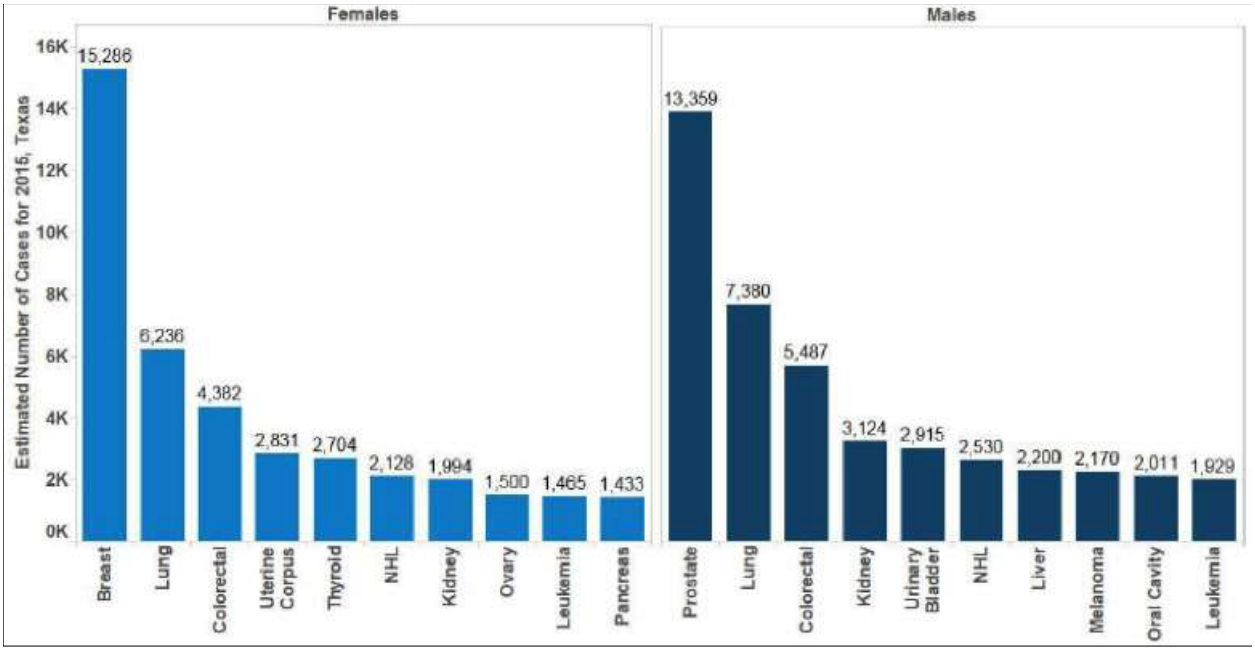


Figure 3.2. Leading Causes of Cancer Death by Sex in Texas, 2015 Estimates

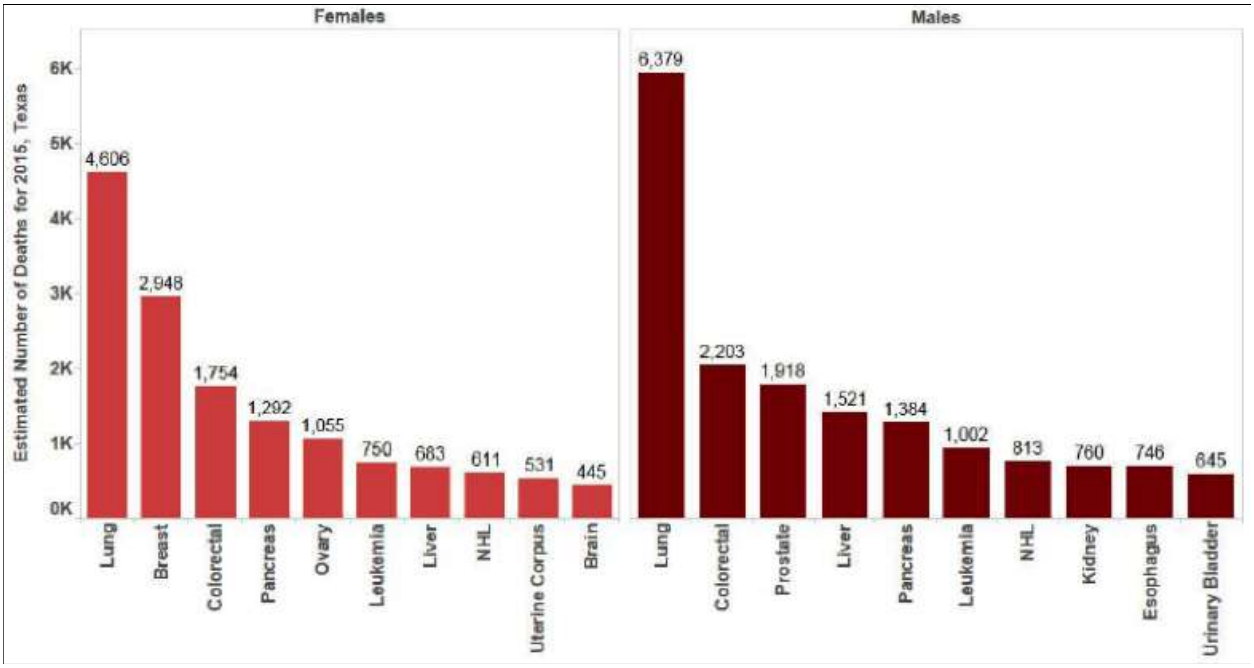


Figure 3.3. Texas Age-Adjusted Overall Cancer Incidence and Mortality Rates by Race, 2009-2013

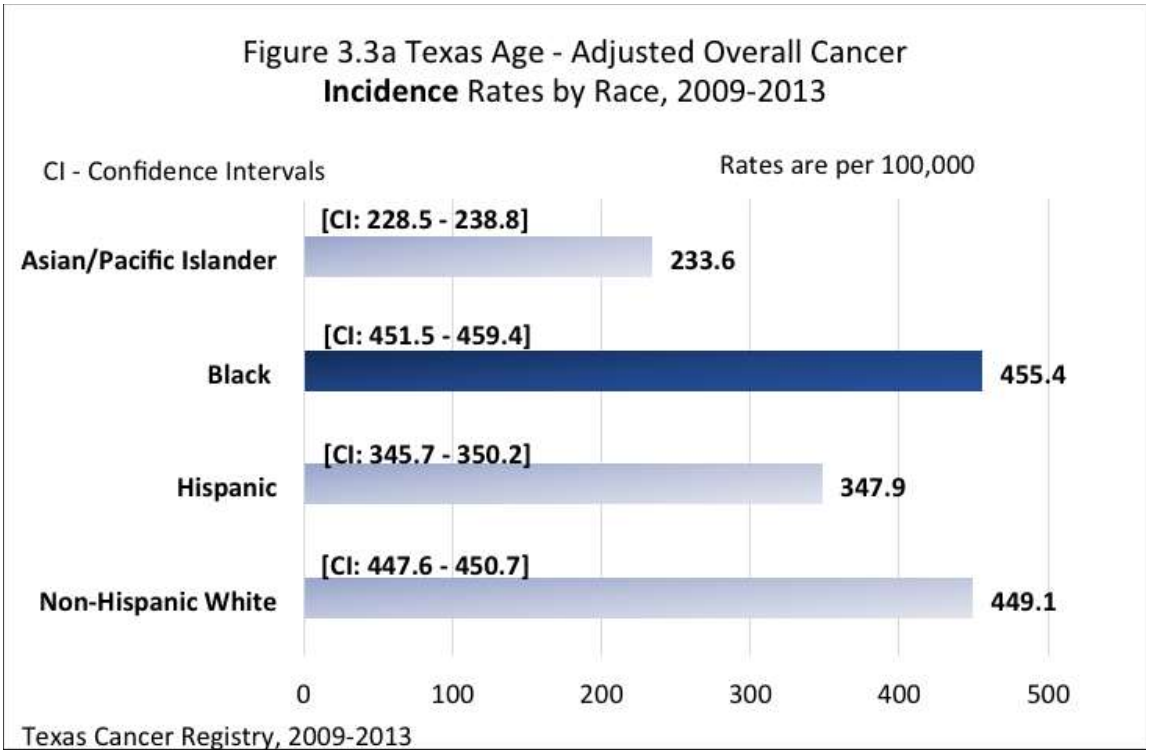


Figure 3.3. Texas Age-Adjusted Overall Cancer Incidence and Mortality Rates by Race, 2009-2013

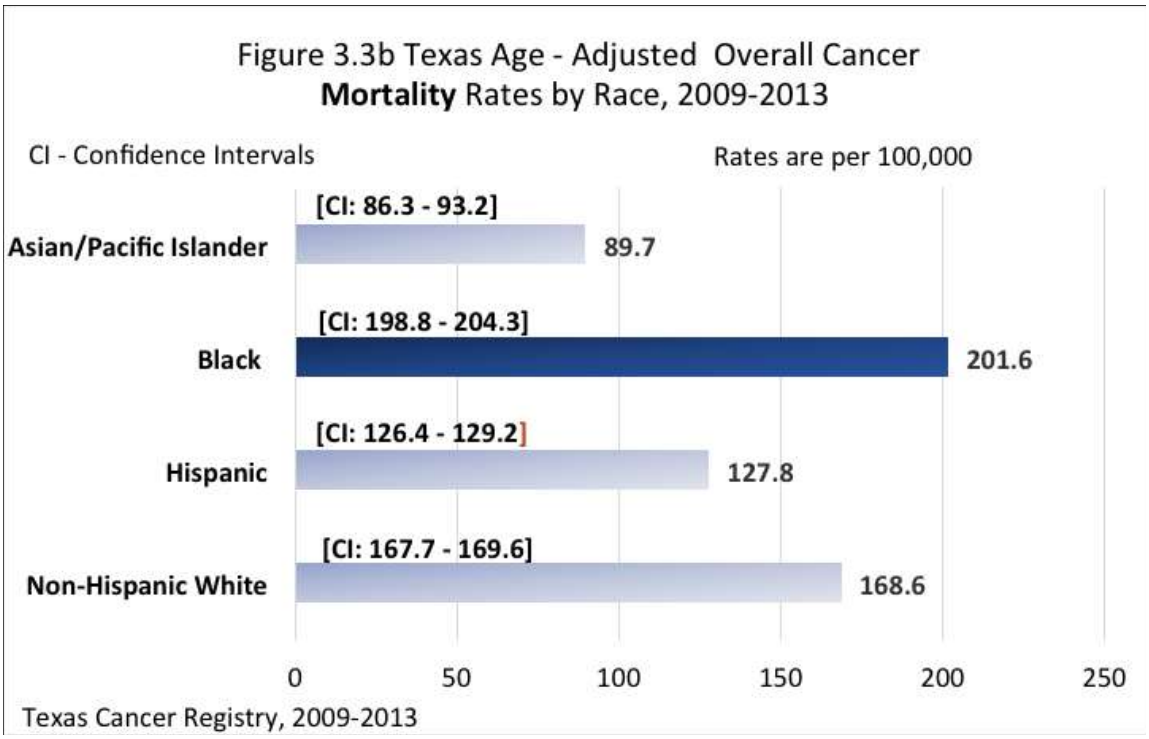
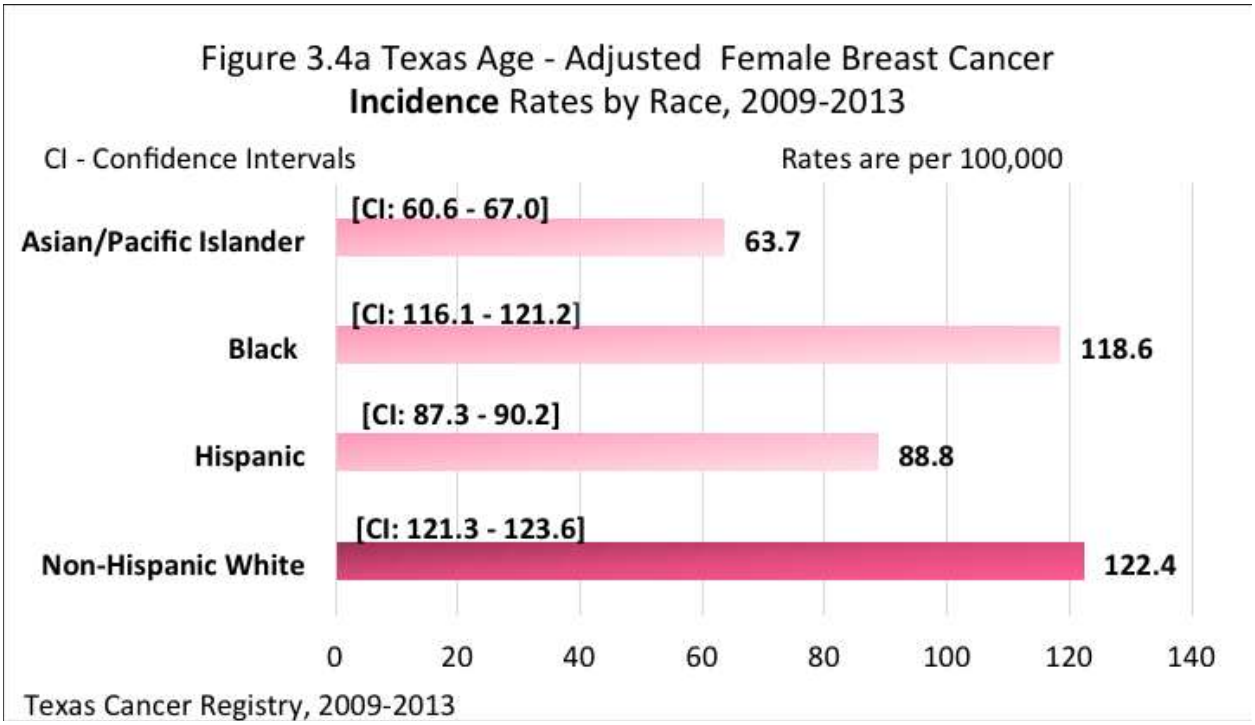


Figure 3.4. Breast Cancer Incidence and Mortality (by Race and MSA)



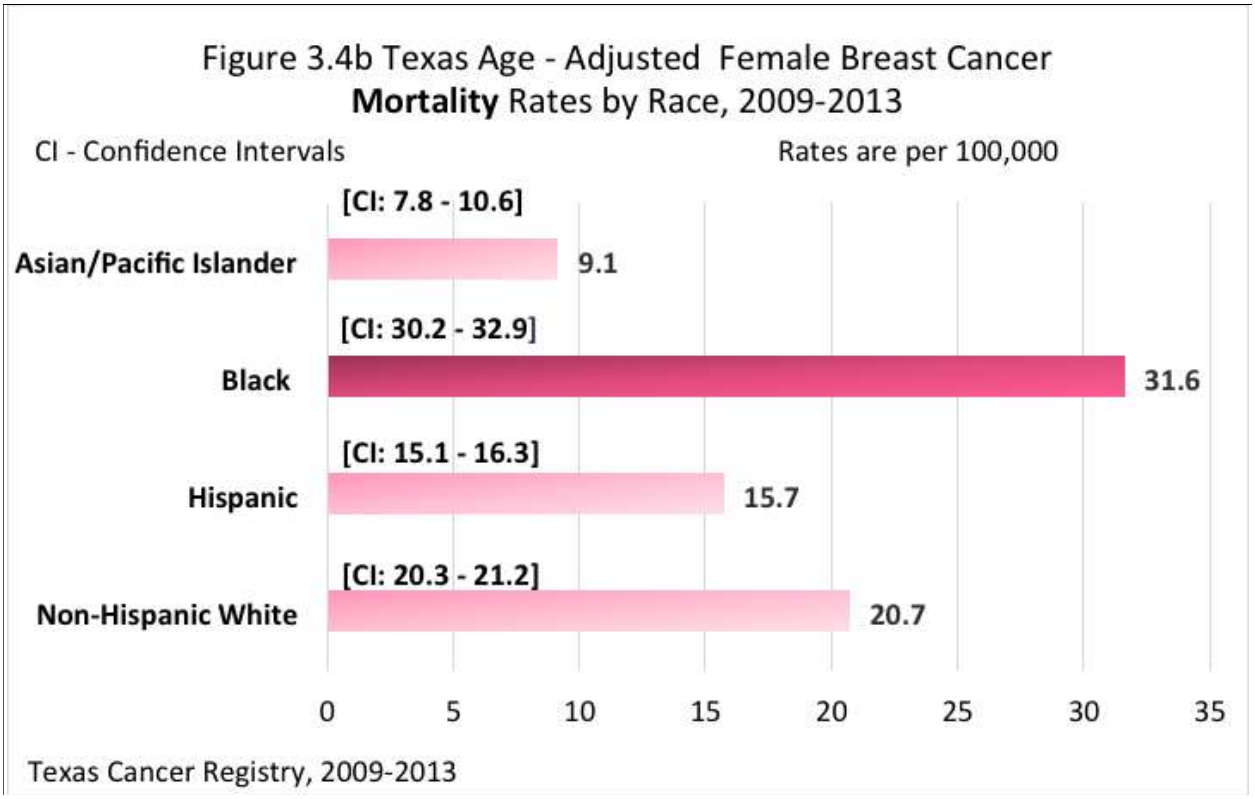
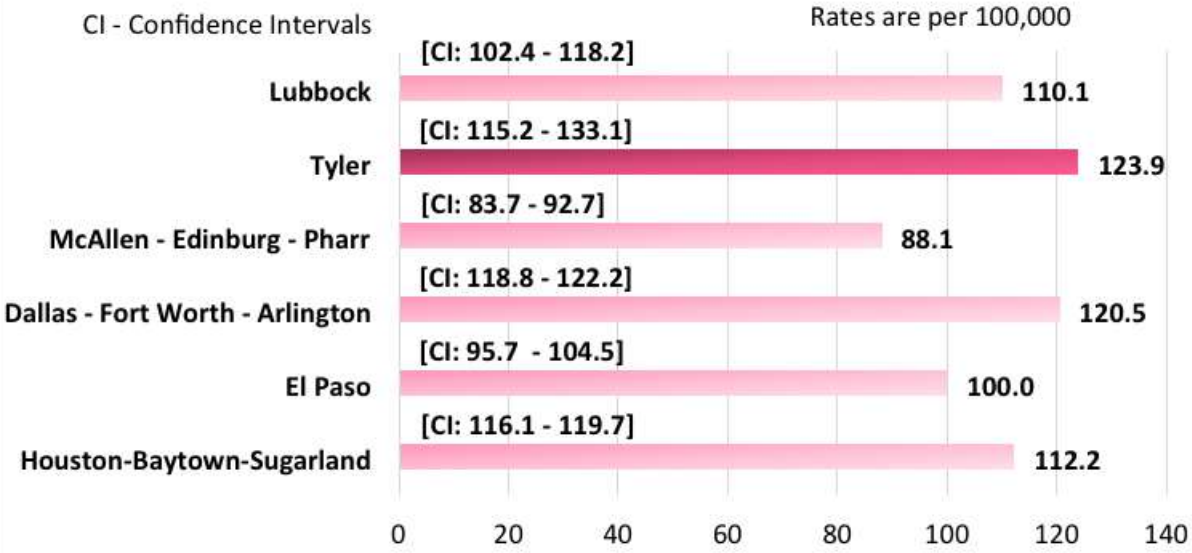
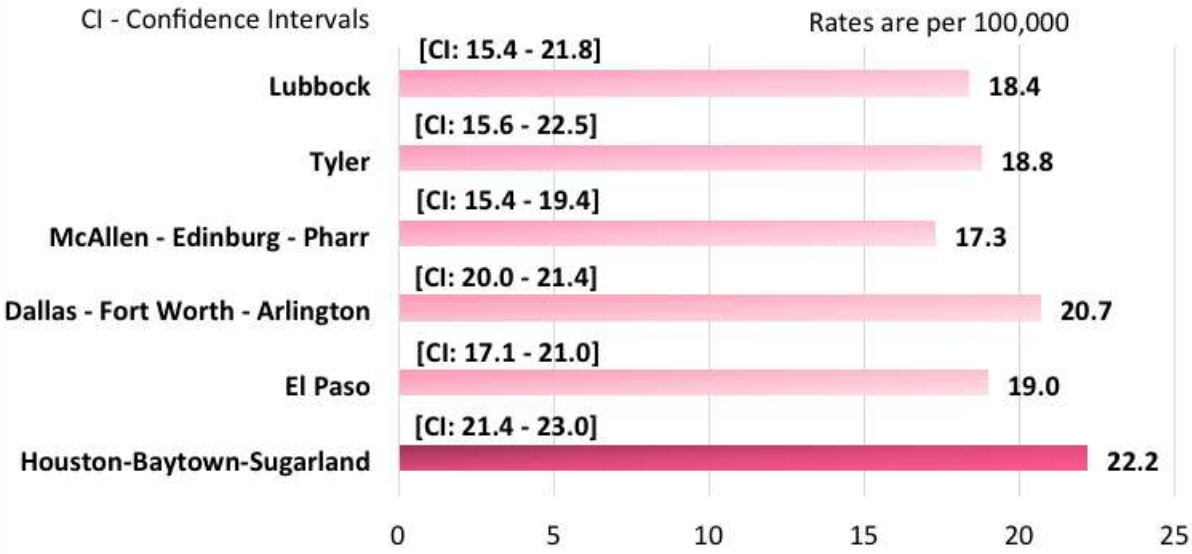


Figure 3.4c Age - Adjusted Female Breast Cancer
Incidence Rates by MSA, 2009-2013



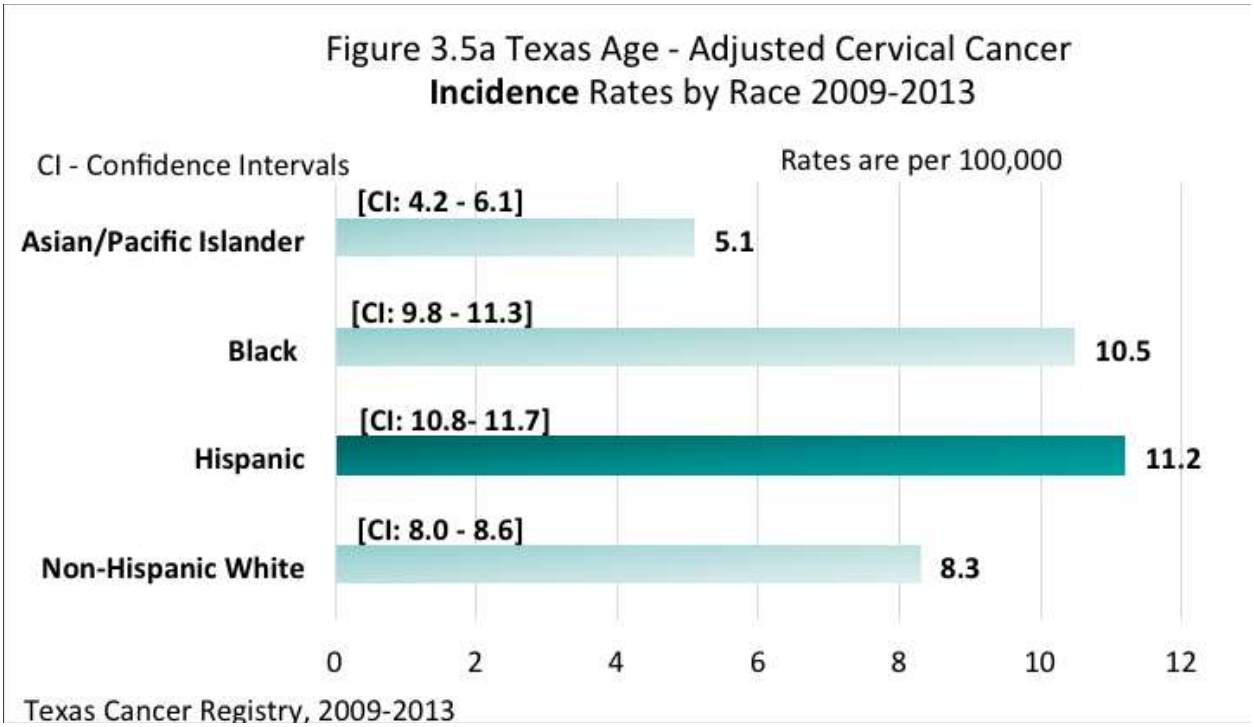
Texas Cancer Registry, 2009-2013

Figure 3.4d Age - Adjusted Female Breast Cancer
Mortality Rates by MSA, 2009 - 2013



Texas Cancer Registry, 2009-2013

Figure 3.5 Cervical Cancer Incidence and Mortality (by Race and MSA)



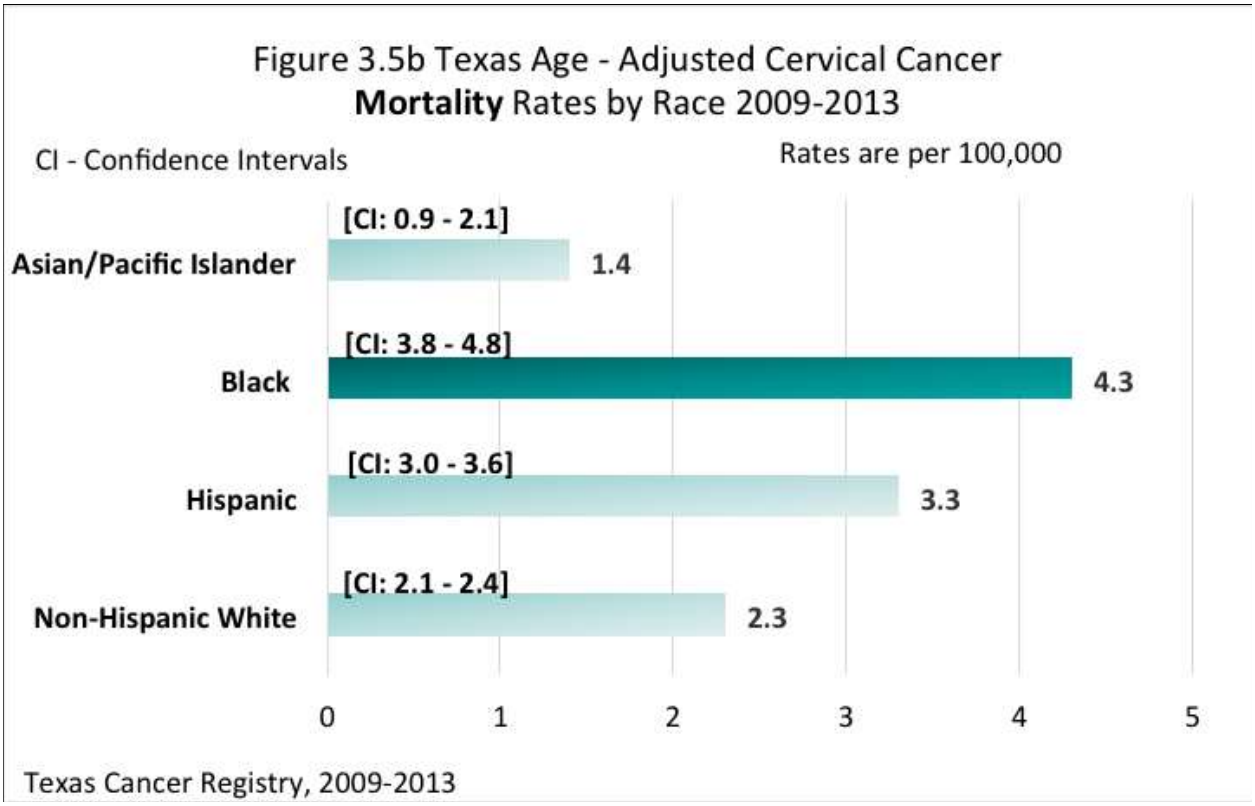
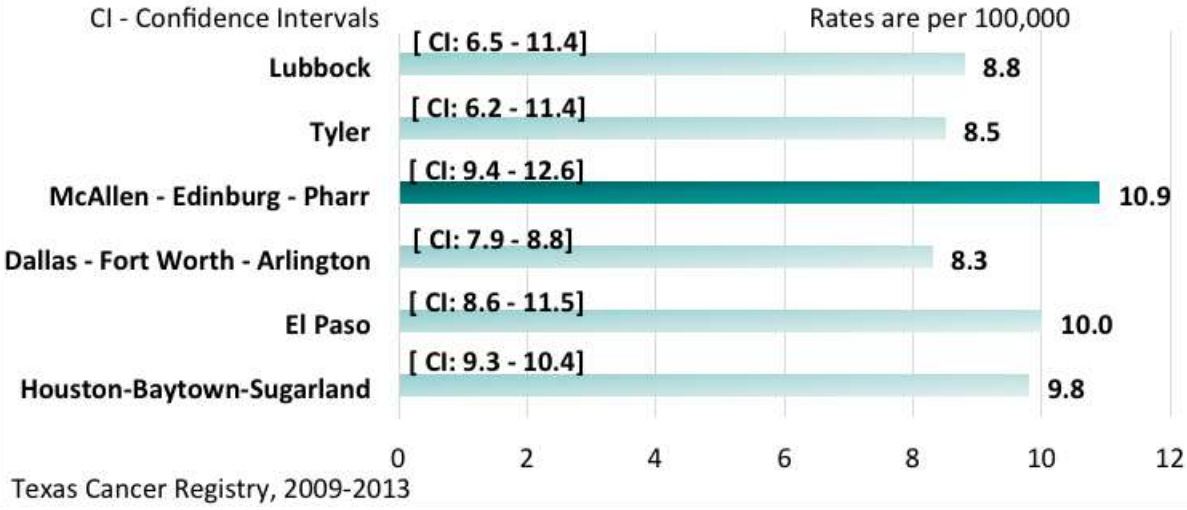
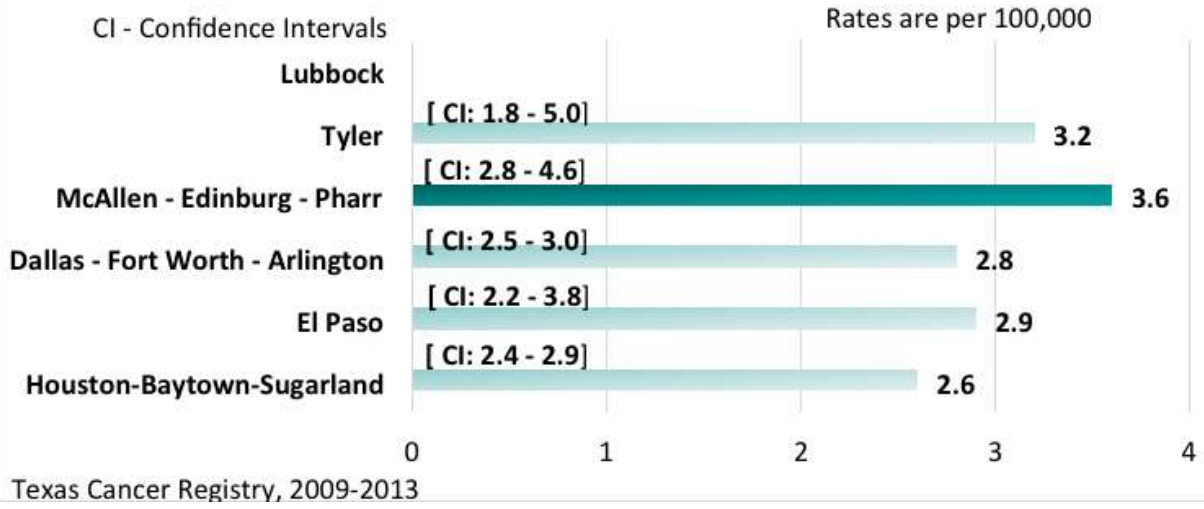


