

# **SOUTH CAROLINA CANCER PLAN EVALUATION**

## **EVALUATION REPORT, 2009-2010**

**Project Period:** July 2009-June 2010

**Principal**

**Investigator:** Anthony Alberg, PhD, MPH; MUSC Hollings Cancer Center

**Co-Investigators:** James Hebert, ScD; USC Arnold School of Public Health;  
Ginie DaGuise, PhD; SC DHEC

Susan Bolick-Aldrich, MSPH; SC Central Cancer Registry

**Coordinator:** Kathleen Cartmell, MPH; MUSC Hollings Cancer Center

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## **INTRODUCTION**

The South Carolina (SC) Cancer Plan, henceforth referred to as the “Cancer Plan,” serves as SC’s central blueprint for cancer prevention and control. The goals, objectives, and strategies delineated in the plan are the identified priorities for reducing the burden of cancer in SC. The initial Cancer Plan was first published in 2005 as an 80-page document that contained five goals, 68 objectives and 203 strategies. The Cancer Plan’s five goals are: 1) Reduce the number of new cancer cases; 2) Reduce deaths attributable to cancer; 3) Improve the quality of life of those living with cancer and their families/caregivers; 4) Eliminate and/or reduce health disparities attributable to cancer; and 5) Improve access to and provision of quality cancer care.

As the focal point of cancer prevention and control activities in SC, and hence the blueprint for action for DHEC’s Cancer Control Program and the South Carolina Cancer Alliance (SCCA), having a thorough, methodologically rigorous, and innovative plan in place is essential to monitor progress toward achieving the plan’s goals and objectives. This report describes the development and implementation of an evaluation plan that was designed to ensure routine, data-driven monitoring of progress toward the goals and objectives of the Cancer Plan. A guiding framework for the evaluation plan was CDC’s Framework for Program Evaluation (1) (**Figure 1**). This cyclical evaluation approach begins with engaging stakeholders, includes establishing an evaluation design and gathering the necessary evidence to measure results, and ends with ensuring the use/sharing lessons from the evaluation with stakeholders. This model is well-suited for evaluating the Cancer Plan, which depends on a diverse, voluntary group of stakeholders from throughout the state.

## **B. METHODS**

As described below, the evaluation plan consists of a multi-component strategy. The two primary initiatives related to the outcome evaluation were to: 1) organize and prioritize the Cancer Plan indicators and compile outcome evaluation data for the highest priority indicators

and 2) collect and organize data related to funded projects and map the funded projects back to the relevant Cancer Plan indicators.

### **B.1. Stakeholder Engagement**

To ensure that the evaluation was rooted in the reality of ongoing SCCA activities and responsive to SCCA needs, the evaluation team regularly communicated with SCCA leadership groups on progress and for feedback/guidance in the evaluation process (**Table 1**). These groups included the SCCA Board of Directors, Coordinating Council, Liaison Committee, the now-defunct SCCA Research Task Force, and the South Carolina Central Cancer Registry Surveillance Committee. A major portion of a meeting of the former Research Task Force was devoted to developing strategies for the evaluation plan. A poster was presented at an SCCA Quarterly Meeting, and a mid-year updated was provided to the SCCA.

### **B.2. Organizing the Fluid Cancer Plan**

The first step was to dissect the Cancer Plan's goals, objectives, and strategies. This proved to be non-trivial, as the Cancer Plan was not a static document; in fact, many changes were made to the original Cancer Plan since it was published in 2005. Therefore, before dissecting the objectives/strategies it was imperative to develop a uniform objective/strategy tracking system to catalogue the Cancer Plan's history and evolution. Initially, the central information source was a spreadsheet, previously maintained by DHEC, with both the original Cancer Plan and new/changed indicators. These data were subsequently supplemented with interviews/notes from SCCA Task Force Chairs who had worked on the Cancer Plan changes.

Changes to the Cancer Plan include adding, deleting, and modifying indicators in their wording and/or benchmark goals; **Table 2** provides actual examples of indicator changes. A numeric "fixed" classification system was developed to track each indicator's initial and current location in the Cancer Plan. This system allows a user to review an objective from the original Cancer Plan and track progress towards this objective in the updated evaluation spreadsheet, even if the objective was subsequently modified or deleted.

During this process, two chapters emerged as notable outliers. The Cancer Plan's "Genetics" chapter has apparently never been directly addressed. Furthermore, the "Health Disparities" chapter is a compilation of objectives/strategies from other Cancer Plan chapters that was not independently developed, so its content overlaps with other indicators elsewhere in the plan. For these reasons, these two chapters were not a focus of evaluation efforts.

### **B.3. Rating the Evaluability of Cancer Plan Indicators**

A few definitions will assist in a discussion of indicator assessment. "Goals" are broad, overarching statements about the outcomes to be achieved. "Objectives" are specific statements about what is to be achieved and are stated in measurable terms. "Strategies" are the specific actions that will lead to accomplishing the objectives. Therefore, objectives should be directly measurable and strategies should be stated very clearly so that one can ascertain directly if the strategy was carried out (2).

A rating system was developed to assess each objective and strategy according to whether 1) it could be readily evaluated as written and 2) data were available to evaluate it. The rating system consists of two scales, one characterizing the extent indicators were measurable as written (range: "A" to "C") and the other characterizing the availability of outcome measurements (range: "1" to "3").

The purpose of the first scale was to measure the clarity and precision of the Cancer Plan indicators. An "A", "B", or "C" rating meant it could be directly evaluated as written, evaluated with minor changes, or only evaluated with major revisions, respectively. Examples of "minor changes" are defining baseline and benchmark values or more specifically describing the target population. Examples of "major changes" include breaking apart multiple objectives that were written as a single objective and more carefully defining vague terms in an indicator.

The present evaluation hinged on data availability; hence, rating each indicator on the current availability of outcome data was a priority. A "1", "2", or "3" rating meant outcome data were readily available, available with secondary data collection, or required primary data

collection, respectively. Secondary data collection refers to analysis of existing data. Primary data collection entails pro-actively collecting new data.

These two separate ratings were combined into a single summary measure (e.g. A1, B3, C2) to jointly characterize the extent that an indicator was clear/precise and had available outcome data. For example, an “A1” rating refers to an objective/strategy that is clear and precise and with available data to evaluate progress, whereas a “C3” rating lacked both clarity/precision and available outcome data; specific examples are provided in **Table 3**. This rating system was applied to each objective and strategy independently by two reviewers. As of this writing, the consensus process on discordant ratings has yet to be completed.

#### **B.4. Prioritizing Subsequent Evaluation Activities Based on Ratings**

The results of the rating system described above were used to prioritize the objectives and strategies actually evaluated for outcomes. This report’s focus is on objectives/strategies that were evaluable, as defined by being clearly written and with available outcome data. For these “A1” indicators, outcome data were obtained and summarized.

#### **B.5. Allocations of Resources through Grant Funding**

A primary way the Cancer Plan is implemented is by allocating grant funds for local projects. There are two primary funding streams in which CDC Cancer Control grant funds are allocated. One flows directly from the DHEC Cancer Control Program to eight DHEC Public Health Regions through a Regional Mini-Grant mechanism, allocated to each of the SC public health regions to develop cancer control projects that the local communities determine are priorities. The other funding stream flows from the DHEC Cancer Control Program through the SCCA, in which SCCA awards competitive Implementation Grants, awarded to SCCA partners for projects that address Cancer Plan objectives or strategies. Since these funding streams generate the bulk of the actual “on the ground” cancer control activity throughout the state, tracking the funded projects and mapping these back to the Cancer Plan’s indicators was an important element of the evaluation.

Thus, to the extent feasible, all projects funded through SCCA Implementation Grants and DHEC Regional Mini-Grants to address Cancer Plan objectives/strategies were ascertained. Data on funded projects through these grant mechanisms since they were established on 7/1/2005 through 6/30/2010 were procured from sources such as individuals at DHEC and SCCA who had grant oversight and also grantees. No uniform data source seemed to be available for either funding mechanism. The list of funded grants is believed to be complete, but the level of detail about the grants varied substantially by year. Grant information included title, funding period, region/counties served, a brief statement of work, and a detailed description of project components. For some years, data were also available on grant amount, contact person, project venues, and grant deliverables. In most cases outcome data and project contact information were not available. For Implementation Grants, the proposed scope of work was provided for some projects but for others the actual grant deliverables were provided. Therefore, a summary of overall project deliverables could not be compiled for this evaluation.

All grants were linked with the Cancer Plan indicators they addressed. Grants funded during the past five years were mapped back to Cancer Plan objectives and strategies to describe the distribution of funding across the plan's content areas. DHEC Regional Mini-Grant Projects are focused on cancer prevention and early detection, so were considered relevant to four Cancer Plan sections (Prevention, Early Detection, Advocacy and Genetics).

Given that grant projects could be cross-cutting and address numerous objectives/strategies, we attempted to map the full scope of project activities back to Cancer Plan indicators. Also, some substantive areas contain a great deal of overlap with other chapters due to the nature of the activity; for example, Advocacy is a specific activity but the content of the issue (e.g., cigarette taxes, insurance coverage for screening) always overlapped with another chapter, most often Prevention or Early Detection.

## **B.6. Data Management**

Key data were entered and managed in a spreadsheet with the variables needed to monitor and evaluate the Cancer Plan. This evaluation database (Excel spreadsheet) was used to store and manage data related to the variables needed for the evaluation. The evaluation database is comprised of 11 worksheets; **Table 4** summarizes the full list of variables. The first worksheet contains the Cancer Plan goals. The next eight worksheets each contain a Cancer Plan chapter (Patient Care, Advocacy & Policy, Research, Prevention, Early Detection, Survivor & Family, Genetics, and Health Disparities). Variables in these include current/historical goals, objectives/strategies, indicator ratings, history of changes, outcome data sources, baseline, benchmark and results data, and linkage of indicators with funded grant projects. The last two worksheets contain data on Regional Mini-Grants and Implementation Grants, including variables for project description, project deliverables, project target area, award amount, and project contact person. These variables will likely need to be refined over time, as this represents a compilation of data that was difficult to collect and not previously synthesized.

## **C. RESULTS**

### **C.1. Key Words for Organizing Indicators**

Based on input from the Research Task Force, a set of key words was developed to facilitate locating specific topic areas in the Cancer Plan (**Table 5**). These key words were linked to the goals, objectives, and strategies in the evaluation database. If there is future development of living, online accessible Cancer Plan database, these key words will provide a useful foundation to begin conceptualizing how to enhance effective searches for specific topic areas to that all elements of the plan pertaining to a specific topic are ascertained.

### **C.2. Aligning Goals with Related Objectives and Strategies**

In assessing the Cancer Plan indicators, the goals were found not to be linked to the objectives and strategies. As goals are dependent on objectives, which in turn are dependent on

strategies, these all ought to be linked. Consequently, the objectives and strategies were linked in the evaluation database to the goal(s) they were meant to accomplish.

### **C.3. Rating of Cancer Plan Indicators**

Overall, 33% of Cancer Plan objectives were measurable as written with available outcome data (**Table 6**). The ratings varied widely across chapters, from 0% for Genetics to 80% for Advocacy and Policy. Overall, 18% of strategies were measurable as written with available data for monitoring. These ratings also ranged widely according to chapter, from 0% for Genetics to 50% for Survivor and Family.

The distribution of ratings assigned to Cancer Plan objectives (**Table 7**) shows the proportional distribution of ratings across all 61 objectives in the Cancer Plan, with 30% A1 and 16% C3. By definition, objectives should be measurable with outcome data in place. Thus, ideally 100% of objectives should have “A1” ratings, whereas in reality only approximately one-third of the objectives met this standard.

For objectives/strategies that could not be measured as written because they were not clearly written or had no evaluation data available, recommendations were made to improve these indicators. In the evaluation database, specific feedback is provided for suggested revisions for making the remaining objectives measurable and for clarifying the strategies. For the 2015 Cancer Plan Update, the SCCA has already started updating these indicators.

### **C.4. Assessment of Progress: Cancer Plan Goals and Objectives**

#### **C.4.a. Overall Cancer Plan Goals: Cancer Incidence and Mortality**

SC Central Cancer Registry data (2000-2006, most recently available data) were used to evaluate progress for the first two Cancer Plan goals (**Table 8**). These goals were written in terms of actual numbers of cancer cases and deaths, but we tracked both absolute and age-adjusted rates to control for the effect of changes in population size and age distribution. As the goals are currently stated to decrease actual numbers of cancer cases and deaths, neither goal

was accomplished. If we consider these goals using age-adjusted rates, there was not a decrease in age-adjusted cancer incidence but there was a decrease in age-adjusted mortality.

**Cancer Incidence:** The first goal was to “Reduce the number of new cancer cases.” The age-adjusted cancer incidence rate in SC remained stable between 2000 and 2006. In 2000 it was 508.2 and in 2006 it was 510.8. The actual number of cancer cases increased from 20,146 in 2000 to 23,663 in 2006 (**Table 8**).

**Cancer Mortality:** The second goal was to “Reduce deaths attributable to cancer.” The age-adjusted cancer mortality rate declined from 216.3 in 2000 to 198.0 in 2006. The actual number of cancer deaths increased from 8,370 to 9,063 (**Table 8**).

#### **C.4.b. Objectives and Strategies**

The remainder of the outcome evaluation focuses solely on objectives/strategies that were measurable as written with outcome data available (“A1” rating). A summary of the overall results for these objectives and strategies (**Table 9**) indicates that of the 58 total objectives/strategies with A1 ratings, 60% were not met, 7% were partially met, and 33% were met. Of the six included chapters, the percentage of objectives/strategies achieved varied from 8% for Patient Care to 56% for Advocacy. Detailed below is a summary of progress by Cancer Plan chapter; these results are presented in greater detail in **Appendices 1 and 2**.

##### **C.4.b.1. Patient Care**

In the Patient Care chapter, 12 of 46 indicators (26%) had A1 ratings.

**Improving South Carolina’s Pain Grade Policy:** Data are not yet available to measure change for Objective 1D (“improve state pain policy grade from C+ to B) and Objective 1E (“improve state grade of “D” to a “C” on the Center to Advance Palliative Care Report Card”), but the following steps have been taken that should result in a pain grade improvement: 1) Consensus statement between SC Board of Nursing and SC Board of Pharmacy; SC Medical Board did not sign on but adopted Federation of State Medical Board policy; and 2) Guide for practicing physicians “Responsible Opioid Prescribing” distributed to all SC physicians.

**Development/Dissemination of Palliative Care Resource Information:** For strategies 1-4 under Objective 1E, we found no evidence that work was done to compile or distribute palliative care resource information to the public or healthcare professionals.

**Development of Resource Directory for Patient Care Transportation:** Strategies 1a-4, aimed at identifying/disseminating information about available transportation resources for cancer patients, have begun but are not yet completed. A survey of radiation oncology centers was conducted to identify contacts for information about local transportation resources. A follow-up survey has not been conducted yet to identify resources available by region. Thus, work remains to generate transportation resource and transportation needs information.

#### **C.4.b.2. Advocacy and Policy**

In the Advocacy and Policy chapter, 9 of 26 indicators were rated A1.

**Extend Medicaid Coverage for Treatment of Breast/Cervical Cancer:** Objective 1, to secure sustained legislative support to extend Medicaid coverage for breast/cervical cancer treatment to all low-income uninsured women, was accomplished in July 2005 with SC Medicaid extending coverage for breast and cervical cancer treatment to all women <200% of poverty (i.e. option 3 adopted). However, Option 3 treatment services were eliminated in Jan–March 2009 and then reinstated in March. SCCA and partners advocated for reinstatement; SCCA must remain vigilant to ensure continued DHHS funding. As of July 2008, >1,000 breast/cervical cancer patients received treatment through this expanded coverage.

**Extend Medicaid Coverage for Screening/Treatment of Colorectal Cancer (CRC):** Objective 1, “By June 2007, secure legislative support to extend Medicaid coverage for screening, early detection, and treatment of CRC to indigent low income, uninsured persons,” was accomplished. The SC Legislature allocated \$1 million to SC DHEC in 2008 and 2009 for statewide CRC screening program for uninsured SC citizens. A \$2 million allocation was in the 2010 legislative session budget. SCCA worked closely with partners (ACS, USC’s Center for Colon Cancer Research, and SC Gastroenterology Assoc.) to advocate for SCOPE SC, which

has provided no-cost colonoscopies to >600 SC citizens. Additionally, CRC screening coverage was added for SC Medicaid recipients in August 2006, making >50,000 residents eligible for free CRC screening. Strategy 1 to “Research the experiences of other states on obtaining Medicaid coverage” was carried out by interviewing Medicaid program officials in Colorado, Maryland and New York. The objective to extend Medicaid coverage for CRC screening, diagnosis and treatment was partially accomplished, with success in funding screening for the uninsured, but not for cancer treatment if needed.

**Advocacy for Tobacco Sales Tax:** Objective 4, “By June 2006, increase the SC sales tax on cigarettes to \$1.00 per pack,” was partially accomplished when the tobacco tax was raised from 7 to 50 cents per pack in 2010. The SCCA and partners ACS and SC Tobacco Collaborative contributed to this major accomplishment by 1) partially accomplishing related Strategy 4 to conduct town meetings at four targeted locations promote the cigarette sales tax increase (meetings were held in Florence and Charleston); 2) accomplishing Objective 4 related strategy to educate SC citizens about the tobacco tax; and 3) accomplishing strategy 5a to have the necessary number of legislators support the tax increase. Strategy 3, to ensure continued collection of youth risk behavior surveillance data, was accomplished.

**Use Tobacco Sales Tax Revenue for Comprehensive Cancer Control:** Objective 5, which reads “By 2010, secure stable state funding for comprehensive cancer control with a strong component for youth tobacco prevention and cessation” was partially accomplished. Funding was not secured for comprehensive cancer control, but beginning in FY 2011, \$5 million/year will be allocated to youth tobacco control.

#### **C.4.b.3. Research**

In the Research chapter, 6 of 44 indicators (14%) were rated A1.

**Cancer Research Needs Assessment:** Objective 1, which reads “By August 2005, produce a report prioritizing cancer research in SC,” was accomplished. SC’s research needs were published in the Journal of the SC Medical Association in 2006. No evidence was identified to

suggest that the following related strategies were accomplished: 1) hire a public relations firm/individual to create an educational campaign about research needs, and to 2) create a model study participant recruitment campaign that capitalizes on the statewide public relations campaign, which can be used by a variety of cancer control research disciplines.

**Tissue Bank Development:** Objective 8, “By October 2008, develop and oversee a Statewide Tissue Bank, which will collect cancer specimens from all pathology services associated with the three largest medical centers in SC and provide technical assistance to all other entities that treat cancer patients in SC,” was accomplished. The statewide tissue bank was created with patient specimens from Palmetto Health (n>500), Greenville (n=60), and Spartanburg (n=20). The related strategy to ensure that tissue bank resources can be used for epidemiologic research with data linkage to patient data has not yet been accomplished. Currently, no process is in place to request tissue from the tissue bank. HSSC is re-structuring the tissue bank and will develop policies on how and by whom tissue can be accessed, and whether identifiers will be linked to the tissue (planning to use CABig format). So far, tissue provided to the tissue bank is in a de-identified format (only submitting hospitals have patient identifiers).

#### **C.4.b.4. Prevention**

In the Prevention chapter, 12 of 50 indicators (24%) were rated A1.

**Adult Tobacco Use:** Objective 1 was to decrease the tobacco use prevalence among SC adults (age 18+) from 26% in 2003 to 12% in 2010. According to BRFSS data, adult tobacco use steadily declined from 26% in 2003 to 20% in 2008, indicating positive progress but still short of the target 12% prevalence.

**Increase Usage of the SC Quitline:** The strategy to increase the number of quitline calls by 10% was not accomplished, as quitline calls decreased from 2007 (n=4793) to 2009 (n=2212).

**Smoke-Free Workplaces:** Strategy 6b, “To Increase the percentage the population covered by comprehensive smoke-free ordinances to 50+%,” has not yet been accomplished. Strategy 6c to have 100% of hospitals smoke-free is not yet accomplished; currently 48 out of 70 hospitals

are now smoke-free (excludes VA and rehab hospitals). Strategy 6d to have 100% of colleges and universities smoke-free was not yet accomplished; currently 27 out of 59 of the public and private 4-year, 2-year technical, and 2-year private campuses are smoke-free. Strategy 6e to increase the percentage of state agencies with smoke-free government vehicle policies to 100% was accomplished via blanket state regulation.

**Decrease Youth Tobacco Use:** Objective 2 reads, “By June 2010, decrease the percentage of high school students in SC using tobacco from 36% in 2005 to 16%.” Using SC Youth Tobacco Survey data as the data source, we were unable to replicate the 36% used in this original indicator and noted that the indicator had been revised in a 2015 update to 24% baseline in 2005; therefore we use the 24% as the baseline measure. For high school youth, 24.4% of youth reported current tobacco use in 2005, which steadily declined to 18.7% in 2007; thus progress toward the objective was achieved but the target was not met.

**Increase Integration of Tobacco Prevention Cessation Curriculum:** Strategy 4, to have all school districts with tobacco control education in their curricula, has not been addressed yet.

**Increase Youth Participation in Tobacco Cessation:** Objective 2, Strategy 6 read: “Increase the percentage of high school smokers who participate in cessation programs from 5.8% in 2005 to 10%.” This objective was achieved, as youth participation in cessation programs increased from 5.8% in 2005 to 10.9% in 2007 (Data source: SC Youth Tobacco Survey).

**Nutrition:** Objective 5 read: “By June 2010, increase the proportion of the SC population that consumes at least five servings of fruits and vegetables from 23.9% in 2003 to 50%.” BRFSS revealed a slightly different baseline of 22.3%. The objective to increase fruit/vegetable consumption was not met; rather, the proportion who consume  $\geq 5$  fruit/vegetable servings/day decreased from 22.3% in 2003 to 18.7% in 2007.

**Physical Activity:** Objective 6 is to “By June 2015, increase the proportion of adults who engage regularly in moderate physical activity for at least 30 minutes/day from 23.5% to 29% (SC BRFSS, 2003).” The proportion of adults who engage in regular moderate physical activity

for  $\geq 30$  minutes/day increased incrementally from 23.5% in 2003 to 30.7% in 2007, apparently achieving this objective. However, this indicator measures daily moderate physical activity only among those who report moderate physical activity; therefore, it is limited to only those who are moderately physically active. Consequently, we recommend using an alternate, more standard measure of physical activity that characterizes physical activity among all adults and can be measured using BRFSS data. It distinguishes those who meet the recommended level to be considered vigorously ( $\geq 30$  minutes/day,  $\geq 5$  days/week) or moderately ( $\geq 20$  minutes/day,  $\geq 3$  days/week) physically active. Using this measure, the percentage who met the physical activity guidelines remained constant from 46.2% in 2003 to 46.5% in 2007. Thus, the objective would not be met using this more standard physical activity measure.

**Mandatory Cervical Cancer Vaccine for Middle School Entry:** Strategy 1 read “Add HPV vaccine to required list for middle school girls entering school” was not accomplished. Currently HPV vaccination is strongly recommended—but not required—for middle school entry.

#### **C.4.b.5. Early Detection**

In the Early Detection chapter, 13 of 59 indicators (22%) were rated A1.

**Colorectal Screening:** Objective 1, to increase the proportion of adults age 50+ who have had a colonoscopy/sigmoidoscopy within 5 years from 49.2% in 2002 to 53%, was met as the prevalence of screening in this group increased from 49% in 2002 to 66% in 2008.

**Additional Data Collection re: FOBT:** Strategy 1 is: “Add a two-part BRFSS question asking individuals 50+ if they have been offered a Fecal Occult Blood Test within the last year and if they have returned the test.” This question is not being collected on BRFSS, but a more generic BRFSS item could be used: “A blood stool test is a test that may use a special kit at home to determine whether the stool contains blood. Have you ever had this test using a home kit?”

**Increase Clinical Breast Exam (CBE) Use:** Objective 2: “By June 2010, increase the proportion of women age 40+ who have received a CBE within the preceding two years from 77.4% in 2002 to 82%. We were unable to replicate the baseline proportion of women who had

had a CBE, the 2002 Objective stated 77.4% for the baseline measure compared to the 86.7% we found. Our data source for this measure was BRFSS staff because clinical breast exam measures are not reported in BRFSS reports. The proportion of women ages 40 and above who report having had a CBE in the past two years decreased incrementally from 86.7% in 2002 to 83.5% in 2008. While there was a decline in clinical breast exams over this period, the objective of 82% of women having a clinical breast exam was technically met.

**Increase Mammography Use:** Objective 3 was to increase the proportion of women age 40+ who had a mammogram within the preceding two years from 76% in 2002 to 80%. The proportion of women ages 40 and above who report having had a mammogram in the past two years remained stable (75.6% in 2002; 74.9% in 2008).

**Implement Locally Tailored Interventions to Promote Breast Cancer Screening for those at High Risk:** Strategy 2: “Implement findings from SC research on efficacy of public education campaigns to promote breast cancer screening, focusing on groups at highest risk for not being screened (i.e., small media campaigns; faith-based outreach)” was accomplished. The Witness project was implemented to reach AA women with breast/cervical cancer about breast cancer screening; trained breast/cervical cancer survivors to save lives by talking about their cancer experience. Projects were implemented in several areas of the state resulting in 79 women already trained, and 60 more to be trained this year.

**Develop a Campaign to Promote Physician Mammography Referral:** There was no evidence that progress was made to accomplish Strategy 4 (“Collaborate with the SC Medical Association, SC Nurse’s Association, Physician Assistant Associations, and the Carolina Medical Review Board to develop a campaign promoting referral for all women 40+ seen by providers in primary care or internal medicine practices.”)

**Increase Cervical Cancer Screening:** Objective 4 reads “By June 2010, increase the proportion of women at risk for cervical cancer who have received screening services within the preceding three years from 83% in 2002 to at least 90%.” The benchmarking apparently used

the standard population of females  $\geq 18$  years rather than the specified “women at risk.” Even so, a different baseline measure of cervical cancer screening in 2002 was observed (88.3% compared to 83%). The prevalence of cervical cancer screening in the past 3 years in women  $\geq 18$  years decreased from 88.3% in 2002 to 86.1% in 2008 leading to the conclusion that the objective to increase the cervical cancer screening rate to 90% was not met.

**Increase Early Detection of Prostate Cancer:** Objective 5 reads “By June 2010, increase the proportion of men newly diagnosed with prostate cancer at the localized stage from 72.6% in 2002 to at least 75%.” The proportion of men diagnosed with early stage prostate cancer increased from 72.6% in 2002 to 81.1% in 2006, so the objective was met.

**Convene Task Force on Prostate Screening Guidelines:** No evidence was uncovered to suggest Strategy 1 was accomplished. This strategy entailed convening a task force of experts to include African Americans and community activists to review screening guidelines to make recommendations for implementation of guidelines for best practices in SC.

**Increase Oral Cancer Exams:** Objective 7 was to increase the percentage of South Carolinians who had an oral examination from 23% in 2000 to 30%. This objective was not met, as the prevalence of oral cancer exams remained stable (23% in 2000; 23.5% in 2006).

**Increase Oral Cancer Early Detection:** Objective 8 read: “By June 2010, increase the proportion of oral/pharyngeal cancers newly diagnosed among African-American (AA) males at early stage (in-situ or localized) from 23% to at least 30%.” (The baseline year for this objective was not stated.) This objective was not met, as the proportion of oral cancer cases in AA men detected at the early stage declined from 22.1% in 2002 to 14.0% in 2006.

**Increase Early Detection of Esophageal Cancer:** Objective 9 was to increase the proportion of esophageal cancers newly diagnosed among African-American (AA) males at early stage from 20.5% to at least 33%.” This objective was not met, as the proportion of AA males diagnosed with early stage esophageal cancer was 16% in 2004 and 17% in 2008.

#### **C.4.b.6. Survivor & Family**

In the Survivor & Family chapter, 7 of 26 indicators (27%) were rated A1.

**Patient Navigation:** Objective 1 was to have trained patient navigators in 100% of ACOS certified hospitals. This objective is not completed but is being actively worked on, with navigation training in development. Strategy 1 was to identify the primary patient navigation models used across the state and provide education on the differing roles, responsibilities and training of the different professional and lay navigators. This strategy was accomplished via presentations at SCCA meetings on navigation models used in SC and nationally.

**Cancer Patient Resource Guide:** Strategy 1 is to compile an inventory of currently available resource information and referral agencies to be accessed on SCCA web site. This project is under development as a web-based resource directory.

**Pediatric Cancer Resource Guide:** Strategy 1, to “develop a pediatric cancer Family Resource Guide focusing on state-wide resources and survivor issues,” was accomplished. The pediatric cancer resource guide is available on the SCCA website and in hard copy. The strategy to “By June, 2008, conduct a training session on use of the Pediatric Cancer Family Resource Guide with patients and their families for individuals interested in volunteering as resource navigators” has not been conducted. Trainings were not done with patients and family (deferred); therefore, this strategy was not accomplished. Trainings in hospitals/major pediatric centers were conducted that included staff physicians and child care workers.

**Lion in the House Initiative:** Strategy 1, to work with ETV to promote the televised documentary on pediatric cancer “Lion in the House,” was accomplished. Strategy 2, to produce and air 3 PSAs related to pediatric cancer, was also accomplished. Strategy 3, to generate 3 newsworthy articles related to cancer survivorship and write  $\geq 6$  cancer survivor testimonials, was partially accomplished, with the testimonials but not news articles developed.

#### **C.4.b.7. Genetics**

In the Genetics chapter, zero of the 19 indicators were rated A1.

#### **C.4.b.8. Health Disparities**

Not applicable: All Health Disparities objectives/strategies are also in other chapters.

#### **C.4.c. Summary of Quantifiable Objectives with Outcome Data**

For measures that are purely quantitative in nature, such as those available from surveys like the Behavioral Risk Factor Surveillance System or the Youth Tobacco Survey or cancer incidence and mortality statistics from the Cancer Registry, we report trend data for all time periods available since the Cancer Plan was developed. See **Appendix 2** for summaries of the A1 rated indicators with quantitative data over time. We report the objectives alongside the years of available trend data, enabling progress toward these objectives to be tracked over time.

#### **C.4.d. Indicators with Relevant, but not exact Data Source**

Four objectives were identified for which quantitative data could be—but is not currently being—collected: skin protection, HPV vaccination, FOBT, and skin cancer screening.

**Skin Protection:** Objective 7 under the Prevention Section reads “By June 2010, increase the proportion of persons who use at least one of the following protective measures that may reduce the risk of skin cancer: avoid the sun between 10 am and 4 pm; wear sun-protective clothing; use sunscreen rated SPF 15 or higher; routinely check for unusual moles; and avoid artificial sources of ultraviolet light.” We have not identified a BRFSS measure which contains the required components to measure this objective. A question was asked in the 2005 BRFSS about skin protective measures which queried use of sunscreen, staying in the shade and wearing sun-protective clothing, but did not query checking for moles, avoiding UV exposure, or avoiding the sun between 10 and 4 PM. For practical reasons, we recommend that the objective align with the 2005 BRFSS measurement as follows: “By June 2010, increase the proportion of persons who regularly use at least one of the following protective measures that may reduce the risk of skin cancer: wear sun-protective clothing; use sunscreen rated SPF 15 or higher, or stay in the shade.” This series of questions would then need to be queried again in an upcoming BRFSS survey to assess change over time.

**HPV Vaccination:** Objective 9 in the Prevention chapter relates to HPV vaccination, but is not yet finalized. Currently it reads: “By June 2010, increase the (# or %) of females ages 11-26 who have been vaccinated with a cervical cancer vaccine. An accompanying workgroup note stated “Should this be reduce # or percentage of women with cervical cancer?, Or increase # or % of women who take preventive measures for cervical cancer? (regular pap tests & vaccination).” Our recommendation is that because HPV vaccines are a major cancer prevention breakthrough with enormous potential, it would be a worthwhile investment to collect information to measure the proportion of the eligible population (ages 11-26) who has been vaccinated. Because the age group for this recommendation overlaps with both the Youth Risk Behavior Survey and the Behavioral Risk Factor Surveillance Survey (adults 18+), data would need to be collected on both of these surveys to measure this objective. Alternately, a state-based baseline survey could be conducted to establish a baseline for HPV vaccine coverage.

**Fecal Occult Blood Test (FOBT):** Objective 1, Strategy 1 in the Early Detection chapter is to “Add a two-part BRFSS question asking individuals 50+ if they have been offered a FOBT within the last year and if they have returned the test.” These two questions have not yet been added to the BRFSS. We recommend considering an alternate measure that can currently be collected through BRFSS. It reads “A blood stool test is a test that may use a special kit at home to determine whether the stool contains blood. Have you ever had this test using a home kit?” Alternately, the original question may be viewed as critical, in which case the SCCA may consider identifying funds to collect the data using the indicator originally proposed.

**Skin Cancer Screening:** Objective 10 in the Early Detection chapter is a place-holder for a skin cancer screening objective still to be developed. Currently, no BRFSS items relate to skin cancer screening. Since skin cancer screening is not currently recommended by evidence-based screening guidelines, collection of this measure could potentially be deferred.

## **C.5. Allocation of Grants According to Cancer Plan Indicators**

See **Table 10** for a summary of SCCCA Cancer Plan Implementation Grants awarded according to Cancer Plan chapter. See **Table 11** for a summary of SC DHEC Regional Mini-Grants that were awarded according to Cancer Plan chapters. All SCCA Implementation Grants and DHEC Regional Mini-Grants are summarized in **Appendices 3 and 4**, respectively.