Figure 3.5c Age - Adjusted Cervical Cancer
Incidence Rates by MSA, 2009-2013



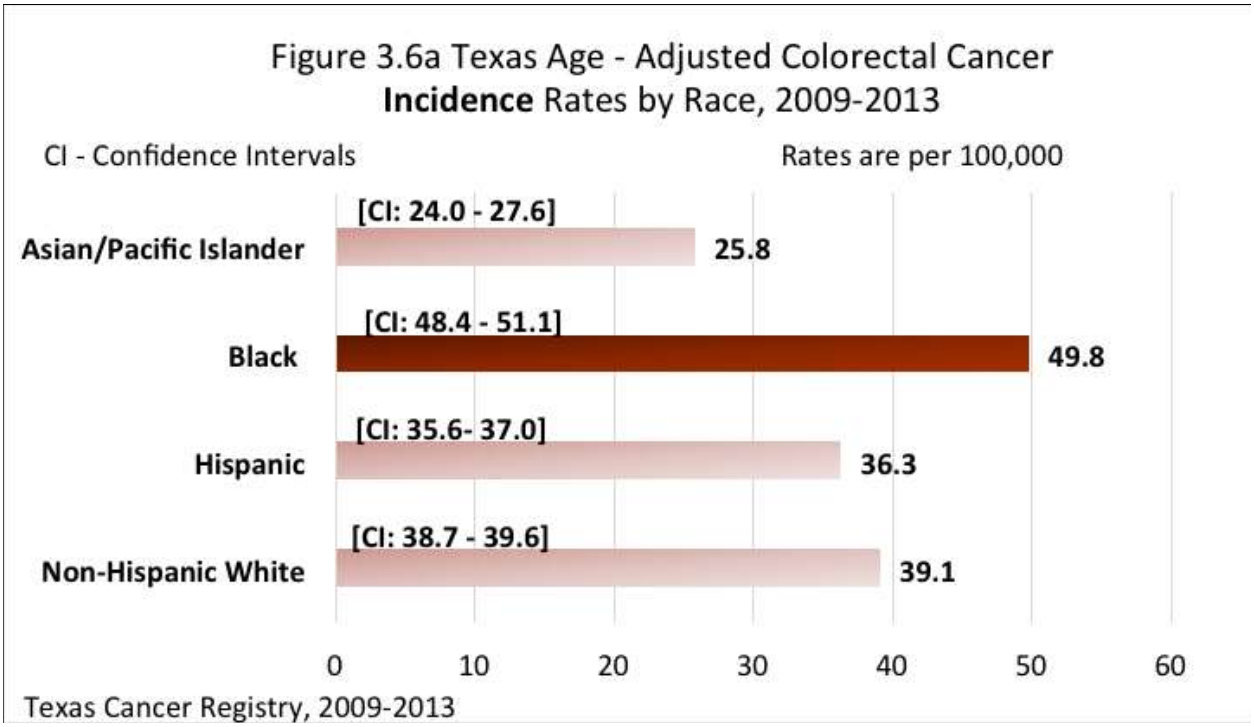
Texas Cancer Registry, 2009-2013

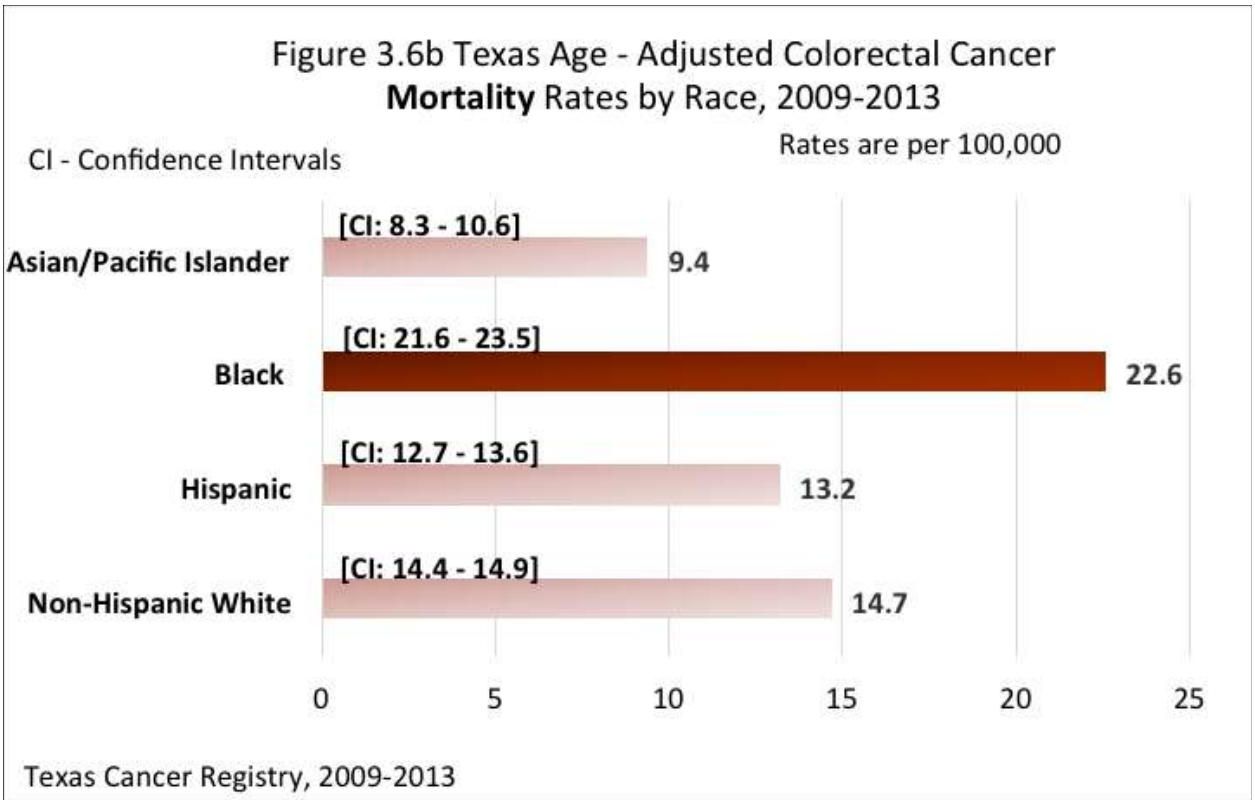
Figure 3.5d Age - Adjusted Cervical Cancer
Mortality Rates by MSA, 2009 - 2013



Texas Cancer Registry, 2009-2013

Figure 3.6. Colorectal Cancer Incidence and Mortality (by Race and MSA)





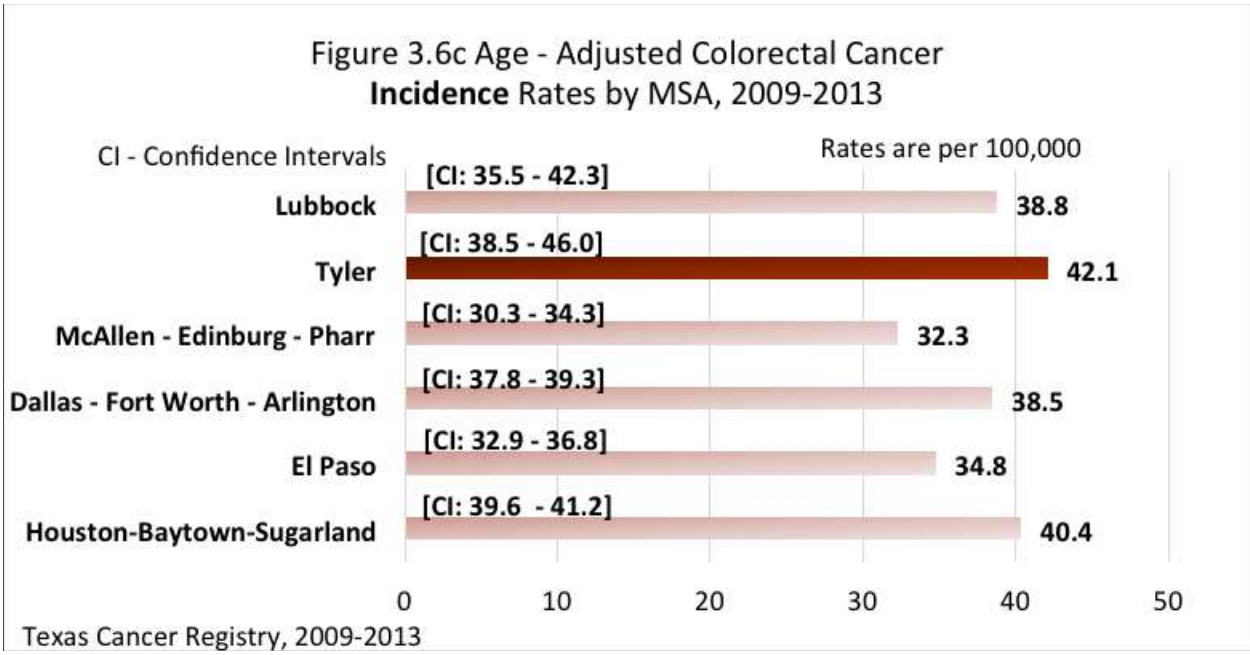


Figure 3.6c Age - Adjusted Colorectal Cancer
Incidence Rates by MSA, 2009-2013
CI - Confidence Intervals
Rates are per 100,000
Lubbock
[CI: 35.5 - 42.3]
38.8
Tyler
[CI: 38.5 - 46.0]
42.1
McAllen - Edinburg - Pharr
[CI: 30.3 - 34.3]
32.3
Dallas - Fort Worth - Arlington
[CI: 37.8 - 39.3]
38.5
El Paso
[CI: 32.9 - 36.8]
34.8
Houston-Baytown-Sugarland
[CI: 39.6 - 41.2]
40.4
0
10
20
30
40
50
Texas Cancer Registry, 2009-2013

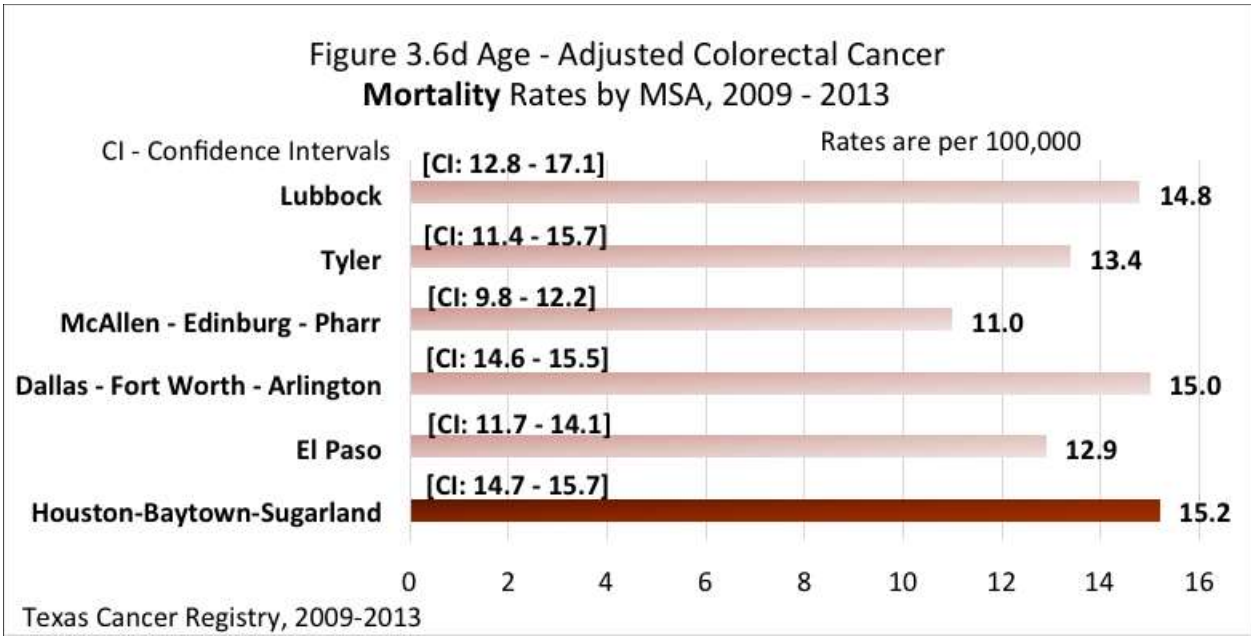
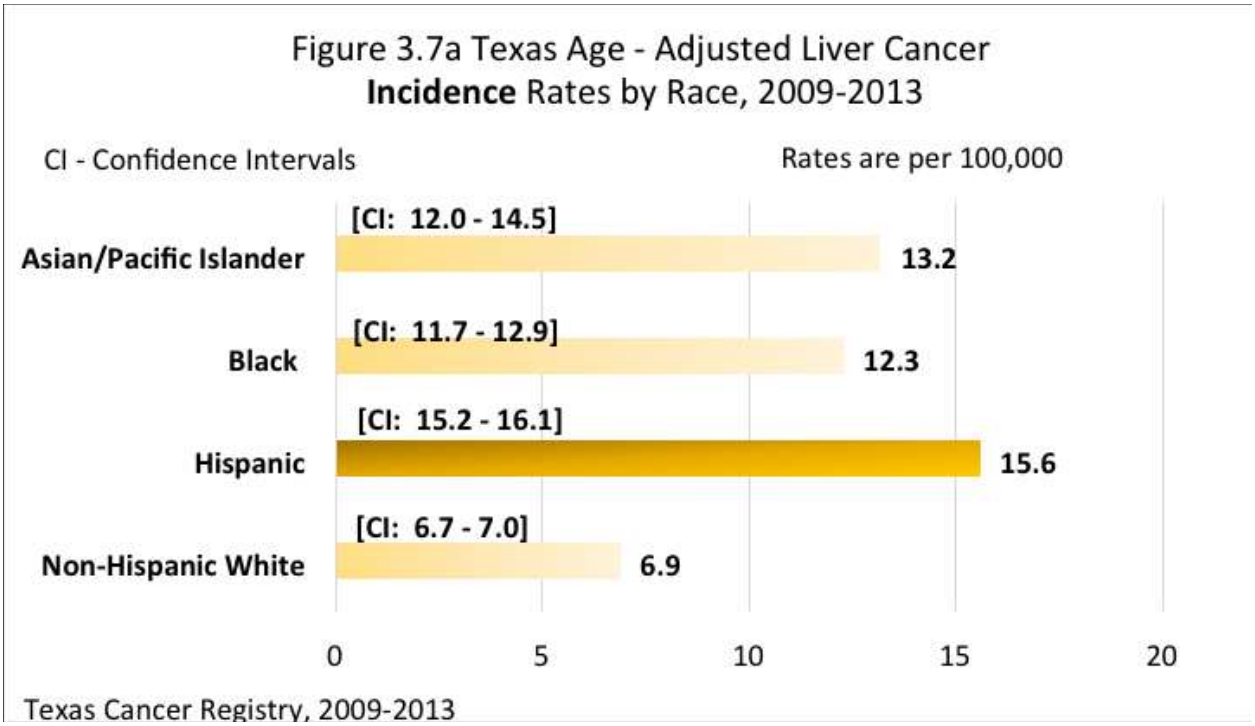
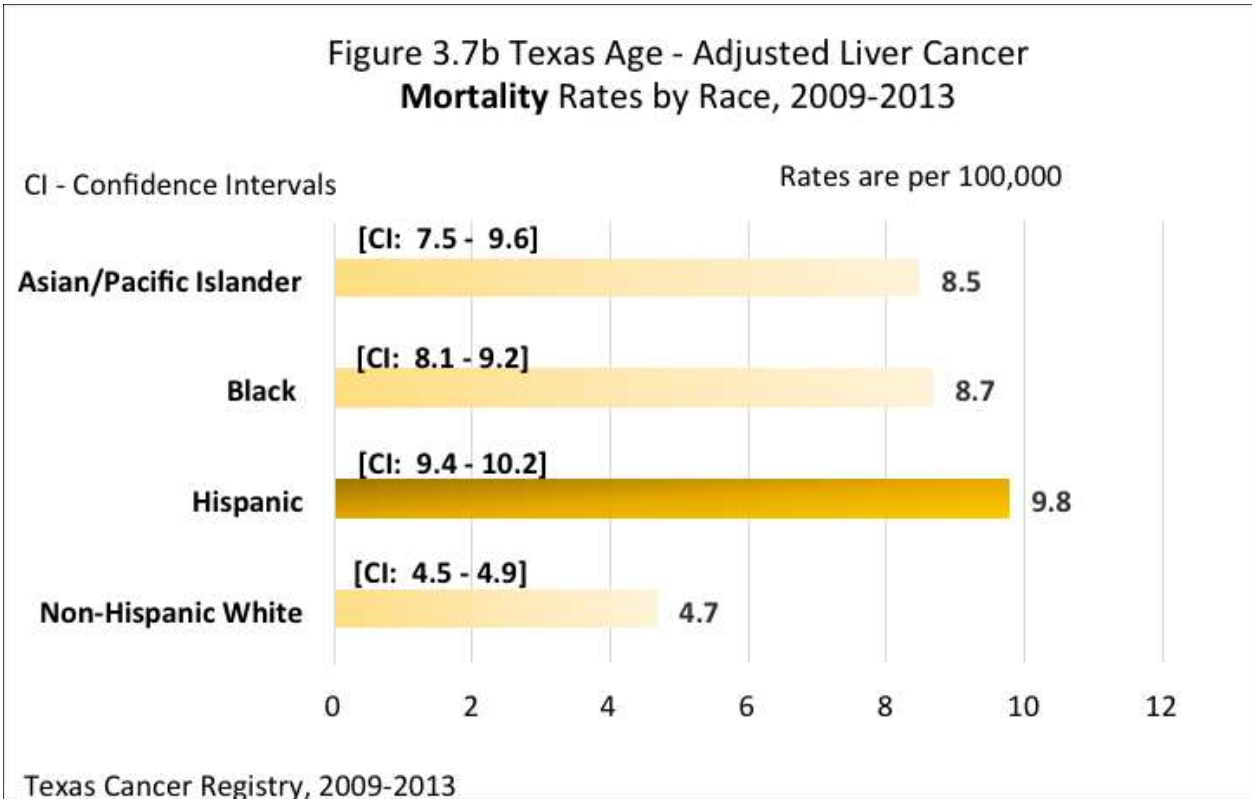


Figure 3.6d Age - Adjusted Colorectal Cancer
Mortality Rates by MSA, 2009 - 2013
CI - Confidence Intervals
Rates are per 100,000
Lubbock
[CI: 12.8 - 17.1]
14.8
Tyler
[CI: 11.4 - 15.7]
13.4
McAllen - Edinburg - Pharr
[CI: 9.8 - 12.2]
11.0
Dallas - Fort Worth - Arlington
[CI: 14.6 - 15.5]
15.0
El Paso
[CI: 11.7 - 14.1]
12.9
Houston-Baytown-Sugarland
[CI: 14.7 - 15.7]
15.2
0
2
4
6
8
10
12
14
16
Texas Cancer Registry, 2009-2013

Figure 3.7. Liver Cancer Incidence and Mortality (by Race and MSA)





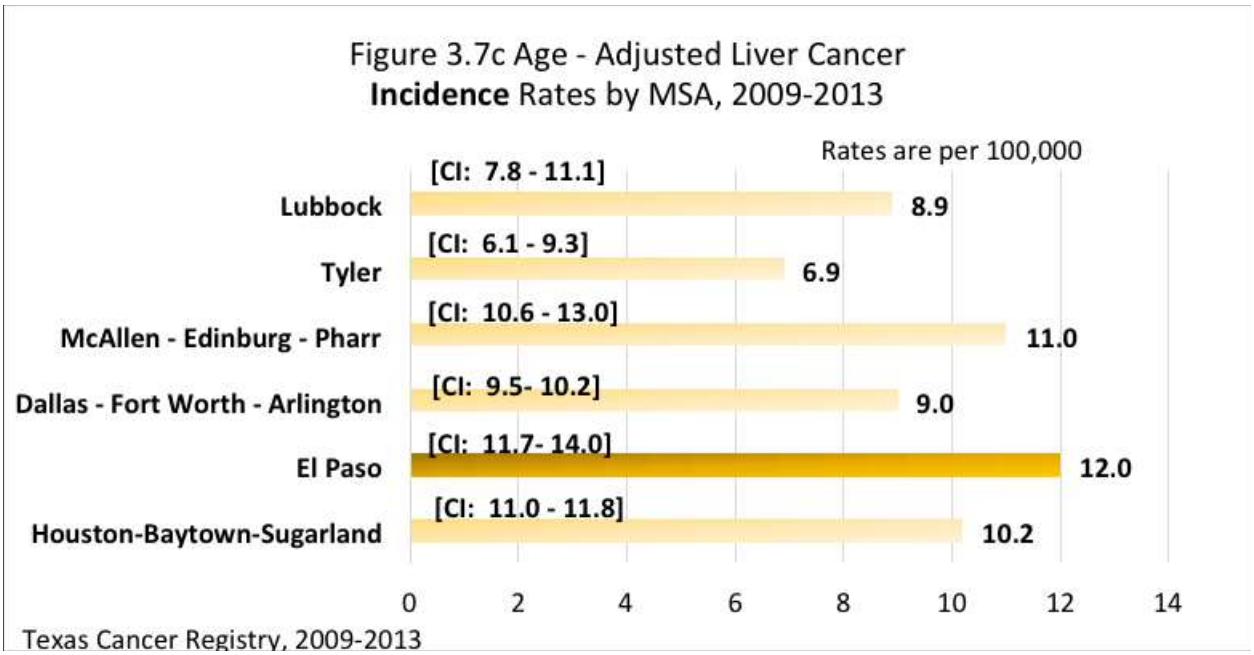


Figure 3.7c Age - Adjusted Liver Cancer
Incidence Rates by MSA, 2009-2013
Rates are per 100,000
[CI: 7.8 - 11.1]
Lubbock
8.9
[CI: 6.1 - 9.3]
Tyler
6.9
[CI: 10.6 - 13.0]
McAllen - Edinburg - Pharr
11.0
[CI: 9.5- 10.2]
Dallas - Fort Worth - Arlington
9.0
[CI: 11.7- 14.0]
El Paso
12.0
[CI: 11.0 - 11.8]
Houston-Baytown-Sugarland
10.2
0
2
4
6
8
10
12
14
Texas Cancer Registry, 2009-2013

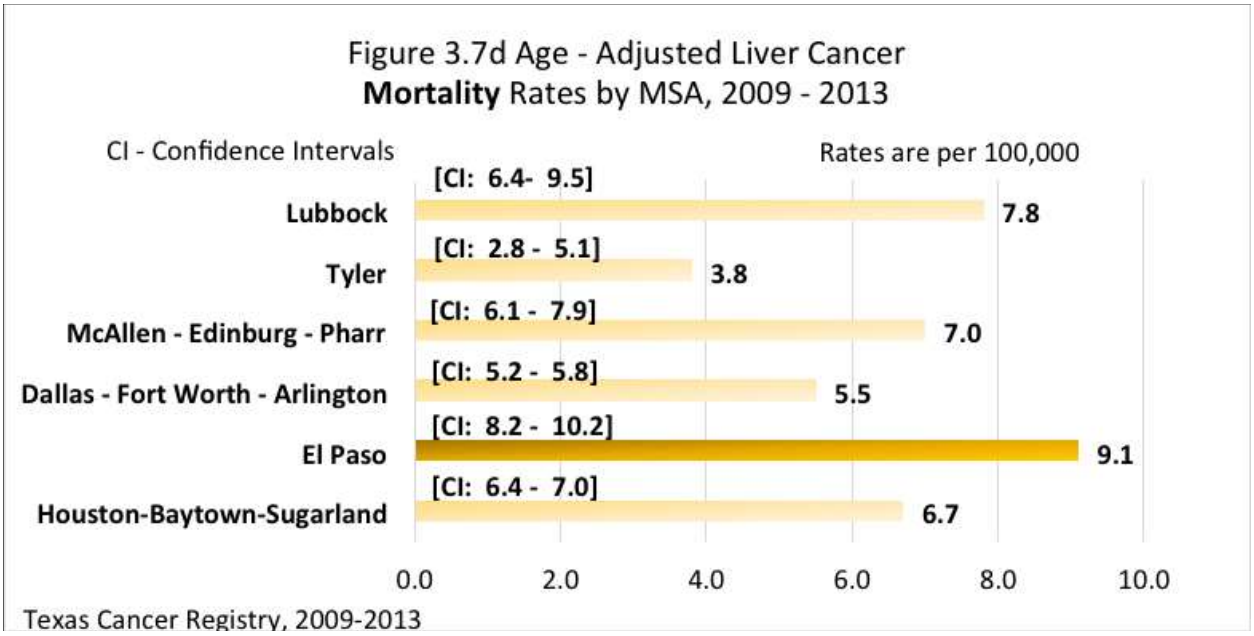
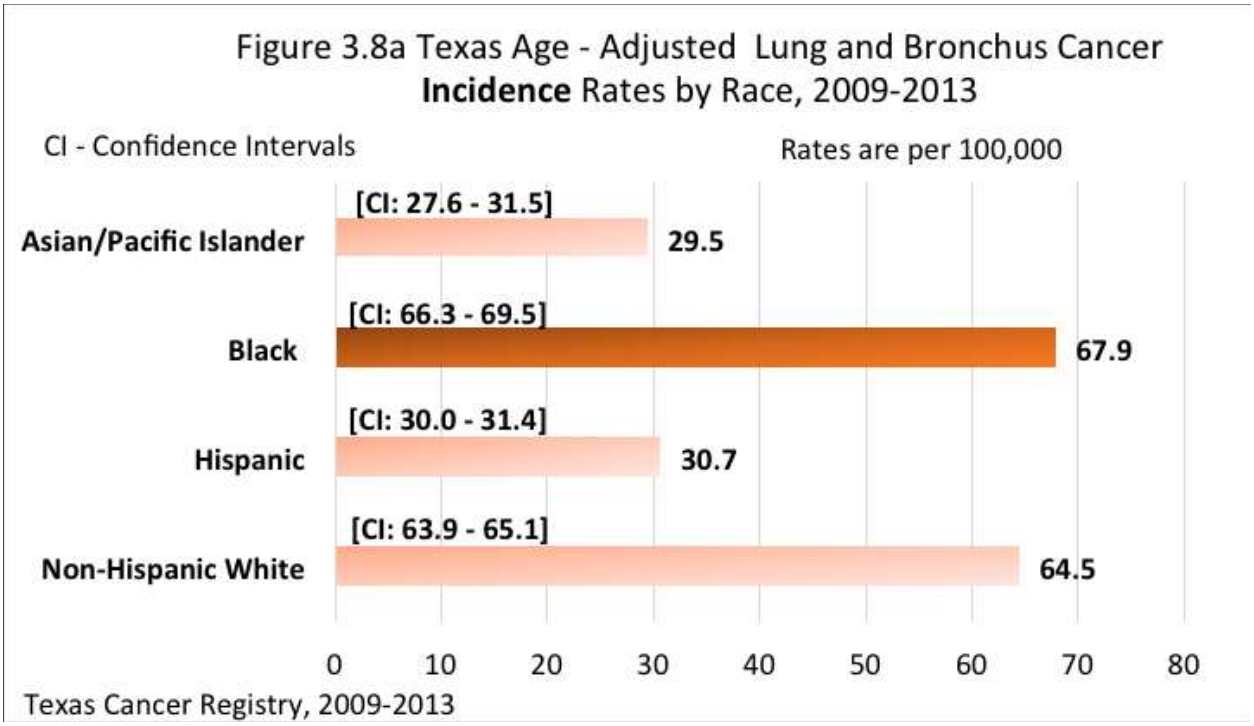
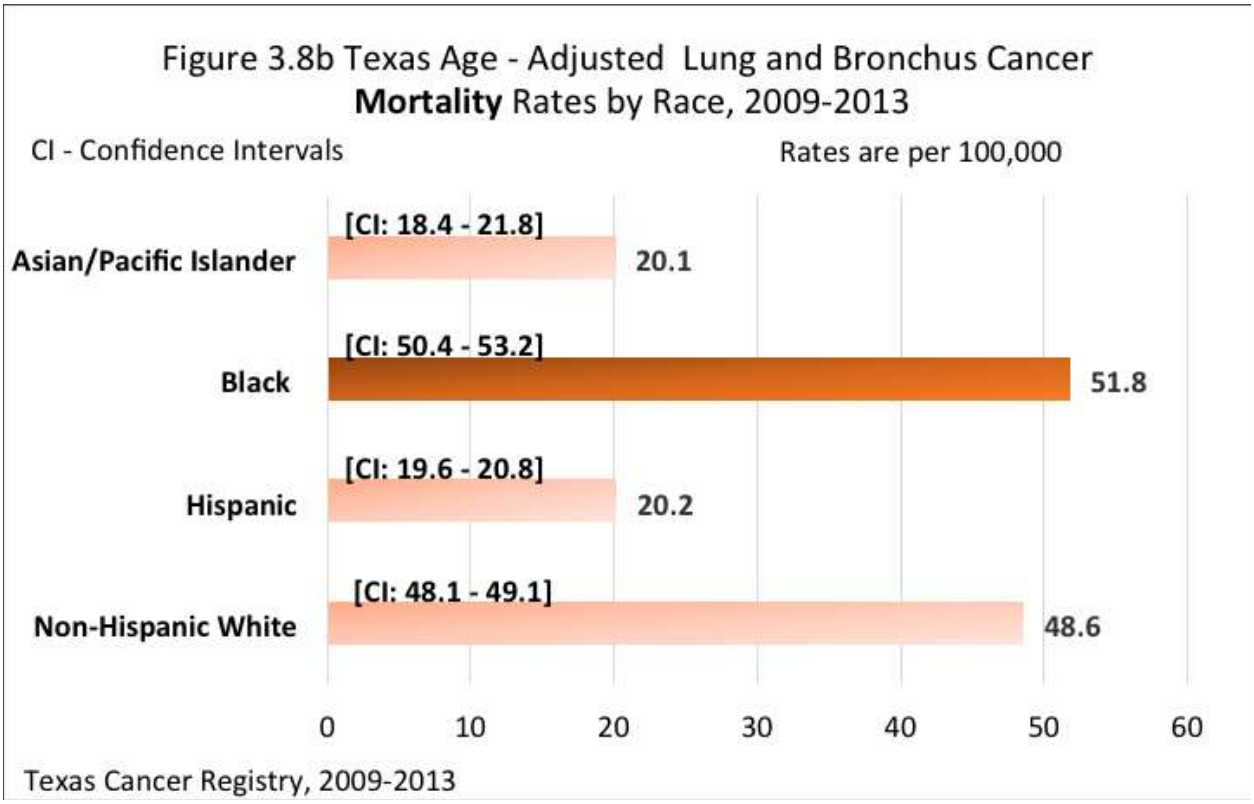


Figure 3.7d Age - Adjusted Liver Cancer
Mortality Rates by MSA, 2009 - 2013
CI - Confidence Intervals
Rates are per 100,000
[CI: 6.4- 9.5]
Lubbock
7.8
[CI: 2.8 - 5.1]
Tyler
3.8
[CI: 6.1 - 7.9]
McAllen - Edinburg - Pharr
7.0
[CI: 5.2 - 5.8]
Dallas - Fort Worth - Arlington
5.5
[CI: 8.2 - 10.2]
El Paso
9.1
[CI: 6.4 - 7.0]
Houston-Baytown-Sugarland
6.7
0.0
2.0
4.0
6.0
8.0
10.0
Texas Cancer Registry, 2009-2013

Figure 3.8. Lung Cancer Incidence and Mortality (by Race and MSA)





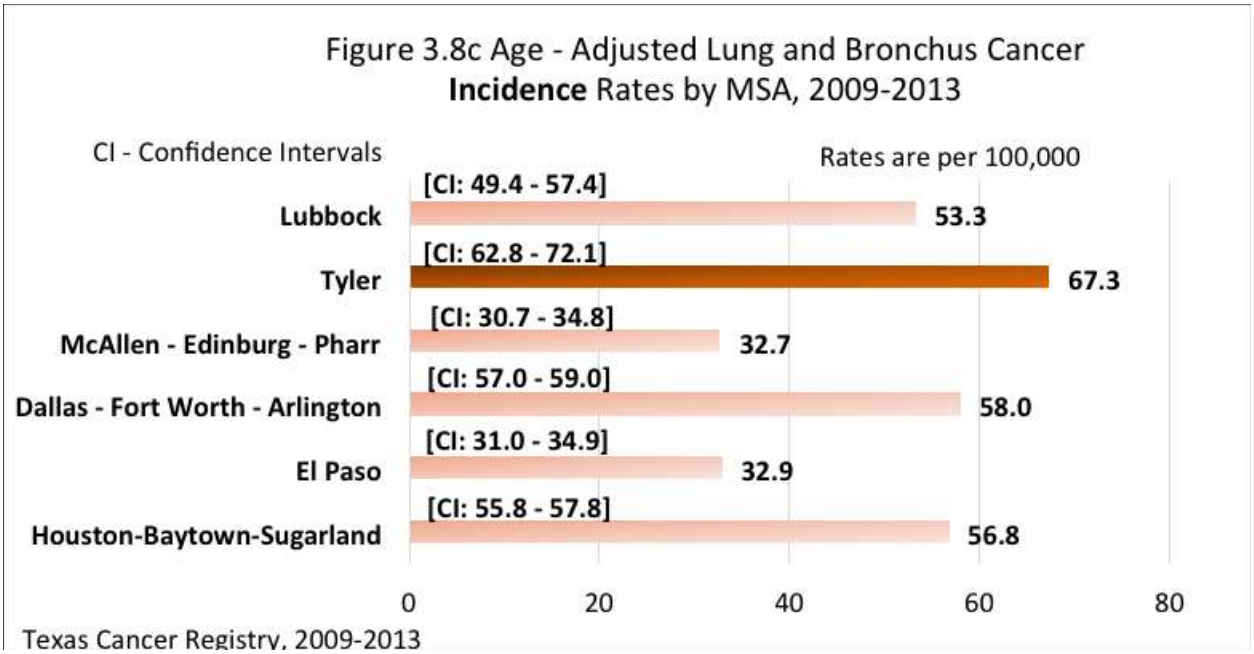


Figure 3.8c Age - Adjusted Lung and Bronchus Cancer
Incidence Rates by MSA, 2009-2013
CI - Confidence Intervals
Rates are per 100,000
[CI: 49.4 - 57.4]
Lubbock
53.3
[CI: 62.8 - 72.1]
Tyler
67.3
[CI: 30.7 - 34.8]
McAllen - Edinburg - Pharr
32.7
[CI: 57.0 - 59.0]
Dallas - Fort Worth - Arlington
58.0
[CI: 31.0 - 34.9]
El Paso
32.9
[CI: 55.8 - 57.8]
Houston-Baytown-Sugarland
56.8
0
20
40
60
80
Texas Cancer Registry, 2009-2013