### **C.5.a. SCCA Cancer Plan Implementation Grants**

Since the SCCA Implementation Grants were established, 51 grants totaling \$465,042 have been funded (**Table 10**, for detailed award-by-award summary see **Appendix 3**). Award amounts varied substantially by year. In FY 05/06 (half-year of funding), \$50,924 was awarded, projects ranged from \$4,950-\$26,500. In FY06/07 \$124,950 was awarded (range: \$1,500-\$18,510 per project). In FY07/08, \$130,000 was awarded, ranging from \$1,800-\$30,000 per project. In FY08/09, \$99,168 was awarded, ranging from \$500-\$19,000 per project. In FY09/10, \$60,000 was awarded (range: \$2,000-\$14,889 per project).

Among the Cancer Plan's eight chapters, the Prevention (n=15) and Early Detection (n=14) chapters had the most funded Implementation Grants, followed by Advocacy (n=11) (these often overlapped with other chapters), Survivor & Family Issues (n=9), Patient Care (n=7), and Research (n=2). No funding was allocated to Genetics. Summarized below are assessments of funded projects within each Cancer Plan chapter.

#### **C.5.a.1. Prevention**

**Tobacco:** Eleven tobacco control projects totaling \$99,680 were funded. Five (total \$56,280) were to support smoke-free initiatives and two (total \$26,400) were for advocacy for the tobacco sales tax. One \$5,000 grant was to support youth advocacy against tobacco (Rage Against the Haze). Additionally, one \$12,000 grant was for healthcare provider training in tobacco cessation.

**Nutrition:** One \$500 grant was funded to purchase more Families Eating Smart and Moving More educational packages.

**Sun Safety:** 3 grants totaling \$8,450 were awarded for sun safety education.

**Areas in Prevention Chapter Not Funded:** Only one Implementation Grant (Families Eating Smart...) was to promote healthy eating or physical activity. School-based projects could include 1) physical activity and nutrition education, 2) mandatory physical education, and 3) improving healthy snack options in vending machines. Physical activity could also be promoted through environmental approaches (eg. green spaces, walking paths) and through collaborating with community organizations to promote healthy eating programs and policies. Cervical cancer prevention was another content area that was not funded, as none of the projects were to add HPV vaccination to the list of mandatory middle school vaccines, to assure funding for HPV vaccines and pap tests for the uninsured and through insurance companies, and to promote awareness of the preventability of cervical cancer through HPV vaccination and pap tests. Tobacco control projects were relatively well-funded, but some potentially fruitful areas of youth tobacco control work were not funded, such as school-based tobacco control activities.

#### **C.5.a.2. Early Detection**

**General Cancer Education:** Four grants were funded in the amount of \$60,236 for the Cancer Education Guide (CEG). One was to translate and use the CEG in a Latino population.

**Colorectal Cancer (CRC):** Five grants (total \$67,525) were awarded for CRC control. Two grants (\$14,900) were funded to support advocacy efforts for colorectal cancer coverage. One \$3,625 grant was funded to develop a database of information resources and educational webcasts related to CRC screening. A \$30,000 grant was awarded to conduct a CRC awareness campaign and another (\$19,000) to fund the work of the CRC Workgroup.

**Breast/Cervical Cancer:** One \$8,700 grant was for the Witness Project Expansion into SC.

**Prostate Cancer:** Three grants totaling \$21,079 were funded for prostate cancer control projects. A \$3,125 grant was funded to educate healthcare providers about prostate cancer. Two grants (total \$17,954) were to educate African American men about prostate cancer.

**Cancer Risk Material Development:** One \$5,000 grant was funded to update a cancer risk reduction brochure and to develop new partnerships for its distribution.

**Areas in Early Detection Not Funded:** No grants were funded for oral or esophageal cancer, despite Cancer Plan indicators for collaborating with healthcare providers to support oral cancer exams among African American (AA) men, supporting dissemination of new information related to oral or esophageal cancer prevention or early detection, and collaborating with faith-based and community initiatives to increase awareness in high risk AA males. No grants were funded in the area of promoting skin cancer examination, despite Cancer Plan indicators for educating healthcare providers and the public about skin cancer prevention and early detection. Additionally no projects were carried out to increase health promotion/disease prevention in the curricula of schools of medicine, dentistry, nursing and allied health sciences.

#### **C.5.a.3. Patient Care**

**Pain:** Four grants totaling \$64,550 were awarded to develop, market, and provide training on the SC Pain Initiative.

**Clinical Trials:** Two grants (\$11,024) were awarded for clinical trials, one to conduct education about clinical trials and the second to establish a professional clinical trials recruitment network.

**Indigent Care:** One grant (\$5,000) was funded to conduct an indigent care study.

#### **C.5.a.4. Survivorship**

**Resource Information for Cancer Patients:** Four grants (total \$21,500) were awarded to develop information resources for cancer patients and their caregivers. Two grants (\$7,000) were funded to develop a resource database of cancer projects. Another \$10,000 project was to develop a cancer resource guide for patients and their families. Additionally one grant funded the Lion in the House initiative, the SCCA network brochure and marketing the network.

**Survivorship:** Two grants totaling \$16,500 were funded to hold cancer survivorship conferences. One grant (\$3,080) was funded for survivor care plans and another (\$4,000) was to develop an addendum to the Lance Armstrong Cancer Survivor Notebook.

**Patient Navigation:** Three grants (total \$19,360) were funded to develop a statewide patient navigation program and training curriculum.

**Areas in Survivorship Not Funded:** Most objectives and strategies in the Survivorship chapter were addressed by SCCA-funded Survivorship Conferences to educate patients, providers, legislators, and policymakers. Two areas not addressed via Implementation Grants were to develop pediatric cancer information resources and increase programs available for providers.

#### **C.5.a.5. Research**

**Evaluation:** One grant was funded (\$13,500) to support a mammography registry project.

Another (\$14,889) was funded to evaluate the SC Cancer Plan.

**Areas in Research Chapter Not Funded:** No projects were funded in the areas of faculty recruitment, advocacy for reducing barriers to research, development of core research resources for recruitment, retention and compliance or the statewide tissue bank. No projects were funded for disseminating best practices to community physicians in rural areas.

Additionally, no projects were funded for developing a statewide research education campaign or developing partnerships between researchers, the community and community leaders.

#### **C.5.a.6. Advocacy**

**Advocacy Support:** A \$1,719 grant was for an SCCA educational briefing. Additionally, other cross-cutting work was carried out and reported above in other sections that involved advocacy, including grants to support smoke-free initiatives (n=5, \$56,280) and cigarette sales tax(n=3, \$26,400). Two grants (\$14,900) were funded to advocate for CRC coverage.

**Areas in Advocacy Not Funded:** No projects were funded for advocacy for breast/cervical cancer screening, diagnostics/treatment for the uninsured and for those insured through Medicaid and other insurance plans.

#### **C.5.a.7. Health Disparities**

**Cancer Disparities Planning :** One \$10,000 grant was for a cancer disparities dialogue.

#### **C.5.b. SC DHEC Regional Mini-Grants**

Since the DHEC Regional Mini-Grants were established, 43 grants have been funded (**Table 11**; detailed award-by-award summary see **Appendix 4**). Grant amounts varied from

\$160,00 in FY09 to \$315,000 in FY07, with award amounts that ranged from \$1,500 to \$56,457. Due to state budget cutbacks, funding for Mini-Grants has decreased during the past few years.

We assessed funding across the four sections of the Cancer Plan that were eligible for Regional Mini-Grants funds: Prevention, Early Detection, Advocacy, and Genetics. Of the funded projects, 35% addressed Prevention, 21% addressed Early Detection, and 44% addressed both Prevention and Early Detection. Four grants related to Advocacy; these overlapped with the Prevention and Early Detection chapters.

The most common grant activities funded through the DHEC Regional Mini-Grants were cancer education, cancer screening and healthy lifestyle education. All eight health regions conducted education about cancer screening guidelines and cancer risk factors. The Cancer Education Guide, a train the trainer module developed by the SCCA, was the most commonly used curriculum; cancer education was also conducted using the Risky Business curriculum, Best Chance Network materials, and other non-specified training formats.

Mini-grants were strongly aligned with Cancer Plan objectives and strategies in the following areas: cancer screening and risk factor education and awareness (breast, colorectal, prostate, cervical); nutrition and physical activity education, cancer screening (breast, colorectal, prostate, cervical), tobacco control (tobacco cessation provision; training healthcare, worksite and other community partners to conduct tobacco cessation counseling; and facilitating smoke-free workplace policies), and sun safety education and policy in daycares and schools. Below is a detailed summary of funded projects according to Cancer Plan chapter.

#### **C.5.b.1. Prevention**

All eight public health districts conducted some nutrition and/or physical activity education. The most commonly used curriculum for diet and nutrition education were the Body & Soul Program, a church-based nutrition and physical activity program; the Families Eating Smart, Moving More curriculum, a nutrition and physical activity program for families; and the Putting a Rainbow on Your Plate, and Color Me Healthy curricula, a nutrition education program

designed for elementary school children. Two contiguous health districts conducted a robust blend of community-wide childhood obesity prevention projects, such as nutrition and physical activity education and anthropometric measures in daycares and schools, working with school partners to develop school wellness policy, training healthcare providers in obesity surveillance and intervention, and community planning and conferences.

Tobacco control activities were conducted by five of the eight health districts. Three health districts directly provided tobacco cessation counseling, two trained healthcare providers in tobacco cessation and one distributed guidelines to healthcare providers, three trained business or community partners in tobacco cessation counseling, and two developed or supported a tobacco cessation referral system. Two of the eight health districts worked with worksite partners to develop smoke-free tobacco policy, two worked with community partners to support and inform smoke free legislation.

Sun safety activities using the Safe in the Sun curriculum were conducted by five of the eight health districts. Five trained daycare or elementary teachers in sun safety, two worked with these teachers to establish institutional policies regarding sun safety, and one health district provided landscaping technical assistance to help daycares develop naturally shaded areas for their children. Three public health districts implemented targeted tobacco control interventions that involved  $\geq 2$  tobacco control strategies.

Areas of community-based prevention that were not the focus of DHEC regional mini-grants included 1) youth tobacco prevention, cessation, and advocacy; 2) promotion of the SC DHEC Quitline as a resource for tobacco cessation; 3) local support of advocacy for the tobacco sales tax; 4) environmental approaches to promote physical activity such as promoting healthy vending machine options in schools and design of playgrounds to encourage healthy choices, and 5) promoting regular physical activity and nutrition as a regular activity of healthcare providers and through incorporation into school-based educational curriculum. No regional mini-grants used cancer genetics approaches to cancer prevention, such as education on the use of

family history for identifying those who may require genetic screening; dissemination of genetic counseling resources; and establishment of referral networks for genetic screening.

#### **C.5.b.2. Early Detection**

Six of the health districts carried out cancer screenings; these include screening for prostate cancer (n=6), breast cancer (n=4), colorectal cancer (n=3), and cervical cancer (n=2). Two health districts focused their efforts on educating state employees about their CRC cancer screening insurance benefit. One health district focused on marketing the availability of cancer screenings because cancer screening opportunities were not always utilized.

Targeted CRC education was a priority for three health districts. Two health districts implemented the “Coaches Versus Cancer” campaign featuring high school and college coaches on billboards and the use of presentations and promotional items at basketball games to provide awareness about CRC prevention. Two health districts conducted Shop Talk, a barber and beauty shop-based CRC awareness initiative. Two health districts focused on educating state employees about their insurance coverage for CRC; one of these two health district also focused on educating physicians on referral guidelines for CRC screening to promote referrals. Targeted CRC awareness campaigns which included two or more CRC awareness strategies were conducted in three health districts.

Areas of community-based early detection that were not the focus of DHEC regional mini-grants included: 1) addressing barriers and gaps to clinical breast exam education for healthcare providers; 2) collaboration to make cancer screenings more accessible and affordable in communities; 3) development of tracking systems for cancer re-screenings; 4) dissemination of new information on cervical cancer guidelines; 5) increasing health promotion content in schools of medicine, dentistry, nursing and allied sciences; 6) healthcare provider education about oral cancer exams and provision of oral exams; 7) education of providers on recognizing signs of skin cancer and provision of skin cancer exams.

Below we provide brief summaries of the regional mini-grant projects that were conducted by the eight public health districts during the past five years.

**C.5.b.3. Region 1 (Abbeville, Anderson, Edgefield, Greenwood, Laurens, McCormick, Oconee, and Saluda Counties):** Region 1 projects emphasized cancer education, healthy lifestyle programs and sun safety. Efforts during the 5-year funding period focused heavily on training a cadre of DHEC coordinators and community members to conduct breast, colorectal, cervical and prostate cancer education using the Community Education Guide. One year they conducted CRC screening using Fecal Occult Blood Tests and prostate cancer screening using PSA and DRE tests, with referral for abnormal screening results. They conducted targeted education about the need for CRC screening, which included a Lunch and Learn session for state employees to learn about CRC insurance coverage. They also worked on training community organizations to implement nutrition and physical activity education using the Body & Soul and the Families Eating Smart and Moving More curricula. Sun safety promotion was emphasized through activities with daycares/schools to train staff in sun safety practices, update sun protection policies, and provide landscape design assistance to expand shaded areas.

**C.5.b.4. Region 2 (Cherokee, Greenville, Pickens, Spartanburg, and Union Counties):** Region 2 projects emphasized tobacco control and cancer screening and education. Tobacco control activities included: 1) providing tobacco cessation counseling, 2) partnering with worksites to develop tobacco control programs, smoke-free policies, and to increase referrals to an tobacco cessation programs, 3) updated and distributed >1,000 Smoke-free Dining Guides, and 4) hosted a “Dedicate to Quit” event. Prostate, cervical, breast and CRC education and screening activities took place, particularly in their rural counties. They helped to deliver CRC events, such as the Coaches against Cancer initiative, the Shop Talk initiative, and the CRC Awareness Walk. Community members were trained to be trainers using the Cancer Education Guide. Nurses and lay health ministers were trained to be trainers in the Put a Rainbow on Your

Plate program. Additionally, daycare providers were trained in sun safety practices and assistance was provided to daycares to update their sun safety policies.

**C.5.b.5. Region 3 (Chester, Fairfield, Lancaster, Lexington, Newberry, Richland and York Counties):** Region 3 projects focused primarily on CRC awareness and screening. CRC awareness initiatives included the Shop Talk and March Madness campaigns, a Lunch and Learn session for employees to promote awareness of CRC screening insurance coverage, and CME education for physicians to promote referral for CRC screening. CRC screenings were conducted. They provided cancer education using the Cancer Education Guide train the trainer module. Diet/physical activity education took place with churches using the Body & Soul and Families Eating Smart and Moving More curricula. In Newberry County, healthcare providers were trained in tobacco cessation counseling and processes put in place to refer patients to tobacco cessation services. In Lancaster County, prostate cancer screenings were carried out and awareness information was developed and distributed to worksites.

**C.5.b.6. Region 4 (Chesterfield, Clarendon, Darlington, Dillon, Florence, Kershaw, Lee, Marion, Marlboro and Sumter Counties):** Region 3 projects emphasized cancer education and screening, including screenings for breast, colorectal (FOBT), cervical and prostate cancer. A survey of regional cancer screening providers was conducted to ascertain the available cancer screening services; efforts then focused on promoting available cancer screening opportunities. Cancer education training was provided using the Cancer Education Guide. Task force members were trained in the Body & Soul curriculum; they then educated church members, trained families in the Families Eating Smart and Moving More curriculum, and trained daycares in the Color Me Healthy curriculum. Training of healthcare providers in tobacco cessation counseling was promoted and local smoke free ordinance initiatives were supported.

**C.5.b.7. Region 5 (Aiken, Allendale, Bamberg, Barnwell, Calhoun, and Orangeburg Counties):** Projects focused primarily on cancer screening and healthy lifestyle education. Activities included breast and prostate screenings, cancer education using the Cancer

Education Guide and the Real Men Checking it Out curriculum, and a Father's Day Screening. They conducted combined prostate cancer, nutrition and physical activity education for churches and mason lodges, working with churches to implement the Body & Soul curriculum and to improve healthy food options. Train the trainer sessions used the Color Me Healthy curriculum. Policy and environmental change to improve physical activity was supported.

**C.5.b.8. Region 6 (Georgetown, Horry, and Williamsburg Counties):** Region 6 projects emphasized cancer and lifestyle education. They worked with churches to implement the Body & Soul program, the Families Eating Smart Moving More program and the MESS programs. They worked with churches to provide education about breast and prostate cancer, diet and exercise. They provided education on the Color Me Healthy nutrition program for Head Start staff and trained daycares about sun safety using the Safe in the Sun curriculum. Prostate cancer screenings were hosted.