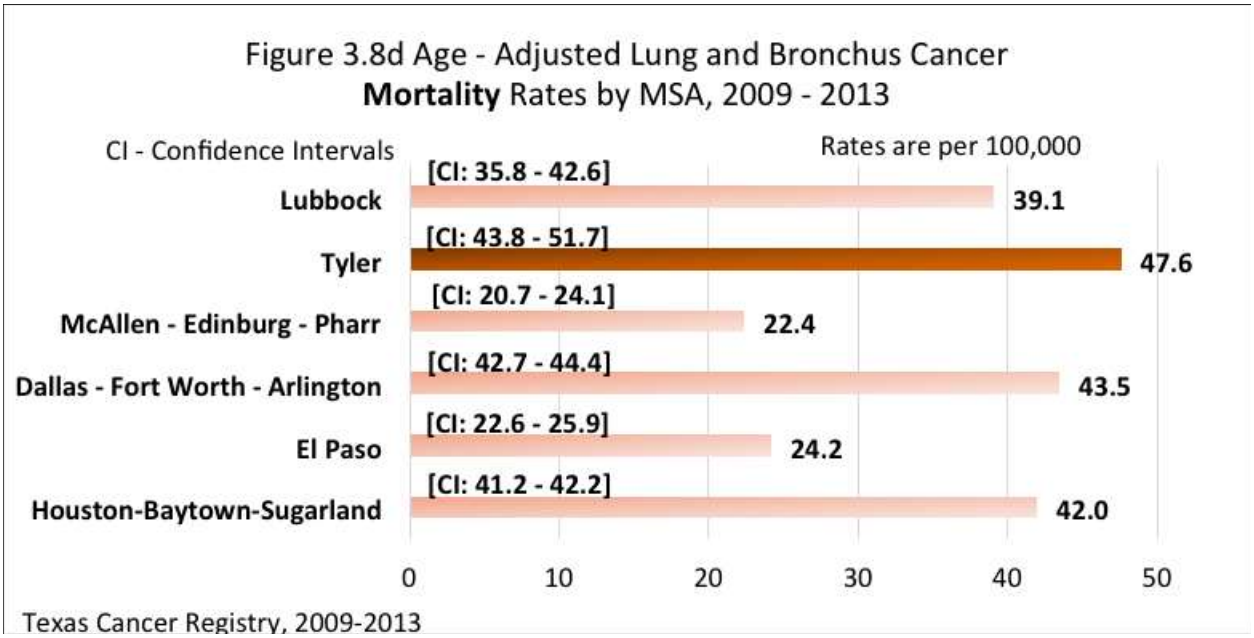
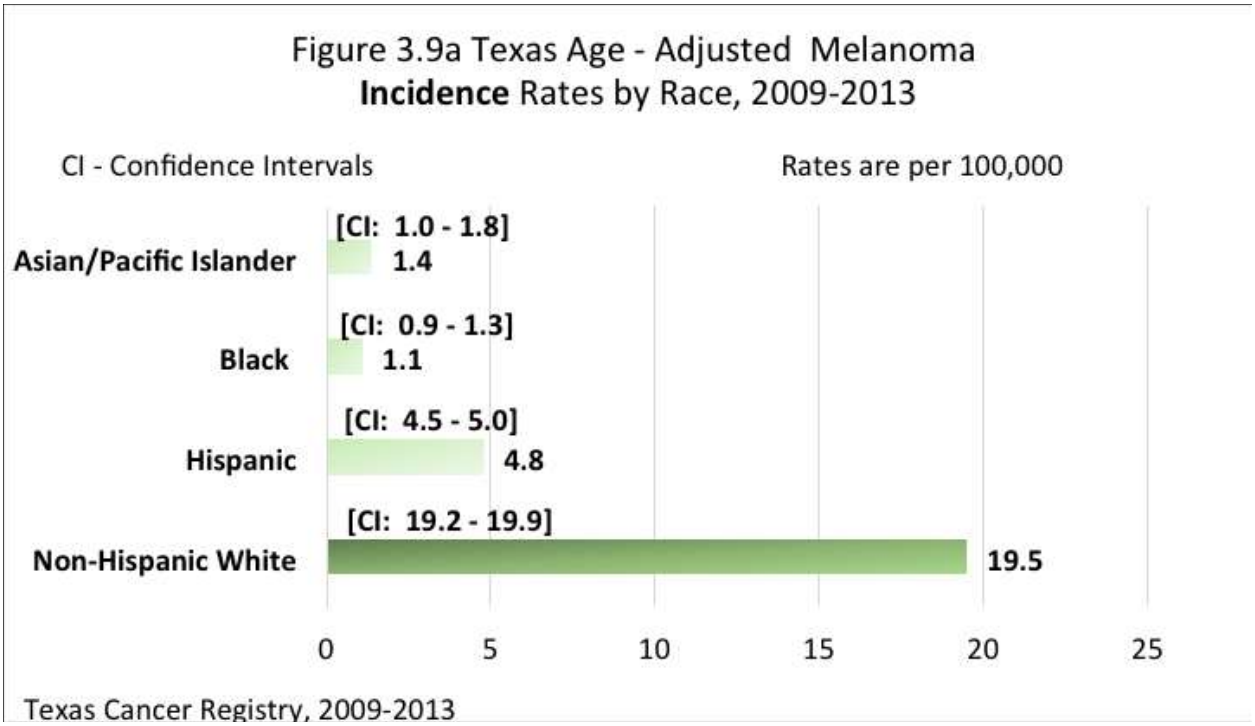
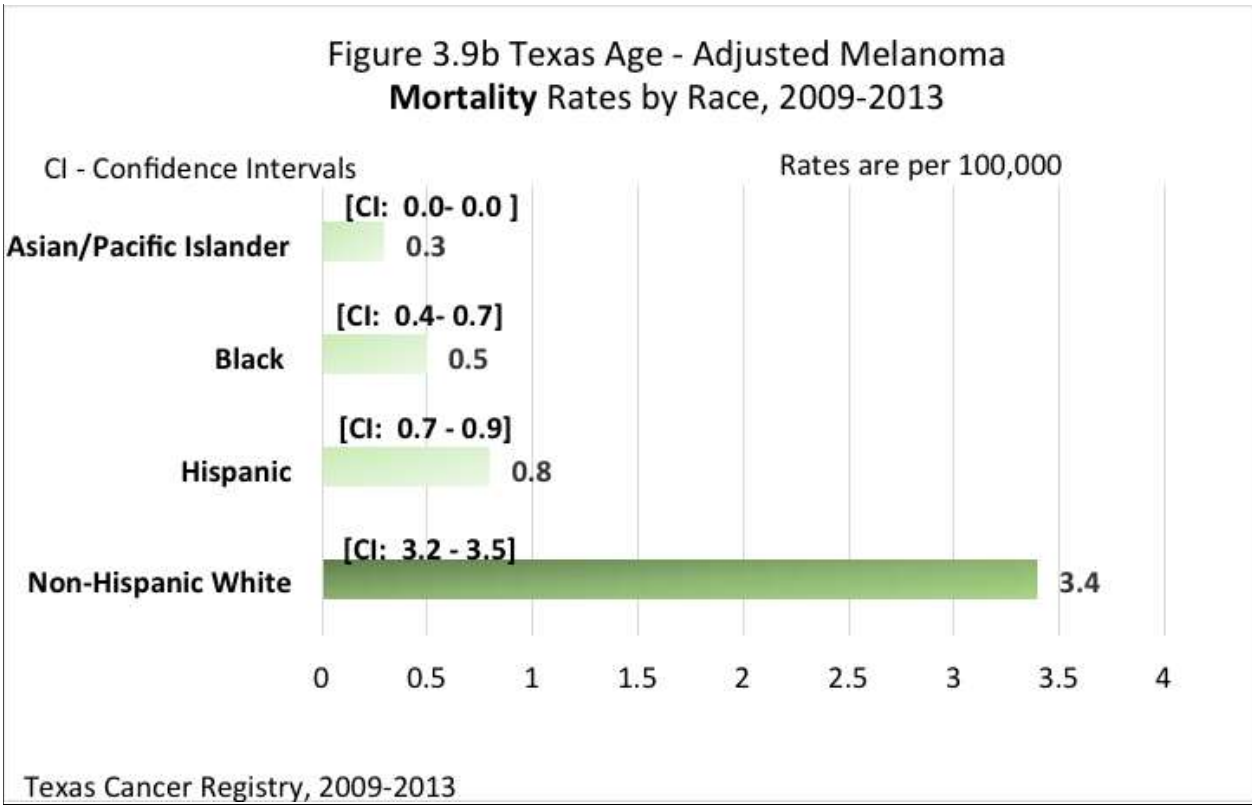


Figure 3.8d Age - Adjusted Lung and Bronchus Cancer
Mortality Rates by MSA, 2009 - 2013
CI - Confidence Intervals
Rates are per 100,000
[CI: 35.8 - 42.6]
Lubbock
39.1
[CI: 43.8 - 51.7]
Tyler
47.6
[CI: 20.7 - 24.1]
McAllen - Edinburg - Pharr
22.4
[CI: 42.7 - 44.4]
Dallas - Fort Worth - Arlington
43.5
[CI: 22.6 - 25.9]
El Paso
24.2
[CI: 41.2 - 42.2]
Houston-Baytown-Sugarland
42.0
0
10
20
30
40
50
Texas Cancer Registry, 2009-2013

Figure 3.9. Melanoma Incidence and Mortality (by Race and MSA)





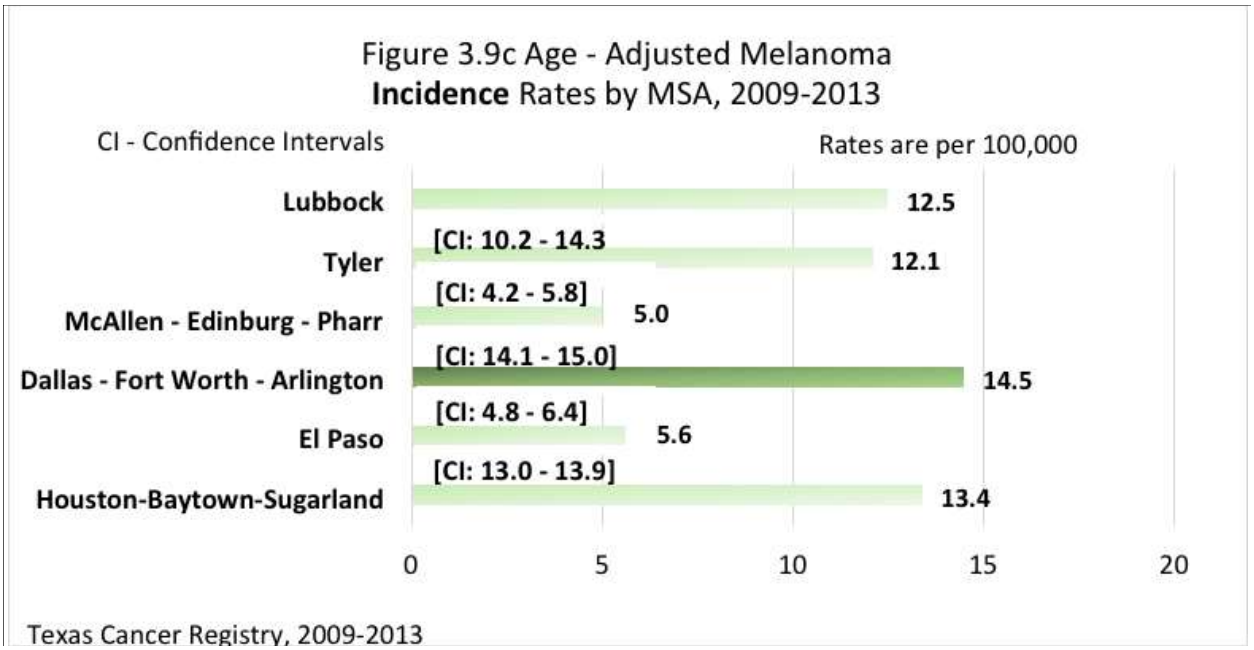


Figure 3.9c Age - Adjusted Melanoma
Incidence Rates by MSA, 2009-2013
CI - Confidence Intervals
Rates are per 100,000
Lubbock
12.5
[CI: 10.2 - 14.3
Tyler
12.1
[CI: 4.2 - 5.8]
McAllen - Edinburg - Pharr
5.0
[CI: 14.1 - 15.0]
Dallas - Fort Worth - Arlington
14.5
[CI: 4.8 - 6.4]
El Paso
5.6
[CI: 13.0 - 13.9]
Houston-Baytown-Sugarland
13.4
0
5
10
15
20
Texas Cancer Registry, 2009-2013

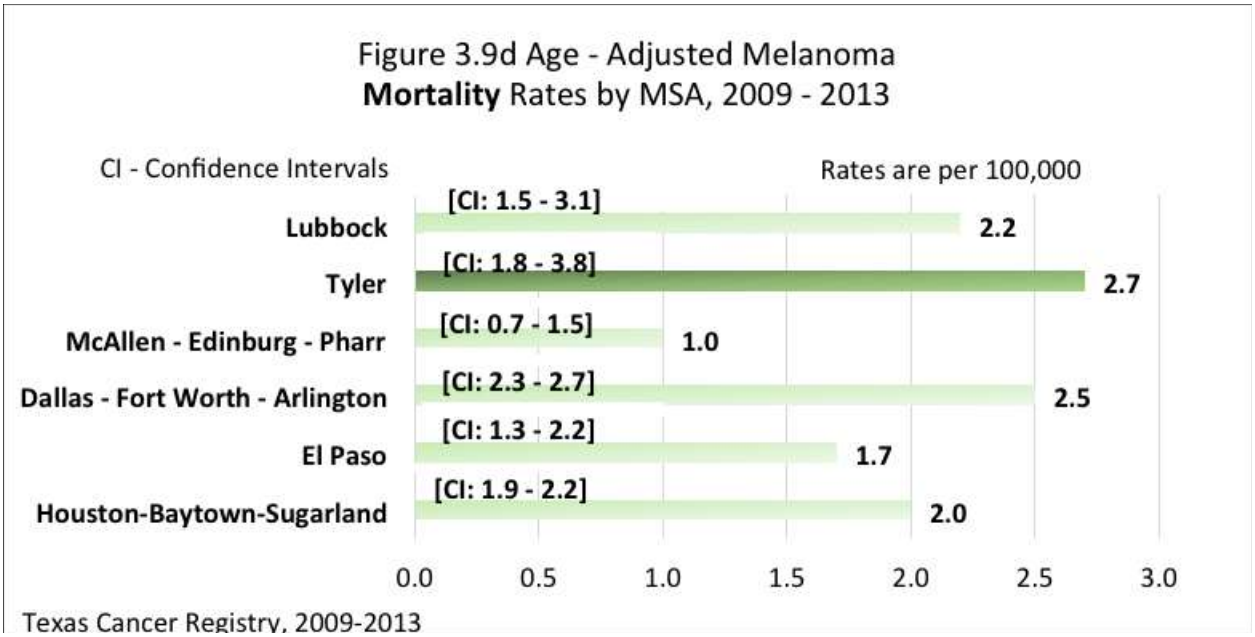
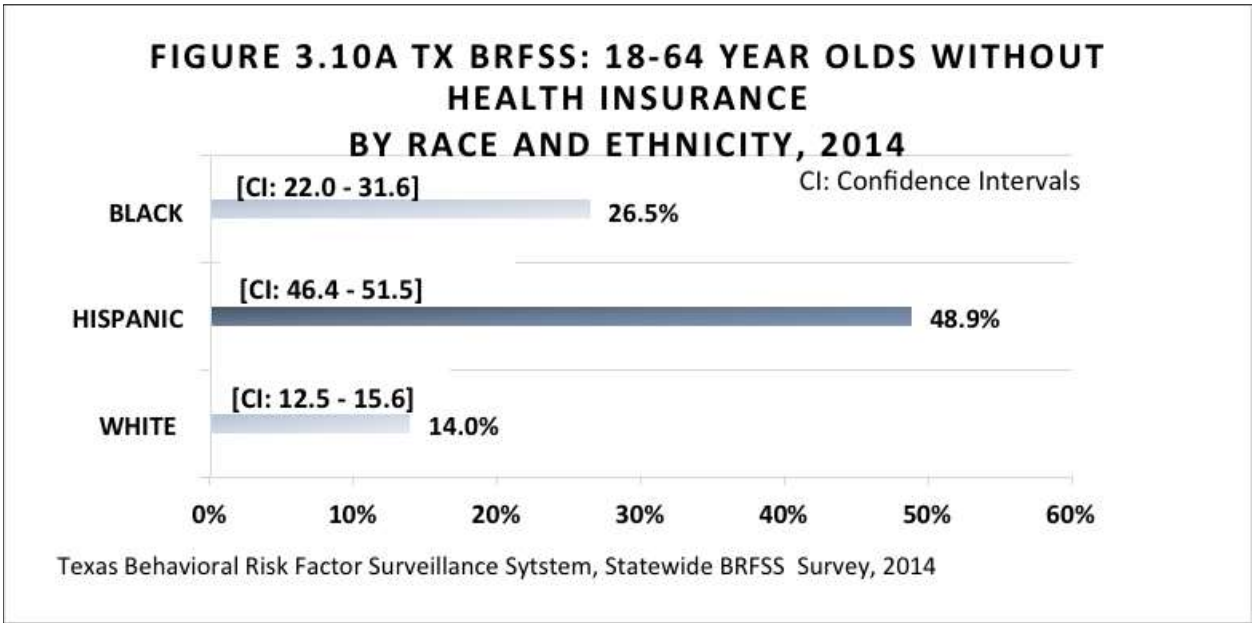


Figure 3.9d Age - Adjusted Melanoma
Mortality Rates by MSA, 2009 - 2013
CI - Confidence Intervals
Rates are per 100,000
[CI: 1.5 - 3.1]
Lubbock
2.2
[CI: 1.8 - 3.8]
Tyler
2.7
[CI: 0.7 - 1.5]
McAllen - Edinburg - Pharr
1.0
[CI: 2.3 - 2.7]
Dallas - Fort Worth - Arlington
2.5
[CI: 1.3 - 2.2]
El Paso
1.7
[CI: 1.9 - 2.2]
Houston-Baytown-Sugarland
2.0
0.0
0.5
1.0
1.5
2.0
2.5
3.0
Texas Cancer Registry, 2009-2013

Figure 3.10 Uninsured Adults (18-6 years old) by Race and MSA



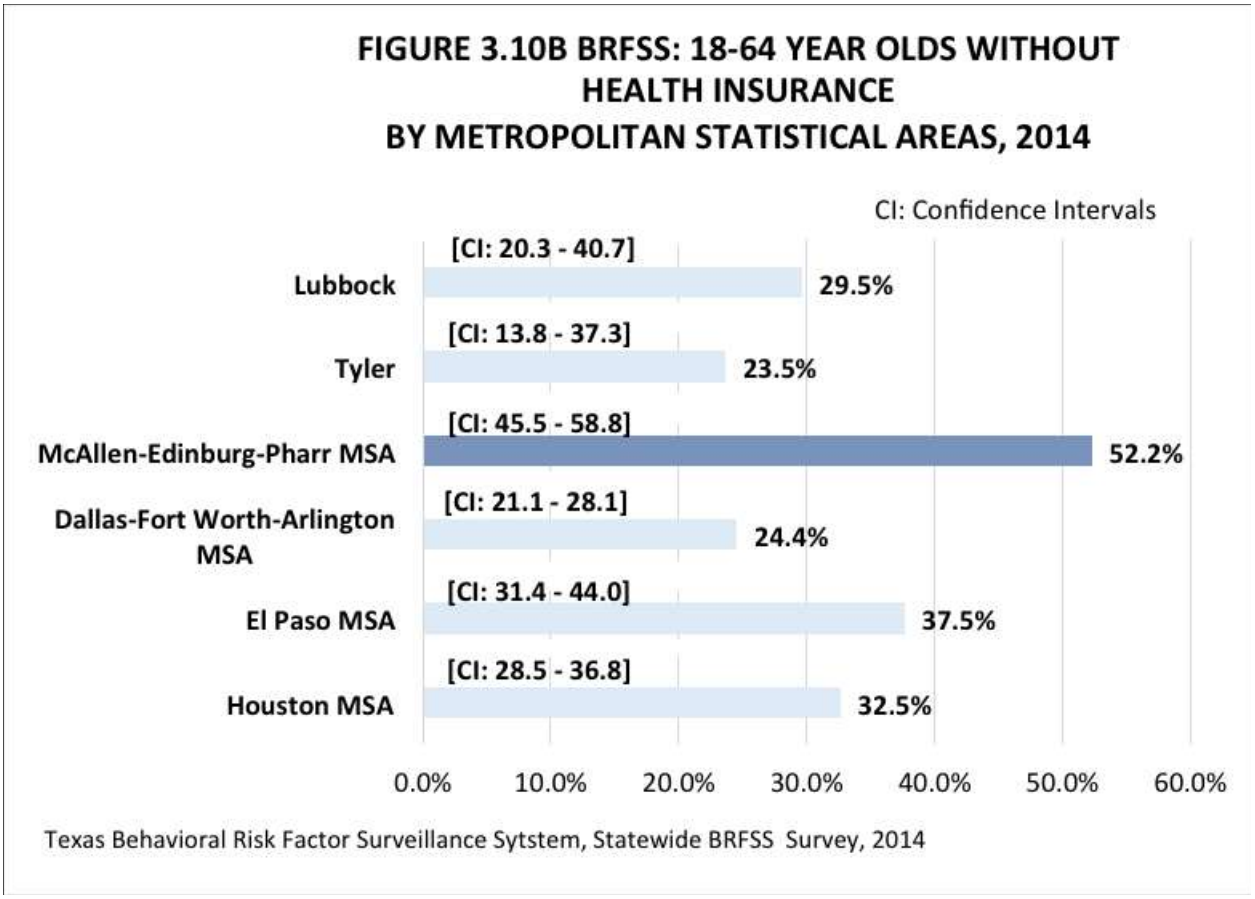
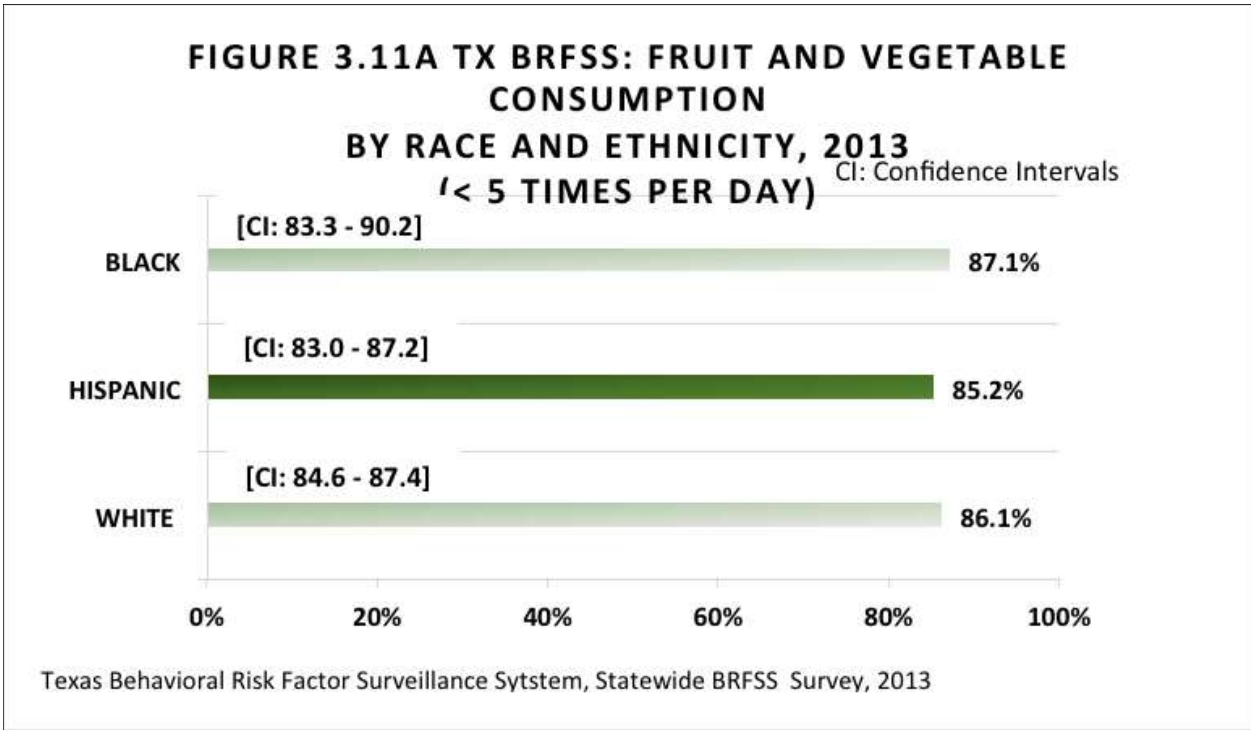


Figure 3.11 Fruit and Vegetable Consumption by Race and MSA



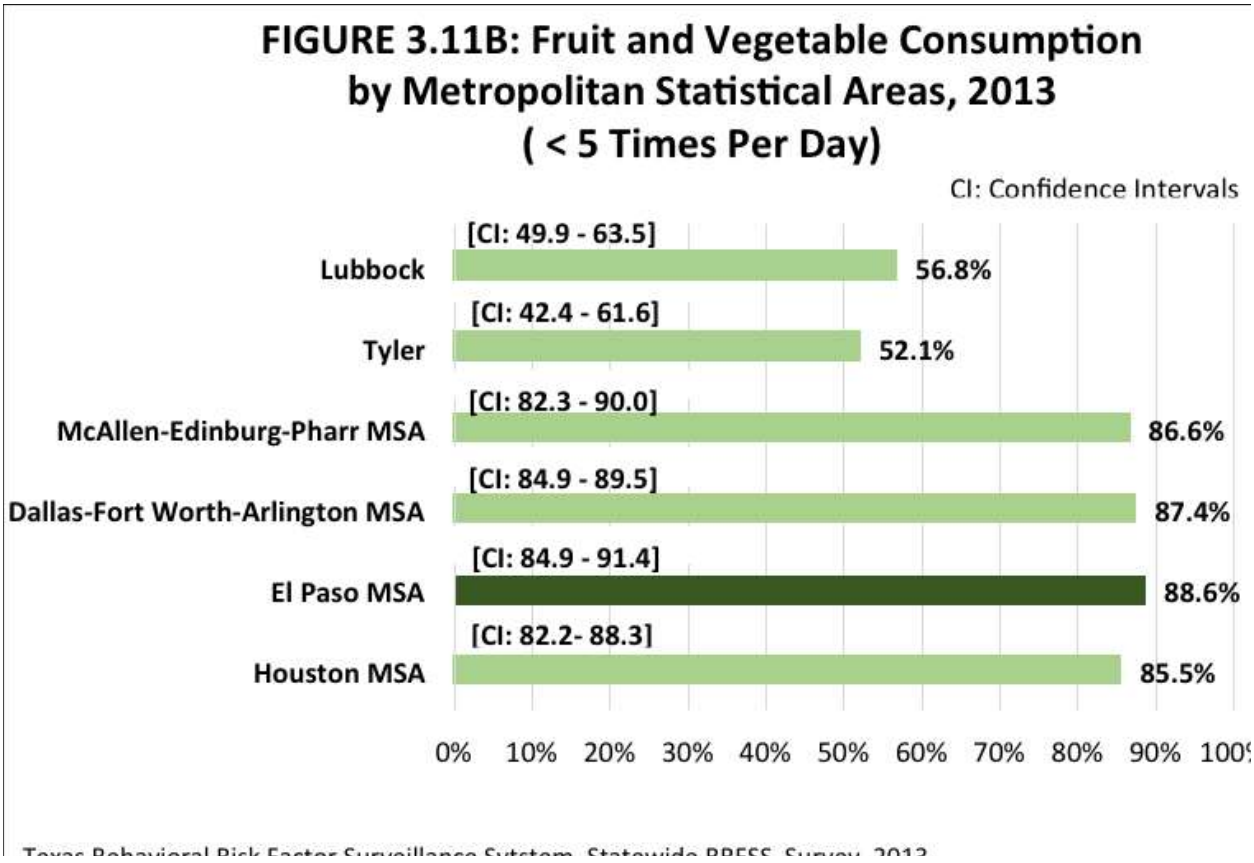
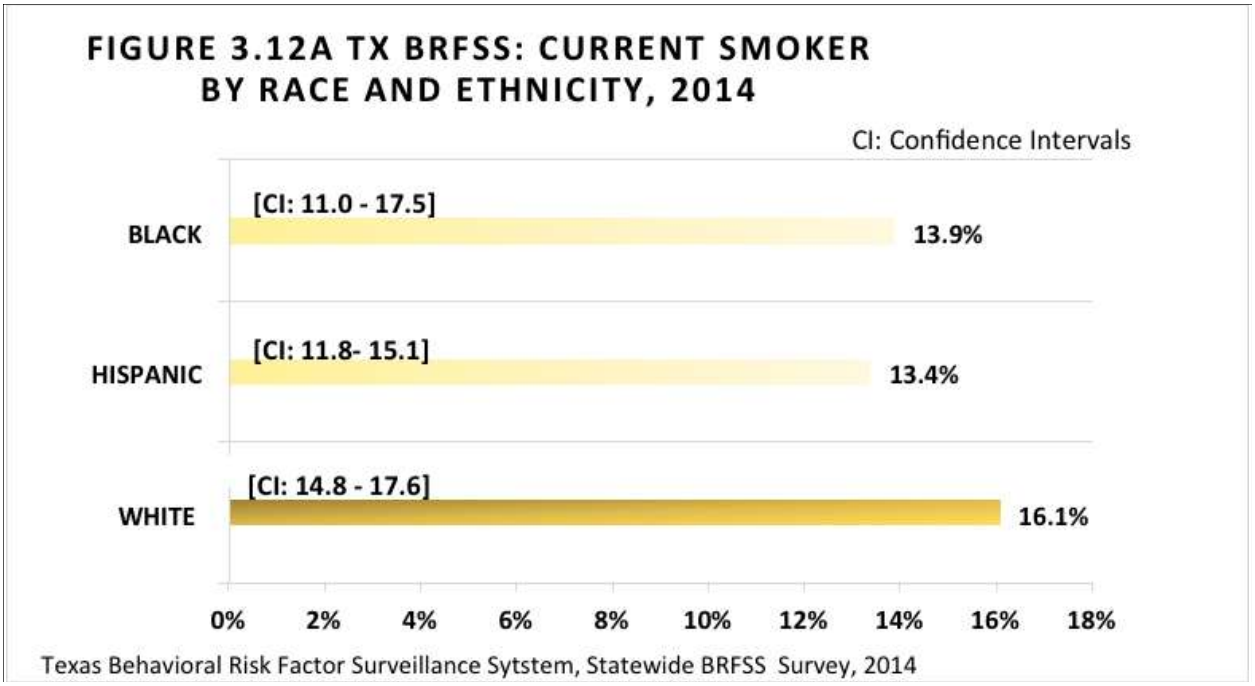


Figure 3.12 Smoking-related BRFSS Survey Results by Race and MSA



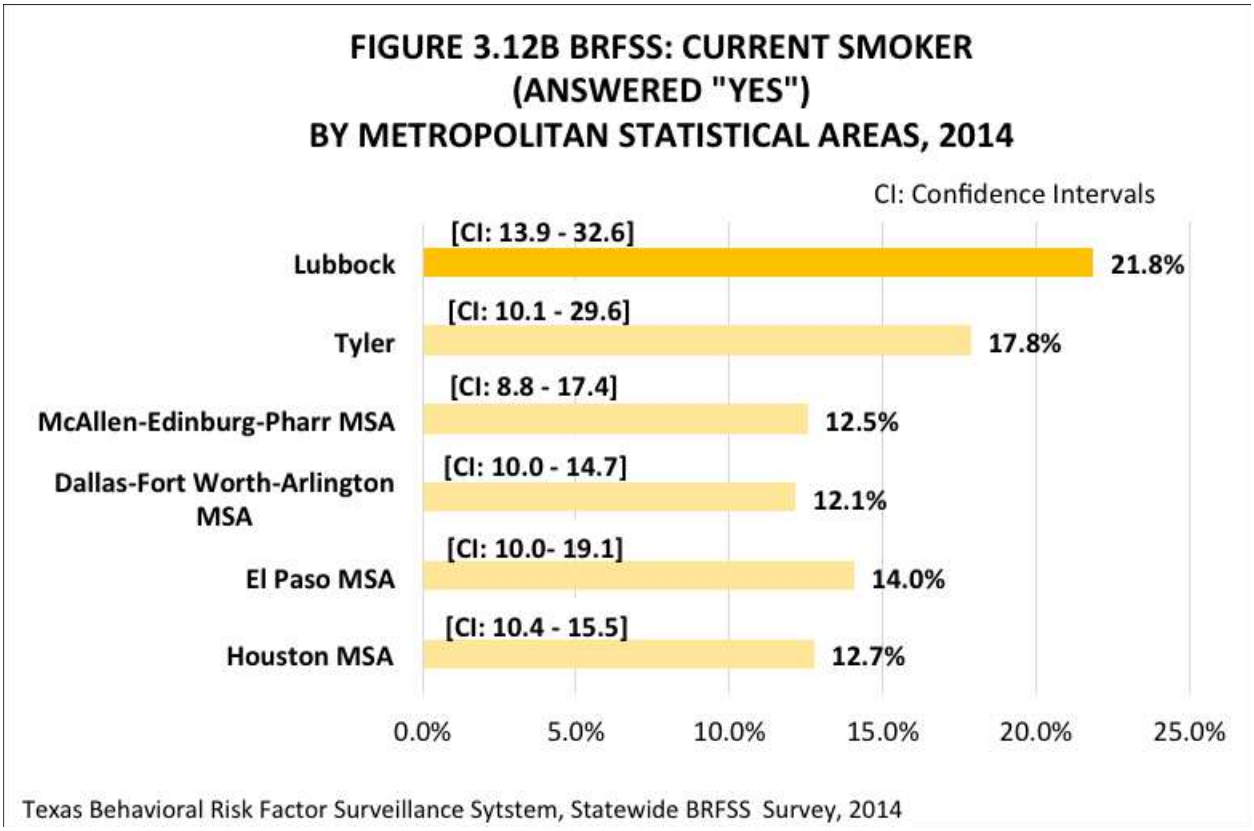
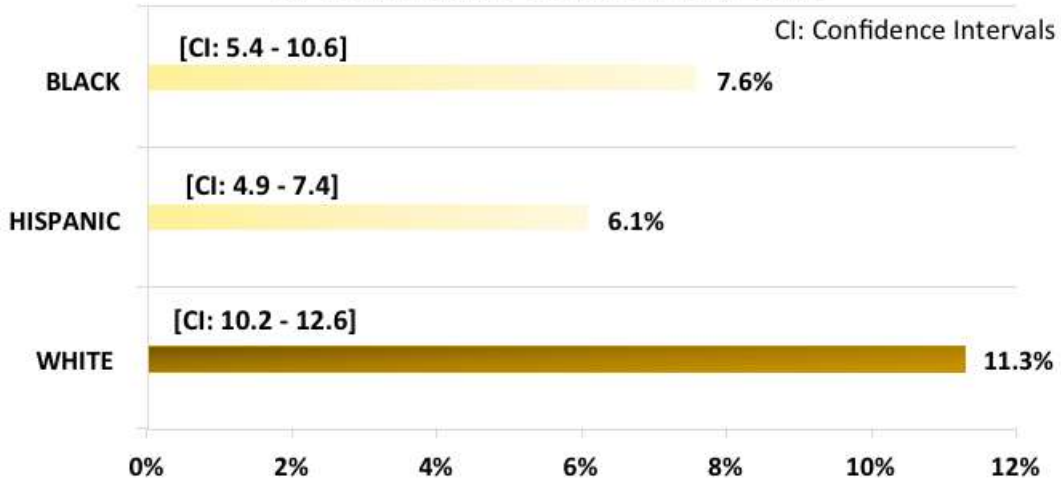
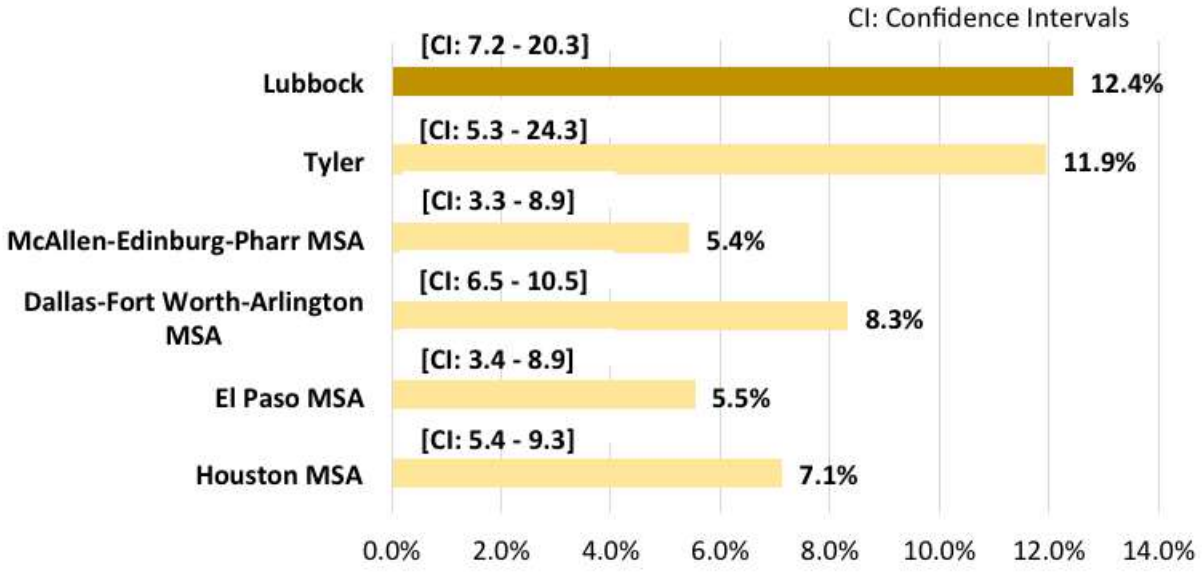


FIGURE 3.12C TX BRFSS: SMOKER STATUS (CURRENT SMOKER - EVERY DAY) BY RACE AND ETHNICITY, 2014



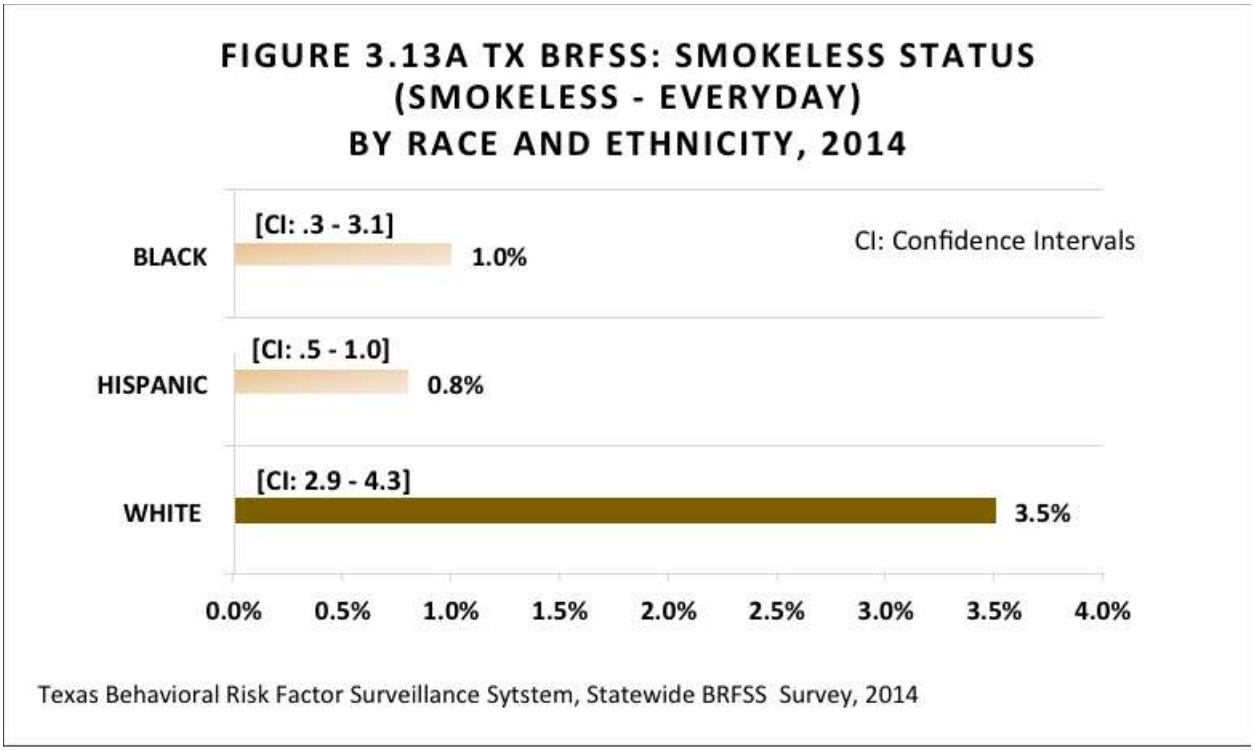
Texas Behavioral Risk Factor Surveillance Sytstem, Statewide BRFSS Survey, 2014

FIGURE 3.12D BRFSS: SMOKER STATUS (CURRENT SMOKER - EVERY DAY) BY METROPOLITAN STATISTICAL AREAS, 2014



Texas Behavioral Risk Factor Surveillance Sytstem, Statewide BRFSS Survey, 2014

Figure 3.13 Smokeless Tobacco Status by Race, 2009-2013



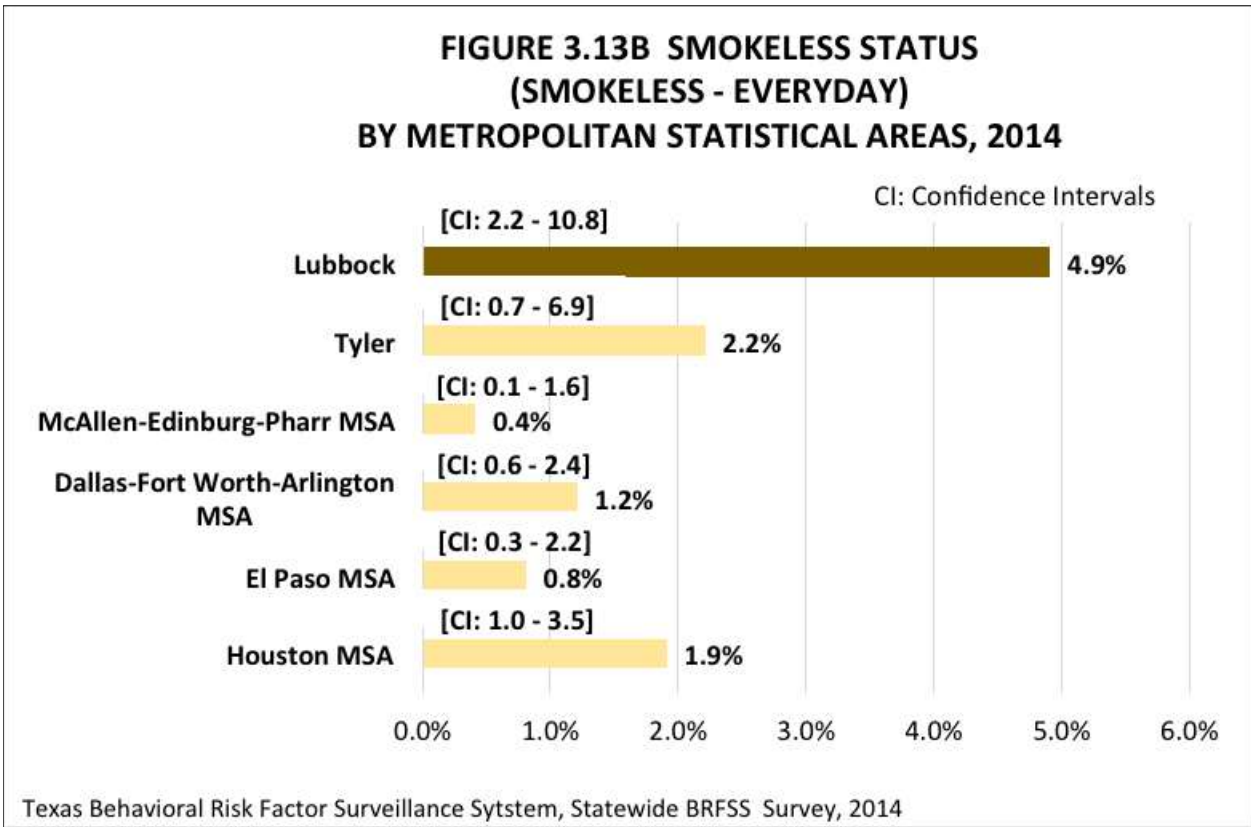
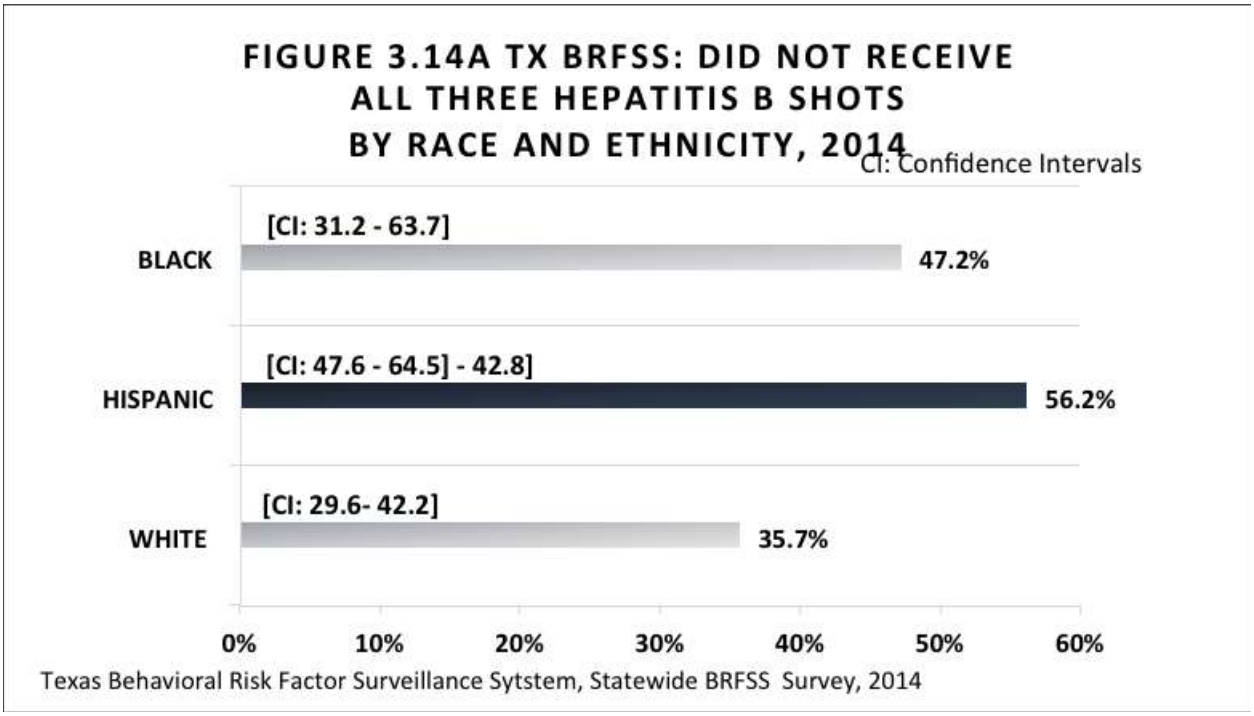


Figure 3.14 Completion of Hepatitis B Series by Race and MSA



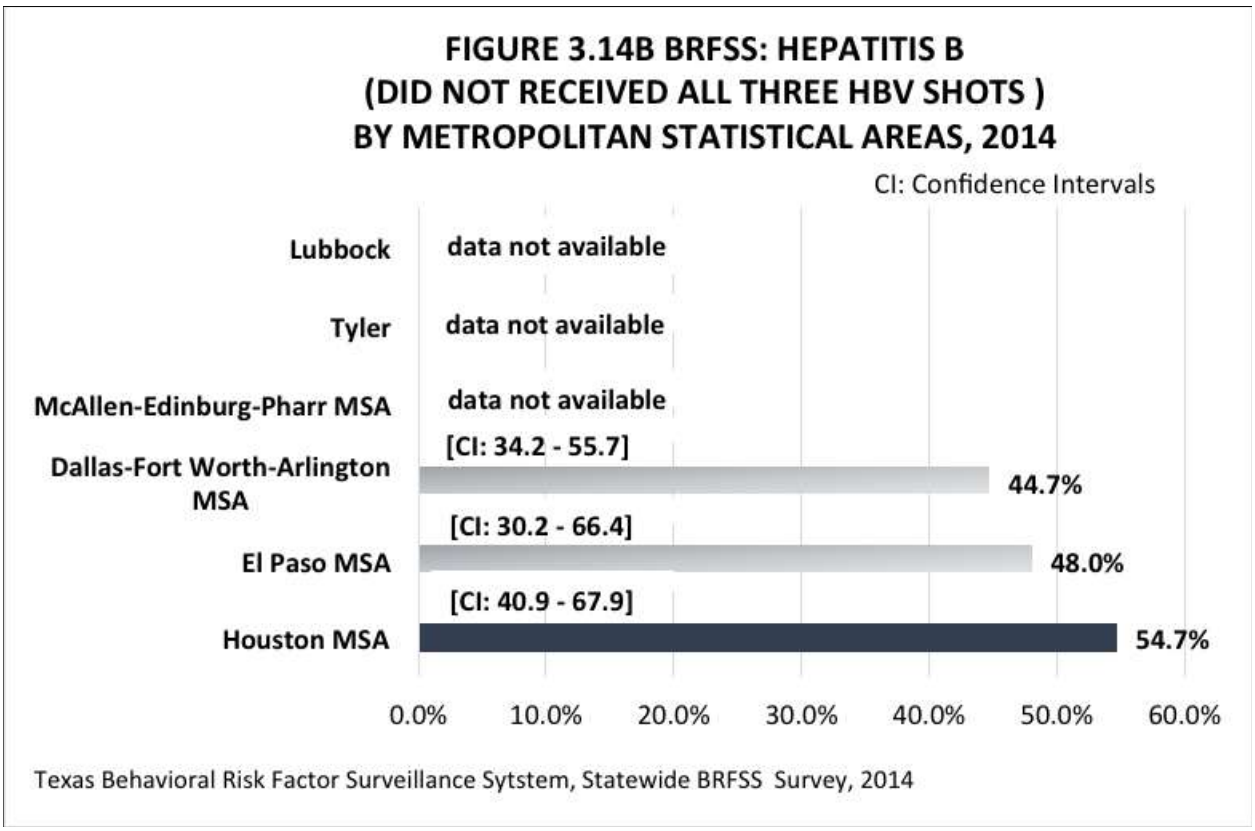
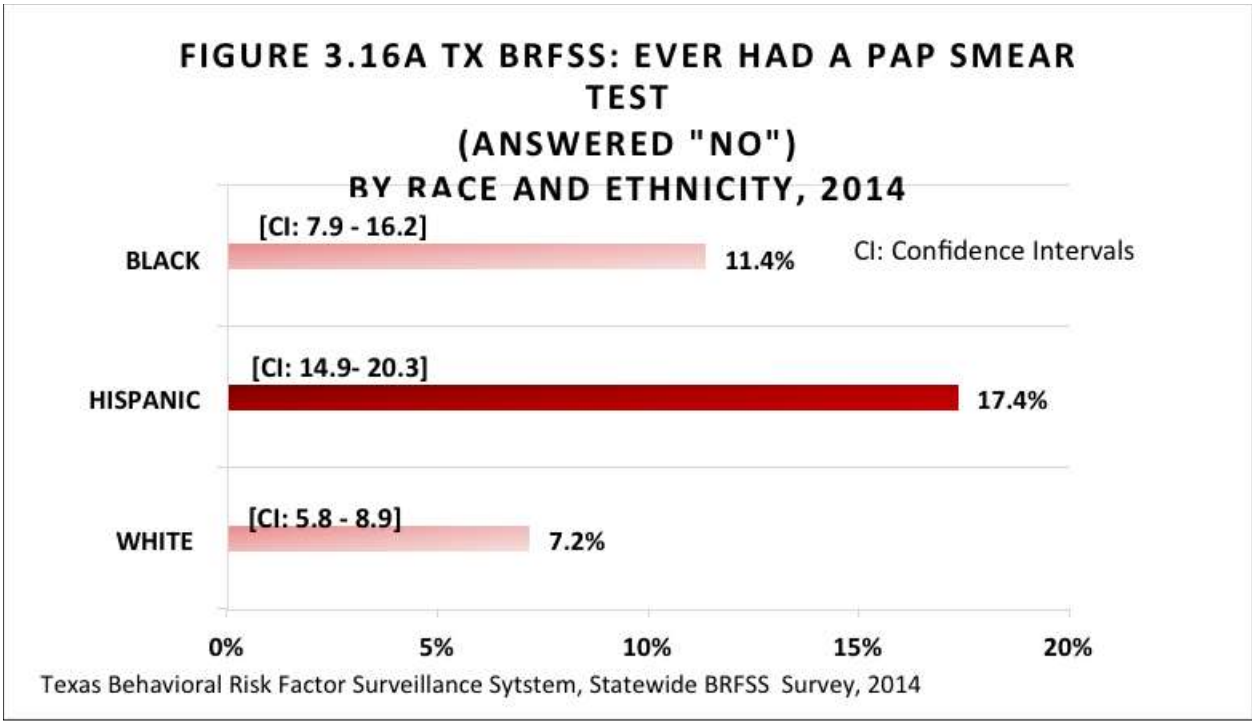


Figure 3.15 Women Who Have Never Had a Mammogram by Race and MSA



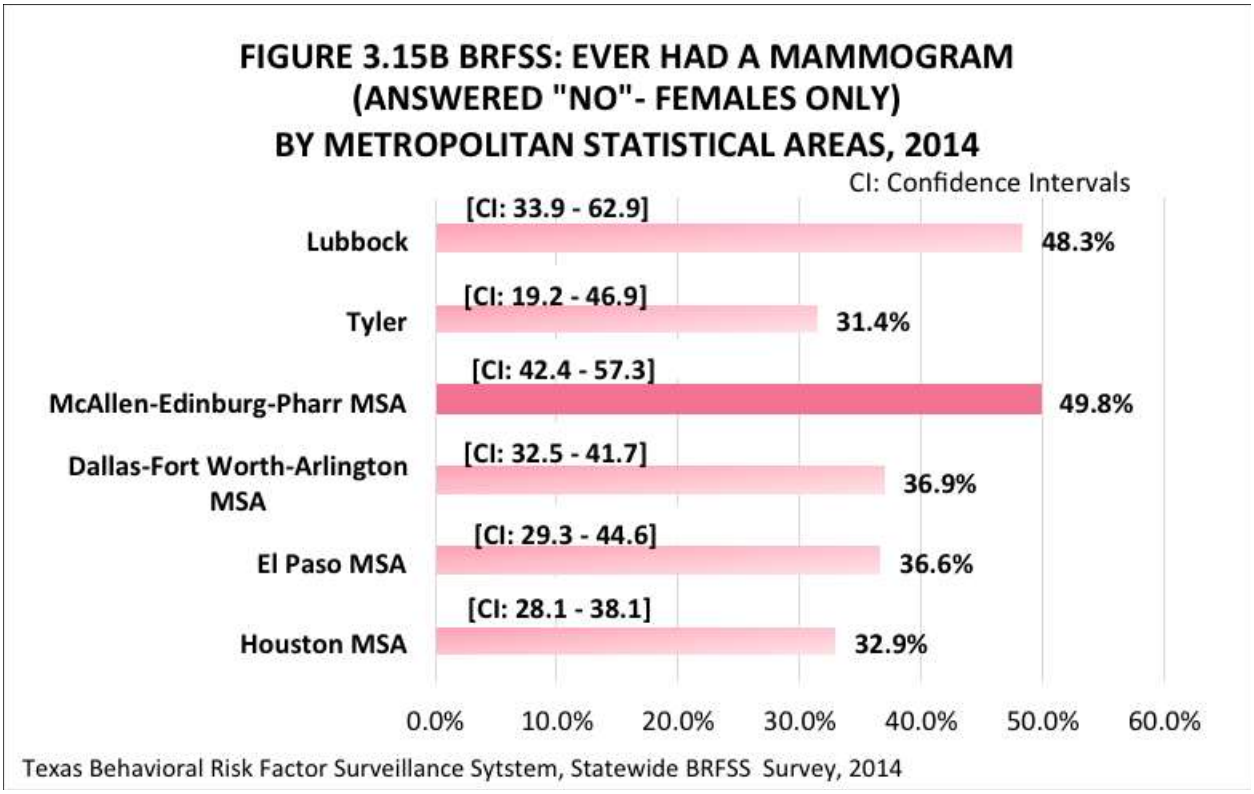
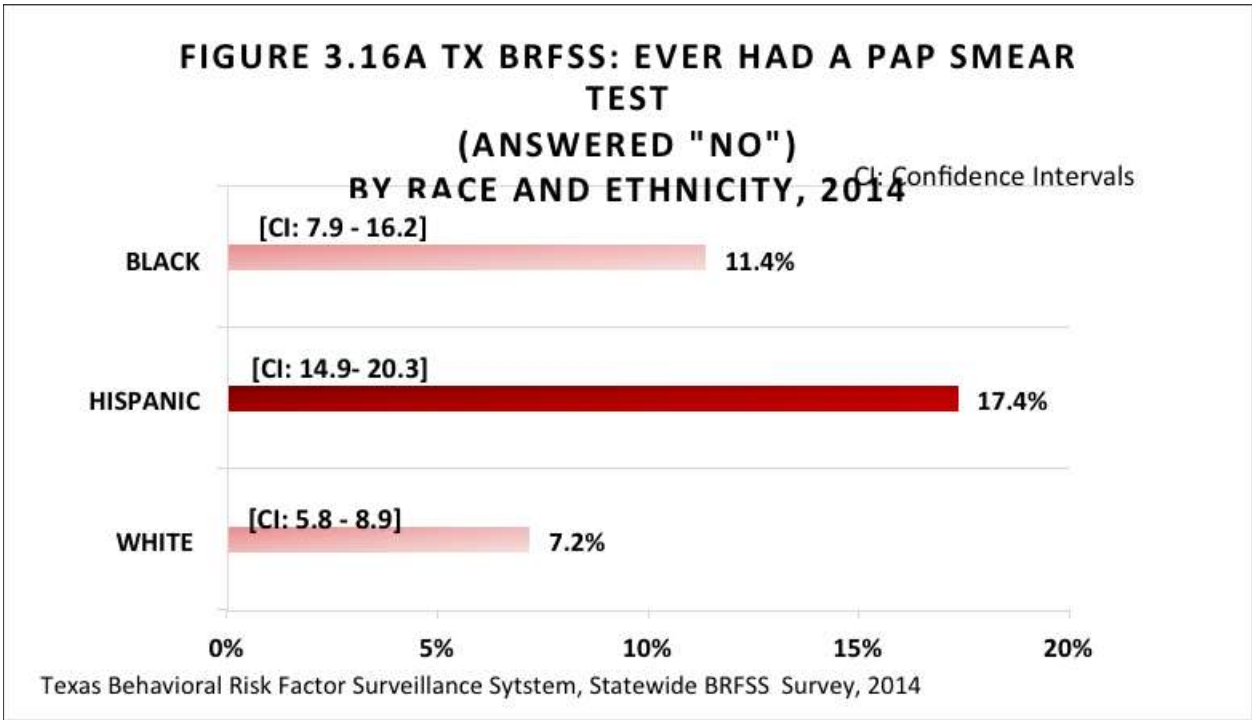


Figure 3.16 Women Who Have Not Had a Pap Smear by Race and MSA



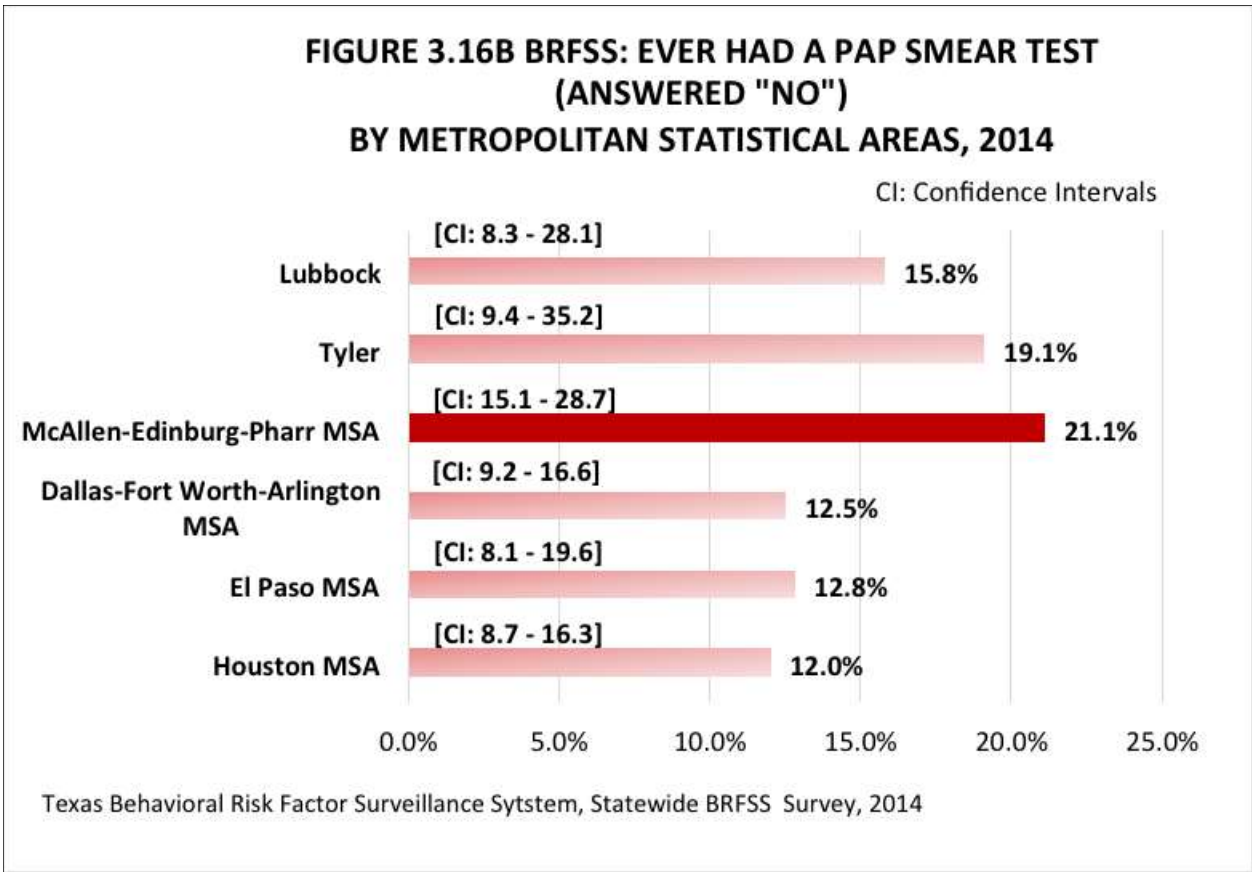
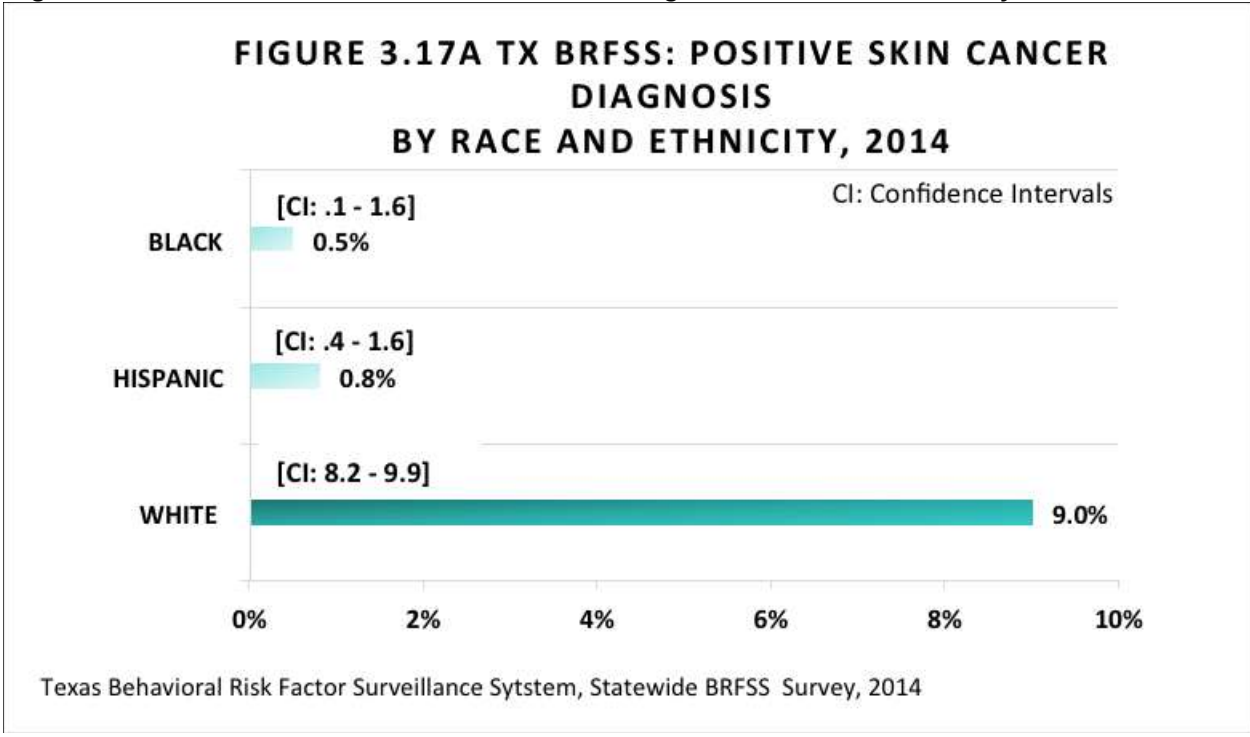
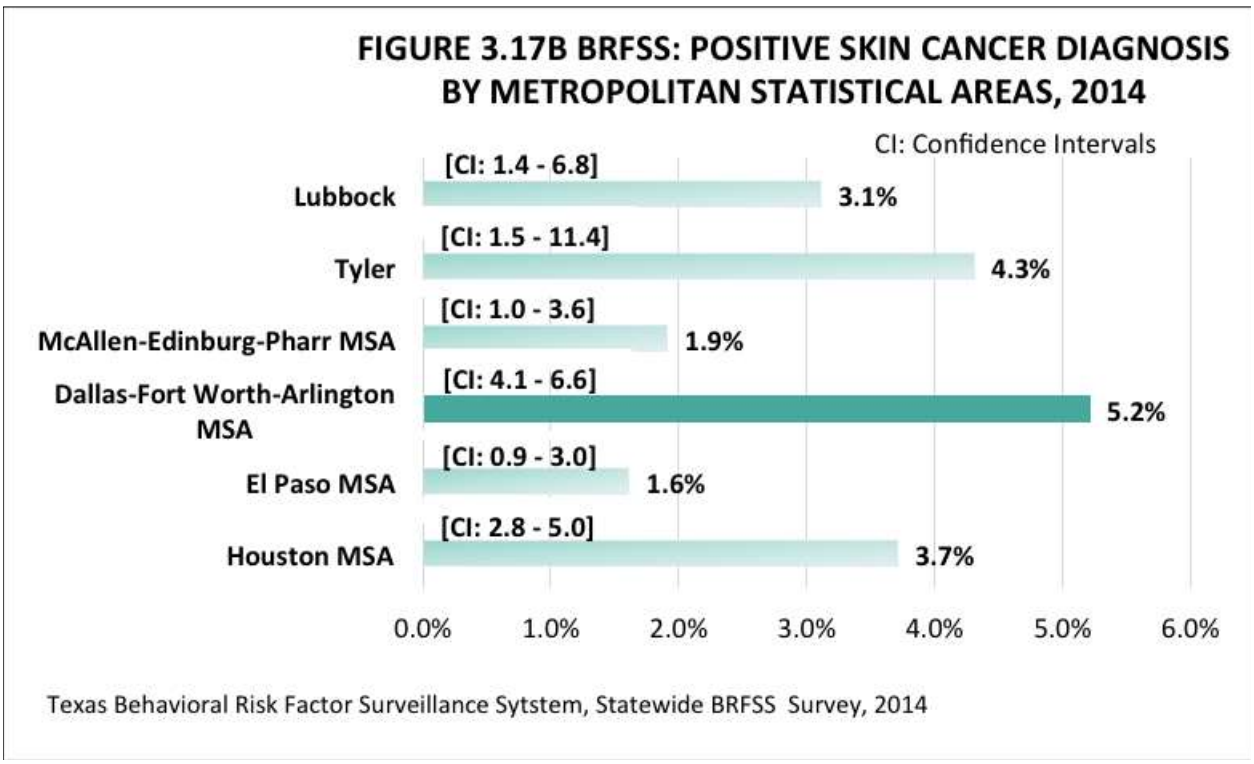