**C.5.b.9. Region 7 (Berkeley, Charleston, and Dorchester Counties):** Region 7 projects emphasized tobacco control and obesity prevention. For their tobacco control initiative, they 1) trained DHEC staff as tobacco cessation counselors, 2) distributed tobacco cessation guidelines to healthcare providers, 3) trained healthcare providers and businesses in tobacco cessation counseling, 4) provided worksite tobacco cessation classes, and 5) advocated for smoke-free worksite policies. To target childhood obesity, they 1) trained Head Start staff on the Color Me Healthy program, 2) collected anthropometric data on all Head Start children, 3) created a Healthcare Provider Toolkit for childhood obesity, 4) developed school-based worksite wellness partnerships, 5) worked with schools to develop school wellness policies, 6) partnered with churches to implement the Body & Soul curriculum. They also trained daycare providers in sun safety and worked with them to implement a sun safety curriculum.

**C.5.b.10. Region 8 (Beaufort, Colleton, Hampton, and Jasper Counties):** Region 8 conducted projects to prevent childhood obesity that included 1) an obesity coalition was developed and a needs assessment carried out, 3) participated in a targeted obesity conference

to highlight the obesity problem, 4) promoted wellness policies, 5) provided nutrition and physical activity curriculum to program attendees for the Families Eating Smart and Moving More and the Color Me Healthy nutrition and physical activity curriculum, 6) educated daycare providers on nutrition and physical activity using the Color Me Healthy and Families Eating Smart and Moving More curriculums, 7) provided obesity prevention training and technical assistance for preschool teachers. For Head Start, they provided sun safety education and worked to develop sun safety policies.

#### **D. CONCLUSIONS**

The evaluation strategy described in this report is a novel, model plan for evaluating a state cancer plan. This evaluation strategy is a major step forward, as it represents a methodologically rigorous, data-driven plan to monitor progress and enhance planning. The major elements of the process were to: 1) organize the goals, objectives, and strategies and then rate them according to clarity and data availability; 2) focus the subsequent outcome evaluation on the indicators that were clear and had available data; 3) map the allocation of funded grants back to the cancer plan to characterize the distribution of funding across the various elements of the plan.

The evaluation process clearly highlighted the enormous information deficit that existed prior to this evaluation. Consequently, the preponderance of time invested in this evaluation was spent tracking down information that would ideally have been readily available. Thus, much more time was spent on collecting and summarizing the information than in synthesizing and interpreting the data. Nevertheless, a large amount of relevant data is summarized in this report for those involved in statewide cancer control to reflect upon. These data represent a useful first step in a process that will require continued emphasis and investment of resources. As a preliminary first step toward a more complete evaluation, caution is warranted in interpreting the data. For example, it is worthwhile to know that 33% of the indicators with A1 ratings were met, as this represents a major accomplishment. On the other hand, the A1 indicators may have

received the highest priority, and possibly as evaluation activities focus more holistically on the entire Cancer Plan the proportion of indicators accomplished could be considerably lower.

A major contribution was the compilation of the allocation of grant funds, and mapping these funding streams back to the Cancer Plan's goals, objectives and strategies. Detailed, prospective future monitoring of these allocations is essential for tracking progress and priority setting. For example, if important areas of the Cancer Plan have been left unaddressed by past Mini-Grants or Implementation Grants, these could be emphasized as priority areas for a future funding or become the topic of a special request for applications. Alternatively, areas of the plan that have been overly emphasized in the past could be identified as low priority areas for future funding. Although this report provides the most comprehensive assessment to date of the allocation of these funds, these represent approximations at best. Left unaddressed is the critical area of the actual outcome evaluations of each of these separate projects.

Based on this set of circumstances, the recommendations below relate more to improving the composition of the Cancer Plan and the need for routine tracking and data collection than to the actual progress toward the Cancer Plan's goals, objectives, and strategies.

## **D.1. Recommendations**

### **D.1.a. Re-Visit Objectives and Strategies with Poor Ratings**

Many objectives and strategies were found to be in need of improvement based on the rating scale employed. It will be useful to re-visit these Cancer Plan elements to consider editing to enhance clarity/precision and/or availability of outcome data. Without clearly defined indicators, it will be difficult to determine if objectives and strategies were accomplished.

### **D.1.b. Prospective Rating Process for New/Revised Objectives and Strategies**

New objectives and strategies should include specification of baseline data and anticipated year of completion. A rating process should be pro-actively in place to ensure clarity/precision and availability of outcome data (if applicable). Without clearly defined indicators, it will be difficult to determine if objectives and strategies were accomplished.

#### **D.1.c. Detailed Tracking of Status of Objectives/Strategies**

The Cancer Plan is critical to the mission of the DHEC Cancer Control Program and SCCA. However, the centralized record-keeping concerning the status of past and current indicators and how and why indicators had changed over time has been sub-optimal, leading to the recommendation that documentation be carefully, prospectively maintained. This will include capturing information on the status of previous indicators, formally documenting that status of objectives/strategies that were modified or discarded and reasons for the changes (e.g., accomplished, change in priorities, change in evidence, etc.) For objectives/strategies still active, actively tracking progress is clearly a priority.

#### **D.1.d. Ensure Alignment of Strategies to Accomplish Related Objectives/Goals**

An objective requires a clearly defined set of strategies tailored to accomplish the objective. This evaluation included a thorough review of objectives and their related strategies to identify when modifications to current strategies were needed to achieve objectives. However, this work is incomplete. Continuing progress to align strategies with objectives should remain an organizational priority.

#### **D.1.e. Evaluate Whether to Pro-Actively Address Data Gaps**

For important objectives for which data are not readily available, it is worth explicitly considering whether or not to invest resources to generate relevant data. If this is feasible at all, it is likely to be feasible for only one or a few objectives, so will require priority setting. Primary data collection usually requires a considerably greater investment of resources than secondary data collection. In considering this, it may be wise to pro-actively evaluate datasets that might be useful for evaluation, such as data from the certified cancer centers or linkage of Cancer Registry data with large insurance databases (such as Medicare, Medicaid, Blue Cross/Blue Shield). It may be useful to explore alternative existing data sources to use to evaluate indicators for which no obvious high-quality data source is available.

#### **D.1.f. Decide if Evidence-Based Strategies are a Priority**

In an era of evidence-based medicine and public health, it is noteworthy that certain objectives/strategies in the Cancer Plan are not currently supported by evidence-based guidelines. Examples include screening for oral cancer and skin cancer. It will be worth explicitly considering this issue and arriving at a decision as to whether Cancer Plan objectives should rely on evidence-based guidelines, rather than leaving this to the vagaries of chance and potentially introducing unevenness in approach to different sections of the Cancer Plan.

#### **D.1.g. Ensure Alignment of Funding Allocation with Institutional Goals**

A major contribution of this report is the compilation of the allocation of grant funds, and mapping these funding streams back to the Cancer Plan's goals, objectives and strategies. Detailed, prospective future monitoring of these allocations is essential for data tracking and priority setting. For example, if important areas of the Cancer Plan have been left unaddressed by past Mini-Grants or Implementation grants, these could be emphasized as priority areas for a future funding or become the topic of a special request for applications. Alternatively, areas of the plan that have been overly emphasized in the past could possibly be deemed low priority areas for future funding. Although this report provides the most comprehensive assessment to date of the allocation of these funds, these represent approximations at best.

#### **D.1.h. Invest in Outcome Evaluation of Funded Projects**

A critical, but as yet unaddressed question is whether or not the funded Implementation (and Mini-Grant) projects actually achieved their intended objectives. Outcome evaluations of each project is essential to learn what works and what does not work, to assess what projects are/are not worth future investment, etc. These projects represent a major core investment in statewide cancer control activity, adding to the importance of accountability, and adding further weight to the importance of outcome evaluations of each funded project.

#### **D.1.i. Address Inactive Chapters of the Cancer Plan**

Given the importance of cancer disparities in SC and the fact that is ostensibly a priority SCCA area, it was surprising that the Health Disparities chapter was a compilation of measures from elsewhere in the Cancer Plan that apparently was not independently developed. Clearly, this area requires focused attention in the future as an independent, stand-alone chapter.

The “Genetics” chapter of the plan has not been directly addressed since the plan was developed. The implications of this observation are not immediately clear, but suggest this a topic for reflection by the SCCA and DHEC Cancer Control leadership.

#### **D.1.j. Restate Cancer Incidence/Mortality Goals: Age-Adjusted Rates**

As accomplishing reducing the actual number of cancer cases and deaths may be complicated by population growth and aging patterns, restating these goals in terms of age-adjusted rates is warranted.

#### **D.1.k. Consider Revising Skin Protection, HPV vaccination, FOBT, Skin Cancer Screening Indicators**

A set of quantitative indicators for which data are not being collected was identified, namely assessing: skin protection measures, HPV vaccination coverage, FOBT by healthcare providers, and skin cancer screening. For skin protection, a simplified measure used in BRFSS in 2005 is worth considering for future use. HPV vaccines are a major cancer prevention breakthrough, and tracking vaccine uptake is a critical step, so it is worth considering creating a data source to capture information about the prevalence of HPV vaccination among the age-appropriate population. For FOBT by healthcare providers, a more general measure from BRFSS that provides information about what proportion of the population was screened is worth considering; however, if healthcare providers are the critical link for the use of FOBT, then a data source may need to be created to capture this data. For skin cancer screening, because skin-cancer screening is not currently considered an evidence-based screening practice, the collection of this measure could be deferred.

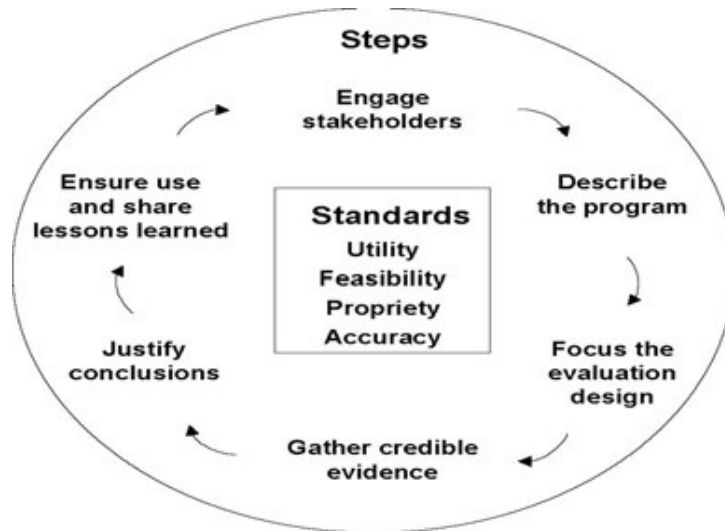
### **D.1.I. Institute Routine Data Collection and Monitoring**

Routine collection of high-quality data is needed to monitor and evaluate the Cancer Plan. This evaluation provides a start to conceptualizing the core set of evaluation variables needed for Cancer Plan evaluation. These include goals, objectives and strategies, history of changes to these measures over time, grants funded through Implementation Grants and Mini-Grants, and progress towards goals, objectives and strategies. We recommend that these and possibly other core evaluation data variables are routinely collected and tracked to monitor progress.

### **REFERENCES**

1. Centers for Disease Control and Prevention. Framework for program evaluation in public health. MMWR 1999;48 (No. RR-11).
2. Issel M. Health Program Planning and Evaluation: A Practical Systematic Approach for Community Health. Jones and Bartlett: Sudbury (MA), 2004.

**Figure 1: Overview of the CDC's Framework for Program Evaluation**



**Table 1. Summary of meetings where Cancer Plan Evaluation was discussed with stakeholders.**

- SCCA Annual Meeting Exhibit on the Cancer Plan Evaluation Project, October 2009;
- SCCA Research Task Force (former); July 28, 2009; held at the American Cancer Society in Columbia
- South Carolina Central Cancer Registry Surveillance Committee, March 26, 2009; held at MUSC
- the SCCA Board of Directors (ACS, Columbia), November 4, 2009; held at the American Cancer Society in Columbia
- SCCA Board Council Liaison Committee, March 23, 2010, meeting held by phone
- the SCCA Coordinating Council, April 20, 2010 (ACS, Columbia)

**Table 2. Examples of New Objectives and Strategies Added to the Cancer Plan**

<p><b>New Objective:</b> By December 2010, promote the use of ACS/NCCN approved pain management guidelines to 100% of the South Carolina ACOS certified cancer centers (Patient Care)</p>
<p><b>New Objective:</b> By June 2008, educate survivors about the array of programs that has shown success in increasing the quality of life of cancer survivors</p>
<p><b>New Strategy:</b> Promote the use of the Families Eating Smart and Moving More program to increase awareness of the benefits of regular physical activity as related to cancer prevention (Prevention).</p>
<p><b>New Strategy:</b> Collaborate with breast cancer service providers, and community organizations and businesses to recruit women who are rarely or never screened through the Cancer Education Guide (Early Detection).</p>
<p><b>Examples of Deleted Objectives and Strategies</b></p>
<p><b>Deleted Objective:</b> By 2006, assess and address the magnitude of indigent cancer care to improve access to care (Patient Care).</p>
<p><b>Deleted Objective:</b> By June 2006, obtain appropriate GIS data on cancer and potential environmental risks and conduct an awareness campaign on potential environmental risks in selected areas (Research).</p>
<p><b>Deleted Strategy:</b> Conduct town meetings at four targeted locations in SC to promote the increase in sales tax on cigarettes (Advocacy and Policy).</p>
<p><b>Deleted Strategy:</b> For intervention trials of all types, develop centralized resources to enhance compliance with protocols (Research).</p>
<p><b>Deleted Strategy:</b> Increase the availability of effective cessation programs (Prevention).</p>
<p><b>Deleted Strategy:</b> Develop a campaign with the SC Medical Association, SC Nurse's Association, Physician Assistant associations, and the Carolina Medical Review to promote mammography referral for all women 40+ seen by providers in primary care or internal medicine practices (Early Detection).</p>
<p><b>Examples of Changed Objectives and Strategies</b></p>
<p><b>Changed Objective:</b> Year, baseline and benchmark percentages changed (Prevention)</p> <p>Current: By June 2015, decrease the rate of tobacco use among adult South Carolinians (age 18+) from <b>21.9% to 12%</b> (SC BRFSS, 2007).</p> <p>Previous: By June 2010, decrease the rate of tobacco use among adult South Carolinians (18+) from <b>26% to 12%</b>.</p>
<p><b>Changed Objective:</b> Changed benchmark from being measurable to not being measurable (Early Detection) with deletion of benchmark percentage</p> <p>Current: By June 2010, increase the proportion of women age 40+ who have received a mammogram within the preceding two years to <b>greater than 74.6%</b>.</p> <p>Previous: By June 2010, increase the proportion of women age 40+ who have received a mammogram within the preceding two years from <b>76% to 80%</b>.</p>
<p><b>Changed Objective:</b> Changed measurement of timeframe between procedures from 10 to 5 years (Early Detection)</p> <p>By June 2010, increase the proportion of adults age 50+ who have had a colonoscopy or sigmoidoscopy</p>

<p>procedure within the past <b>10 years</b> from 49.2 to 53% (SC BRFSS, 2002).</p> <p>Objective 1: By June 2010, increase the proportion of adults age 50+ who have had a colonoscopy or sigmoidoscopy procedure within the past <b>5 years</b> from 49% to over 50%.</p>
<p><b>Changed Objective:</b> Objective in original SC Cancer Plan modified to be 4 strategies in current database. (Prevention)</p> <p>Current: <b>Increase the percentage of the population covered by comprehensive smoke free ordinances to 50+%</b></p> <p>Current: Increase the percentage of smoke free hospitals to 100%</p> <p>Current: Increase the percentage of smoke free colleges and universities to 100%</p> <p>Current: Increase the percentage of state agencies with smoke free government vehicle policies to 100%</p> <p>Previous: By June 2006, <b>increase the number of smoke-free facilities in the state including:</b> increase the number of hospitals with smoke-free campuses by two; increase to six the number of colleges/universities with campus-wide smoke-free policies and increase the number of state agencies with smoke-free government vehicle policies by one.</p>
<p><b>Changed Strategy:</b> Added to also increase use of screening services (Advocacy and Policy)</p> <p>Current: Work with insurance commission officials, key legislators and staff to promote changes in regulation/s/policies to increase private <b>cancer screening coverage and use of screening services.</b></p> <p>Previous: Work with insurance commission officials, key legislators and staff to promote changes in regulations/policies to increase cancer screening coverage" (Advocacy and Policy)</p>
<p><b>Changed Objective:</b> Specifies a mechanism for securing stable funding (Advocacy and Policy)</p> <p>Current: By 2010, secure stable state funding for comprehensive cancer control with a strong component for tobacco youth prevention and cessation.</p> <p>Previous: By 2008, ensure that <b>25% of SC Tobacco Settlement funds and tobacco sales tax is earmarked</b> for comprehensive cancer control</p>

**Table 3. Examples of Ratings for SC Cancer Plan Objectives**

Rating Category	Indicator	Rationale
<b>Examples of A1 Measures:</b>	<b>A1:</b> Objective 2 By June 2015, decrease the percentage of high school students in South Carolina using tobacco from 17.8% to 10%.	Measures that are rated “A1” are measurable as written because they are “A” clearly written AND “1” data is currently available to measure them
	<b>A1:</b> Objective 1: By June 2010, increase the proportion of adults age 50+ who have had a colonoscopy or sigmoidoscopy procedure within the past 10 years from 49.2 to 53% (SC BRFSS, 2002).	
	<b>A1:</b> Objective 8: By June 2010, increase the proportion of oral/pharyngeal cancers newly diagnosed among African-American males at early stage (in-situ or localized) from 22.1% to at least 30%.	
	<b>A1:</b> By July 2010, improve South Carolina’s state pain policy grade from C+ to B.	
<b>Examples of B1 Measures:</b>	<b>B1:</b> Strategy 4b. Increase the number of calls to the SC Quitline by 10% ( <i>Prevention, Objective 1, Strategy 4b</i> )	<b>Rationale:</b> “B” because baseline and benchmark measures are needed to make the strategy measurable (ie. 10% increase in calls from x calls in Year X to x calls in Year Y). “1” because data is available through DHEC to measure this strategy
	<b>B1:</b> By June 2007, secure legislative support to extend Medicaid coverage for screening, early detection, and treatment of colorectal cancer to indigent low income, uninsured persons ( <i>Advocacy and Policy, Objective 2</i> )	<b>Rationale:</b> “B” because clarification is needed to define a definition for “indigent low income, uninsured” and to distinguish between "screening" and "early detection"? “1” because this objective can be measured directly (yes/no) by Medicaid policy review
<b>Other Measures: A3</b>	<b>A3:</b> By June 2010, 50% of people affected by early onset colon cancer (diagnosed < age 50 years) will have met with a genetics professional to learn about risk reduction strategies ( <i>Genetics, Objective 4</i> )	<b>Rationale:</b> “A” because clearly written; however “3” because there is no data being collected to measure the objective
<b>B2</b>	<b>B2:</b> Educate SC residents about the known and researched risk factors specific to breast cancer in order to dispel myths and reduce the likelihood of misinformation about breast cancer ( <i>Objective 2, Strategy 5</i> )	<b>Rationale:</b> “B” because strategy would need more detail to determine if it had been accomplished. For example: What are the known myths about breast cancer? What is a "researched risk factor"? “2” because currently there is no identified data source to measure this strategy. Would this be measured by ad campaign coverage, survey results, etc?
<b>C3</b>	<b>C3:</b> Identify existing resources in communities to promote access to care in South Carolina ( <i>Patient Care, Objective 2, Strategy 3</i> )	<b>Rationale:</b> “C” because the strategy is unclear as written. For example: what level is a "community"?; What types of resources? Is the strategy to identify resources, to promote access or both? “3” because as written, it is not clear what data could be used to evaluate this measure

**Table 4. Variables in Cancer Plan Evaluation Database.**

<b>A. Variables Contained in Spreadsheets for Each Section of the Cancer Plan</b>	
Goal	Specifies goal(s) each objective/ strategy links back to in the Cancer Plan
Section Topic	Heading that describes the specific content area (such as Tobacco, Colorectal Cancer Screening, Patient Navigation )
Indicator #	Unique, sortable identifier for each indicator (that ties back to Section #)
Original Plan Location	The assigned objective or strategy number from the original 2005 Cancer Plan
Objective	Stated objective from plan
Strategy	Stated strategy from plan
Year Created	Year indicator created
Data Source	Source(s) of information that will be used to construct indicator
Indicator Construction	Specific formula and details for construction of indicator
Indicator Quality	A-C A=Can be evaluated as written B=Can be evaluated with minor changes C=Can be evaluated only with major changes
Ease of Measurement	1-3 1=Data currently available to measure 2=Secondary data collection required to measure 3=Primary data collection required to measure
Indicator Notes	Notes about the indicator
History of Changes to Indicator	Detailed history of the changes made to the evaluation indicator
Baseline Year	Year for baseline measure to be collected
Baseline Measure	Year and numerical value (ie. 28% in Year 2004) for measurement at baseline
Benchmark Year	Year by which measure is to be achieved
Benchmark Measure	The stated improvement anticipated between baseline and final measure
Result Year	Year that result was achieved and/or year that it was targeted to be achieved
Result Measure	Quantitative measure stating the change from baseline to final measurement, specifying if the indicator was accomplished.
Status	Whether indicator is currently being addressed by any SCCA groups or implementation grants (Accomplished/Inactive/Active)
Status Notes re: Progress	Text history of progress towards achieving the measure
Funded Projects	Projects that have been funded to help achieve the objective/strategy (includes both CDC Implementation Grants and SC DHEC Regional Mini Grants)
<b>B. Variables Contained in Spreadsheets for Each Section of the Cancer Plan</b>	
Grant title	Grant title assigned for grant award
Start date	Date that grant funding began
End date	Date that grant funding ended
Grant type	Grant mechanism (Implementation Grant or Regional Mini-Grant)
Grant recipient	Health District that received the grant
Grant project leader	Contact person for grant information
Region	Region where grant was awarded
Grant counties	Counties in the region funded by the grant
Amount	Amount of funding received
Summary scope of work	Brief statement of area to be targeted by grant
Project component	Specific strategies to be implemented
Indicators addressed	Indicators from the Cancer Plan that the grant is intended to target
Project type	Brief description of project component (breast cancer screening, etc.)
Numbers served	Number of deliverables provided (eg. # of colonoscopies, # of conference attendees, etc.)
Unit	Unit of service (exams, individuals, worksites, etc.)
Project counties	Counties where grant services will be delivered
Project notes	Notes about the project

**Table 5. Key Words for Searching the Cancer Plan**

<b>Key Words related to Cancer Types</b>	Cancer, Colorectal, Breast, Lung, Prostate, Cervical, Skin, Oral, Head and Neck, Esophageal, Ovarian
<b>Key Words related to Cancer Screening</b>	Screening, Early detection, Mammography, Mammogram, Clinical breast exam, CBE, Self breast exam, Pap test, HPV, Human Papillomavirus, Vaccine, Prostate Screening Antigen, PSA, Digital Rectal Exam, DRE, Informed decision-making, Colonoscopy, Sigmoidoscopy, Fecal Occult Blood Test, FOBT
<b>Key Words related to Lifestyle Factors</b>	Tobacco, Cigarette, Smoking, Cessation, Alcohol, Diet, Nutrition, Physical Activity, Exercise, Skin Protection, Sunscreen use
<b>Key Words related to Population Type</b>	Public, Patient, Survivor, Caregiver, Family, Healthcare professional, Cancer center, African American, Men, Child, Youth, Men, Daycare, Worksite, Business, School, Community organization, Research staff, Indigent
<b>Key Words for Action</b>	Education, Training, Awareness, Dissemination, Legislation, Advocacy, Policy, Assessment, Data collection, Survey, Prevention, Treatment, Infrastructure development, Risk assessment, Risk reduction, Capacity-building, Outreach, Patient care, Inventory cancer research resources, Diagnostic, Institutional support
<b>Other Key Words</b>	Disparities, Navigation, Navigator, Quality of Life, Genetics, Genetic counseling, Tissue bank, Faculty recruitment, Staff recruitment, SCCA recruitment, Cancer Research, Pain, Palliative care, Transportation, Access to care, Curriculum, Media campaign, Clinical guidelines, Medicaid, Insurance, Long term needs, Environment, Program, Cancer control, Referral system, Coalition, SC Quitline, Ordinance, Ban, Cancer Education Guide, Computer system, Family history, Resource guide, Clinical trial, Barrier to care, Conference, Environmental risk, Research participation, Sales tax, Settlement

**Table 6. Summary of the Proportion of Objectives (n=63) and Strategies (n=206) in the Cancer Plan that were Measurable as Written**

<b>Cancer Plan Chapter</b>	<b>Total # Objectives</b>	<b>Measurable Objectives n (%)</b>	<b>Total # Strategies</b>	<b>Measurable Strategies n (%)</b>
<b>Patient Care</b>	<b>9</b>	<b>2 (22%)</b>	<b>38</b>	<b>10 (26%)</b>
<b>Advocacy and Policy</b>	<b>5</b>	<b>4 (80%)</b>	<b>21</b>	<b>5 (24%)</b>
<b>Research</b>	<b>11</b>	<b>2 (18%)</b>	<b>32</b>	<b>3 (9%)</b>
<b>Prevention</b>	<b>9</b>	<b>4 (44%)</b>	<b>40</b>	<b>8 (20%)</b>
<b>Early Detection</b>	<b>11</b>	<b>8 (73%)</b>	<b>48</b>	<b>4 (8%)</b>
<b>Survivor &amp; Family</b>	<b>12</b>	<b>1 (8%)</b>	<b>14</b>	<b>7 (50%)</b>
<b>Genetics</b>	<b>6</b>	<b>0 (0%)</b>	<b>13</b>	<b>0 (0%)</b>
<b>Health Disparities</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>
<b>Total</b>	<b>63</b>	<b>21 (33%)</b>	<b>206</b>	<b>37 (18%)</b>

**Table 7. Summary of Ratings for SC Cancer Plan Objectives (n=63)**

Rating for Availability of Data for Evaluation	Rating for Quality of Objective		
	A= Measurable as written N (%)	B= Measurable with minor changes N (%)	C= Measurable with major changes n (%)
<b>1 = Data currently available to evaluate</b>	19 (30%)	2 (3%)	0 (0%)
<b>2 = Secondary data collection required</b>	3 (5%)	12 (19%)	4 (6%)
<b>3 = Primary data collection required</b>	4 (6%)	9 (14%)	10 (16%)

**Table 8. Data to assess progress toward Cancer Plan goals related to cancer incidence and cancer mortality.**

<b>To Decrease Cancer Incidence in South Carolina</b>								
Goal 1: Reduce the number of new cancer cases								
<b>Measure</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>Goal</b>
Number of Cases	20,146	20,948	22,349	21,940	22,811	23,576	23,663	Is there a ↓?
Rate per 100,000	508.2	522.0	535.6	516.2	525.2	528.3	510.8	Is there a ↓?
<b>To Decrease Cancer Mortality in South Carolina</b>								
Goal 2: Reduce the number of deaths attributable to cancer								
<b>Measure</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>Goal</b>
Number of Cancer Deaths	8,370	8,434	8,472	8,684	8,492	8,818	9,063	Is there a ↓?
Rate per 100,000	216.3	215.3	207.5	207.8	199.1	201.1	198.0	Is there a ↓?

\* Rates are age-adjusted to the 2000 population.

**Table 9. Status of Progress towards Measurable Objectives and Strategies in the Cancer Plan**

Cancer Plan Chapter	# Measurable Objectives & Strategies	Status		
		Not Met n (%)	Partially Met n (%)	Met n (%)
Prevention	12	9 (75%)	0 (0%)	3 (25%)
Early Detection	12	8 (66%)	0 (0%)	4 (33%)
Advocacy	9	1 (11%)	3 (33%)	5 (56%)
Patient Care	12	11 (92%)	0 (0%)	1 (8%)
Research	5	3 (60%)	0 (0%)	2 (40%)
Survivor & Family	8	3 (38%)	1 (13%)	4 (50%)
Genetics	0	0 (0%)	0 (0%)	0 (0%)
Health Disparities	--	--	--	--
<b>Total</b>	<b>58</b>	<b>35 (60%)</b>	<b>4 (7%)</b>	<b>19 (33%)</b>

\* Met but poor progress: Two objectives were formally met, but this represented no improvement. Under Prevention, % getting moderate exercise daily was calculated from those who engaged in some moderate physical activity; therefore, physical activity increased in this population, but the measure did not represent the entire population. When a more standard index measure of adequate physical activity was used, the population declined in physical activity over time. Under Early Detection, the baseline data used to develop the original measure for clinical breast exam screening rate was incorrect and too low; therefore, the measure was formally achieved, but using corrected data from BRFSS, there was a decline in clinical breast exams over time.

**Table 10. Summary of SCCA Cancer Plan Implementation Grants by Cancer Plan Chapter.**

Section of Cancer Plan	2005-2006		2006-2007		2007-2008		2008-2009		2009-2010		All Years	
	# of grants	Award Amount	# of grants	Award Amount	# of grants	Award Amount	# of grants	Award Amount	# of grants	Award Amount	# of grants	Award Amount
Prevention *	2	\$31,450	6	\$47,300	3	\$21,000	3	\$10,660	1	\$8,612	15	\$119,030
Tobacco	1	\$26,500	4	\$36,900	2	\$19,000	1	\$8,668	1	\$8,612	9	\$99,680
Nutrition/PA	0	\$0	0	\$0	0	\$0	1	\$500	0	\$0	1	\$500
Sun Safety	1	\$4,950	1	\$5,400	1	\$2,000	1	\$1,500	0	\$0	4	\$13,850
Cancer Risk Education	0	\$0	1	\$5,000	0	\$0	0	\$0	0	\$0	1	\$5,000
Early Detection *	1	\$9,500	4	\$30,660	3	\$62,600	4	\$52,500	1	\$7,780	13	\$163,040
Colorectal Cancer	1	\$9,500	2	\$9,025	1	\$30,000	1	\$19,000	0	\$0	5	\$67,525
Breast/Cerv. Cancer	0	\$0	0	\$0	0	\$0	1	\$8,700	0	\$0	1	\$8,700
Prostate Cancer	0	\$0	1	\$3,125	1	\$3,500	1	\$14,454	0	\$0	3	\$21,079
Skin Cancer	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Oral Cancer	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Esophageal Cancer	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Cancer Education	0	\$0	1	\$18,510	1	\$29,100	1	\$10,346	1	\$7,780	4	\$65,736
Patient Care *	2	\$9,974	2	\$30,000	2	\$17,400	1	\$15,000	2	\$12,000	9	\$84,374
Pain	0	\$0	1	\$23,950	1	\$15,600	1	\$15,000	1	\$10,000	4	\$64,550
Clinical Trials	1	\$4,974	1	\$6,050	0	\$0	0	\$0	0	\$0	2	\$11,024
Pall. Care	0	\$0	0	\$0	0	\$0	0	\$0	1	\$2,000	1	\$2,000
Indigent Care	1	\$5,000	0	\$0	0	\$0	0	\$0	0	\$0	1	\$5,000
MD Ed Cancer Care	0	\$0	0	\$0	1	\$1,800	0	\$0	0	\$0	1	\$1,800

Advocacy *	4	\$52,925	2	\$37,500	2	\$19,000	1	\$8,668	2	\$10,331	11	\$128,424
Smoke-Free	1	\$26,500*	1	\$7,500*	1	\$5,000*	1	\$8,668*	1	\$8,612*	5	\$56,280
Tobacco Tax	1	\$17,400*	0	\$0	1	\$14,000*	0	\$0	0	\$0	2	\$31,400
Colorectal CA Coverage	1	\$5,400*	1	\$30,000*	0	\$0	0	\$0	0	\$0	2	\$35,400
Clinical Trial Recruitment	1	\$3,625*	0	\$0	0	\$0	0	\$0	0	\$0	1	\$3,625
Education Briefing	0	\$0	0	\$0	0	\$0	0	\$0	1	\$1,719	1	\$1,719
Research	0	\$0	0	\$0	0	\$0	1	\$13,500	1	\$14,889	2	\$28,389
Cancer Plan Evaluation	0	\$0	0	\$0	0	\$0	0	\$0	1	\$14,889	1	\$14,889
Mamm. Registry	0	\$0	0	\$0	0	\$0	1	\$13,500	0	\$0	1	\$13,500
Survivor & Family	0	\$0	4	\$17,440	3	\$24,500	2	\$7,500	2	\$15,000	11	\$64,440
Resource Info for Cancer Pts	0	\$0	1	\$1,500	1	\$5,500	0	\$0	1	\$10,000	3	\$17,000
Patient Navigation	0	\$0	1	\$8,360	0	\$0	1	\$6,000	1	\$5,000	3	\$19,360
Survivor Conference	0	\$0	0	\$0	1	\$15,000	1	\$1,500	0	\$0	2	\$16,500
Survivor Care Planning	0	\$0	1	\$3,080	1	\$4,000	0	\$0	0	\$0	2	\$7,080
Lion in the House	0	\$0	1	\$4,500	0	\$0	0	\$0	0	\$0	1	\$45,000
Genetics	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
Health Disparities	--	--	--	--	--	--	--	--	--	--	--	--
Total †		\$50,924		\$125,400		\$125,500		\$99,168		\$60,000		\$456,492

\* There is overlap between grants funded through Advocacy and Policy and three other committees: overlap with prevention section as a result of cross-cutting tobacco tax and smoke free advocacy content; overlap with early detection due to overlap with colorectal cancer advocacy, and overlap with patient care due to advocacy for clinical trials). Therefore, the totals for all columns may not sum up to the funding amount. The following grants were reported under two sections: Smoke-free 2006, CRC screening advocacy 06/07, Rage against the Haze, 06/07, Cigarette tax advocacy 06/07, Clinical trial recruitment 06/07, colorectal cancer awareness 07/08, smokefree 07/08, smokefree 08/09, smokefree 09/10, Cigarette tax advocacy 07/08.