Figure 3.17 Texans Who Have Received a Diagnosis of Skin Cancer by Race and MSA





Appendix D

Cancer Domains	Program Name	Contact Information	Policy, Education, Services (PES): Choose Primary Category	Research or Program Implementation/Services	Program Summary	Offered ONLY to MDACC Patient/Faculty and Staff
Lung Cancer Prevention and Screening	ASPIRE	Alexander Prokhorov aprokhor@mdanderson.org	Services	Program Implementation	ASPIRE (A Smoking Prevention Interactive Experience) is a www.mdanderson.org/aspire is a web-based bilingual, multimedia program developed for adolescents. ASPIRE uses animations, videos, and interactive activities to communicate the facts about smoking and tobacco use, as well as, offers skills to adopt a tobacco-free lifestyle.	No
Lung Cancer Prevention and Screening	Promoting Informed Decisions about Lung Cancer Screening	Robert J. Volk bvolk@mdanderson.org	Education-Public	Research	The purpose of this project is to update and evaluate a patient decision aid which promotes informed decision making about lung cancer screening with low-dose computed tomography among current and former heavy smokers. The decision aid emphasizes the importance of smoking cessation for those who continue to smoke.	No
Lung Cancer Prevention and Screening	Tobacco Outreach Education Program	Alexander Prokhorov aprokhor@mdanderson.org	Education-Public & Professional	Program Implementation	The mission of the Tobacco Outreach Education Program (TOEP) is to deliver the highest quality education and training in tobacco control principles and practices to health care professionals and the public locally, nationally, and worldwide.	No
Lung Cancer Prevention and Screening	Teen Tobacco Preveniton Program	Stephanie Kim sfkim@mdanderson.org	Education-Public	Program Implementation	This program uses evidence-based strategies such as role play to educate adolescents on the dangers of tobacco use, including harmful substances in tobacco and cigarettes, ways to recognize marketing tactics used to addict teens and to identify ways to handle peer pressure. It's a one hour, one session program mostly offered in schools. It's in English and includes giveaways that reinforce program messages. Participants are given an anonymous post-survey that measures their knowledge on the program content as well as their self-efficacy on refusal skills strategies.	No
Lung Cancer Prevention and Screening	Tool Cool To Smoke	Stephanie Kim sfkim@mdanderson.org	Education-Public	Program Implementation	This program is a free tobacco awareness program using puppets to motivate young children to resist peer pressure and avoid tobacco. It's a one hour program that includes a take-home pledge card and other handouts. Program requestors are surveyed for their impressions on their student's knowledge.	No
Lung Cancer Prevention and Screening	Tobacco 101 Presentation	Stephanie Kim sfkim@mdanderson.org	Education-Public	Program Implementation	This is a one hour presentation that educates adults on the dangers of tobacco use including secondhand smoke. It is offered in English and includes handouts.	No
Lung Cancer Prevention and Screening	Tobacco Prevention Exhibits	Stephanie Kim sfkim@mdanderson.org	Education-Public	Program Implementation	This is an exhibit that educates audiences about tobacco prevention. It is used at worksites and community events/fairs throughout Houston. Activities include the Tool Cool to Smoke puppets and health education models such as a simulated smokers lung comparison, the Year's Worth of Tar model, the Mr. Gross Mouth model, etc. Participants are given materials and giveaways to reinforce tobacco prevention messages.	No
Lung Cancer Prevention and Screening	Tool Cool to Smoke BINGO Game	Stephanie Kim sfkim@mdanderson.org	Education-Public	Program Implementation	This program reinforces the messages presented in the Tool Cool to Smoke puppet show. It is a stand-alone product and is usually used as a leave behind after the puppet show. It is targeted to third and fourth grades and is correlated to the Texas Essential Knowledge and Skills (TEKS). Teachers receive a full BINGO game including chips, along with print materials and a resource list.	No
Lung Cancer Prevention and Screening	*Cancer Prevention Center	Therese Bevers tbevers@mdanderson.org	Services	Program Implementation	The Cancer Prevention Center offers comprehensive cancer risk assessment, risk reduction and screening services (Lung Cancer, Energy Balance, Colorectal, Cevical/HPV, Breast, Skin and Cancer Survivorship).	No
Lung Cancer Prevention and Screening	Smoking Cessation for Cervical Cancer Survivors in a Safety Net Healthcare System: Cervical Cancer Smoking Study	Diana Hoover dshoover@mdanderson.org	Services	Research	The purpose of Project HEALTH is to evaluate the efficacy and cost-effectiveness of a theoretically- and empirically-based "Motivation and Problem Solving" among smokers who have a history of cervical cancer.	No
Lung Cancer Prevention and Screening	Ask Advise Connect: Implementation in Federally Qualified Health Center	Lorna McNeill lmcneill@mdanderson.org	Services	Program Implementation	Disseminate the Ask Advise Connect approach at 11 Federally-Qualified Health Centers to connect patients who smoke with tobacco cessation treatment.	No
Lung Cancer Prevention and Screening	Legacy: Smoking Cessation for People Living with HIV/AIDS	Alexander Prokhorov aprokhor@mdanderson.org	Services	Program Implementation	This project implements an evidence-based smoking cessation program for persons living with HIV/AIDS at the Legacy Community Health Services sites. Legacy provides care to approximately 4,000 individuals living with HIV/AIDS at five clinic sites in the greater Houston area. Smoking represents the leading cause of preventable death among persons living with HIV/AIDS. By implementing procedures for routine smoking screening and offering an evidence-based smoking cessation program, this project fills an important gap for the underserved population served by Legacy.	No
Lung Cancer Prevention and Screening	CHANT - Children Against Nicotine, and Tobacco. Elementary Education	Daniel Smith dlsmith4@mdanderson.org	Education-Public & Services	Research	First ever research based curriculum that focuses on tobacco and nicotine prevention through learning to identify safe environments versus unsafe environments.	No

Energy Balance (Nutrition and Exercise)	TEAMMe! (Totally Excited About Moving, Mobility and Exercise)	Priti Tewari ptewari@mdanderson.org	Education - Public & Services	Program Implementation	mobility and exercise incentive program for pediatric inpatients created by a multidisciplinary team that utilizes a reward system to encourage children to remain as active as possible during their hospitalization. Is a mobility incentive program used to motivate our patients to remain as active as possible during their hospitalization, treatment, and recovery process.	No
Energy Balance (Nutrition and Exercise)	Energy Balance Nutrition Program	Joya Chandra jchandra@mdanderson.org	Education - Public & Services	Research	Promoting healthy eating habits in pediatric patients and survivors through education, behavioral sciences and innovative research and to help patients find healthy food options during treatment and to lower obesity and the risk of cancer for children	No
Energy Balance (Nutrition and Exercise)	Energy Balance Exercise Program	Keri Schadler klschadler@mdanderson.or	Education - Public & Services	Research	Studies the use of moderate aerobic exercise to enchance chemotherapeutic efficacy.	No
Energy Balance (Nutrition and Exercise)	Tu Salud Si Cuenta! (Your Health Matters) for Hispanics	Stephanie Kim sfkim@mdanderson.org	Education - Public	Program Implementation	This program educates adult Hispanics about how eating more fruits and vegetables, using healthy portions, and increasing physical activity can improve their health, and prevent cancer and other chronic diseases. It is implemented in four, 1.5 hour sessions and is offered in English and Spanish. Handouts and giveaways to incentivize healthy behaviors also are included. There are evaluations for each session that measure many things including how likely the participants is to adopt the healthy behavior learned during the session. The program was a CPRIT funded project originally developed by researchers at The University of Texas Health Science Center at Houston, and adapted by our team.	No
Energy Balance (Nutrition and Exercise)	Tu Salud Si Cuenta! Reaching Latino family dyads to increase physical activity and healthy eating 1R56HL128705-01	Larkin Strong LLstrong@mdanderson.org	Other	Research	The goal of this study is to adapt a theoretically-based intervention designed to promote healthy eating and physical activity in adult Latino family dyads and evaluate its feasibility and acceptability through formative research and pretesting of intervention content and procedures.	No
Energy Balance (Nutrition and Exercise)	Tu Salud Si Cuenta! Reaching Latino family dyads to increase physical activity and healthy eating 1R01HL128705-01A1	Larkin Strong LLstrong@mdanderson.org	Other	Research	The major goal of the proposed study is to use a community-engaged research approach to evaluate the efficacy of a 6-month long family dyad intervention in promoting physical activity and healthy eating among Latino adults	No
Energy Balance (Nutrition and Exercise)	Project CHURCH	Lorna McNeill lmcneill@mdanderson.org	Services	Research	The goal of Project CHURCH is to reduce cancer risk and improve quality of life for African-Americans living in the Houston area. The goal of this research study is to learn if certain factors may affect cancer rates among African Americans. These factors include behavioral, social, and environmental factors including diet and physical activity, cigarette smoking, cancer screening, health care, neighborhood environment, and mental health.	No
Energy Balance (Nutrition and Exercise)	Conference Grant	Lorna McNeill lmcneill@mdanderson.org	Education - Public & Professional	Research	The goal of this conference grant is to leverage an existing partnership to address family obesity and obesity-related behaviors in the African American community.	No
Energy Balance (Nutrition and Exercise)	Food Desert in Houston: Increasing Fruit and Vegetable Consumption	Lorna McNeill lmcneill@mdanderson.org	Education - Public & Services	Research	This study aims to use a community-based approach to engage faith-based communities, the Houston Food Bank, the Brighter Bites program, and MD Anderson Cancer Center in utilizing churches as an effective food co-op concept to provide consistent access to fresh F&V using low-cost strategies combined with nutrition education to low-income African American children and their families.	No
Energy Balance (Nutrition and Exercise)	We Can!	Lorna McNeill lmcneill@mdanderson.org	Services	Program Implementation	We Can! will provide an evidence-based childhood obesity prevention program to children and parents of Harris Health System school-based clinics, elementary and middle schools affiliated with the school-based clinics. The project will target low-income, uninsured and underinsured populations of children who are at risk of obesity. There are three components to the proposed evidence-based We Can! Program: child, parent and community programs. Children and parents will receive health promotion programming that will increase knowledge of physical activity and healthy diets and children will engage in physical activity play time. Parents will also receive evidence-based health promotion counseling to help them identify barriers and solutions to meeting family health goals.	No
Energy Balance (Nutrition and Exercise)	Project LEAP	Co-PI Karen Basen-Engquist kbasenen@mdanderson.org Co-PI Karen Lu khlu@mdanderson.org	Services	Research	Project LEAP (Lowering endometrial cancer risk through activity, nutrition, and preventive medicines) is a study aimed at overweight, post-menopausal women between the ages of 50 and 65. Our study's goals are to determine if we are able to decrease the risk of endometrial cancer through a lifestyle and drug intervention. Our lifestyle intervention includes weekly meetings with a dietitian and supervised exercise sessions twice per week.	No
Energy Balance (Nutrition and Exercise)	Active Living After Breast Cancer	PI Karen Basen-Engquist kbasenen@mdanderson.org	Education - Public & Services	Program Implementation	Active Living After Breast Cancer (ALABC) is a free program for breast cancer survivors offered by MD Anderson and Kelsey-Seybold Clinic. The 12 week program teaches breast cancer survivors how to be more physically active, learn about resources for breast cancer survivors, and provides opportunity to get support from other breast cancer survivors and social media.	No

Energy Balance (Nutrition and Exercise)	HEALTH	PI: Karen Basen-Engquist kbasenen@mdanderson.org Co-PI: Susan Peterson speterso@mdanderson.org	Services	Research	Project HEALTH is a study aimed to conduct pilot tests of interventions to increase physical activity (PA) and weight management using a multi-phase optimization strategy (MOST). Our study tests several different intervention components such as telephone coaching, email coaching, text messages, social networking, self-monitoring and resistance training over a 16 week intervention period. We are conducting three pilot tests in different populations: 1) MDA employees 2) BRCA-positive and Lynch Syndrome positive individuals and their family members and 3) CLL survivors.	No
Energy Balance (Nutrition and Exercise)	DXA & VA Study	PI: Karen Basen-Engquist kbasenen@mdanderson.org	Services	Research	The aim of this research is to conduct a validity study to compare visceral adipose measured by whole body DXA and abdominal computerized tomography (CT) scans in a sample of cancer patients undergoing CT scans.	No
Energy Balance (Nutrition and Exercise)	Power in Motion	PI: Karen Lu khlu@mdanderson.org Co-PI: Karen Basen-Enquist kbasenen@mdanderson.org	Services	Research	The objective of this study is to evaluate changes in the serum concentration of omentin in participants in a 10 week exercise program. Omentin is a newly discovered adipokine that is produced by mesothelial cells within visceral adipose tissue. High levels of this protein are associated with a healthy, lean state. Low levels are associated with obesity and certain cancers, as well as other diseases such as diabetes, inflammatory diseases, and infertility. There is a limited understanding of the effects of exercise on serum omentin concentration. We hypothesize that participation in a 10 week exercise program will lead to an increase in the concentration of serum omentin among participants and that other outcomes related to obesity and cancer risk will also show beneficial changes.	No
Energy Balance (Nutrition and Exercise)	Cancer Survivor Exercise App	PI: Karen Basen-Engquist kbasenen@mdanderson.org	Services	Research	The aim of this formative research is to gather qualitative and quantitative data to inform the development of an appropriate smartphone application and a library of SMS (Short Messaging Services) and educational content for cancer survivors to promote physical activity. This study will collect feedback and data through the use of focus groups and interviews with cancer survivors, interviews with healthcare providers and collecting quantitative data using questionnaires. The feedback we receive will help us to move forward with development of a smartphone/tablet application.	No
Energy Balance (Nutrition and Exercise)	NEXT Steps	PI: Karen Basen-Engquist kbasenen@mdanderson.org	Services	Research	The goal of this project is to assess feasibility and obtain parameter estimates of an innovative, distance-based weight loss intervention in obese endometrial cancer survivors. The three-arm intervention aims to reduce participants' chronic inflammation and metabolic dysfunction and to evaluate the optimal exercise recommendation for maintenance of lean body mass during weight loss, while testing for effectiveness to support a national trial design.	No
Energy Balance (Nutrition and Exercise)	CATCH Global Foundation	Ruth Rechis rrechis@mdanderson.org	Services	Program Implementation	CATCH Global Foundation (CGF) is a 501(c)3 public charity founded in 2014, its mission targets improvement in child health through development, dissemination and sustained implementation of an evidence-based school-based health program designed to promote physical activity and healthy food choices. CGF was formed to specifically transition a body of research, supported by twenty-five (25) years of scientific investigation and more than one-hundred twenty (120) academic publications, to an independent operation outside of academia capable of achieving sustained implementation at significant scale. MD Anderson serves as a founding partner of CGF with the aiming of supporting dissemination and supplementing the curriculum with specific cancer related topics such as sun safety and tobacco cessation.	No
Colorectal Cancer Prevention and Screening	Promoting Health Literacy for Colorectal Cancer Screening	Robert J. Volk bvolk@mdanderson.org	Education - Public	Research	This project aims to increase the uptake of colorectal cancer screening (CRCS) by primary care patients through the use of an entertainment-based education program. The program promotes informed decisions about CRCS, and is targeted at African American patients (English version) and Hispanic patients (Spanish version).	No
Colorectal Cancer Prevention and Screening	Colorectal Cancer Program for Vietnamese	Stephanie Kim sfkim@mdanderson.org	Education - Public	Program Implementation	This program educates Vietnamese populations on the importance of regular colorectal cancer screening exams, risk factors and preventive behaviors; and provide navigation assistance for screening. It can be implemented as one session, or three sessions and includes print materials and giveaways to incentive healthy behaviors learned in the program.	No
Colorectal Cancer Prevention and Screening	Colorectal Cancer Program for Hispanics	Stephanie Kim sfkim@mdanderson.org	Education - Public	Program Implementation	This program educates Hispanic populations on the importance of regular colorectal cancer screening exams, risk factors and preventive behaviors; and provide navigation assistance for screening. It can be implemented as one session, or three sessions and includes print materials and giveaways to incentive healthy behaviors learned in the program.	No
Colorectal Cancer Prevention and Screening	Colorectal Cancer Program African-American	Stephanie Kim sfkim@mdanderson.org	Education - Public	Program Implementation	This program educates African American populations on the importance of regular colorectal cancer screening exams, risk factors and preventive behaviors; and provide navigation assistance for screening. It can be implemented as one session, or three sessions and includes print materials and giveaways to incentive healthy behaviors learned in the program.	No
Colorectal Cancer Prevention and Screening	*Integrated Professional Oncology Curriculum for Texas Primary Care Providers: Enhancing Care and Quality of Life for Breast, Colon and Prostate Cancer Survivors	Lewis Foxhall lfoxhall@mdanderson.org	Education - Professional	Program Implementation	Videotaped modules on specific survivorship issues dealing with breast, colorectal and prostate cancer.	No
Colorectal Cancer Prevention and Screening	SCOPE	Kimberly Tripp ktripp@mdanderson.org	Education - Public	Program Implementation	Sprint for Colorectal Oncology Prevention and Education - Comprised of three key elements: building awareness, promoting education and celebrating survivorship. This includes promotion of the 5K Fun Run Walk and development of preventative educational material.	No

Colorectal Cancer Prevention and Screening	FIT Flu	Lewis Foxhall lfoxhall@mdanderson.org	Services	Program Implementation	Uninsured and underinsured patients with limited financial resources can receive a free, take-home, colorectal cancer screening test called the Fecal Immunochemical Test (FIT) at participating clinics. Patients receive instructions, a reminder of the importance of screening, educational materials and contact information for questions. Patients who test positive are offered a free colonoscopy	No
Cervical Cancer/HPV-Associated Cancer Prevention and Screening	CPRIT Prevntion Project: Improving Cervical Cancer Screening and Prevention in the Rio Grande Valley Through Public Outreach, Patient Navigation, and Telementoring	Kathleen Schmeler kschmele@mdanderson.org	Education - Public & Professional	Program Implementation	Project ECHO connects MD Anderson specialists with providers in rural and underserved communities, providing telementoring and teleconsulting to increase local capacity and improve patient outcomes.	No
Cervical Cancer/HPV-Associated Cancer Prevention and Screening	Prevent Cancer: Get the HPV vaccine (health education program)	Stephanie Kim sfkim@mdanderson.org	Education - Public	Program Implementation	This program educates women about the HPV vaccine and importance of regular cervical cancer screening, risk factors and preventive behaviors. It is a one session, one hour program that includes program materials and giveaways to incentivize healthy behaviors.	No
Cervical Cancer/HPV-Associated Cancer Prevention and Screening	High-Resolution Microendoscopy (HRME) for Cervical Cancer Prevention (multiple projects in multiple sites)	Kathleen Schmeler kschmele@mdanderson.org		Research	Collaboration with Rice University using HRME for cervical cancer prevention. (Multiple sites (Brazil, El Salvador, RGV, Houston)) with funding from NCI. Please contact Dr. Schmeler if additional detail is needed.	No
Cervical Cancer/HPV-Associated Cancer Prevention and Screening	Cervical Cancer and HPV Education for Vietnamese Women	Stephanie Kim sfkim@mdanderson.org	Education - Public	Program Implementation	This program educates Vietnamese women about the importance of regular cervical cancer screening, risk factors and preventive behaviors. It is a one session, one hour program that includes program materials and giveaways to incentivize healthy behaviors.	No
Cervical Cancer/HPV-Associated Cancer Prevention and Screening	Cervical Cancer and HPV Education for Hispanic Women	Stephanie Kim sfkim@mdanderson.org	Education - Public	Program Implementation	This program educates Hispanic women about the importance of regular cervical cancer screening, risk factors and preventive behaviors. It is a one session, one hour program that includes program materials and giveaways to incentivize healthy behaviors.	No
Cervical Cancer/HPV-Associated Cancer Prevention and Screening	HPV Moon Shot	Erich Sturgis (Lead) esturgis@mdanderson.org Lois Ramondetta (Co-PI) lramonde@mdanderson.org Kathleen Schmeler (Co-PI) kschmele@mdanderson.org	Education - Public & Services	Program Implementation	The goals of the project are to: 1) increase HPV vaccination rates in Texas adolescents (ages 13-17) to 80 percent by 2020 through education of healthcare providers and the public, 2) improve access to cervical cancer screening in underserved populations in the US and globally by training providers via ECHO tele-sessions and 3) develop new screening paradigms for non-cervical HPV-related malignancies.	No
Cervical Cancer/HPV-Associated Cancer Prevention and Screening	*Community Collaboration to Empower the Medically Underserved for Cancer Prevention & Control (G3)	Maria Jibaja-Weiss (Baylor Lead) (f Lois Ramondetta (Co-PI) lramonde@mdanderson.org	Services	Program Implementation	The goals of the project are to: 1) offer colon and cervical cancer prevention education for residents of Harris County who are at high risk for cancer or are not getting care; 2) increase outreach and education so that patients who are able to receive services at HCHD know that they can get colon and cervical cancer prevention services at HCHD CHC clinics; 3) design and put into action a patient referral and follow up system at HCHD clinics to monitor abnormal colon and cervical cancer screening results and; 4) monitor the system to make sure that it is working properly. The long term goal is to reduce the number of deaths from colon and cervical cancer in the areas of Harris County where the people are getting the least health care.	No
Breast Cancer Prevention and Screening	Mobile Mammography	Cindy Marquez cmarquez@mdanderson.org	Services	Program Implementation	The Mobile Mammography program provides digital screenings mammograms to employees at corporations and underserved patients at clinics in the greater Houston area.	No
Breast Cancer Prevention and Screening	*Project Valet	Diane Benson dmbenson@mdanderson.org	Services	Program Implementation	Project VALET is a breast screening program for women ages 40-69 with no medical insurance. It is in collaboration with The Rose, a non-profit breast cancer organization, two Spring Branch Community Health Center's and the Houston Department of Health & Human Services. The program also covers the cost of diagnostic follow up, but not treatment costs.	No
Breast Cancer Prevention and Screening	*Project Valet - Waiver Expansion	Diane Benson dmbenson@mdanderson.org	Services	Program Implementation	Project VALET is a breast screening program for women ages 40-69 with no medical insurance. It is in collaboration with local FQHC's and clinics whose patient population is uninsured or medicaid eligible. The program also covers the cost of diagnostic follow up, but not treatment costs.	No
Cancer Survivorship	*Ask the Expert	Debbie Schultz dschultz@mdanderson.org	Services	Program Implementation	Ask The Expert-A cancer diagnosis always comes with questions. How is it treated? What can I expect? Questions like these are best answered by physicians and other health care professionals who deal with cancer every day. Anderson Network's Ask the Expert allows patients and caregivers to get accurate, credible answers from MD Anderson cancer experts for issues that may arise during or after treatment.	No
Cancer Survivorship	*Cancer Survivorship Conference	Debbie Schultz dschultz@mdanderson.org	Education - Public & Professional	Program Implementation	The Centers for Disease Control and Prevention (CDC) works to implement successful strategies to help the millions of people who live with, through and beyond cancer. The Anderson Network Cancer Survivorship Conference is a partner in this effort by offering what has come to be the largest survivor conference in the United States. Each year approximately 590-650 attendees come for two days to learn about the successful strategies available to meet the needs of the growing population of cancer survivors. Since 1988, approximately 14,000 attendees have gathered in Houston for Anderson Network's Cancer Survivorship Conference, a University of Texas MD Anderson Cancer Center-sponsored event providing education and connecting them with fellow cancer patients, physicians, authors, psychologists, nutritionists and others who share in the journey.	No

Cancer Survivorship	Cancer180	Debbie Schultz dschultz@mdanderson.org	Services	Program Implementation	Currently, Cancer180 provides a social environment where young adult patients, survivors, caregivers and friends in their 20's and 30's can connect with others their age affected by cancer. Www.cancer180.org was developed in 2011 for all young survivors.	No
Cancer Survivorship	Filipino Cancer Network of America-Metro Houston	Cherry Sloan-Medrano cpsloan@mdanderson.org	Education - Public & Professional	Program Implementation	This program offers cancer prevention education; referrals to community resources and providers including MDACC; Emotional, spiritual and financial support to cancer survivors and families; Assist in transition of care as requested and Advocate for survivors and their caregivers and families.	No
Cancer Survivorship	Integrative Medicine Center: Individual Services	Kira Taniguchi kmtaniguchi@mdanderson.org	Services	Program Implementation	The Integrative Medicine Center offers a consultation service to provide guidance to patients on a comprehensive and integrative approach to their care, covering a variety of areas including the risks and benefits of using herbs and supplements, acupuncture, exercise/physical activity consultation, meditation/mind-body, nutrition consultation, oncology massage, and music therapy. Our physicians also meet weekly with the team of professionals who have experience in conventional approaches as well as integrative treatments.	Yes
Cancer Survivorship	Integrative Medicine Center: Group Classes	Kira Taniguchi kmtaniguchi@mdanderson.org	Services	Program Implementation	Physical: Yoga, Pilates, Get Moving, Tai Chi, Qi Gong Mind-Spirit: Exploring Music for Relaxation, Tibetan Bowl Meditation, Therapeutic Group Drumming Social: Celebration Singers, Expressive Arts, Laughter for Health, Support Groups (we host PINKNIC and Look Good Feel Better which are both Volunteer Services Programs).	Yes
Cancer Survivorship	my Cancer Connection	Debbie Schultz dschultz@mdanderson.org	Education - Public	Program Implementation	The one-on-one support program connects patients and caregivers with survivors who've had the same or similar diagnosis, treatment or experience; The myCancerConnection Hospitality Centers in the Main Building and Mays Clinic welcomed more than 118,000 visitors in Fiscal Year 2014, offering cookies, cups of coffee and a quiet place to rest or talk with experienced survivor and caregiver volunteers. Throughout the year, myCancerConnection hosts events and programs such as the Annual Cancer Survivorship Conference, Caregiver Week, Cancer180 for young adult cancer survivors ages 18-39, PINKNIC lunch-and-learns and Day Away events where patients, caregivers and survivors can connect with others who've been there.	Yes
Cancer Survivorship	*PIKNIC	Debbie Schultz dschultz@mdanderson.org	Services	Program Implementation	PINKNIC is a weekly educational forum for M.D. Anderson patients, caregivers, faculty and staff who want to learn more about issues relevant to cancer. Sessions are led by experts from MD Anderson or the Houston community, whose topics range from meditation techniques to cancer treatment news and everything in between. Lunch and learn educational sessions are offered at our regional locations and main campus.	No
Cancer Survivorship	One-on-Support	Debbie Schultz dschultz@mdanderson.org	Services	Program Implementation	Central to the mission of the Anderson Network is to match one of our volunteer members with patients and caregivers who have similar cancer diagnoses and treatments. A cancer diagnosis is very stressful for patients and their loved ones. The trauma of cancer, coupled with the often-fearful prospect of coming for treatment to one of the largest cancer centers in the world is difficult to understand if one has never experienced it. As patients that have walked this pathway, the journey can be made easier when the experience is shared by someone who has been there, who understands, and who can serve as a friend along the way. As patients and individuals, survivors recognize that sometimes the emotional and informational concerns of patients can only be satisfied through personal contact with someone of similar diagnosis, treatment, age, and gender.	No
Cancer Survivorship	*Professional Oncology Education	Lewis Foxhall lfoxhall@mdanderson.org	Education - Professional	Program Implementation	MD Anderson's multidisciplinary faculty and cancer experts present free online lectures and courses for physicians, health care professionals and biomedical scientists on a variety of cancer types. Emphasis is placed on clinical diagnosis, screening and prevention, medical management of malignancies, short and long term effects of treatment, and cancer survivorship. Many courses are offered for Continuing Medical Education (CME) credits without charge.	No
Cancer Survivorship	Survivorship Portal	Lewis Foxhall lfoxhall@mdanderson.org	Education - Public	Program Implementation	The texascancersurvivor.info Web portal aims to address the objective of increasing Texans' knowledge of survivorship issues by providing links to pre-screened survivorship Web sites and publications.	No
Cancer Survivorship	Improving Service Delivery to Cancer Survivors In Primary Care Settings	Lewis Foxhall lfoxhall@mdanderson.org	Education - Professional	Program Implementation	The primary aim is to improve use of evidence based cancer preventive services for adult individuals in primary care residency training practices who have completed active treatment for cancer. We propose to support participating Family Medicine residency practices in Improving patient centered, evidence based cancer prevention service delivery focused on adult survivors of cancer supported by addressing knowledge gaps, implementing practice system change interventions and tele-mentoring methods in program practices to help assure delivery of evidence based cancer preventive services. This will additionally improve preventive care and potentially reach all patients within the practices and foster continuous improvement efforts. Further, by focusing implementation on training program practices, awareness of cancer survivor service needs, survivor management best practices will be disseminated to trainees many of whom will eventually practice near their training programs and across Texas. These services include: Primary prevention: counseling for tobacco use cessation, nutrition and physical activity, immunizations and general health promotion. Secondary prevention: screening for second primary cancers, and Tertiary prevention: surveillance for early identification of recurrent cancer, mitigation of sequela of treatment and the primary cancer through rehabilitation services and therapy for specific long term conditions, management of psychosocial problems, symptom management and palliative care.	No