† For the total grant funds row, we excluded overlapping funding amounts, so that each project only gets counted once; therefore the total should reflect total funds distributed.

**Table 11. Summary of DHEC Regional Mini-Grants by Cancer Plan Chapter.**

Region	Prevention			Early Detection					Award Amount	
	Tobacco	Nutrition & PA Ed	Sun Safety	Breast Screen	Prost Screen	Cervical Screen	CRC Screen	CRC Aware		Cancer Ed
<b>FY 05/06</b>										
Region 1					X		X		X	\$50,062
Region 2 East	X	X							X	\$56,457
Region 2 West					X		X			\$36,868
Region 3					X				X	\$6,415
Region 3	X									\$9,953
Region 4				X	X	X	X		X	\$35,880
Region 7	X									\$44,688
<b>Total Projects</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>4</b>	<b>\$240,323</b>
<b>FY 06/07</b>										
Region 1		X	X					X	X	\$35,000
Region 2 East					X				X	\$35,000
Region 2 West	X	X							X	\$35,000
Region 3							X	X	X	\$35,000
Region 4		X		X	X				X	\$35,000
Region 5		X			X				X	\$35,000
Region 6		X			X					\$35,000
Region 7	X	X								\$35,000
<b>Total Projects</b>	<b>2</b>	<b>6</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>6</b>	<b>\$280,000</b>
<b>FY 07/08</b>										
Region 1			X					X	X	\$35,000
Region 2 East					X				X	\$17,500
Region 2 West	X								X	\$17,500
Region 3							X	X		\$35,000
Region 4				X	X	X	X		X	\$35,000
Region 5				X	X				X	\$35,000
Region 6					X				X	\$35,000
Region 7	X		X							\$35,000
Region 8		X								\$35,000
<b>Total Projects</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>6</b>	<b>\$280,000</b>
Region	Prevention			Early Detection						
	Tobacco	Nutrition	Sun	Breast	Prost Screen	Cerv	CRC	CRC	Cancer Ed	Award

		& PA Ed	Safety	Screen		Screen	Screen	Aware		Amount
<b>FY 08/09</b>										
Region 1		X	X							\$25,000
Region 2	X		X					X		\$25,000
Region 3								X		\$25,000
Region 4	X	X							X	\$25,000
Region 5		X							X	\$25,000
Region 6		X		X	X				X	\$25,000
Region 7		X								\$25,000
Region 8		X								\$25,000
<b>Total Projects</b>	<b>2</b>	<b>6</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>\$200,000</b>
<b>FY 09/10</b>										
Region 1		X	X							\$20,000
Region 2	X		X		X			X	X	\$20,000
Region 3		X								\$20,000
Region 4	X	X							X	\$20,000
Region 5		X								\$20,000
Region 6	X	X			X				X	\$20,000
Region 7		X								\$20,000
Region 8		X	X							\$20,000
<b>Total Projects</b>	<b>3</b>	<b>7</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>\$160,000</b>
<b>FY 05/06-FY09/10 COMBINED</b>										
Region 1	0	3	4	0	1	0	1	2	3	\$165,062
Region 2	5	2	2	0	4	0	1	2	6	\$243,325
Region 3	1	1	0	0	1	0	2	3	2	\$131,368
Region 4	2	3	0	3	3	2	2	0	5	\$150,880
Region 5	0	3	0	1	2	0	0	0	3	\$115,000
Region 6	1	3	0	1	4	0	0	0	3	\$115,000
Region 7	3	3	1	0	0	0	0	0	0	\$159,688
Region 8	0	3	1	0	0	0	0	0	0	\$80,000
<b>Total Projects</b>	<b>12</b>	<b>21</b>	<b>8</b>	<b>5</b>	<b>15</b>	<b>2</b>	<b>6</b>	<b>7</b>	<b>22</b>	<b>\$1,160,323</b>

**Appendix 1. Summary of Evaluation Results for “Evaluable Measures” by Chapter in the South Carolina Cancer Plan**

<b>Appendix 1a: PATIENT CARE</b>				
<b>Objective</b>	<b>Baseline Year</b>	<b>Baseline</b>	<b>Benchmark Year</b>	<b>Benchmark</b>
Objective 1D. By July 2010, improve South Carolina’s state pain policy grade from C+ to B.	2008	C+	2010	Data not yet available, but steps have been taken that should result in pain grade improvement: 1) Consensus statement between SC Board of Nursing and SC Board of Pharmacy; SC Medical Board did not sign on but adopted Federation of State Medical Board policy; 2) Guide for practicing physicians “Responsible Opioid Prescribing” being distributed to all MDs in SC.
Objective 1E. By June 2010, improve South Carolina’s state grade of “D” to a “C” on the Center to Advance Palliative Care Report Card.	2008	D	2010	Data not yet available, but description above applies here.
Strategy 1. Identify current palliative care programs and resources in South Carolina and compile a directory for use by the public and health care professionals.	2008	Not yet accomplished	2010	No evidence this was accomplished.
Strategy 2. Partner with the Survivor and Family Issues Task Force to add the palliative care resource directory information into the SCCA Adult and Pediatric Resource Guides (hard copy and web versions).	2008	Not yet accomplished	2010	No evidence this was accomplished.
Strategy 3. Produce a printed tool (post card, etc.) to promote the availability of the palliative care resource information and distribute to SCCA members and partners.	2008	Not yet accomplished	2010	No evidence this was accomplished.
Strategy 4. Develop printed materials which can be utilized to promote education and understanding of palliative care to SCCA members, partners, cancer survivors and family members, and the public.	2008	Not yet accomplished	2010	No evidence this was accomplished.
Strategy 1a. Survey radiation oncology centers on issues related to patient transportation.	2008	Not yet accomplished	2010	Survey of radiation oncology centers was conducted to obtain contact information for a transportation resource expert at each

				institution. This strategy was accomplished.
Strategy 1b. Complete the survey of cancer treatment centers in state related to transportation issues and prioritize needs.	2008	Not yet accomplished	2010	This strategy was not accomplished. Resurvey not yet done; the resurvey will be a detailed interview with medical staff to prioritize transportation needs.
Strategy 1c. Identify current and potential transportation resources in South Carolina and organize information geographically by the eight DHEC Health Regions.	2008	Not yet accomplished	2010	No evidence this was accomplished. This next step is contingent upon Strategy 1b being accomplished.
Strategy 1d. Produce transportation resource report by DHEC regions and distribute to South Carolina hospital based cancer centers and to SCCA members and networks.	2008	Not yet accomplished	2010	No evidence this was accomplished. This next step is contingent upon Strategy 1b being accomplished.
Strategy 2b. Partner with the Survivor and Family Issues Task Force to provide transportation resource information in the SCCA Adult and Pediatric Resource Guides (hard copy and web versions).	2008	Not yet accomplished	2010	No evidence this was accomplished. This next step is contingent upon Strategy 1b being accomplished.
Strategy 4. Re-survey radiation oncology centers routinely to assess changes.	2008	Not yet accomplished	2010	No evidence this was accomplished. This next step is contingent upon Strategy 1b being accomplished.

**Appendix 1b: ADVOCACY AND POLICY**

<b>Objective</b>	<b>Baseline Year</b>	<b>Baseline</b>	<b>Benchmark Year</b>	<b>Benchmark</b>
Objective 1. To secure sustained legislative support to extend Medicaid coverage for treatment of breast and cervical cancer to all low, income uninsured women in South Carolina	2005	Medicaid Option 3 not yet in place	2010	In 2006 Option 3 treatment coverage was incorporated into Medicaid budget; it was taken out in 2009 (January-March) and then reinstated ; SCCA and partners advocated for reinstatement. This objective was accomplished and coverage has been sustained over time.
Objective 2. By June 2007, secure legislative support to extend Medicaid coverage for screening, early detection, and treatment of colorectal cancer to indigent low income, uninsured persons.	2004	Not yet accomplished	2010	Coverage only for people who already have Medicaid; not covered for people without Medicaid to be screened, diagnosed and treated yet. This objective was partially accomplished.

Strategy 1. Research the experiences of other states on obtaining Medicaid coverage; develop a briefing paper on issue.	2004	Not yet accomplished	2007	SCCA partners informally researched the experiences of CO, MD and NY by speaking with their Medicaid program officials. This strategy was accomplished.
Objective 4: By June 2006, increase the SC sales tax on cigarettes to \$1.00 per pack.	2004	Not yet accomplished	2010	Tobacco tax of 50 cents was accomplished in 2010. Therefore this objective is partially accomplished, which was to raise the tax to 1.00 per pack.
Strategy 1. Develop and implement/disseminate a plan to educate and inform SC citizens regarding the rationale for increased user's fees (sales tax) on tobacco products.	2004	Not yet accomplished	2010	Continually done in partnership with SCCA, ACS and SC Tobacco Collaborative. Accomplished.
Strategy 3. Ensure the SC Dept. of Education collect/ secure data regarding youth behavior via Youth Risk Behavior Surveillance Survey; recruit a Dept of Educ. representative for SCCA.	2004	Ongoing	2010	YRBSS continues to be done; therefore this strategy is accomplished. However, this strategy is not a priority and is therefore an inactive strategy
Strategy 4. Conduct town meetings at four targeted locations in SC to promote the increase in sales tax on cigarettes.	2004	Not yet accomplished	2010	Town hall meetings done in Florence and Charleston in partnership with SCCA, ACS and SC Tobacco Collaborative. This objective to host four town hall meetings was partially accomplished (ie. two were hosted)
Strategy 5a. Gain support of the necessary number of legislators to support tax increase to ensure passage.	2004	Not yet accomplished	2010	Conducted 3 meetings with legislators in Orangeburg, Columbia and Kingstree (PeeDee) ; done in partnership with SCCA, ACS and SC Tobacco Collaborative. This strategy was accomplished because the tobacco tax increase. was achieved.
Objective 5. By 2010, secure stable state funding for comprehensive cancer control with a strong component for tobacco youth prevention and cessation. SC State Budget (25% of tobacco funds and tobacco tax would go to comprehensive cancer control)	2004	Not yet accomplished	2010	"Comprehensive state funding" stalled; however, 5 million is in house tobacco tax bill to address youth prevention; (not yet passed). Not yet accomplished.

**Appendix 1c: RESEARCH**

<b>Objective</b>	<b>Baseline Year</b>	<b>Baseline</b>	<b>Benchmark Year</b>	<b>Benchmark</b>
Objective 1: By August 2005, produce a report prioritizing cancer research in SC	2004	Not yet accomplished	2005	This objective was accomplished. Published in the Journal of the SC Medical Association online in July, 2005 and in hard copy in 2006.
Strategy 1. Hire a public relations firm/individual to work with the SCCA to develop/create the core underpinnings of the campaign and its priority messages.	2004	Not yet accomplished		No evidence that this was accomplished.
Strategy 2. Create a model study participant recruitment campaign that capitalizes on the statewide public relations campaign, which can be used by a variety of research disciplines in cancer control.	2004	Not yet accomplished		No evidence that this was accomplished.
Objective 8. By October 2008, develop and oversee a Statewide Tissue Bank, which will collect cancer specimens from all pathology services associated with the three largest medical centers in South Carolina and provide technical assistance to all other entities that treat cancer patients in SC.	2005	Not yet accomplished	2008	Phillip Buckhaltes established the tissue bank and had primary oversight over it until he recently moved to MCG. Currently there are over 500 Palmetto Health patients in the tissue bank, 60 from Greenville, and 20 from Spartanburg. This objective was accomplished.
Strategy 4. Ensure that tissue bank resources can be used for epidemiologic research; ensure linking of these data with descriptive patient information obtained from other state resources (e.g., SCCCR) and data collected as part of approved (at local IRBs) human subjects research.	2005	Not yet accomplished		There is currently no process in place to request tissue in the tissue bank. HSSC is in the process of changing the structure of the tissue bank and will decide who can access tissue, how it can be requested and whether identifiers will be linked to the tissue (planning to use CABig format). So far, tissue that has been provided to the tissue bank is in a de-identified format. Therefore, this strategy has not been achieved yet.

**Appendix 1d: PREVENTION**

<b>Objective</b>	<b>Baseline Year</b>	<b>Baseline</b>	<b>Benchmark Year</b>	<b>Benchmark</b>
Objective 1. By June 2010, decrease the rate of tobacco use among adult South Carolinians (age 18+) from 26% to 12% (SC BRFSS, 2003).	2003	25.5%	2010	Decrease from 25.5% in 2003 to 20.0% in 2008 (Other years: 2004=24.3%; 2005=22.5% 2006=22.3%; 2007=21.9%) Not yet accomplished.
Strategy 4b. Increase the number of calls to the SC Quitline by 10%	2007	4793	2009	Not accomplished yet. Calls decreased from 2007 (4793 calls) to 2009 (2212 calls)
Strategy 6b. Increase the percentage the population covered by comprehensive smoke free ordinances to 50+%	06/01/10	31.3%	2015	This is a new strategy with very recent baseline data; will take at least a year or so before it can be measured.
Strategy 6c. Increase the percentage of smoke free hospitals to 100%	02/14/08	48 out of 70 hospitals smoke free (excludes VA and rehab hospitals)	2015	Not yet accomplished
Strategy 6d. Increase the percentage of smoke free colleges and universities to 100%	03/01/10	27 out of 59 campuses smokefree) includes public and private 4-year, 2 year technical and 2 year private	2015	Not yet accomplished
Strategy 6e. Increase the percentage of state agencies with smoke free government vehicle policies to 100%	2010	Thought to be 100%-- verifying	2015	Accomplished
Objective 2 By June 2015, decrease the percentage of high school students in South Carolina using tobacco from 17.8% to 10%	2005	24.4%	2015	Decreased from 24.4% in 2005 to 18.7% in 2007 (36% was baseline reported in SCCA cancer plan; cannot replicate this %, so used revised objective from updated cancer plan). Progress made, but objective not yet

				accomplished
Strategy 4. Increase the percentage of school districts that have tobacco prevention/ cessation education integrated into their curricula to 100%.				No evidence that this was accomplished
Strategy 6. Increase the percentage of HS smokers who participate in cessation programs from 5.8% to 10%	2005	5.8%	2007	Increased from 5.8% in 2005 to 10.9% in 2007. This strategy was accomplished.
Objective 5. By June 2010, increase the proportion of the SC population that consumes at least five servings of fruits and vegetables from 23.9% to 50% (SC BRFSS, 2003).	2003	18.7%	2010	Decrease between 2003 and 2007 (2003=22.3%; 2005=21.2%; 2007=18.7%); This objective was not accomplished.
Objective 6. By June 2010, increase the proportion of adults who engage regularly in moderate physical activity for at least 30 minutes per day from 23.5% to 30% (SC BRFSS, 2003). *	2003	23.5%	2007	The proportion of adults who engage in regular moderate physical activity for at least thirty minutes per day increased incrementally (23.5% in 2003, 22.5% in 2004, 29.2% in 2005, 30.7% in 2007). The objective to increase the proportion of adults who exercise daily for at least 30 minutes to 30% was achieved. We observed this indicator measures daily moderate physical activity only among those who report moderate physical activity; therefore, it does not include information on those who are not involved in moderate physical activity. Using a more standard BRFSS measure, the index measure for individuals who meet physical activity recommendation which is defined as Moderate physical activity for 30 or more minutes per day, five or more days per week or vigorous physical activity for 20 or more minutes per day, three or more days per week, the proportion of the population meeting physical activity

				guidelines remained constant (46.2% in 2003; 45.0% in 2004, 45.3% in 2005, 46.5% in 2007). If this more standard measure of physical activity had been used as the objective, this objective would not have been accomplished.
Strategy 1. Add vaccine to required list for middle school girls entering school (with an informed parent/guardian opt out)	2005	Not required for middle school	2010	This strategy was not achieved. The HPV vaccine is strongly recommended but not required for middle school entry for girls.