Cancer Survivorship	Pediatric Cancer Survivorship Program	JoAnn Ater jater@mdanderson.org, Angela Yarbrough aryarbrough@mdanderson.org	Education-Public & Services	Program Implementation	Intervention research that seeks to promote wellness, prevention, and surveillance of persistent, late effects related to a cancer diagnosis and/or its treatments.	No
Skin Cancer Prevention and Screening	Skin Cancer Screening	Mary Tripp mtripp@mdanderson.org	Services	Program Implementation	This project will provide evidence-based, culturally-relevant and literacy-appropriate skin cancer health education to non-Hispanic whites and Hispanics (English and Spanish speakers). Skin screenings will be provided. For participants who are referred for biopsy of a suspicious lesion, project staff will navigate the participant to a biopsy appointment, track the appointment, services provided and outcome (diagnosis). If the participant receives a diagnosis of skin cancer, project staff will assist with treatment navigation as necessary.	No
Skin Cancer Prevention and Screening	Sunbeatables-PreK Sun Safety Curriculum	Daniel Smith dlsmith4@mdanderson.org	Education-Public & Services	Program Implementation	Melanoma Moon Shot Prevention-Evidence based program that aims to educate teachers, parents, and children about sun protection. Each unit includes 4 activities, a puppet show, sun safety songs, science experiments, and more.	No
Other	Exxon Mobil Healthy Communities*	Ruth Rechis rrechis@mdanderson.org	Services	Program Implementation	Healthy Communities, a program of the University of Texas M.D. Anderson Cancer Center, aims to create healthier communities by forging partnerships in the communities we serve and uniting individuals, schools, workplaces, government, health care providers and policy-makers to plan and carry out community-led solutions that will make positive, lasting change in the health of the population. The ExxonMobil Healthy Communities is building a sustainable partnership among ExxonMobil Oil, MD Anderson, and Baytown, TX (75,000 people). The ExxonMobil Healthy Communities is supported by a $10 million gift from ExxonMobil which will be implemented over the next 7-10 years.	No
Other	*Ask MD Anderson	Jennifer Kennedy Stovall jkstovall@mdanderson.org	Services	Program Implementation	Contact center for prospective patients and public. Answer requests via phone and email regarding MD Anderson's appointment process, treatments, trials and services.	No
Other	*Faculty Speakers Bureau	Lewis Foxhall lfoxhall@mdanderson.org	Education-Professional	Program Implementation	This program is designed to educate physicians and other health care professionals (outside the Institution) using the expertise of the MD Anderson Faculty to present on topics such as diagnosis, advances in medical, surgical and radiation oncology treatment	No
Other	*TCI Website	Lewis Foxhall lfoxhall@mdanderson.org	Education-Professional	Program Implementation	Texas Cancer Information (TCI) gathers, organizes and delivers cancer information to empower Texans with the knowledge needed to reduce the impact of cancer. TCI connects patients, caregivers, the general public, health care policy planners, physicians and other health professionals with reliable online cancer information.	No
Other	*Focused on Health	Stephanie Kim sfkim@mdanderson.org	Education-Professional	Program Implementation	MD Anderson produces Focused on Health, a monthly, online newsletter for the public about ways to reduce cancer risks.	No
Other	*Institutional representation in community and business organizations	Stephanie Kim sfkim@mdanderson.org	Education-Public	Program Implementation	MD Anderson participates in community meetings, business organizations and networking groups to increase awareness of MD Anderson programs and services including cancer screening and risk reduction activities.	No
Other	*Community partner hosted events	Stephanie Kim sfkim@mdanderson.org	Education-Public	Program Implementation	MD Anderson participates and plans events with community partners to increase cancer awareness including screening and risk reduction behaviors.	No
Other	*Prevention videos	Stephanie Kim sfkim@mdanderson.org	Education-Public	Program Implementation	MD Anderson produces videos for use on social media and web platforms to educate the public about cancer prevention and risk reduction.	No
Other	*Cancer Risk Check	Stephanie Kim sfkim@mdanderson.org	Education-Public	Program Implementation	This program will be hosted on the MD Anderson website and used to help people determine whether they are at increased risk for cancer. Users also will be able to learn more info about how to reduce their risks, and what screening exams are appropriate for their age, gender and risk status.	No
Other	*Prevention Social media	Stephanie Kim sfkim@mdanderson.org	Education-Public	Program Implementation	MD Anderson posts information about cancer prevention and risk reduction on branded social media platforms to educate the public.	No
Other	*Cancer awareness presentations	Stephanie Kim sfkim@mdanderson.org	Education-Public	Program Implementation	This program provides presentations that increase cancer awareness, and promote MD Anderson programs and services in schools, worksites and throughout the community. Seven topics are offered, and each presentation is one hour. Materials are included.	No
Other	*Prevention Social Media	Stephanie Kim sfkim@mdanderson.org	Education-Public	Program Implementation	MD Anderson uses social media sites, such as Facebook and Twitter to inform participants about ways to reduce their cancer risks.	No
		Stephanie Kim		Program	This program educates small Houston area African American church congregations on cancer prevention, screening and risk reduction. The articles are adapted from Focused on Health, and are tailored to African American audiences. An annual	

Other	*In the Spirit of Health	sfkim@mdanderson.org	Services	Implementation	survey is administered to measure knowledge gained and intent to change behavior.	No
Other	*Prevention print materials	Stephanie Kim sfkim@mdanderson.org	Education - Public	Program Implementation	Develops and distributes brochures to educate the public about how to reduce their cancer risks and how to access MD Anderson services. Organizations can order brochures at no charge via an online order form.	No
Other	*MD Anderson-hosted Community Education Events	Stephanie Kim sfkim@mdanderson.org	Education - Public	Program Implementation	MD Anderson coordinates education events for the public and targeted community groups to teach them about cancer prevention, screening and risk reduction topics. Events are planned in Houston and regional care center markets.	No
Other	*Charitable Sponsorships	Stephanie Kim kim@mdanderson.org	Education - Public	Program Implementation	MD Anderson sponsors a variety of charitable events to support the local community. We participate as a way to invest in the community, and to have the opportunity to educate people about healthy behaviors to reduce cancer risks.	No
Other	*Community Partnerships	Stephanie Kim sfkim@mdanderson.org	Education - Public	Program Implementation	Develop partnerships/relationships with worksites, retailers, community organizations, religious organizations and internal MD Anderson departments to plan events/activities that increase cancer awareness.	No
Other	*Exhibit Program	Stephanie Kim m@mdanderson.org	Education - Public	Program Implementation	This program increases cancer awareness, and promotes MD Anderson programs and services at health fairs and other community events throughout Houston.	No
Other	*Prevention Website	Stephanie Kim sfkim@mdanderson.org	Education - Public	Program Implementation	This program includes all the content on the prevention and screening section of MD Anderson's homepage. It is used to increase cancer awareness, and educate the public about cancer prevention, screening and risk reduction.	No
Other	Pediatric Fertility Program	Cindy Schwartz clschwartz@mdanderson.org Donna Bell dabell@mdanderson.org	Education - Public & Services	Program Implementation	Comprehensive, patient centered fertility counseling before cancer treatment, discussion of parenthood after cancer, streamlined access to fertility preservation methods.	No
Other	Filipino Cancer Network of America-Metro Houston (Survey)	Cherry Sloan-Medrano cpsloan@mdanderson.org	Education - Public & Professional	Research	Cancer morbidity and mortality survey of Filipino Americans in Metro Houston.	No

Appendix E

Cancer Prevention Programs of Texas ***(Updated August 19, 2016)***

Focus	Institution	Public Health Service Region	County	Link to website	Program	Program Description	Funding	Type of Program
Breast	Amarillo Area Breast Health Coalition	Region 1	Armstrong, Briscoe, Carson, Castro, Childress, Collingsworth, Dallam, Deaf Smith, Donley, Gray, Hall, Hansford, Hartley, Hemphill, Hutchinson, Lipscomb, Moore, Ochiltree, Oldham, Parmer, Potter, Randall, Roberts, Sherman, Swisher, Wheeler	http://www.aabhc.org/wise.html	Breast Coalition Services	Provides education, support and greater access to breast health services, promoting awareness, early detection of breast cancer and healthy lifestyles for people in the Panhandle, especially the under served, uninsured, and under insured. Modeling the Cure- Programs for organizations that educate women about breast health and the 3 steps to early detection of breast cancer. WISE Woman- Community based outreach providing education and mammograms to women in need.	Combination	Public Education, Service
Cervical	City of Amarillo department of Public Health	Region 1	Potter, Randall	http://www.amarillopublichealth.com/?page_id=13	Immunization Program	Low or no-cost vaccines including HPV vaccine to qualified individuals	State	Service
Colorectal	Texas Tech University Health Sciences Center	Region 1	Armstrong, Briscoe, Carson, Castro, Childress, Collingsworth, Dallam, Deaf Smith, Donley, Gray, Hall, Hansford, Hartley, Hemphill, Hutchinson, Lipscomb, Moore, Ochiltree, Oldham, Parmer, Potter, Randall, Roberts, Sherman, Swisher, Wheeler	http://www.cancerscreeningtx.com/	Get FIT to Stay Fit. Stepping Up to Fight Colorectal Cancer in the Panhandle	Awarded 11/2014. Target: low income, undereducated, and minorities including refugees. Specific goals: 1. Increase community awareness and knowledge about CRC and CRC screening, 2. Increase CRC screening rates in underinsured and uninsured population, 3. Increase uptake of diagnosis and treatment services for CRC to reduce the numbers of advanced cases, 4. Increase provider recommendation for CRC screening, 5. Build a sustainable screening, diagnosis and treatment network for CRC.	CPRIT	Public Education, Service
Breast	Texas Tech University Health Science Center - Laura Bush Institute for Womens Health	Region 1	Bailey, Cochran, Crosby, Dickens, Floyd, Garza, Hale, Hockley, King, Lamb, Lubbock, Lynn, Motley, Terry, Yoakum		Breast Care for West Texas	Breast cancer screenings for those who qualify including, breast exams, mammograms, breast ultra-sounds and specified biopsy procedures.	Combination	Service
Comprehensive	Harrington Cancer Center	Region 1	Armstrong, Briscoe, Carson, Castro, Childress, Collingsworth, Dallam, Deaf Smith, Donley, Gray, Hall, Hansford, Hartley, Hemphill, Hutchinson, Lipscomb, Moore, Ochiltree, Oldham, Parmer, Potter, Randall, Roberts, Sherman, Swisher, Wheeler	www.harringtoncc.org	Free screening and cancer treatment to eligible patients	Community cancer center providing patient care, cancer education and research. Also has a survivorship center which is a free resource for patients.	Combination	Service
Comprehensive	Texas Tech University Health Sciences Center	Region 1	North-West Texas, North-West Texas	http://www.ttuhsc.edu/wtcsn/default.aspx	West Texas Cancer Survivors Network (WTCSN)	Initiative to enroll cancer survivors in a network to provide cancer education for cancer survivors in west Texas.	CPRIT	Service
Colorectal	Texas Tech University Health Sciences Center	Region 1, Region 9/10	Crosby, Hale, Hockley, Lamb, Lubbock, Floyd, Garza, Lynn, Terry, El Paso, Hudspeth	www.ttuhsc.edu	ACCION (Against Colorectal Cancer in our Neighborhoods) for Rural West Texas	Collaboration to provide education about colorectal cancer to the community and offer screenings in El Paso (Dr. Shokar) Awarded 11/2014: ACCION in Rural West Texas in Lubbock and 8 contiguous counties- led by Dr. Byrd. Modification of project that has been shown to work in El Paso, Texas. Specific Goals: 1) Increase community awareness and knowledge about CRC and CRC screening guidelines 2) Influence community attitudes and beliefs about CRC screening 3) Increase CRC screening rates in the uninsured and underinsured residents of COG2, with a special emphasis on our rural population. 4) Provide navigation to increase uptake of treatment services for CRC to reduce the number of advanced cases 5) Build a sustainable screening, diagnosis and treatment network for CRC We expect to educate over 5,000 people in rural West Texas and to provide over 2500 CRC tests (including FIT and colonoscopy.	CPRIT	Public Education, Service
Colorectal	The University of Texas Southwestern Medical Center	Region 2/3			The C-SPAN Coalition: Colorectal Screening and Patient Navigation	Awarded 5/2015. A systematic CRCS outreach strategy of mailed FIT test invitations and provide follow-up to an estimated 174,000 underserved residents in 20 counties. Based on prior two CPRIT grants targeted at populations within the UTSW- Moncrief Cancer Institute and John Peter Smith Health System. Will also provide a baseline evaluation of quality of colonoscopy services in rural areas.	CPRIT	Service

Cancer Prevention Programs of Texas ***(Updated August 19, 2016)***

Focus	Institution	Public Health Service Region	County	Link to website	Program	Program Description	Funding	Type of Program
Tobacco	Covenant Health Hospital	Region 1	Dallam, Sherman, Hansford, Ochiltree, Lipscomb, Hartley, Moore, Hutchinson, Roberts, Hemphill, Oldham, Potter, Carson, Gray, Wheeler, Deaf Smith, Randall, Armstrong, Donley, Collingsworth, Castro, Parmer, Briscoe, Swisher, Childress, Hall, Bailey, Lamb, Hale, Floyd, Motley, Cochran, Hockley, Lubbock, Crosby, Dickens, King, Yoakum, Terry, Lynn, Garza	http://www.covenanthealth.org Hill, Bosque, Limestone, Freestone, Hamilton, McLennan, Mills, Coryell, Falls, Leon, San Saba, Lampasas, Bell, Robertson, Madison, Llano, Burnet, Williamson, Burleson, Brazos, Grimes, Blanco, Travis, Lee, Washington, Hays, Caldwell, Bastrop, Fisher	"A NEW DAY" Tobacco cessation program (5 counseling sessions: in person or over the phone, depending on geographic proximity)	Offers tobacco cessation services to cancer patients. Fee services	Private	Service
Tobacco	DSHS	Region 1	Lubbock	https://www.dshs.state.tx.us/region1/lubbock.shtm	Tobacco Prevention Program	Offers support to community based organizations to implement tobacco control programs	State	Public Education
Tobacco	Llano Estacado Tobacco Prevention and Control Coalition - Lubbock-Cooper ISD	Region 1	Delta, Lubbock	http://www.lcisd.net/pages/LCISD	Tobacco control	Comprehensive tobacco control in the area	State	Public Education
Tobacco	Prevention Resource Center, Region 1	Region 1	Dallam, Sherman, Hansford, Ochiltree, Lipscomb, Hartley, Moore, Hutchinson, Roberts, Hemphill, Oldham, Potter, Carson, Gray, Wheeler, Deaf Smith, Randall, Armstrong, Donley, Collingsworth, Castro, Parmer, Briscoe, Swisher, Childress, Hall, Bailey, Lamb, Hale, Floyd, Motley, Cochran, Hockley, Lubbock, Crosby, Dickens, King, Yoakum, Terry, Lynn, Garza	www.prc1.org	Tobacco Stinks!	Tobacco retailer education and compliance checks, educate about dangers of tobacco and selling to minors, and carding anyone under age 27 years old.	State	Public Education, Service
Tobacco	Texas Tech University	Region 1	Lubbock	https://www.depts.ttu.edu/opmanual/OP60.15.pdf	Tobacco free policy	Advocated and implemented a tobacco free campus	Combination	Policy
Tobacco	Texas Tech University	Region 1	Lubbock	www.ttu.edu	Tobacco Cessation	Offers tobacco cessation for students and staff	Combination	Service
Tobacco	Texas Tech University. Health Sciences Center Amarillo	Region 1	Amarillo	http://www.ttuhsc.edu/amarillo/	Tobacco Cessation Program for High Risk Patients	Implement a smoking cessation program for high-risk hospitalized patients that uses evidence-based methodologies including social media and text messaging to provide smoking cessation counseling and education, ongoing free medication, and follow-up.	Combination	Service
Tobacco	West Texas Smoke-free coalition	Region 1	Lubbock	https://twitter.com/WestTXSmokeFree	Pressure for smoke free ordinance and Public Education	Coalition to communicate the issues of tobacco consumption and secondhand smoke	Private	Public Education, Policy
Tobacco	Prevention Resource Center	Region 2/3	Archer, Baylor, Brown, Callahan, Clay, Coleman, Collin, Comanche, Cooke, Cottle, Dallas, Denton, Eastland, Ellis, Erath, Fannin, Fisher, Foard, Grayson, Hardeman, Haskell, Hood, Hunt, Jack, Johnson, Jones, Kaufman, Kent, Knox, Mitchell, Montague, Navarro, Nolan, Palo Pinto, Parker, Rockwall, Runnels, Scurry, Shackelford, Somervell, Stephens, Stonewall, Tarrant, Taylor, Throckmorton, Wichita, Wilbarger, Wise, Young	www.prc2.org	Tobacco prevention for the Youth	Tobacco prevention strategies and Educational programs for Teens	State	Public Education
Tobacco	Scott & White Hospital	Region 2/3	Archer, Baylor, Brown, Callahan, Clay, Coleman, Collin, Comanche, Cooke, Cottle, Dallas, Denton, Eastland, Ellis, Erath, Fannin, Fisher, Foard, Grayson, Hardeman, Haskell, Hood, Hunt, Jack, Johnson, Jones, Kaufman, Kent, Knox, Mitchell, Montague, Navarro, Nolan, Palo Pinto, Parker, Rockwall, Runnels, Scurry, Shackelford, Somervell, Stephens, Stonewall, Tarrant, Taylor, Throckmorton, Wichita, Wilbarger, Wise, Young	http://www.sw.org/enuff-of-the-puff/tobacco-cessation-programs	Enuff of the Puff	Free tobacco cessation services for employees, family members. Low cost for patients and the community	Private	Service
Tobacco	Seymour Hospital	Region 2/3	Baylor	http://www.seymourhospital.com/departments/randal-wellness-center	Randal Wellness Community Program	Tobacco cessation and preventative programs for the community	1115 Medicaid Waiver	Service

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Breast, Cervical	Coastal Bend Wellness Foundation	Region 11	Aransas, Bee, Brooks, Duval, Jim Wells, Kenedy, Kleberg, Live Oak, McMullen, Nueces, Refugio, San Patricio		REACH, Rural Education and Awareness for Community Health	REACH will integrate community health worker program models to deliver targeted outreach, evidence-based education, and navigation services to provide screening and early detection services of breast and cervical cancer. REACH staff will utilize culturally appropriate evidence-based education to facilitate health promotion. REACH will reach an estimated 24,000 people through public outreach activities and serve 5,551 Hispanic women with targeted outreach, evidence-based education, navigation services, and volunteer recruitment (Awarded in 2015).	CPRIT	Public Education, Service	
Breast, Cervical, Tobacco	City of Corpus Christi	Region 11	Nueces	http://www.cctexas.com/government/health-district/health-services/womens-health-services/index	Womens Health Program	Free or low cost mammograms, Breast & cervical cancer screening, Patch treatment available.	State	Public Education, Service	
Breast, Cervical	East Texas Center for Healthy Living-North East Texas Public Health District	Region 2/3	Smith	http://www.healthyeasttx.org/	Breast Health and Screening Initiative	Screening services for women who are uninsured or underinsured. Recipient of Susan G. Komen grant which funds clinical services for breast screenings including mammograms for low-income women, at risk women, those under the age of 50, those who are unable to pay for follow up services after a mobile mammogram, or those who are symptomatic and thus not eligible for mobile services. Participant of	Combination	Service	
Breast	YWCA Dallas	Region 2/3	Dallas	www.ywcadallas.org	YW Women's Health	Breast cancer screening for uninsured or underserved women.	Private	Service	
Colorectal	UT Southwestern Medical Center	Region 2/3	Dallas	http://www.utsouthwestern.edu/research/fact/detail.html?studyid=STU%20082012-086	Colorectal cancer screening for the uninsured	Evidence based colorectal scanning program for the uninsured.	CPRIT	Service	
Breast, Cervical	The University of North Texas Health Science Center at Fort Worth	Region 2/3	Dallas	http://www.hsc.unt.edu/news/newsrelease.cfm?ID=1448#.VBMdg5go7IU	Building Bridges Initiative (BBI)	The project's aim is to expand breast, cervical and liver cancer prevention efforts, activities and clinical services to include refugee women. The model includes: 1) Lay Health Advisor Outreach and Community Education, 2) Midwife Model of Care 3) Medical Case Management, 4) Ethnic Community Leader Guidance, 5) Health Provider Awareness and Education and 6) Community Collaboration. Lay health advisors (LHAs) will provide evidence-based breast, cervical and liver cancer prevention education to refugee women. A nurse midwife will provide cervical cancer screenings, clinical breast exams, HPV vaccines, assess the need for the hepatitis B vaccine and refer women to mammography services.	CPRIT	Service, Public Education	November 2013-present
Breast, Colorectal	UT Southwestern Medical Center	Region 2/3	Dallas	http://www.cprit.state.tx.us/files/funded-grants/PP110220.pdf	Cancer Genetics Services for Rural and Underserved Populations in Texas (Genetics 1)	Evidence based program for genetic testing initiatives in underserved populations. The program provides comprehensive genetic screening and testing with follow-up services to large safety-net populations across Dallas and Fort Worth, in addition to implementing telemedicine sites underserved counties. More than 3,600 women will be screened for HBOC genetic risk annually through the rural expansion by embedding the FHOC screening tool into the Moncrief mammogram registration process. The program will also pilot Telephone Genetic Counseling (TGC) to increase accessibility of services.	CPRIT	Service	
Tobacco	American Lung Association of The Gulf Plains Region	Region 2/3	Dallas		Health Education	Provides and offers smoking cessation self-help manuals and videos. Adult and children's Better Breathing Clubs support/self-help groups for adults and children and their parents with lung disease. Also provides school programs to teach lung health and smoking prevention, educational literature, and referral for lung disease patients for assistance from community services.	Combination	Public Education	

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Tobacco	Children's Medical Center of Dallas	Region 2/3	Dallas	http://www.childrens.com/	Tobacco Cessation	Tobacco cessation programs for employees and family members	Private	Service	
Cervical	Denton County Health Department	Region 2/3	Denton	http://dentoncounty.com/Departments/Health-Services/Health-Department/Immunizations.aspx	Immunizations program	Low to no-cost HPV vaccine for eligible children	State	Service	
Colorectal	UT Southwestern Medical Center	Region 2/3	Denton	http://www.utsouthwestern.edu/research/fact/detail.html?studyid=STU%20082012-086	Colorectal Cancer Screening	Evidence based program for uninsured patients at risk.	CPRIT	Service	EXPIRED 2015
Tobacco	University of North Texas	Region 2/3	Denton	http://healthcenter.unt.edu/ready-quit	Tobacco cessation	Quit-smart education classes for students desinged to educate and assist individuals who are ready to quit.	Combination	Service	
Breast, Colorectal, Cervical	Texas Health Harris Methodist Hospital Fort Worth	Region 2/3	Ellis, Erath, Hood, Johnson, Navarro, Parker, Somervell, Wise		Increase access to cancer detection screening services	Facilitate access to high quality early cancer detection screening services (breast, colon and cervical cancer) to medically underserved counties (excluding Tarrant County) in Region 10 (RHP 10). The proposal utilizes mobile health services.	1115 Medicaid Waiver	Service	
Tobacco	Grayson County Health Department	Region 2/3	Grayson	http://www.co.grayson.tx.us/default.aspx?name=hlth.home	Tobacco cessation	Tobacco cessation classes for Grayson County Health Department employees	State	Service	
Tobacco	Grayson County Health Department	Region 2/3	Grayson	http://www.co.grayson.tx.us/users/Wellness/docs/Wellness_Tobacco_Certification_Program.pdf	Tobacco user certification program	Employees must certify either tobacco user or tobacco non-user. Health insurance premiums are adjusted accordingly. Tobacco users may enroll in tobacco cessation program	State	Policy	
Comprehensive	UT Southwestern Moncrief Cancer Institute	Region 2/3	Denton, Tarrant	http://www.moncrief.com/	Bilingual screening program for low income cancer survivors	Implements evidence-based cancer surveillance and screening guidelines using a mobile unit to provide post-treatment survivorship services to cancer survivors.	1115 Medicaid Waiver	Service	
Cervical	Tarrant County Public Health Department	Region 2/3	Tarrant	http://www.tarrantcounty.com/ehealth/cwp/view.asp?A=763&Q=430300	Breast and Cervical Cancer Screening	Screening services for eligible women	State	Service	
Colorectal	UT Southwestern Moncrief Cancer Institute	Region 2/3	Tarrant	http://www.moncrief.com/index.php/research#colorectal_cancer	Colorectal cancer education for the community	Prevention program designed to boost colorectal cancer awareness at the area's safety-net health system, JPS Health Network.	State	Public Education	
Breast, Colorectal	Rolling Plains Memorial Hospital	Region 2/3	Nolan	http://www.rpmh.net/index.php	Screening services	Implement evidence based protocols to screen people for immunizations, breast cancer, and colorectal cancer.	1115 Medicaid Waiver	Service	
Tobacco	MHMR of Tarrant, Texas	Region 2/3	Tarrant	www.mhmrtarrant.org	Tobacco Cessation Program	Treatment to quit tobacco in MHMR patients	Combination	Service	
Tobacco	Tarrant County Public Health Department	Region 2/3	Tarrant	http://www.tarrantcounty.com/egov/site/default.asp	Tobacco Control	Use the American Lung Association's evidence-based Freedom From Smoking curriculum to decrease tobacco use for uninsured and uninsured smokers	State	Public Education	
Breast	Susan G. Komen Greater Fort Worth Affiliate	Region 2/3	Tarrant, Parker, Johnson and Hood	http://komengreaterfortworth.org/	Health	Breast health services, breast cancer education with local community	Combination	Public Education, Service	
Tobacco	Hendrick Health System	Region 2/3	Taylor	http://www.ehendrick.org/main/home.aspx	Tobacco prevention, cessation	Tobacco cessation classes and not hiring tobacco or nicotine policy (tobacco free campus)	Combination	Service, Policy	
Tobacco	United Regional Healthcare	Region 2/3	Wichita	http://www.unitedregional.org/tobacco-free-campus	Tobacco Cessation Classes. Smoke-free campuses	Free tobacco cessation classes open to public	Combination	Service	
Colorectal	Parkland Hospital, UT Southwestern	Region 2/3	Dallas	http://www.utsouthwestern.edu/newsroom/news-releases/year-2011/utsw-and-parkland-partner-for-nci-grant-to-improve-colorectal-cancer-screenings.html	PROSPR	Population-based Research Optimizing Screening through Personal Regimens	Federal	Service	

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Breast	YWCA of Metropolitan Dallas	Region 2/3	Collin, Dallas		YWCA Women's Health	Offers free mammogram screenings and breast health diagnostic assistance.	Private	Service
Breast	The Bridge Breast Network	Region 2/3, Region 4/5N	Collin, Cooke, Dallas, Denton, Ellis, Fannin, Grayson, Hunt, Kaufman, Lamar, Rockwall	http://www.bridgebreast.org/	Breast Cancer Services for Ineligible Patients	Offers access to diagnostic and treatment services to underserved patients in North Texas (region 3 and 4). The program reduces geographic and financial barriers through an expansive network of 800 medical providers (including stand-alone mammography centers and Mobile Mammography Units) and 3,500 community partners. The project will reach 31,700 and provide early detection services to 8,000 women in 13 rural and/or medically underserved North Texas counties.	CPRIT	Service
Tobacco	DSHS Region	Region 9/5N	Anderson, Bowie, Camp, Cass, Cherokee, Delta, Franklin, Gregg, Harrison, Henderson, Hopkins, Lamar, Marion, Morris, Panola, Rains, Red River, Rusk, Smith, Titus, Upshur, Van Zandt, Wood, Angelina, Houston, Jasper, Nacogdoches, Newton, Polk, Sabine, San Augustine, San Jacinto, Shelby, Trinity, Tyler	https://www.dshs.state.tx.us/region4-5/tobaccoprevention.shtm	Tobacco Prevention and Cessation	Tobacco cessation services and educational resources	State	Service
Tobacco	East Texas Council on Alcoholism and Drug Abuse, Tobacco Prevention and Control Coalition	Region 9/5N	Tyler	http://www.etcada.com/	Tobacco Prevention	Forming coalitions with local groups to prevent tobacco use in youth, refer tissues for health care professionals to tobacco use treatments.	Combination	Professional Education, Service
Tobacco	East Texas Council on Alcoholism and Drug Abuse, Tobacco Prevention and Control Coalition	Region 9/5N	Tyler	http://www.etcada.com/events/stay-up-to-date-with-us-on-facebook	Tobacco Use Treatment Integration Regional Training	Training for tobacco cessation educators in the region	Combination	Professional Education
Tobacco	Prevention Resource Center	Region 9/5N	Angelina, Hardin, Houston, Jasper, Jefferson, Nacogdoches, Newton, Orange, Polk, Sabine, San Augustine, San Jacinto, Shelby, Trinity, Tyler	www.prc5.org	Tobacco prevention for the Youth	Education programs for the youth	State	Public Education
Tobacco	American Cancer Society	Region 9/5N	Tyler	http://www.cancer.org/acs/groups/content/@highplains/documents/document/freshstartbrochurefinalpdf.pdf	Freshstart Smoking Cessation	Provides education, training, outreach and consultation on tobacco cessation. IDPENT to the public. Freshstart is offered in conjunction with other organizations and businesses throughout the area - home is offered the class for FREE and there's little charge for the program.	Private	Public Education
Tobacco	Trinity Mother Frances Rose Cancer Center	Region 9/5N	Tyler	http://www.tmfhc.org/cancer-treatment/cancer/quit-smoking/	Nicotine Anonymous	Free 12 step services to quit smoking	Combination	Service
Comprehensive	East Texas Medical Center Cancer Institute	Region 9/5N	Henderson, Tyler	http://www.etmc.org/location/etmc-cancer-institute/support-services/	Cancer Support Groups	Free support groups for different types of cancer for patients and family members	Private	Service
Comprehensive	North East Texas Public Health District	Region 9/5N	Wood, Van Zandt, Smith	http://www.longlivetexans.com/index.php/site/transforming-texas	Transforming Texas	A five-year, federally funded initiative supporting communities, workplaces, schools and health care providers as they work together to reduce chronic disease, lower the cost of care and promote a lifetime of health through the power of prevention	Federal	Public Education
Breast	Boat People SOS (BPSOS) Inc.	Region 6/5S	Brazoria, Chambers, Galveston, Harris	http://www.bpsos.org	HAPP - Breast Health Program	Promotes breast cancer awareness to the community through health partners collaboration, mass media, and educational workshops.	Private	Public Education
Breast	Brazosport Health Foundation	Region 6/5S	Brazoria	http://www.brazosport-health-foundation.org/home.aspx	The Mermaid Project	The Project provides free breast cancer screening to qualifying low-income, uninsured men and women living in Southern Brazoria County.	Private	Service