**Appendix 1e: EARLY DETECTION**

<b>Objective</b>	<b>Baseline Year</b>	<b>Baseline</b>	<b>Benchmark Year</b>	<b>Benchmark</b>
Objective 1: By June 2010, increase the proportion of adults age 50+ who have had a colonoscopy or sigmoidoscopy procedure within the past 10 years from 49.2 to 53% (SC BRFSS, 2002).	2002	49.2%	2008	Increased from 49.2% in 2002 to 65.6% in 2008. (2001=46.7%; 2002=49.2%; 2003=55.3%; 2004=55.9%; 2006=59.5%; 2008=65.6%). This objective was accomplished.
Strategy 1: Add a two-part BRFSS question asking individuals 50+ if they have been offered a Fecal Occult Blood Test (FOBT) within the last year and if they have returned the test.	2002	Not included in BRFSS	2008	This measure has not been incorporated into BRFSS; therefore, this strategy was not accomplished. Could use more generic BRFSS question: A blood stool test is a test that may use a special kit at home to determine whether the stool contains blood. Have you ever had this test using a home kit?
Objective 2: By June 2010, increase the proportion of women age 40+ who have received a clinical breast exam (CBE) within the preceding two years from 77.4% to 82% (SC BRFSS, 2002)	2002	86.7%	2008	Decrease in CBE over time (1999=88.5%; 2000=91.3%; 2002=86.7%; 2004=84.4%; 2006=83.1%; 2008=83.5%). Note: cancer plan had 77.4% as 2002 baseline, but this doesn't match data from BRFSS coordinator. Therefore technically the objective of 82% was accomplished, but there has actually been a decline in CBEs based on registry data we obtained.
Objective 3: By June 2010, increase the proportion of women age 40+ who have received a mammogram within the preceding two years from 76% to 80% (SC BRFSS, 2002).	2006	74.5%	2008	Mammography remained fairly stable (2002=75.6%; 2004=72.1%; 2006=74.5%; 2008=74.9%); therefore the objective to increase to 80% was not accomplished.
Strategy 2: Implement findings from SC research on efficacy of public education campaigns to promote breast cancer screening, focusing on groups at highest risk for not being screened (ie, small media campaigns; faith-based outreach).	2004	Not yet accomplished	2009	This strategy was accomplished through the Witness project. This project reaches AA women with breast and cervical cancer about breast cancer screening; trained breast or cervical cancer survivors to save lives by talking about their cancer experience; project

				implemented in Greenwood, then in upstate, peedee and midlands. then in Orangeburg, Bamberg, Allendale, trained; 79 women trained in program through scca funds; another 60 this year. Strategy accomplished.
Strategy 4: Collaborate with the SC Medical Association, SC Nurse's Association, Physician Assistant Associations, and the Carolina Medical Review Board to develop a campaign promoting referral for all women 40+ seen by providers in primary care or internal medicine practices.	2004	Not yet accomplished	2010	No evidence that this was accomplished.
Objective 4: By June 2010, increase the proportion of women at risk for cervical cancer (including never/rarely screened, uninsured, age-specific populations) who have received screening services within the preceding three years from 83% to at least 90% (SC BRFSS, 2002).	2006	86.8%	2008	There was subtle decline in cervical cancer screening over time (2002=88.3%; 2004=87.1%; 2006=86.8%; 2008=86.1%). Therefore the objective to increase cervical cancer screening to 90% was not accomplished.
Objective 5: By June 2010, increase the proportion of men newly diagnosed with prostate cancer at the localized stage from 72.6% to at least 75% (SC BRFSS, 2002).	2004	80.4%	2006	Stage at diagnosis for prostate cancer increased (2002=72.6%; 2004=80.4%; 2005=81.1%; 2006=81.1%). The objective to increase early staging to 75% was accomplished.
Strategy 1: Convene a task force of experts to include African Americans and community activists to review current national screening guidelines and make recommendations for implementation of guidelines for best practice in SC.	2000	Not yet accomplished		No evidence this was accomplished.
Objective 7: By June 2010, increase the percentage of South Carolinians who report having had an oral examination from 23 to 30%. (SC BRFSS, 2002).	2000	23.0%	2006	There was little change in oral cancer screening (23% in 2000, 22.4% in 2002; 23.5% in 2006). The objective to reach 30% of the public to have had oral cancer screening was not achieved.
Objective 8: By June 2010, increase the proportion of oral/pharyngeal cancers newly diagnosed amongn African-American males at early stage (in-situ or localized) from 22.1% to at least 30%.	2004	18.9%	2006	Incremental decline in early stage diagnosis of oral/pharyngeal cancer based on data we obtained from SCCCR staff (2002=22.1%; 2004=18.9%; 2005=14.5%; 2006=14.0%); therefore the objective to increase to 30% was not accomplished.

Objective 9: By June 2010, increase the proportion of esophageal cancers newly diagnosed among African-American males at early stage (in-situ or localized) from 20.5% to at least 33%	2004	16.4%	2006	Fluctuation in early stage esophageal cancer diagnosis (2004=16.4%; 2005=20.8%; 2006=16.7%); The objective to increase early stage diagnosis to 33% was not accomplished.
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**Appendix 1f: SURVIVOR AND FAMILY**

<b>Objective</b>	<b>Baseline Year</b>	<b>Baseline</b>	<b>Benchmark Year</b>	<b>Benchmark</b>
Objective 1: By June 2010, having trained patient navigators in 100% of ACOS certified hospitals.	2007	Not done yet	2010	Statewide patient navigation not in place yet; however planning of patient navigation and navigation training are still active. This objective has not yet been accomplished. .
Strategy 1: By June 2007, identify the primary patient navigation models being utilized across the state and provide education on the differing roles, responsibilities and training of the different professional and lay navigators.	2007	Not done yet	2007	Presentations on patient navigation—panel on patient navigation with 4 different institutions. This was accomplished.
Strategy 1: By June 2009, compile an inventory of currently available resource information and referral agencies to be accessed on SCCA web site. Explore feasibility of producing hard copy of resource directory.	2007	Not done yet	2010	In development. Julie Houston working on web-based resource directory. Not doing hard copy. Not accomplished yet.
Strategy 1: By June 2008, develop a pediatric cancer Family Resource Guide focusing on state-wide resources and survivor issues.	2007	Not done yet	2007	Accomplished. Hard copy and on website
Strategy 1: By June 2008, conduct a training session on use of the Pediatric Cancer Family Resource Guide with patients and their families for individuals interested in volunteering as resource navigators.	2007	Not done yet		Training not done with patients and family (deferred to be part of patient navigation training). Therefore strategy not accomplished.  As a note, trainings in hospitals were done by Anthony Coggiola who went to each major pediatric centers and trained staff physicians, child care workers.
Strategy 1: By September 2007, work with ETV to promote the televised documentary on Pediatric Cancer – “Lion in the House”	2007	Not done yet	2008	Lion in the House was produced and aired on TV. Objective accomplished.
Strategy 2: By June 2009, produce and air 3 PSAs related to pediatric cancer	2007	Not done yet		This was likely done after Lion in the House, but unable to confirm. Believe to be accomplished.

Strategy 3: By June 2009, generate 3 news-worthy articles related to cancer survivorship. Write a minimum of six testimonials of cancer survivors.	2007	Not done yet		Andreal Huffman collected 6 testimonials of cancer survivors. No evidence that newspaper articles done yet. Strategy was partially accomplished.
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**Appendix 1: GENETICS**

No evaluable indicators

**Appendix 1: HEALTH DISPARITIES**

All indicators in the Health Disparities were taken from other sections within the Cancer Plan.

**Appendix 2. Summary of results for thirteen “A1” rated indicators (measurable with outcome data available) with quantitative outcome data over time.**

<b>1. Increase Tobacco Use among Adults</b>						
Prevention Section; Objective 1. By June 2010, decrease the rate of tobacco use among adult South Carolinians (age 18+) from 26% to 12%						
2003	2004	2005	2006	2007	2008	Goal
25.5%	24.3%	22.5%	22.3%	21.9%	20.0%	12% (NOT MET)

Source: SC BRFSS Online Query and Annual Reports

<b>2. Decrease Tobacco Use among High School Students</b>			
Prevention Section; Objective 2: By June 2010, decrease the percentage of high school students in South Carolina using tobacco from 17.8% to 10%			
2005	2006	2007	Goal
24.4%	19.1%	18.7%	10% (NOT MET)

Source: South Carolina Youth Tobacco Survey 2005-2007 Reports

\*Note: The percentages we obtained from SC YTS reports are slightly different from the SCCA baseline measure.

<b>3. Increase Participation in Tobacco Cessation Programs among High School Students</b>			
Prevention Section, Objective 2; Strategy 6: Increase the percentage of HS smokers who participate in cessation programs from 5.8% to 10% (SC BRFSS 2005)			
2005	2006	2007	Goal
5.8%	5.8%	10.9%	10% (MET)

Source: South Carolina Youth Tobacco Survey Reports

<b>4. Increase Fruit and Vegetable Consumption among Adults</b>			
Prevention Section; Objective 5. By June 2010, increase the proportion of the SC population that consumes at least five servings of fruits and vegetables from 23.9% in 2003 to 50% (SC BRFSS, 2003).			
2003	2005	2007	Goal
22.3%	21.2%	18.7%	50% (NOT MET)

Source: SC BRFSS Online Query and Annual Reports

<b>5. Increase Moderate Physical Activity among Adults</b>					
Prevention Section; Objective 6: By June 2015, increase the proportion of adults who engage regularly in moderate physical activity for at least 30 minutes per day from 23.5% to 30% (SC BRFSS, 2003). *					
2003	2003	2004	2005	2007	Goal
% as currently written	23.5	22.5%	29.2%	30.7%	30% (MET)
% meeting physical activity recommendation	46.2%	46.0%	45.3%	46.5%	---

Source: SC BRFSS Online Query and Annual Reports; \* It appears that this measure came from the question “How many days per week do you do these moderate activities for at least 10 minutes at a time?.” This question

was asked only of respondents who reported doing moderate activities at least 10 minutes at a time. A more standard indicator of physical activity is the created index measure of individuals who meet physical activity recommendation “Moderate physical activity for 30 or more minutes per day, five or more days per week or vigorous physical activity for 20 or more minutes per day, three or more days per week.

<b>6. Increase Colonoscopy/Sigmoidoscopy Use among Adults 50+</b>						
Early Detection Section; Objective 1: By June 2010, increase the proportion of adults age 50+ who have had a colonoscopy or sigmoidoscopy procedure within the past 10 years from 49.2 to 53% (SC BRFSS, 2002)						
<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2006</b>	<b>2008</b>	<b>Goal</b>
46.7%	49.2%	55.3%	55.9%	59.5%	65.6%	53% (MET)

Source: SC BRFSS Online Query and Annual Reports

<b>7. Increase Clinical Breast Exams among Women 40+</b>						
Early Detection Section, Objective 2: By June 2010, increase the proportion of women age 40+ who have received a clinical breast exam (CBE) within the preceding two years from 77.4% to 82% (SC BRFSS, 2002). *						
<b>1999</b>	<b>2000</b>	<b>2002</b>	<b>2004</b>	<b>2006</b>	<b>2008</b>	<b>Goal</b>
88.5%	91.3%	86.7%	84.4%	83.1%	83.5%	82.0% (MET)

Source: Data obtained via data request to Ryan Lewis, SC BRFSS Coordinator

\* Note: 2002(?) baseline of 77.4% does not match data obtained from BRFSS Coordinator.

<b>8. Increase Mammograms among Women 40+</b>				
Early Detection Section; Objective 3: By June 2010, increase the proportion of women age 40+ who have received a mammogram within the preceding two years from 76% to 80% (SC BRFSS, 2002).				
<b>2002</b>	<b>2004</b>	<b>2006</b>	<b>2008</b>	<b>Goal</b>
75.6%	72.1%	74.5%	74.9%	80% (NOT MET)

Source: SC BRFSS Online Query and Annual Reports

<b>9. Increase Cervical Cancer Screening among Women at Risk for Cervical Cancer</b>				
Early Detection Section; Objective 4: By June 2010, increase the proportion of women at risk for cervical cancer (including never/rarely screened, uninsured, age-specific populations) who have received screening services within the preceding three years from 83% in 2002 to at least 90%				
<b>2002</b>	<b>2004</b>	<b>2006</b>	<b>2008</b>	<b>Goal</b>
88.3%	87.1%	86.8%	86.1%	90.0% (NOT MET)

Source: SC BRFSS Online Query and Annual Reports

\* Note: It appears this indicator was calculated from % of adult women screened for cervical cancer in past 3 years (or was it calculated from a population subset as described in indicator?).

<b>10. Increase the Proportion of Prostate Cancers Detected at Local Stage</b>				
Early Detection Section; Objective 5: By June 2010, increase the proportion of men newly diagnosed with prostate cancer at the localized stage from 72.6% in 2002 to at least 75%				
2002	2004	2005	2006	Goal
72.6%	80.4%	81.1%	81.1%	75% (MET)

Source: Margaret Ehlers, SC Central Cancer Registry

\* Data stated in the SCCA baseline value is slightly different from value we obtained from SCCCR.

<b>11. Increase Oral Exams for Mouth Cancer</b>			
Early Detection Section, Objective 7: By June 2010, increase the percentage of South Carolinians Who report having had an oral examination from 23% in 2000 to 30%			
2000	2002	2006	Goal
23%	22.4%	23.5%	30.0% (NOT MET)

Source: SC BRFSS Online Query and Annual Reports

<b>12. Increase the Proportion of Oral Cancers Detected at Early Stage among African American Men</b>				
Early Detection Section; Objective 8: By June 2010, increase the proportion of oral/pharyngeal cancers newly diagnosed among African-American males at early stage (in-situ or localized) from 22.1% to at least 30%.				
2002	2004	2005	2006	Goal
22.1%	18.9%	14.5%	14.0%	30% (NOT MET) *

Source: Margaret Ehlers, SC Central Cancer Registry

Note: Indicator was already >13.2% in 2004.

<b>13. Increase the Proportion of Esophageal Cancers Detected at Early Stage among African American Men</b>			
Early Detection Section: Objective 9: By June 2010, increase the proportion of esophageal cancers newly diagnosed among African-American males at early stage (in-situ or localized) from 20.5% to at least 33%			
2004	2005	2006	Goal
16.4%	20.8%	16.7%	33% (NOT MET)

Source: Margaret Ehlers, SC Central Cancer Registry

### Appendix 3. Summary of SCCA Cancer Plan Implementation Grants Awarded 2006-2010.

Grant Title	Start	End	Amount	Project Component
Special Olympics Sun Safety	7/1/06	6/30/07	4,950	Sun safety
Prevention-Smoke free facilities	1/1/06	6/30/06		Smoke free facilities
Patient Care-Clinical trials education	1/1/06	6/30/06		Clinical trials education
Patient Care-Indigent care study	1/1/06	6/30/06		Indigent care study
Advocacy/Policy-Colorectal screening coverage	1/1/06	6/30/06		Colorectal screening coverage
Advocacy/Policy-Tobacco tax increase	1/1/06	6/30/06		Tobacco tax increase
Family/Survivor-Care resource system	1/1/06	6/30/06		Care resource system
Family/Survivor-Patient navigation	1/1/06	6/30/06		Patient navigation
Family/Survivor-Lion in the House	1/1/06	6/30/06		Lion in the House
Early Detection-Patient education guide	1/1/06	6/30/06		Patient education guide
Early Detection-Clinical breast exam	1/1/06	6/30/06		Clinical breast exam
Early Detection-Colorectal study	1/1/06	6/30/06		Colorectal study
Colorectal cancer screening coverage	7/1/06	6/30/07	5,400	Advocate for passage of SC legislation requiring compliance with screening standards Increase number of insurers covering CRC screening
"Rage Against the Haze" Promotion	7/1/06	6/30/07	5,000	Conduct Youth Tobacco Prevention Advocacy Training Event Increase number of trained youth advocates Increase media coverage & # of legislative supporters
Cancer Education Guide training	7/1/06	6/30/07	18,510	Hire project coordinator (SCCA employee-Part time) Conduct 50 CEG community trainings Conduct 3 facilitator trainings (2 english; 1 spanish)
Professional education-Tobacco cessation	7/1/06	6/30/07	12,000	Produce new tobacco cessation packet for MDs (PHS guidelines, Quitline, CME credits) Distribute information to 2000 SC family practitioners
Brochure update "Reduce Cancer Risk"	7/1/06	6/30/07	5,000	Update "reduce cancer risk" brochure Develop new avenues/partnerships for dissemination
SCCA Providers/Resource Network	7/1/06	6/30/07	4,500	Expand "Lion in the House" cancer resources network Develop SCCA networking resource brochure and marketing plan Utilize network partners to promote cancer plan objectives
Statewide Patient Navigation Network	7/1/06	6/30/07	8,360	Develop statewide network of patient navigation programs