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Breast	D'Feet Breast Cancer	Region 6/5S	Galveston	http://www.dfeetbreastcancer.com/	Think Pink-"Check it out" and Mammography screenings	Provides screenings to underserved and uninsured Galveston County women ages 40-64 and those at high risk for breast cancer. D'Feet has provided educational programs in Galveston County high schools and colleges, professional organizations and small groups on the importance of learning the technique of breast self examination (BSE).	Private	Public Education, Service
Breast, Cervical, Colorectal, Tobacco	Asian American Health Coaltion of Greater Houston (AAHC) dba HOPE Clinic	Region 6/5S	Harris	http://www.cprit.state.tx.us/files/funded-grants/PP140205.pdf	Eliminating Cancer Dispaities in Medically Underserved Immigrant and Refugee Populations in Houston	HOPE Clinic will continue providing linguistically and culturally competent prevention and related education services to address breast, cervical and liver cancer, and will expand services to address colorectal screening and smoking cessation. In addition, HOPE will provide health nutrition education to address obesity and malnutrition which impact various forms of cancer. Clinical screening, diagnosis, education and intervention services will be provided to a total of 16,890 individuals, while general health education through community events and media is expected to reach 26,000.	CPRIT	Public Education, Service
Breast, Cervical, Colorectal	Light and Salt Association	Region 6/5S	Fort Bend, Galveston, Harris, Montgomery, Austin	www.light-salt.org	Comprehenisive Cancer Prevention and Support Program within Asian American Communities in Houston and Austin Areas of Texas	Provides community cancer prevention education and early screening info. Established cancer support group targeted to Chinese patients and will expand to Vietnamese, Korean and Filipino communities. The program is a joint effort of 12 AA community-based organizations, clinics and universities targeting Asian communities in Houston and Austin areas. Its four major components include: prevention/education; screening; survivorship services; and capacity building. The screening services include mammogram, Hepatitis B and C, FOBT, and Pap Smear/HPV tests. The survivorship program provides group-based interventions, patient navigation, and one-on-one support for cancer patients.	State	Service, Public Education
Breast	Sister's Network Inc.	Region 6/5S	All Counties across TX	http://sistersnetworkinc.org	National Breast Cancer Assistance Program	Provide standardized outreach programs which are implemented by the 40 Affiliate Chapters; breast health education, outreach materials, instructions on how to be an Advocate and clinical trial recruitment assistance to major studies	Private	Service, Public Education
Breast	The Rose	Region 6/5S	Austin, Brazoria, Burleson, Chambers, Colorado, Fort Bend, Galveston, Hardin, Harris, Jasper, Jefferson, Liberty, Matagorda, Montgomery, Newton, Polk, Sabine, San Augustine, San Jacinto, Shelby, Tyler, Waller, Washington, Wharton, Angelina, Brazos, Grimes, Leon, Orange, Madison, Nacogdoches, Robertson, Trinity, Walker	http://www.the-rose.org/	Empower Her To Care Expansion: Increasing Access to Breast Cancer Screening and the Continuum of Care for Underserved Texas Women	Expansion of Empower Her to Care program. Provides quality breast health care. This project will continue to increase the delivery of breast cancer screening, diagnostic procedures and patient navigation services to 3,700 underserved women (Y1=1,800 and Y2=1,900 over 24 months) in 34 southeast Texas counties. Services will be provided through The Rose's digital Mobile Mammography Program through partnerships with established community clinics, physicians and other organizations that offer education/outreach efforts and clinical breast exams to recruit eligible women in need of screening. Diagnostic testing, coordinated care and access to breast cancer treatment will be provided at either of The Rose's two locations.	CPRIT	Service
Breast	The University of Texas Medical Branch at Galveston	Region 6/5S	Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery	http://www.komen-houston.org/case-studies/utmb-komen-complete-care-project/	Komen Complete Care Project	Comprehensive breast health services to underserved and uninsured women. Including screening, diagnostic imaging, treatment, navigation services and health education.	State	Service, Public Education
Breast, Colorectal	UT-MD Anderson Cancer Center	Region 6/5S	Brazoria, Chambers, Galveston, Harris, Smith, Travis		Improving Service Delivery to Cancer Survivors in Primary Care Settings	Engage family medicine residency program practices in practice system change initiatives serving identified survivors by providing treatment summaries and establishing care plans coordinated with treating cancer specialists. The knowledge base of primary care clinicians related to survivorship care management will be assessed and any gaps addressed through an existing CPRIT funded online curriculum. Tele-mentoring will be provided through regular interactive sessions. Practice systems interventions will be implemented to promote survivors adherence to recommended preventive services. The intervention will also reach family members and the general patient population in the practices with prevention information and improved level of prevention service. delivery.	CPRIT	Professional Education
Colorectal	The University of Texas Health Center at Tyler	Region 4/5N	Anderson, Cherokee, Henderson, Rusk, Smith, Van Zandt, Wood	https://www.uthealth.org/free-colorectal-cancer-screenings/	Improving Access to Colorectal Cancer Screening in East Texas	Awarded 8/2014: Increase access to and delivery of CRC services to individuals in a seven county area of East Texas. Partners with a federal program and existing community programs. 1) Increase CRC screening education (goal of reaching at least 10,000 people) and access in a seven county area 2) Increase the rate of CRC screening services by at least 10% and goal of 2200 people. Working with UT Health Northeast.	CPRIT	Service, Public Education
Breast	UT-MD Anderson Cancer Center	Region 6/5S	Harris, Fort Bend		Project Valet	Mobile mammography screenings for uninsured, indigent population.	1115 Medicaid Waiver	Service
Breast, Cervical	Lesbian Health Initiative of Houston	Region 6/5S	Harris	http://www.lhihouston.org/	Access to Screenings	Screenings and services provided include, mammograms, pap/well exams. Provide health and wellness Education by producing, printing and Distributed LGBT health and wellness related newsletters	Private	Public Education, Service
Breast, Cervical	The University of Texas Medical Branch at Galveston	Region 6/5S	Harris	http://www.utmb.edu/rmchp/utmbfinscreeningsrv.html	UTMB Cancer Stop Program	Provides breast and cervical cancer screening services to eligibile women through our network of UTMB Regional Maternal and Child Health Program Clinics.	State	Service, Public Education
Breast, Colorectal, Cervical	Baylor College of Medicine	Region 6/5S	Harris	https://www.bcm.edu/centers/cancer-center/community-outreach/community-network-for-cancer-prevention	Harris County Colorectal Cancer Screening Outreach Support Project	Led by Community Network for Cancer Prevention which established a joint collaboration between Baylor College of Medicine, the Harris Health System, and several community-based organizations to reach out to Harris County residents with breast, colorectal and cervical cancer prevention information. Goals: 1) Colorectal oureach and eductaion to 800 community members. 2) Distribute 40,000 FIT kits to community health systems affiliated with Harris Health.	State	Public Education, Service

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Cervical	Hope Clinic	Region 6/5S	Harris	www.hopechc.org	The Jade Circle Project	Cervical cancer prevention project targeting Vietnamese population. Provided Pap smears and colonoscopies.	Combination	Service
Cervical	Legacy Community Health Services	Region 6/5S	Harris, Jefferson		Increasing HPV vaccinations in Harris and Jefferson counties using combined evidence-based approaches in a FQHC	Awarded August 2014	State	Service, Public Education
Cervical	UT-Health Science Center in Houston	Region 6/5S	Harris				State	
Colorectal	City of Houston	Region 6/5S	Harris		Colorectal Cancer Awareness and Screening (COCAS)	Raises awareness using small media campaign and provide CRC FIT screenings.	1115 Medicaid Waiver	Service, Public Education
Colorectal	Fort Bend County Clinical Health Services	Region 6/5S	Fort Bend		Colonoscopy Screening	Provides evidence-based prevention for colon and rectal cancers for uninsured in the Fort Bend County	1115 Medicaid Waiver	Service
Colorectal	Hope Through Grace	Region 6/5S	Harris	http://www.hopethroughgrace.org		Provides educational sessions on colorectal cancer prevention. Have partnered with American Cancer Society.	Combination	Service, Public Education
Colorectal	UT- MD Anderson Cancer Center	Region 6/5S	Austin, Calhoun, Chambers, Colorado, Fort Bend, Harris, Matagorda, Waller, and Wharton		Fit/Flu	Provides colorectal screening (FIT tests) to uninsured, indigent population.	1115 Medicaid Waiver	Service
Colorectal	UT- MD Anderson Cancer Center	Region 6/5S	Brazoria, Fort Bend, Galveston, Harris, Montgomery, Waller	http://www.mdanderson.org/patient-	Colorectal Cancer Eductaion Program	This program educates Vietnamese, Hispanic and African American populations on the importance of regular colorectal cancer screening exams, risk factors and preventive behaviors; and provide navigation assistance for screening. It can be implemented as one session, or three sessions and includes print materials and giveaways to incentive healthy behaviors learned in the program.	State	Public Education
Breast	St. Vincent's House	Region 6/5S	Galveston	www.stvhope.org	St. Lukes Mobile Van Unit	Provides mammograms through St. Lukes Mobile Van Unit	Combination	Service
Breast, Colorectal, Cervical	Dia de la Mujer	Region 6/5S	Harris	http://diadelamujerlatina.org	Promotore/CHW training program	Promotes healthy behaviors within the underserved Latino community by providing a culturally and linguistically proficient education, facilitating early detection screening, culturally preventative care interventions; promoting wellness with resource information.	Private	Professional Education
Tobacco	Harris County Public Health and Environmental Sciences (HCPHES)	Region 6/5S	Harris	http://publichealth.harriscountytx.gov/Services-Programs/Services/TobaccoCessation	Adult Tobacco Cessation program for at-risk, low income and Medicaid eligible/indigent participants within the HCPHES jurisdiction	HCPHES proposes to expand its operations alongside existing fixed clinics to meet the health needs of low income, indigent and special needs populations, that lack the resources and/or physical mobility to commute to fixed site locations to receive the vital and preventative services necessary to reduce tobacco use. The expansion will allow for increased accessibility to services, health education programs, and the dissemination of critical health education information to the target communities.	State	Public Education
Tobacco	Spindletop Center	Region 6/5S	Hardin, Jefferson, Orange		Alcohol and other drug prevention programs will be provided to at risk youth in middle and high Schools- Medicaid 1115 waiver	The program will use the Positive Action and Youth Connection curriculum in a ten-session format.	1115 Medicaid Waiver	Public Education
Tobacco	UT- MD Anderson Cancer Center	Region 6/5S	Harris	https://www.mdanderson.org/patients-family/diagnosis-treatment/clinical-trials/clinical-trials-index/clinical-trials-detail.ID2013-0491.html	Ask, Advise, Connect	Implementation of evidence-based program in federally qualified health center (FQHC) clinics that provides cesstion services to current smokers	1115 Medicaid Waiver	Service
Tobacco	UT- MD Anderson Cancer Center	Region 6/5S	Harris	https://www.mdanderson.org/patients-family/diagnosis-treatment/clinical-trials/clinical-trials-index/clinical-trials-detail.ID2013-0495.html	Legacy Community Health Clinic	Provides cessation services to low-income and uninsured people living with HIV in the Houston area	1115 Medicaid Waiver	Public Education
Tobacco	UT- MD Anderson Cancer Center	Region 6/5S	Harris	https://www.mdanderson.org/about-md-anderson/community-services/aspire.html	ASPIRE	A Smoking Prevention Interactive Experience (ASPIRE) provides tobacco prevention and educational information to Medicaid-eligible and indigent youth. Participating youth are exposed to multilingual, culturally relevant anti-tobacco messages using electronic, digital and print media.	1115 Medicaid Waiver	Public Education
Breast, Tobacco	Julie Rogers "Gift of Life"	Region 6/5S	Harris	http://www.giftoflifebmt.org/	Screening and tobacco cessation	To provide Southeast Texans extensive educational outreach that focuses on breast, prostate, testicular, ovarian, and other gynecological cancers; free mammograms and prostate cancer screenings with access to follow-up treatment for medically underserved women and men; and a tobacco prevention program, which targets both adults and children.	Private	Service, Public Education

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Focus	Institution	Public Health Service Region	County	Link to website	Program	Program Description	Funding	Type of Program
Tobacco	American Cancer Society	Region 6/5S	Harris	http://www.cancer.org/acs/groups/content/@highplains/documents/document/freshstartbrochurefinalpdf.pdf	Freshstart Smoking Cessation	Provides four one-hour group sessions that provide supportive interaction. Helps participanats stop smoking by providing essential information and strategies to direct the efforts of stopping and staying off cigarettes.	Private	Public Education
Comprehensive	Africa Cancer Care Inc.	Region 6/5S	Harris	http://www.africacancercareinc1.org/home.html	Prevention and Screening Programs	Devoted to providing early detection screenings for cancer for minorities in the United States.	Private	Public Education
Skin	The University of Texas MD Anderson Cancer Center	Region 6/5S	Harris		Project DERM	Project DERM aims to reduce the risk of skin cancer in the Harris County area by providing evidence-based, culturally-relevant, and literacy-appropriate skin cancer health education and screening to English and Spanish speakers in underserved, low-SES geographic areas.	1115 Medicaid Waiver	Service, Public Education
Comprehensive	Intercultural Cancer Council (ICC)	Region 6/5S		http://www.interculturalcancercouncil.org	Biennial Symposium Series and Summer workshops	Promotes policies, programs, partnerships, and research to eliminate the unequal burden of cancer among racial and ethnic minorities and medically underserved populations.	Private	Professional Education, Public Education
Breast, Cervical	UT Health Science Center at Houston	Region 6/5S, Region 11			A community based program to increase breast and cervical cancer screening and HPV vaccination to reduce the impact of breast and cervical cancer among Latinas	Women eligible for CDC-recommended HPV vaccination and breast screening will receive education and navigation support. The specific goals include: (1) Recruit and enroll 4,000 Latinas with unmet breast and cervical cancer screening or HPV vaccination needs to participate in the evidence-based CHW-delivered breast and cervical screening education session, (2) Deliver telephone-based navigation services to help women overcome access to CBE, mammography, Pap screening and HPV test screening, and HPV vaccination, and (3) Evaluate the increase in breast and cervical screenings, and HPV vaccination outcomes, and conduct a comprehensive process evaluation of the program, monitoring program implementation fidelity, reach, dose and coverage.	CPRIT	Public Education, Service
Breast, Cervical, Colorectal	Texas A&M University System Health Science Center	Region 6/5S, Region 7, Region 9/10, Region 11	Brazos, Cameron, Hidalgo, Willacy		Training CHWs for More Effective Cancer Education and Navigation	This proposal has two specific goals: 1) Train CHWs to disseminate resources from CPRIT-funded Texas A&M projects for prevention, detection, treatment, survivorship, and navigation for breast, cervical, and colorectal cancers; 2) Equip programs employing CHWs with best practices to implement resources related to prevention, detection, treatment, survivorship, and navigation for breast, cervical, and colorectal cancers over two years. CHWs in the priority regions will have access to certified training via in-person training workshops and CHWs across the state will be able to access online training modules. The four priority geographic areas include Lower Rio Grande Valley, Coastal Bend region, the extended Brazos Valley, and Northeast Texas.	CPRIT	Professional Education
Breast	Health for All	Region 7	Brazos, Burleson, Grimes, Leon, Madison, Robertson, Washington	http://www.hlth4all.org/	Breast Cancer Screening	Preventive mammogram screening for breast cancer for uninsured population.	Combination	Service
Breast	Community Action, Inc. of Central Texas	Region 7	Burnet, Williamson, Blanco, Travis, Hays, Caldwell, Bastrop	http://communityaction.com/our-services/health-services/breast-cancer/	Breast Cancer Patient Navigation Program	Focus on increasing early detection by improving diagnostics, funding and treatment access to patients.	Combination	Service
Breast	University Medical Center at Brackenridge (UMCB)	Region 7	Travis	http://www.seton.net/locations/brackenridge/	Breast & Cervical Cancer Screening Mobile Unit	Expand timely access to breast and cervical cancer screening via a mobile unit for uninsured and underinsured women in Travis County.	1115 Medicaid Waiver	Service
Cervical	University of Texas at Austin	Region 7	Travis	http://healthyhorns.utexas.edu/sti_HPVaccine.html	HPV Vaccination for Students	Provides HPV vaccines for students. If uninsured, partnered with Merck Vaccine assistance	Combination	Service
Colorectal	The University of Texas MD Anderson Cancer Center	Region 6/5S, Region 2/3, Region 4/5N	Brazos, Brazoria, Burleson, Galveston, Grimes, Hardin, Jasper, Jefferson, Leon, Liberty, Madison, Montgomery, Newton, Orange, Polk, Robertson, San Jacinto, Trinity, Tyler, Walker, Washington		Alliance for Colorectal Cancer Testing (ACT) in Southeast Texas	Awarded 5/2015. The program goal is to utilize an evidence based approach to increase CRCS by implementing clinical practice changes. Program offers take-home FIT tests to north, east and southeast Texas. 1) Through partnerships with community clinics and FQHC's 5,000 FIT tests will be distributed annually for three consecutive years covering 21 counties. 2) Patient navigation and colonoscopies will be provided. 3) The program will partner with the American Cancer Society (ACS) to offer professional education and support materials to assist physicians in providing CRCS recommendations. 4) Partner with local programs to increase public awareness of the importance of CRS. 5) Develop a regional coalition and state network.	CPRIT	Service, Public Education, Professional Education
Breast	Mary Ruth Duncan Women's Health Center, Waco	Region 7	Bosque, Falls, Freestone, Hill, Limestone, McLennan		Breast Health Services	Provides comprehensive family planning services including free or low-cost breast health screenings and mammogram vouchers for qualifying patients.	Private	Service
Colorectal	Texas A&M Physician Family Medicine Center	Region 7	Brazos, Burleson, Grimes, Leon, Madison, Robertson, Washington	www.texascstep.org	Colorectal Cancer Service, Training, Education and Prevention	Texas C-STEP will provide a critical safety-net service to uninsured, underserved, and rural Texans through an established family medicine residency training program. Results: 33 months, 1072 colonoscopies were completed as a result of C-STEP education/outreach; 75% at no cost to the patient. Sixty-three % of CPRIT-funded colonoscopies were received by African American or Hispanic individuals.	CPRIT	Professional Education, Service
Breast, Cervical	Texas A&M University System Health Science Center	Region 7	Brazos	www.tamhsc.edu	Screening and Education Services	Enhanced Breast and Cervical Cancer Prevention for Low-Income and Underserved Using Transdisciplinary Collaboration in a Family Medicine Setting.	CPRIT	Service, Public Education
Breast, Cervical	National Center for Farmworker Health, Inc.	Region 7	Hays, Travis	http://www.ncfh.org/?pid=49	Cultivando la Salud	Evidence based breast and cervical cancer education program for farmworker women.	CPRIT	Public Education

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Focus	Institution	Public Health Service Region	County	Link to website	Program	Program Description	Funding	Type of Program
Tobacco	Seton Healthcare Network	Region 7	Travis		Tobacco Education Resource Center	Provides group based tobacco education classes for adults 18 years and older. Classes are offered in 6 six-week series that meet once a week for 90 minutes. Classes are also offered at the Mayo Clinic model for treating tobacco use and dependence. Provides counseling and support services.	Private	Public Education
Comprehensive	Lance Armstrong Foundation	Region 7	Travis	https://www.livestrong.org/we-can-help/fertility-services	Fertility Training Module	Improving access to fertility preservation information and services for cancer survivors.	CPRIT	Professional Education
Comprehensive	LIVESTRONG	Region 7	Travis	www.livestrong.org	Survivor Empowerment Initiative	Multi-Faceted Outreach Program to Hispanic/Latino Cancer Survivors and their Loved Ones.	CPRIT	Public Education, Service
Comprehensive	Texas Nurses Foundation	Region 7	Travis	http://www.texasnurses.org/	Nurses Oncology Education Program (NOEP)	Non-for-profit program to educate nurses in cancer prevention of all primary cancers.	CPRIT	Professional Education
Comprehensive	Seton Healthcare Family	Region 7	Travis	http://www.seton.net	Survivorship program for adults and young adults	Navigation through survivorship. Uses podcasts and other resources to guide patients.	CPRIT	Service
Skin	Texas A&M AgriLife Extension	Region 7	Brazos	http://zoolshade.tamu.edu/links.html	Cool In the Shade	Education program for elementary school, middle school and high school children and students and their parents	State	Public Education
Tobacco	Rice University	Region 7	Travis	http://www.cprit.texas.gov/files/funded-grants/PP130032.pdf	Tobacco-free workplace program	Multicomponent tobacco-free workplace program implemented at Austin/Travis County Integral Care, a Local Mental Health Treatment Authority (LMHA). Implements a tobacco-free campus policy and significant increases in screening and treatment provision to consumers	CPRIT	Public Education
Tobacco	Austin-Travis County Integral Care	Region 7	Travis	http://www.integralcare.org/content/Tobacco-cessation	Tobacco Cessation	Tobacco Cessation program for employees	Combination	Service
Tobacco	Austin/Travis County Health and Human Services Department	Region 7	Travis	http://www.austintexas.gov/department/tobacco-smoking-cessation-and-prevention	Tobacco/Smoking Cessation and Prevention	This program offers help to quit tobacco, as well as support to help make long-lasting changes that promote tobacco-free living where you live, work, and play.	State	Service
Tobacco	Seton Health	Region 7	Travis, Williamson	http://services.211texas.org/Resource4View2.aspx?org=726058&agencyunid=28125592	Tobacco Cessation	Free Classes, Medication	Combination	Service
Tobacco	Health for All	Region 7	Brazos, Burleson, Grimes, Leon, Madison, Robertson, Washington	http://www.hfahall.org/	Tobacco Cessation	Counseling Services for uninsured population	Combination	Service
Tobacco	Prevention Resource Center	Region 7	Hill, Bosque, Limestone, Freestone, Hamilton, McLennan, Mills, Coryell, Falls, Leon, San Saba, Lampasas, Bell, Robertson, Madison, Llano, Burnet, Williamson, Burleson, Brazos, Grimes, Blanco, Travis, Lee, Washington, Hays, Caldwell, Bastrop, Fayette	http://bvcasa.org/programs/prevention-resource-center/	Tobacco prevention for the Youth	Prevention resources for providers	State	Professional Education
Tobacco	Scott & White Healthcare	Region 7	McLennan	http://www.sw.org/enuff-of-the-puff/tobacco-cessation-programs	Tobacco Cessation	Low/lost Tobacco Cessation program	Private	Service
Tobacco	University of Texas at Austin	Region 7	Travis	https://www.healthyhorns.utexas.edu/quitters.html	Comprehensive Tobacco Cessation programs	Free Tobacco Cessation classes for students, faculty and staff; low/lost fee	CPRIT	Service
Tobacco 1	University of Texas at Austin	Region 7	Travis	http://sites.utexas.edu/tobaccofree/	Tobacco-free Campus	Tobacco-free Campus since 2012	State	Policy
Tobacco 1	Austin Travis County Integral Care	Region 7	Travis	http://www.integralcare.org/content/Tobacco-cessation-initiative	Tobacco Cessation Initiative	Tobacco Cessation program for staff and consumers. TOBACCO IS EXPROHIBITED SINCE 2011	Combination	Service
Tobacco 1	City of Austin Health & Human Services Department	Region 7	Travis	http://www.livetobaccofreeaustin.org/	Live Tobacco Free Austin	Promotes smoke free environments in Travis County. Facilitates access to quit services to smokers	State	Public Education, Service
Tobacco 1	Williamson County and Cities Health District	Region 7	Williamson	http://www.wcchd.org/	Tobacco Cessation Program	Free Tobacco Cessation classes for Williamson County residents	State	Service
Comprehensive	Texas A&M AgriLife Extension, Family and Consumer Sciences	Region 7	Brazos	http://fcs.tamu.edu/health/lower-your-cancer-risk/	Comprehensive program for Cancer early detection and education	Several programs to lower cancer risk in the rural areas of Texas.	CPRIT	Public Education
Comprehensive	Texas A&M University System Health Science Center	Region 7	Brazos	http://www.cprit.texas.gov/files/funded-grants/PP140230.pdf	Cancer Genomics Training Program	Development, implementation and evaluation of a program for health educators.	CPRIT	Professional Education

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Focus	Institution	Public Health Service Region	County	Link to website	Program	Program Description	Funding	Type of Program
Breast	Alamo Breast Cancer Foundation	Region 8	Atascosa, Bandera, Bexar, Comal, Frio, Gillespie, Guadalupe, Karnes, Kendall, Kerr, Medina, Wilson	http://www.alamobreastcancer.org	Community Outreach and Patient Advocacy	Offers a breast cancer helpline that is answered by volunteers who have had a breast cancer experience. The helpline is manned 24 hours a day and is bilingual. Volunteers furnish information regarding breast self-examination, mammography, and information for the newly diagnosed including support for the patient, family, and friends. Conducts quarterly educational meetings and offers presentations on early detection, latest treatment options, clinical trials, psycho-social needs, and nutrition in regards to breast cancer. Also provides free mammograms for women who do not qualify for Breast and Cervical Cancer Control Program (BCCCP) or Medicaid/Medicare coverage of mammography.	Combination	Public Education, Service
Breast	University Health System (UHS)	Region 8	Bexar		A Su Salud- Breast Health Program	Develop and implement outreach, prevention and screening services to fight breast, cervical for the underinsured and uninsured in our community	State	Public Education, Service
Colorectal	University Health System (UHS)	Region 8	Bexar		Evidence-Based Colorectal Cancer Prevention Screening	Awarded 5/2015. The project proposes navigation services, which includes in-home education sessions with the patient and their family for 1,584 patients over the period of three years. We plan to provide 980 no cost screening services, transportation, and procedure preparation medication for uninsured patients, while transportation only services will be provided to 222 insured patients and scheduling only services to 382 insured patients. Project has particular emphasis on culturally-sensitive care and education. Target population: uninsured, low income Hispanics residing in medically underserved areas.	CPRIT	Service
Colorectal	Val Verde Regional Medical Center	Region 8	Val Verde		FluFIT on the Frontera: Increasing Colorectal Cancer Screening on the Texas-Mexico Border	Awarded 5/2015: Project implements a community based CRCS program by leveraging and expanding the chronic care model of primary care health delivery at Val Verde Regional Medical Center in Del Rio Texas through partnerships with Quad Counties Council Colonia Promotoras Program (QCC-CPP), community advocates, academic health centers and loco-regional government. 1) Provides CRC screening information, free fecal immune-chemical test (FIT) kits, navigation to appropriate free and/or discounted follow-up colonoscopies.	CPRIT	Service, Public Education
Cervical	University Health System (UHS)	Region 8	Bexar		A Su Salud- Breast Health Program- Cervical Cancer Awareness	develop and implement outreach, prevention and screening services to fight breast, cervical for the underinsured and uninsured in our community	State	
Cervical	University of Texas Health Science Center at San Antonio	Region 8	Willacy, Hidalgo and Cameron	http://www.saludtoday.com/blog/tag/entre-madre-e-hija/	Entre Madre e Hija- peer education outreach program	Peer eductaion and outreach program to prevent cervical cancer among Latina mothers and daughters living in Texas-Mexico border communities.	State	Public Education
Colorectal, Skin	Arthur Nagel Community Clinic	Region 8	Bandera	http://www.nagelclinic.org/mens-health-tune-up.html	Arthur Nagel Community Clinic: Men's Health Tune-Up and Well Women Program	Provides free preventive services to low-income, uninsured residents of Bandera County. Provide screening for skin, colon and testicular cancer for men. Provide screening for cervical, breast and colon cancer for women.	Private	Service
Colorectal	San Antonio Gastroenterology Endoscopy Center	Region 8	Bexar	http://saendocenter.com/	StopColonCancerNow Initiative	Outpatient surgery part of Stopcoloncancernow network of sites to increase screening rates (free screenings to those who qualify) and awareness of colon cancer.	Private	Service, Public Education

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Focus	Institution	Public Health Service Region	County	Link to website	Program	Program Description	Funding	Type of Program
Tobacco	Texas Department of State Health Services (DSHS)	Region 8	Bexar		Freshstart: Smoking Cessation-Tobacco Prevention/Control	Provides education, training, outreach and consultation on tobacco cessation. Provides information and referral to other agencies such as American Cancer Society. No eligibility restrictions. If Anyone can receive information on tobacco."	State	Public Education
Tobacco	San Antonio Council on Alcohol and Drug Abuse	Region 8	Bexar	http://sacada.org/	Prevention Resource Center	Provide tobacco prevention classes and educational workshops for youth & adults.	State	Public Education
Tobacco	University of Texas Health Science Center at San Antonio	Region 8	Willacy, Hidalgo and Cameron	http://www.cprit.state.tx.us/files/funded-grants/PP140176.pdf	SMS Cessation Service for Young Adult Smokers in South Texas	Awarded August 2014	CPRIT	Service
Breast, Colorectal, Cervical, Tobacco	University of Texas Health Science Center at San Antonio	Region 8	Atascosa, Bandera, Bexar, Comal, Dimmit, Duval, Edwards, Frio, Gillespie, Guadalupe, Hidalgo, Karnes, Kendall, Kerr, Kinney, La Salle, Maverick, Medina, Real, Val Verde, Webb, Wilson, Zapata	https://www.redesenaccion.org	Redes En Accion: The National Latino Cancer Research Network	Conduct formal training program to increase the number and quality of Latino cancer researchers working to reduce cancer health disparities. Hosted more than 2,000 cancer education events; bilingual education materials, such as Cuenta Vida (cancer health magazine) and Nuestras Historias websites, blogs and E-communications, social media campaigns and PSAs.	State	Public Education, Policy, Professional Education
Comprehensive	American Cancer Society, San Antonio Metropolitan Unit, Early Detection for Breast, Prostate and Colorectal Cancer	Region 8	Atascosa, Bandera, Bexar, Comal, Dimmit, Duval, Edwards, Frio, Gillespie, Guadalupe, Hidalgo, Karnes, Kendall, Kerr, Kinney, La Salle, Maverick, Medina, Real, Val Verde, Webb, Wilson, Zapata	http://www.cancer.org	Community Education	Provides community based activities and collaborates with community partners to provide information and awareness of breast, prostate, colorectal and cervical cancer, tobacco prevention, healthy children programs, skin cancer and nutrition.	Private	Public Education
Comprehensive	University of Texas Health Science Center at San Antonio	Region 8	Bexar	http://www.cprit.state.tx.us/files/funded-grants/PP140209.pdf	Building a Healthy Temple Cancer primary prevention program among Hispanics	Awarded August 2014	CPRIT	Public Education
Cervical	Center for Disease Control and Prevention	Region 9/10	El Paso	http://www.cdc.gov/cancer/cervical/what_cdc_is_doing/amigas.htm?noredir=false	AMIGAS- "Ayudando a Las Mujeres con Información, Igualdad y Amor para su Salud."[3]	CDC-funded, bilingual educational outreach intervention designed to help promotoras (community health workers) and other lay health educators increase cervical cancer screening among Hispanics[3]	Federal	Professional Education
Breast	Texas Tech University Health Sciences Center at El Paso	Region 9/10	El Paso, Hudspeth		Breast Cancer Education, Screening and Navigation (BEST) program	A multicomponent, evidence-based program designed to reduce breast cancer burden through early diagnosis and access to treatment in El Paso and Hudspeth Counties.[5]specific goals are:[3] 1)increase community awareness about breast cancer and mammography;[2] 2)reduce cultural barriers to screening, diagnosis and follow up;[3] 3)increase mammography rates in uninsured predominantly Hispanic women (aged 40-75 years;[4] 4)increase the timely uptake of diagnosis and treatment services; and[5] 5) build a sustainable screening, diagnosis and treatment network for breast cancer. 3,500 eligible women will be offered no-cost mammography screening and diagnostic follow up, navigation and education services; 750 women ineligible for the cost screening will be offered education and partial navigation services and 2,000 women will be offered education and the resource list.[6]Awarded (1/2013).	CPRIT	Service, Public Education
Breast, Cervical	Centro San Vicente	Region 9/10	El Paso	www.sanvicente.org	Project SEGURO	Provides prevention information and funds from the Cancer Consortium to qualifying patients for uterine/cervical and breast cancer screening. Additional funds are provided by Susan G. Komen to cover screening fees to include mammograms and PAP smears	Combination	Service, Public Education
Tobacco	Healthy Paso Del Norte	Region 9/10	El Paso, Hudspeth	http://www.healthypasodelnorte.org/	Smoke-free Paso Del Norte	Paso Del Norte's Tobacco Network exists in order to promote prevention and cessation of tobacco in the Paso Del Norte region	State	Public Education
Tobacco	Medical Center Hospital	Region 9/10	Ector	http://medicalcenterhealthsystem.com/?doing_wp_cron=1470077055.1807510852831726703125	Tobacco prevention program	Cessation classes and prevention education	State	Service, Public Education
Tobacco	Permian Basin Regional Council on Alcohol and Drug Abuse	Region 9/10	Andrs, Borden, Coke, Concho, Crane, Crockett, Dawson, Ector, Glanes, Glasscock, Howard, Irion, Kimble, Loving, Martin, Mason, McCulloch, Menard, Midland, Pecos, Reagan, Reeves, Schleicher, Sterling, Sutton, Terrel, Tom Green, Upton, Ward and Winkler		Prevention Resource Center	PRC will distribute information/dissemination through education, training, coordination of youth coalitions, program initiation, public awareness, by media and referral services	State	Public Education