				Develop curriculum of patient navigator training, standards and evaluation Conduct 2 lay navigator training sessions
"Project Bank" cancer resource database	7/1/06	6/30/07	1,500	Develop web-based databank of state cancer projects Develop mechanism for data gathering, updating and promotion
Cigarette tax increase campaign	7/1/06	6/30/07	12,400	Conduct paid media campaign re: cigarette tax increase Develop legislative tracking capacity for SCCA website
Clinical Trials Recruitment program	7/1/06	6/30/07	6,050	Establish professional clinical trials network Develop clinical trials promotional materials (lay/profession) Complete at least 1 presentation to healthcare professionals
CRC screening database	7/1/06	6/30/07	3,625	Create interactive SCCA webbased CRC Resource Directory Market to healthcare providers and public; publicize capacity data Develop 2 webcasts to enhance professional education about screening
SC Pain Initiative Program	7/1/06	6/30/07	23,950	Hire project coordinator (SCCA employee-Part time) Develop SCPI webbase information brochure and marketing plan Conduct 4-5 meetings/year and attend national conferences/trainings
Professional education-Prostate cancer	7/1/06	6/30/07	3,125	Provide national speaker (prostate cancer) for SC Family Practice Meeting Provide marketing plan/materials to promote meeting Distribute SCCA promotional and educational materials at meeting
Survivorship "care plans"	7/1/06	6/30/07	3,080	Develop and promote program for addressing QOL issues SCCA involvement in national survivorship conference/training
Smoke-free Columbia	7/1/06	6/30/07	7,500	Conduct media campaign (magazine, radio, promo materials) Increase # of endorsers and petition signers Create website to track supporters/volunteers
Continuation of Cancer Education Guide	7/1/07	6/30/08	23,600	Continuation of Cancer Education Guide
Addendum to the Livestrongt Survivorship Notebook	7/1/07	6/30/08	4,000	Addendum to the Livestrongt Survivorship Notebook
Colorectal Cancer Awareness Campaign	7/1/07	6/30/08	30,000	Colorectal Cancer Awareness Campaign
Increase Cigarette Tax by \$.93	7/1/07	6/30/08	14,000	Increase Cigarette Tax by \$.93
Hold a Cancer Survivorship Confreence in SC	7/1/07	6/30/08	15,000	Hold a Cancer Survivorship Confreence in SC
SC Pain Initiative	7/1/07	6/30/08	15,600	SC Pain Initiative
Education healthcare providers on cancer practice guidelines	7/1/07	6/30/08	1,800	Education healthcare providers on cancer practice guidelines
Sun Safety Practices	7/1/07	6/30/08	2,000	Sun Safety Practices

Smoke -free SC	7/1/07	6/30/08	5,000	Smoke -free SC
Prostate Cancer Educational Event for AA Men in SC	7/1/07	6/30/08	3,500	Prostate Cancer Educational Event for AA Men in SC
Cancer Disparities Dialogue	7/1/07	6/30/08	10,000	Cancer Disparities Dialogue
Cancer Information Clearinghouse/Database	7/1/07	6/30/08	5,500	Cancer Information Clearinghouse/Database
SC Pain Initiative	7/1/08	6/30/09	15,000	SC pain initiative
Breast and Cervical Cancer Ed/Screening for Latinas: Spanish CEG	7/1/08	6/30/09	10,346	Breast and Cervical Cancer Ed/Screening for Latinas: Spanish CEG
Statewide Patient Navigation Program	7/1/08	6/30/09	6,000	Statewide Patient Navigation Program
Hold a Cancer Survivorship Conference in SC	7/1/08	6/30/09	1,500	Hold a Cancer Survivorship Conference in SC
Families Eating Smart, Moving More Additional Packages	7/1/08	6/30/09	500	Families Eating Smart, Moving More Additional Packages
Mammography Registry	7/1/08	6/30/09	13,500	Mammography Registry
Sun Safety Practices	7/1/08	6/30/09	1,500	Sun Safety Practices
Smokefree SC	7/1/08	6/30/09	8,668	Smokefree SC
CRC Workgroup Funding	7/1/08	6/30/09	19,000	CRC Workgroup Funding
Witness Project Expansion into SC	7/1/08	6/30/09	8,700	Witness Project Expansion into SC
African American Men and Prostate (AAMAP) Phase II	7/1/08	6/30/09	14,454	African American Men and Prostate (AAMAP) Phase II
Palliative Care	7/1/09	6/30/10	2,000	Provide cost of speakers/trainers for 1-day Palliative Care Conference
Patient Navigation Network	7/1/09	6/30/10	5,000	Patient navigator network
Cancer Resource Guide	7/1/09	6/30/10	10,000	Cancer resource guide
Cancer Education Guide	7/1/09	6/30/10	7,780	Cancer education guide
Smoke Free SC	7/1/09	6/30/10	8,612	Smoke free SC
Evaluation of the SCCA-Cancer Plan Implementation	7/1/09	6/30/10	14,889	Evaluation of the SC Cancer Plan
SC Pain Initiative	7/1/09	6/30/10	10,000	SC pain initiative
SCCA Educational Briefings	7/1/09	6/30/10	1,719	SCCA educational briefings

**Appendix 4. Summary of DHEC Regional Mini-Grants Awarded from 2006-2010.**

<b>Region</b>	<b>Start</b>	<b>End</b>	<b>Project Component</b>
Region 1	7/1/05	6/30/06	1600 adults educated re: prostate, breast, cervical and colorectal cancer 104 CRC screenings (FOBT with referral process for abnormal) 232 prostate screenings (PSA and rectal exam)
Region 2	7/1/05	6/30/06	48 individuals counseled in tobacco cessation 23 worksites (12000 emps; 2900 smokers) in process of developing tobacco education/cessation programs 4 worksites (1050 emps) implemented "Risky Business" program 75 nurses/lay health ministers trained as trainers in "Put a Rainbow on your Plate" program
Region 2	7/1/05	6/30/06	42 CRC screenings (FOBT) 16 CRC screenings (colonoscopy) 86 prostate screenings (PSA) 226 prostate screenings (PSA)
Region 3	7/1/05	6/30/06	Developed partners/Distributed prostate awareness materials to 40 businesses' employees/customers 85 prostate screenings (PSA with referral process)
Region 4	7/1/05	6/30/06	36 healthcare providers trained in tobacco cessation counseling/referral (w/ educ. materials) Set up smoking cessation referral system 230 tobacco cessation referrals
Region 4	7/1/05	6/30/06	19 trained as trainers in "Cancer Education Guide" 200 trained in "Cancer Education Guide" 200 breast screenings 100 prostate screenings 100 cervical screenings Colorectal screening (FOBT distributed)
Region 7	7/1/05	6/30/06	DHEC staff trained as trainers in tobacco cessation counseling 99 additional staff members trained in tobacco cessation counseling 777 tobacco cessation counseling guidelines distributed to providers 18 healthcare providers trained in tobacco cessation counseling 63 counseled in tobacco cessation Restaurant survey on tobacco policy Worksite cessation classes Workplace smoke-free policies being advocated
Region 1	7/1/06	6/30/07	7 churches implement Body and Soul 30 new coordinators to be trained in CEG CRC Lunch and Learn for 50 state employees 6 sun safety puppet shows 50 daycare professionals to be trained in sun safety 3 daycare sites to implement sun safety policy

Region 2 East	7/1/06	6/30/07	2 prostate screening events for 350+ men (60% AA) 10 education sessions to church groups
Region 2 West	7/1/06	6/30/07	Tobacco cessation education to 5 businesses/community groups Implement 1 Dedicate to Quit cessation series TA to 5 businesses/community agencies on smoking policy and/or program development Update smokefree dining guides, distribute 1000 as pocket guides Risk factor education at 5 worksites using CEG,Risky Business program 2 community groups receive training in 5 A Day Conduct an upstate meeting on issues related to CRC resources/screening Recruit 3 partners to refer to GFPs cessation support group
Region 3	7/1/06	6/30/07	CRC awareness multimedia campaign 10 CEG trainings Lunch and learn with State Employees on new CRC screening guidelines/cancer coverage CME sessions on CRC screening and increasing referrals for 50+ Presentation at SC GI Association Annual Meeting 3 free Saturday cancer screening clinics for uninsured
Region 4	7/1/06	6/30/07	Conduct 25 breast/prostate screening educational events to reach 250+ AA 40+ Develop flyers of breast/prostate screening opportunities 3 breast screening events to include 100 screening mams and 10 diagnostic mams 3 prostate screening events to include 100 PSA tests Train task force members in Body & Soul Taskforce members educate church members Use to promote annual luncheon
Region 5	7/1/06	6/30/07	Use BCN materials to promote self-breast exams, mammograms and PSA screenings Expand prostate screening effort with Real Men Checking It Out Conduct CEG training Conduct 2 train the trainer workshops, Train 4 daycares & 4 churches in Color Me Healthy Media message campaign/distribute materials re: positive behavior Educate 30+% AA men in 5 targeted churches/3 masons lodges re prostate CA, nutrition, PA, tobacco
Region 6	7/1/06	6/30/07	3 churches adopt Body & Soul Program 2 prostate cancer screening events with 30-50 men screened or referred Train Head Start staff in Color Me Healthy 5-2-1-0 Implement Color Me Healthy 5-2-1-0
Region 7	7/1/06	6/30/07	Train 10 businesses in "ALA Freedom from Smoking" 60% of trained businesses will host 2 cessation series Partner with 8 churches to become "Body & Soul" partners Conduct 1 "Body & Soul" intervention with 50%+ of the congregation 50% of "Body & Soul" partners will develop one nutrition/PA policy change Hold conference with teachers in Jasper county to develop a wellness policy

			Provide materials and TA throughout the year for these teachers Provide school nurses with computer software to track ht/wt for students in grades 3,5,8
Region 1	7/1/07	6/30/08	Provide CRC education programs in worksites Provide CEG programs in churches and worksites Provide sun safety programs for students and teachers in public schools
Region 2 East	7/1/07	6/30/08	Provide prostate education/screening in churches Provide cervical education in churches
Region 2 West	7/1/07	6/30/08	Provide prostate prevention and education programs Provide colorectal prevention and education programs Provide breast prevention and education programs Provide tobacco cessation counseling programs
Region 3	7/1/07	6/30/08	Provide CRC education and screening
Region 4	7/1/07	6/30/08	Provide breast education/screening Provide cervical education/screening Provide prostate education/screening Provide colorectal education/screening Provide CEG education
Region 5	7/1/07	6/30/08	Provide breast education/screening Provide prostate education/screening
Region 6	7/1/07	6/30/08	Provide prostate awareness/screening
Region 7	7/1/07	6/30/08	Provide sun safety awareness/education in preschools Provide smoking cessation programs
Region 8	7/1/07	6/30/08	Organize a coalition to address obesity and cancer Educate teachers in school district on the issues
Region 1	7/1/08	6/30/09	Train 30 childcare providers in "Safe in the Sun" policy/practice guidelines 3 daycares will implement or update "Safe in the Sun" policies Train 8 churches in "Body and Soul" curriculum Train 50 community organizations on "FESMM module" presentation
Region 2	7/1/08	6/30/09	Provide TA to 10 businesses on tobacco policy development, education/awareness Train 50 childcare providers in sun safety 3 daycares will implement or update sun safety policies Identify a coach champion for March Madness CRC Campaign Develop a billboard campaign for March Madness Hand out buddy bracelets at one local college game Develop a billboard campaign for CRC prevention and Shop Talk
Region 3	7/1/08	6/30/09	CRC awareness multi media campaign via Shop Talk/March Madness 1 train the trainer event for Shop Talk initiative CRC awareness event at one local HS or college game
Region 4	7/1/08	6/30/09	Coordinate R4 CA Coalition to meet quarterly

			<p>Conduct 25 CEG trainings to reach 250 AA 40+</p> <p>Train 250 family members in "Families Eating Smart"/"Moving More" programs</p> <p>Promote availability of known cancer screening events</p> <p>Promote training providers to do/refer for tobacco cessation counseling</p> <p>Support local smoke free ordinance initiatives</p> <p>Train 12 daycares in "Color Me Healthy" nutrition program</p> <p>Survey regional cancer screening providers re: their services</p>
Region 5	7/1/08	6/30/09	<p>Establish a team to deliver education</p> <p>Use community assessment data to determine priority needs</p> <p>Convene partners to prioritize health priorities and establish action strategies</p> <p>Implement "Body and Soul" curriculum in at least 2 churches in each county</p> <p>Conduct at least 1 Train the trainer for "Color Me Healthy" nutrition program</p> <p>Implement Father's Day Screening Program</p>
Region 6	7/1/08	6/30/09	<p>25% of AA men in 5 targeted churches receive lifestyle/prostate cancer information</p> <p>Conduct cancer screening events in Georgetown and Williamsburg counties</p> <p>2 of 5 churches will adopt "Body and Soul" program</p> <p>25% of AA women in 5 targeted churches receive lifestyle/breast cancer information</p>
Region 7	7/1/08	6/30/09	<p>Train appropriate Head Start staff in "5+-2-2-0" and "Color Me Healthy"</p> <p>Head Start staff will train 1600 children and parents in "CMH"</p> <p>Obtain 2 height, weight, BMI measures on all HS children</p> <p>50% of Head Start sites will host a "5+-2-2-0" and "CMH" parent meeting</p> <p>Create "5+-2-1-0" healthcare provider tool kit</p> <p>Pilot toolkit with 2 healthcare providers</p> <p>Debrief and strategize to expand awareness re: childhood obesity</p> <p>10 schools will become "School-based Worksite Wellness" partners</p> <p>School partners will develop worksite wellness plan (includes 3+ CA prev/screen)</p> <p>50% of school will partners complete Mod. 7: Health Promotion for Staff of School Health Index</p>
Region 8	7/1/08	6/30/09	<p>Collect BMI data on 85% of grades 3,5, and 8 in Beaufort and Jasper counties</p> <p>Analyze BMI data</p> <p>Publish BMI data by county</p> <p>Present BMI trend data at annual Wellness Conference for 200 participants</p> <p>Promote wellness policy among conference participants</p> <p>Discuss state of the art strategies/provide support networks/resources for participants</p> <p>Provide 2 professional trainings in Beaufort/Jasper for 60 pre-school teachers</p> <p>Provide curriculum/materials for "Color Me Healthy" and "FESMM" at 2 professional trainings</p> <p>Provide TA for all 60 training participants</p>
Region 1	7/1/09	6/30/10	<p>2 daycares to implement or update sun safety policies</p> <p>Develop landscape plans for 2 daycares to increase shade protection</p> <p>Develop 10 community gardens</p>

			3 AA churches to implement "Body & Soul"
Region 2	7/1/09	6/30/10	<p>Develop 1 community garden in Cherokee for elementary kids and college students</p> <p>Conduct CRC awareness via 2nd Annual Colon Cancer Walk</p> <p>Train the trainer in CEG</p> <p>Work with Greenville businesses to implement tobacco cessation/policy development</p> <p>Prostate screenings</p> <p>Assist 10 churches to implement "Body &amp; Soul"</p> <p>Assist 10 churches to implement "FESMM"</p> <p>Provide TA to at least 5 churches/worksites to implement health policies re: PA/nutrition</p> <p>Coordinate R4 CA Coalition to meet quarterly</p> <p>Conduct 25 CEG trainings to reach 250 AA 40+</p> <p>Train 250 family members in "Families Eating Smart"/"Moving More" programs</p> <p>Promote availability of known cancer screening events</p> <p>Promote training providers to do/refer for tobacco cessation counseling</p> <p>Support local smoke free ordinance initiatives</p>
Region 5	7/1/09	6/30/10	<p>Train at least 1 church in each county to conduct "Body and Soul" program</p> <p>Participating churches will implement policies to serve healthy food and improve access to healthy foods</p> <p>Support policy and environmental changes that improve physical activity</p>
Region 6	7/1/09	6/30/10	<p>25% of AA men and women in 5 targeted churches receive information about breast and prostate cancer, nutrition, physical activity and tobacco prevention and cessation</p> <p>3 of 5 churches will adopt Body and Soul, FESMM, MESS programs</p> <p>12 of 15 daycares will adopt "Safe in the Sun" program</p>
Region 7	7/1/09	6/30/10	<p>All new Tri-county DHEC staff will be trained in delivering 5'-2-1-0 and Color Me Healthy</p> <p>All children enrolled in the CDI Head Start of the Tri-county will have 2 height, weight and BMI measures</p> <p>The 5-2-1-0 Healthcare provider Tool Kit will be created</p> <p>At least 2 child healthcare providers/practices will have piloted the 5-2-1-0 Healthcare provider Tool Kit</p>
Region 7	7/1/09	6/30/10	<p>Broaden relationships with Color Me Healthy and 5-2-1-0 project partners to share successes, discuss challenges and exchange ideas to expand awareness around childhood obesity, chronic disease and cancer prevention</p> <p>100 preschool/daycare instructors will be trained in Safe in the Sun</p> <p>50% of trained instructors will have presented the Safe in the Sun: 52 Weeks of Sun Safety Activities to at least 10 children, reaching a total goal of 1000 child/parent</p> <p>At least 4 preschool/daycare sites will adopt a policy addressing sun safety</p>
Region 8	7/1/09	6/30/10	<p>Train 27 teachers in 10 Head Start facilities to reach 420 children on "Safe in the Sun"</p> <p>At least 4 of the 10 facilities will adopt a sun-safety policy</p> <p>Train 30 elementary teachers in "Safe in the Sun" and "Eat Smart/Move More" at Wellness Conference to reach potentially 600 children</p> <p>Train 40 daycare providers (from 6+ daycares; 12+ classes) in "Color Me Healthy" and "FESMM"</p>