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Focus	Institution	Public Health Service Region	County	Link to website	Program	Program Description	Funding	Type of Program
Breast, Tobacco	Shannon's Cancer Education Outreach Program	Region 9/10	Tom Green, Concho	http://www.shannonhealth.com/	Prevention program, cessation resources	Host educational sessions for civic groups, schools, organizations that include basic information on cancer prevention and screening.	Combination	Service, Public Education
	City of El Paso	Region 9/10	El Paso	https://www.elpasotexas.gov/public-health/programs/education-and-promotion	Freshstart Smoking Cessation	A curriculum for adults wanting to quit smoking. Classes consist of four lessons that help participants choose a quit date, learn about the benefits of quitting, deal with withdrawal, and preventing relapse.	State	Public Education
Tobacco	Texas A&M Center for Housing and Urban Development	Region 9/10	El Paso		Smoking Education/Prevention	Provides tobacco education by the Promotoras, to residents of the colonias. Also provides literature on the topic as well as information and referrals on cessation programs. Education is conducted one on one at home visits and at each of the community resource center/program sites (target audience is (colonia communities).	State	Public Education
Tobacco	Project Vida Health Center	Region 9/10	El Paso	http://www.pvida.net/tobacco-cessation	Tobacco Cessation-Montana Vista	Provides a free 7 week program to stop smoking to residents of El Paso County. Three different programs include: Not On Tobacco (NOT), Freedom From Smoking, and Teens Against Tobacco Use (T.A.T.U).	State	Public Education
Comprehensive	Rio Grande Cancer Foundation	Region 9/10	El Paso	http://www.rgcf.org	The Green House- health library	Provides cancer, health and wellness information for patients, caregivers and medical professionals in various mediums - books, pamphlets, audio and video offerings as well as a stand-alone, bilingual touch screen computers.	Private	Professional Eductaion, Public Education
Tobacco	Coastal Bend Wellness Foundation	Region 11	Nueces, San Patricio	https://www.facebook.com/cbwfYouthPrograms/info/?section=hours&tab=page_info	Project Turnaround	Project Turnaround provides the Too Good For Drugs (TGFD) curriculum to 1st thru 8th grade students in one hour sessions over 10 weeks or twice a week for 5 weeks to local schools and community sites	Combination	Public Education
Tobacco	MHP Salud	Region 11	Jim wells and Willacy	http://mhpsalud.org/	Transforming Texas	Provide the technical assistance, materials and supporting documents needed to address clinical preventive services, the importance and increase of physical activity, and the benefits of a smoke free environment.	State	Public Education
Tobacco	South Coast Area Health Education Center	Region 11	Bee, Brooks, Jim Wells, Live Oak, Kenedy, Kleberg, Mc Mullen, Nueces, San Patricio	http://www.scahec.com/index.html	Tar Wars and ANTZ - Anti-tobacco program	Using the ANTZ program to educate 1st and 2nd grade students of the effects of smoking. Tar Wars is an interactive program by the American Academy of Family Physicians that is gear towards the education of students about the cost and stigma of smoking.	Private	Public Education, Professional Education
Tobacco	Tobacco Coalition of Nueces County	Region 11	Nueces	https://www.facebook.com/TobaccoCoalitionofNuecesCounty?fref=nf	Tobacco Prevention and Control Coalition (TPCC)	The TPCC promotes and conducts community-based and environmental universal prevention strategies that have an impact on the social, cultural and economic processes of the community	State	Public Education
Tobacco	UNIDAD Tobacco Prevention and Control Coalition	Region 11	Hidalgo	http://www.uttobacco.org/our-programs/texas-comprehensive-tobaccoprevention-control-coalition	Prevention and community outreach programs	Promotes wellness by prevention education services in the schools, with a primary focus on middle school and high school age group; Curriculum will be implemented in the middle school age groups commencing the upcoming school year 2014-2015. Conduct Adult presentations on tobacco-related topics such as prevention, education and cessation. Tobacco media awareness activities.	State	Public Education
Tobacco	Youth Continuum of Care Coalition	Region 11	Nueces, San Patricio	http://www.coada-cb.org	Prevention programs	mobilize community programs to reduce the abuse of alcohol, tobacco and other drugs in their service area	State	Public Education
Colorectal	El Paso Fire Department - City of El Paso	Region 9/10	El Paso, Hudspeth	http://www.elpasotexas.gov/public-health/special-projects/vaccinations-for-health	Free Vaccinations and Health Screenings - El Paso Fire	Program offers vaccinations and screenings to seniors without insurance or on Medicaid. Local fire paramedics will be providing vaccines that will be offered at various sites around El Paso. In addition to flu and pneumonia vaccines, paramedics will also will be providing screening for colorectal cancer and other health conditions.	1115 Medicaid Waiver	Service

Appendix F

Figure 5.1 Cancer Risk Factors; American Association of Cancer Research, 2016

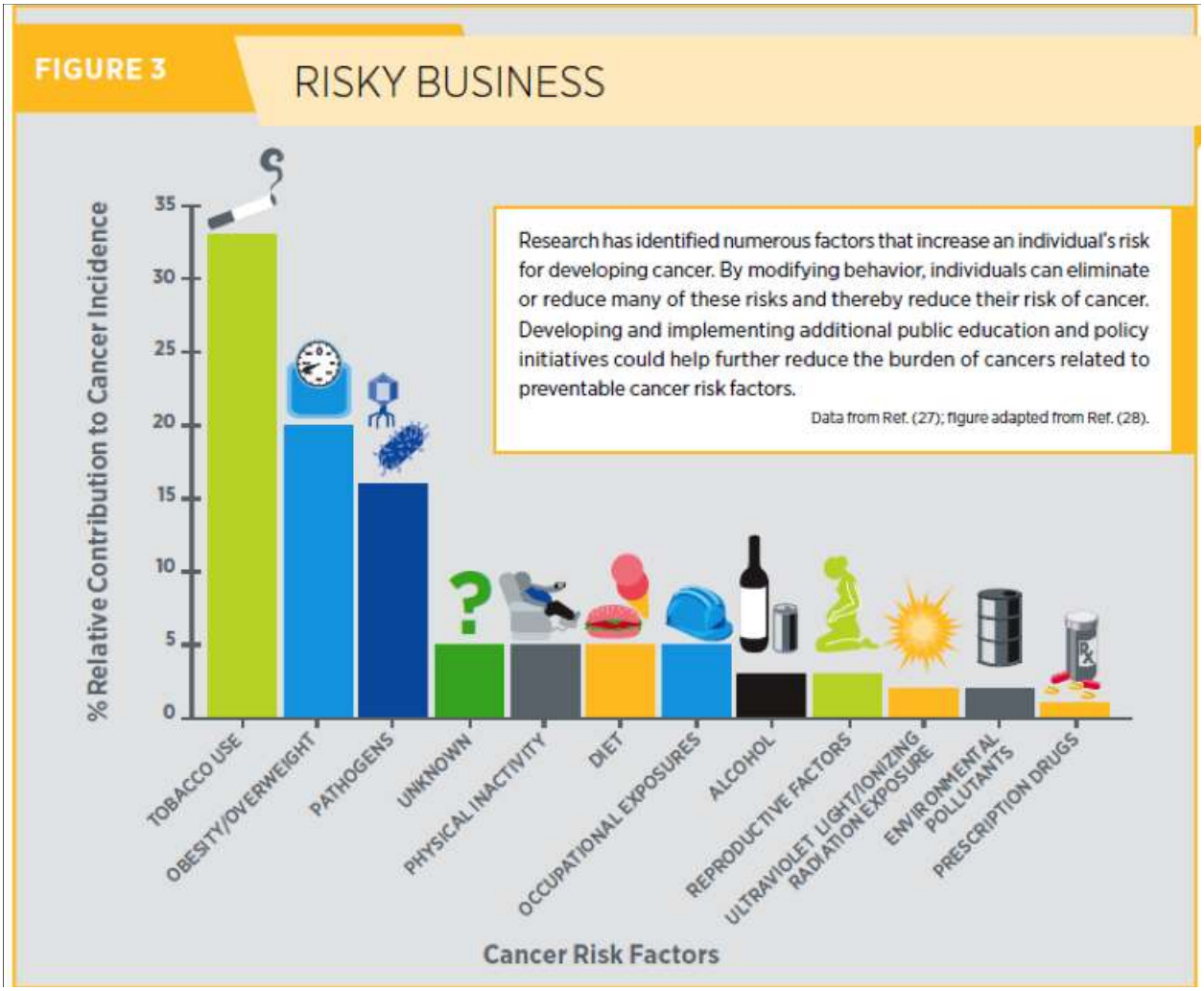


Figure 5.2 Tobacco Use Among Texas High School Students YRBSS, 2013

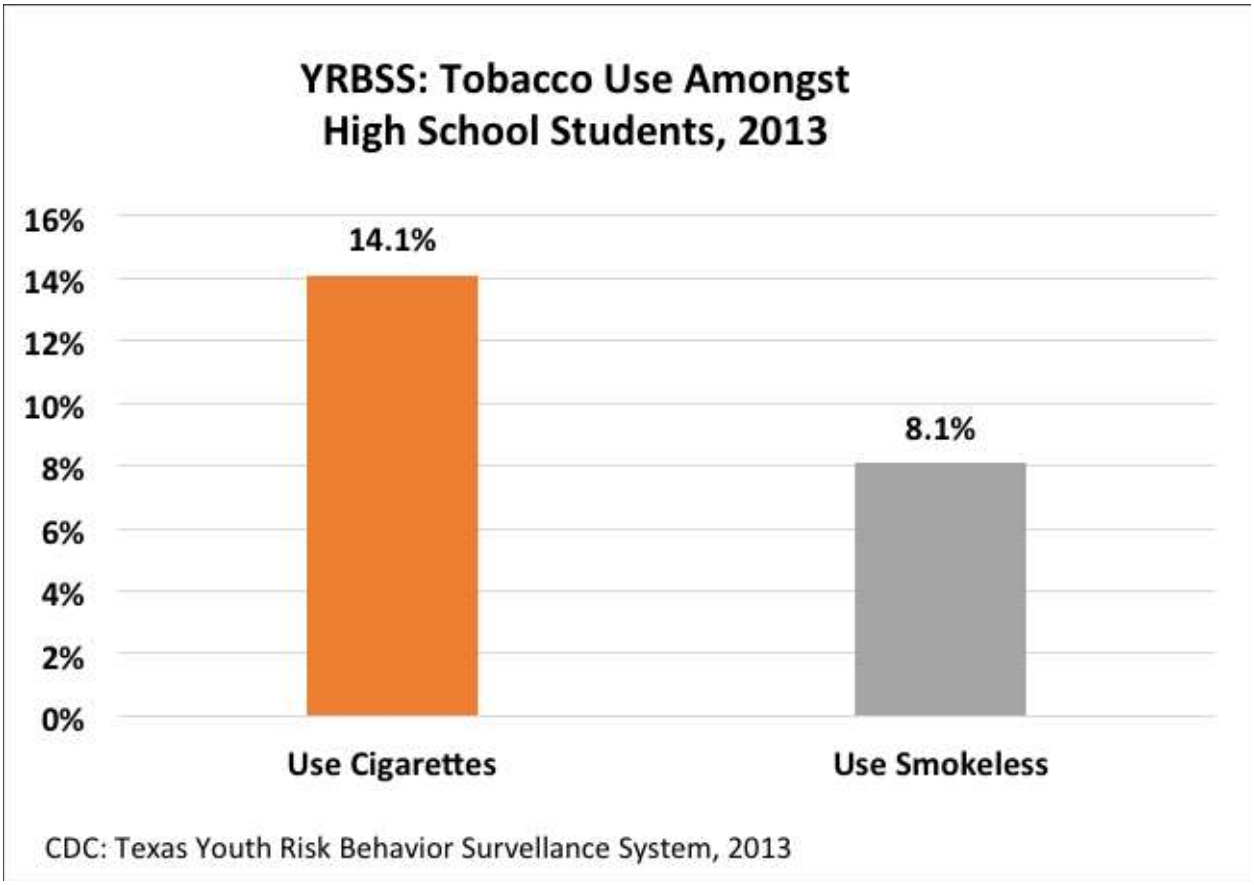


Figure 5.3 Percentage of Cancer Cases Caused by Identifiable and/or Potentially Preventable Factors AACR, 2012

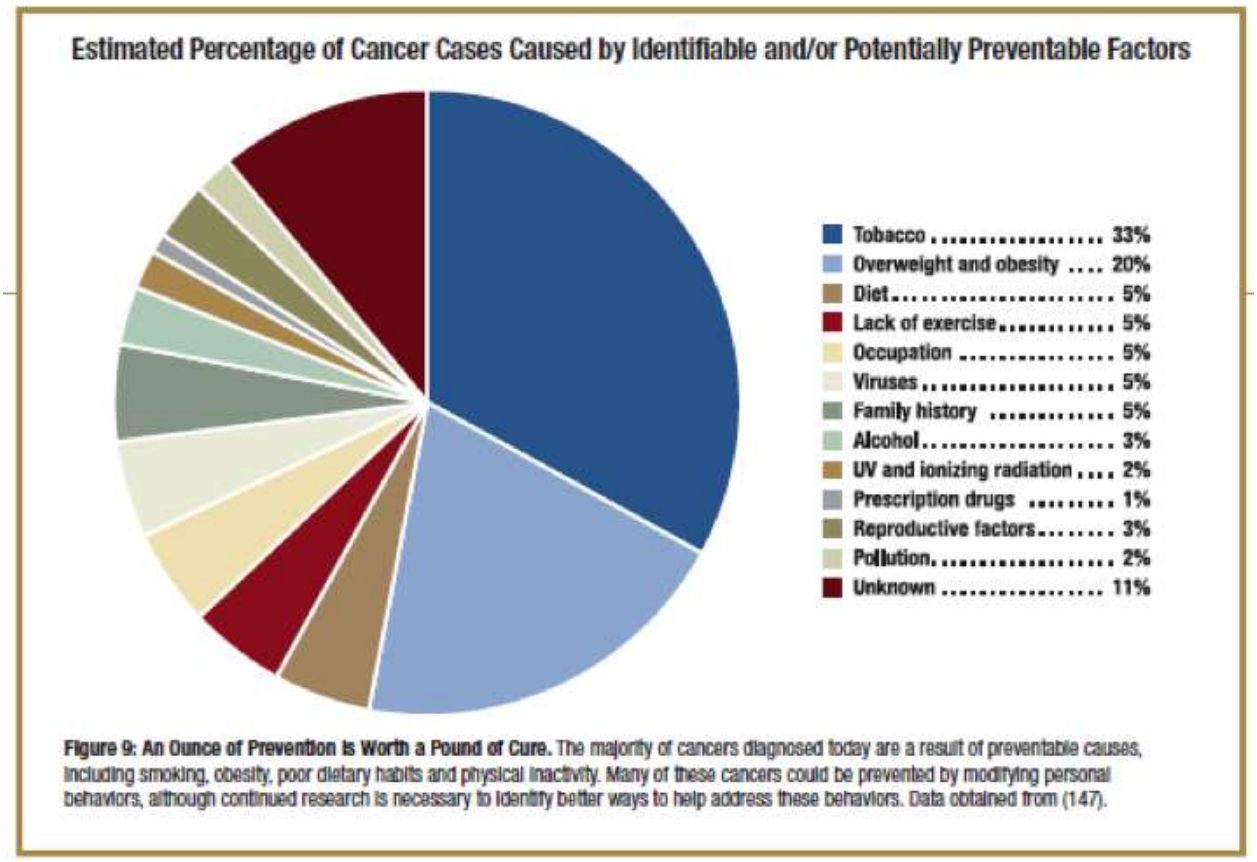


Figure 9: An Ounce of Prevention is Worth a Pound of Cure. The majority of cancers diagnosed today are a result of preventable causes, including smoking, obesity, poor dietary habits and physical inactivity. Many of these cancers could be prevented by modifying personal behaviors, although continued research is necessary to identify better ways to help address these behaviors. Data obtained from (147).

Figure 5.4 Frequency of Physical Activity Among Texas HS Students YRBSS, 2013

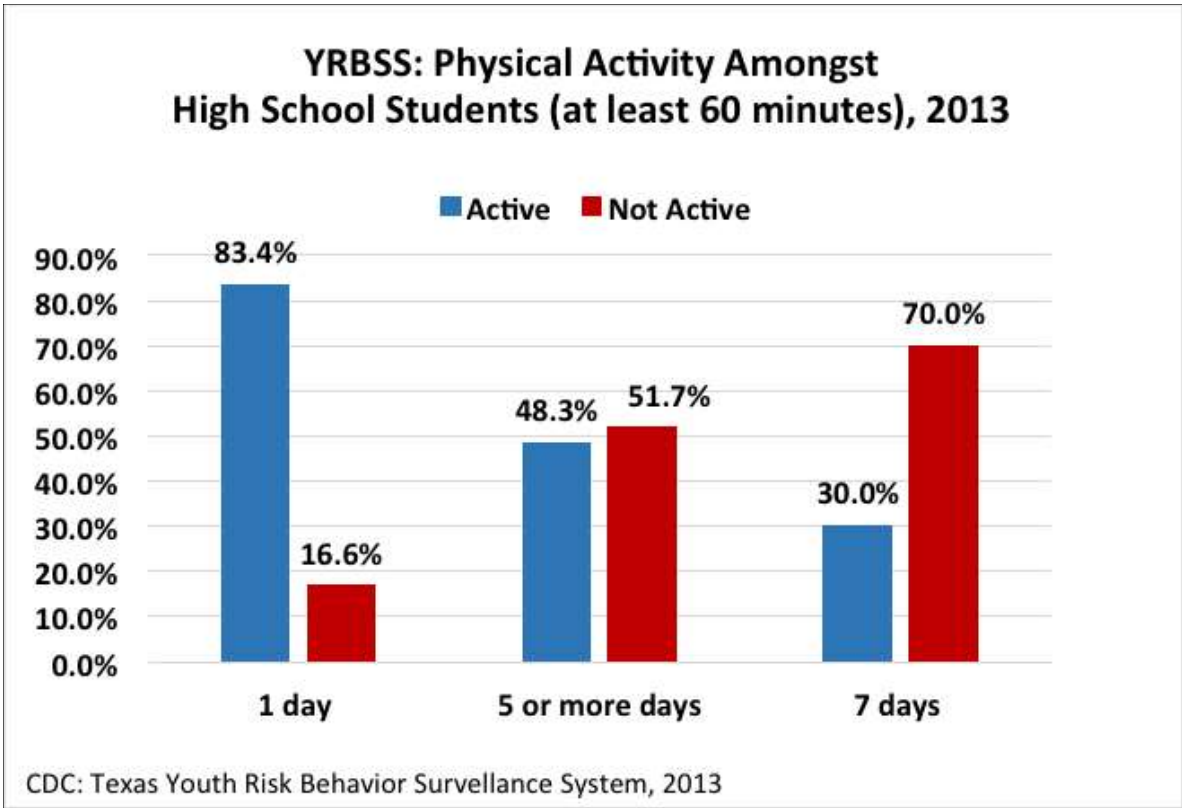
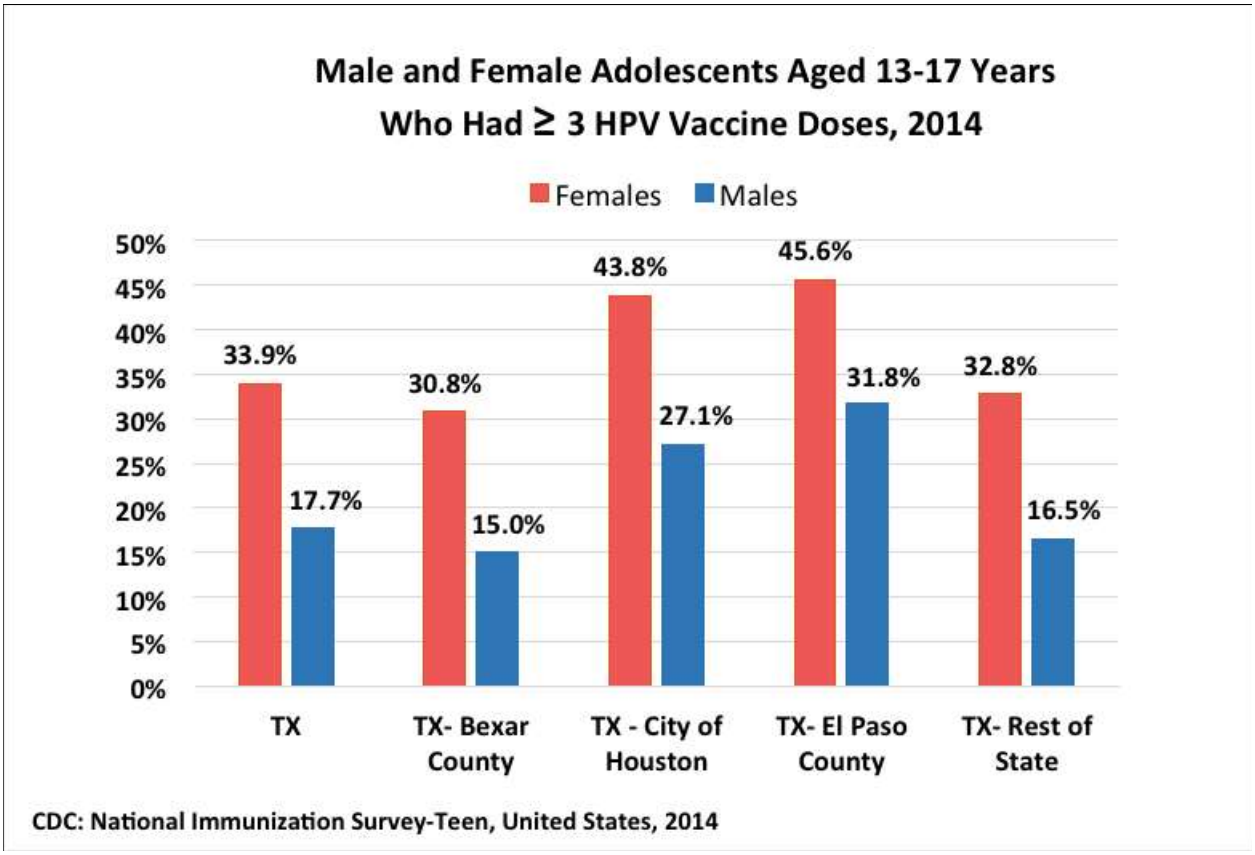


Figure 5.5

Healthy People 2020 and CDC Winnable Battles Goals

Goal	Texas Baseline	US Baseline	Winnable Battle Target, 2015	HP2020 Target
Decrease % of adults who smoke cigarettes	19.2%	20.6% (2008) 18% (2012)	16.3% (21% reduction)	12%
Decrease % of youth who smoke cigarettes	17.4%	20% (2007)	17.27% (11% reduction)	16% (adolescents)
Reduce the initiation of the use of cigarettes among children and adolescents 12-17		6.2%		4.2%
Reduce the initiation of the use of cigarettes among young adults 18-25		8.3%		6.3%
Increase cessation attempts by adult smokers		48.3% (2008)		80%
Increase cessation attempts by adolescent smokers	49% (2011)	58.5% (2009)		64%
Increase tobacco cessation counseling in ambulatory care settings		19.2% (office-based) 22.6% (hospital-based)		21.1% (office-based; 10% increase) 24.9% (hospital-based; 10% increase)
Reduce the proportion of children 3-11 exposed to SHS		52.2%		47% (10% improvement)
Reduce the proportion of adolescents 12-17 exposed to SHS	50.6% (middle school) 65.8% (high school)	45.5%		41% (10% improvement)
Reduce the proportion of adults exposed to SHS		37.6%		33.8% (10% improvement)
Increase proportion of U.S./Texas pop. covered by smoke-free laws	55% (2011)	38.2% (2008)	78.1% (104% increase)	

Figure 5.6 Texas Male and Female Adolescents (Ages 13-17) HPV Vaccination Completion NIS Teen Survey, 2014



Appendix G

Figure 7.1 Medically Underserved Areas and Populations in Texas

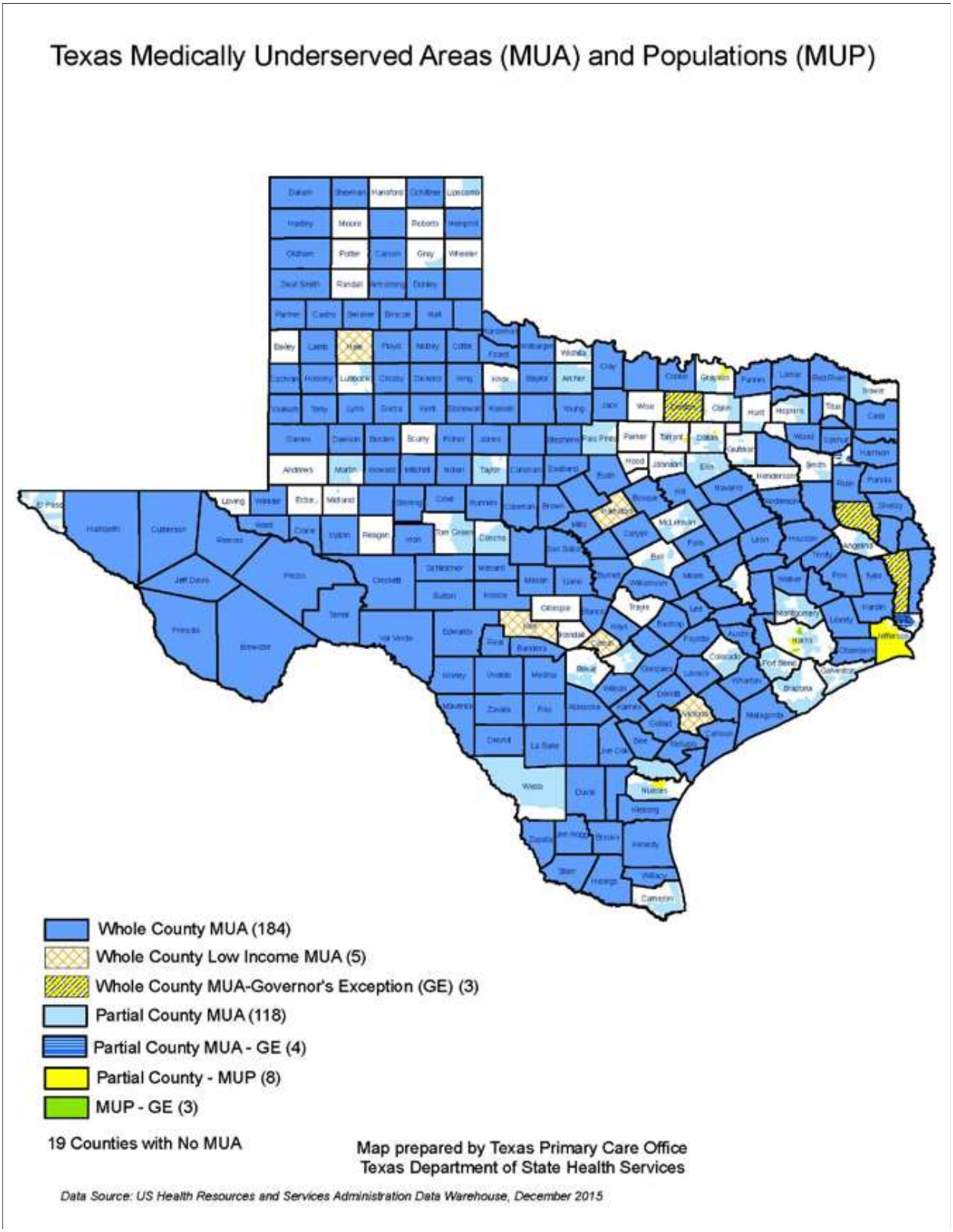
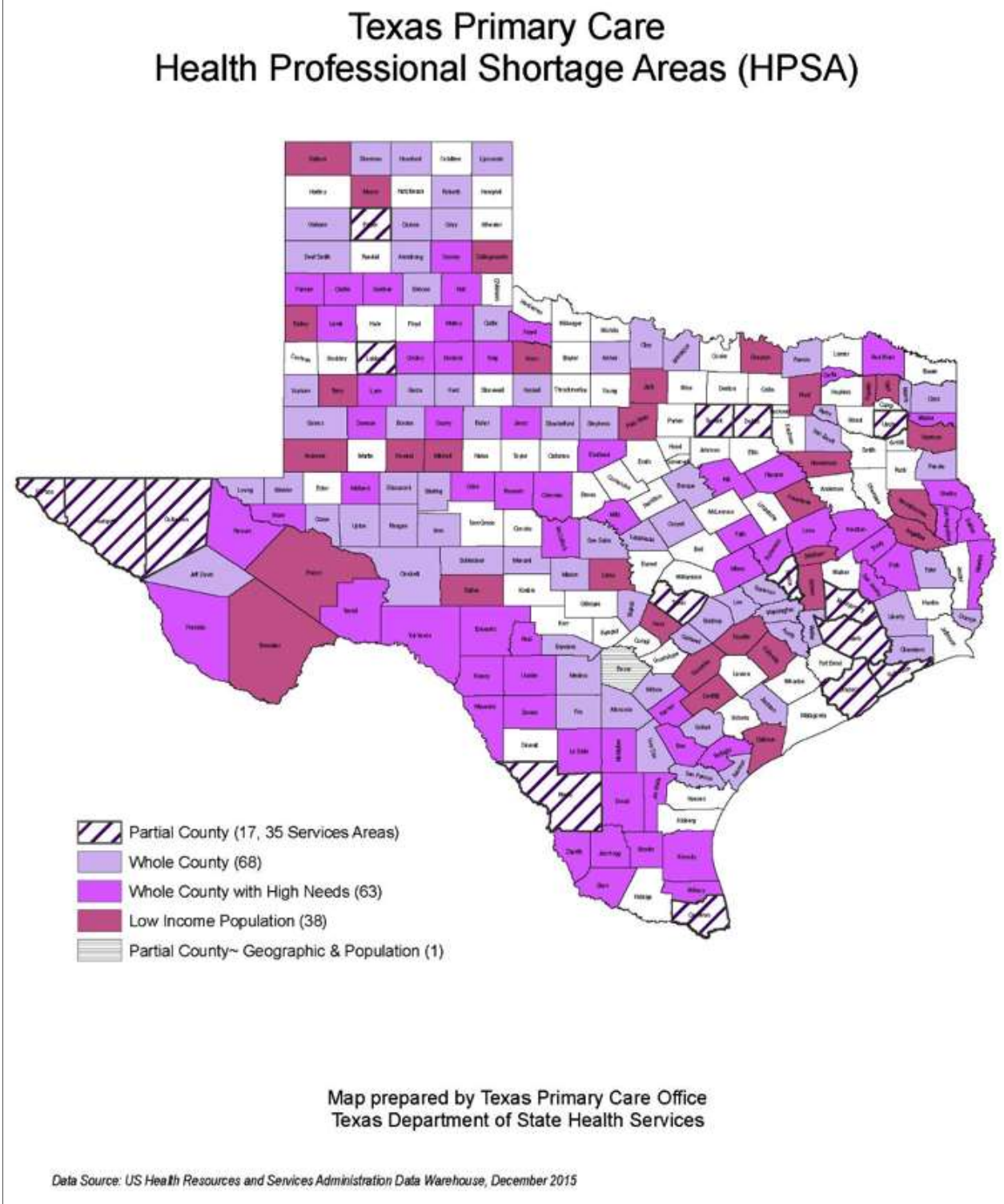


Figure 7.2 Health Professional Shortage Areas within Texas 2015



Appendix H

Figure 8.4 Texas Age-Adjusted Incidence and Mortality Rates for Lung Cancer by Geographic Classification

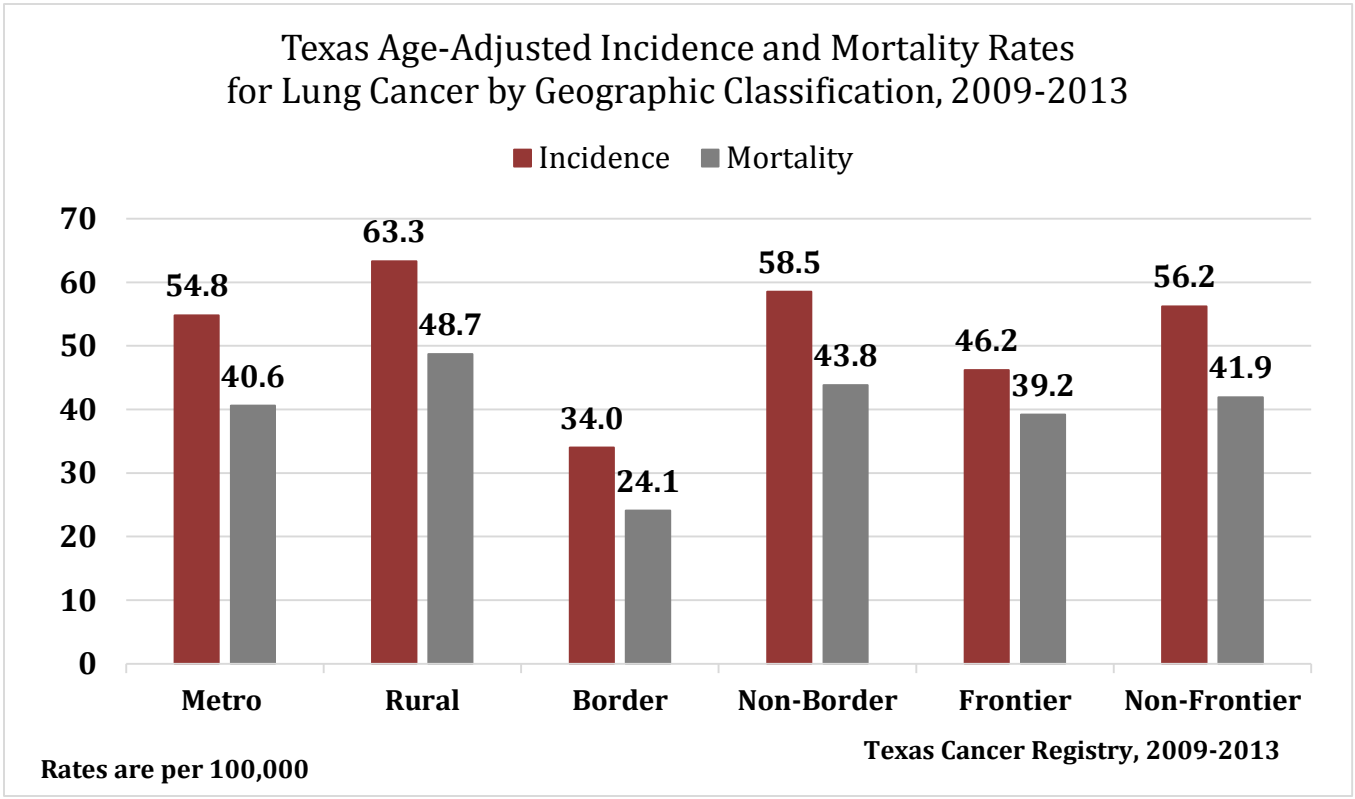


Figure 8.5 Texas Age-Adjusted Incidence and Mortality Rates for Liver Cancer by Geographic Classification