

# Sutter Health Sacramento Sierra Region Cancer Services: 2011 Annual Cancer Program Report



Sutter Health

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## A Note from the Regional Medical Director and Service Line Executive

*Gregory Graves, MD, Medical Director*

*Jennifer Maher, Regional Oncology Executive*

Dear Colleagues and Friends,

As programs that have been approved by the American College of Surgeons (ACoS), we are pleased to present our 2011 Annual Report. This report features a statistical overview of the Sutter Health Sacramento Sierra Region (SHSSR) 2010 Cancer Registry data for three (3) Sutter Health institutions. Our cancer registries are responsible for collecting comprehensive data on all patients, providing demographic, diagnostic, treatment, and long-term follow-up information. The most common cancers are described in more detail and their prevalence compared with trends seen across California and Nationally.

We are proud of the efforts continually made to provide comprehensive care to our cancer patients including many advanced treatments such as blood and marrow transplantation and specialized treatments such as ablative surgery and complementary medicine. Our centers emphasize state-of-the art diagnostic and therapeutic services, provided conveniently in the patient's local community. On behalf of our cancer committees we extend our thanks to our outstanding communities, medical staff, employees, administration and volunteers for the continued support of our cancer programs.

We hope you enjoy and learn from our presentation of the Sutter Health Sacramento Sierra Region (SHSSR) Colorectal Cancer Report and, at the same time, appreciate the extent of services available at the institutions detailed in this report.

For more information, please visit our website at <http://www.suttercancer.org>

## Sutter Health Oncology Committees

The Sutter Health Sacramento Sierra Region (SHSSR) Oncology Committees are multidisciplinary, representing physicians from the diagnostic and treatment specialties and non-physicians from administrative and supportive services. They meet monthly/quarterly to provide leadership in the cancer activities at each of the Sutter institutions. The Oncology Committees are involved in evaluating new technologies, establishing new programs, and improving all cancer-related activities in the region.

### **Sutter Medical Center, Sacramento (SMCS)**

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Coordinator

Dayna Lawrence, Cancer Center Quality Management Specialist, Quality Improvement  
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Sharyl Kooyer, Hospice Manager

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## **Sutter Roseville Medical Center (SRMC)**

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and Cancer Conference Coordinator

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Clinical Liaison Physician, Oncology Committee  
Conference Coordinator

Kim Etcheberry, RN, BSN, OCN, Cancer Program Administrator, Quality Improvement  
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Walailuk Chaiyarat, MD., Medical Oncologist

Gurpreet Dhugga, MD., Palliative Care

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## Clinical and Patient Support Services

This table displays the broad range of services available at three (3) of the Sutter Health Sacramento Sierra Region (SHSSR) American College of Surgeons (ACoS) Cancer Programs. Although this table is reflective of actual physical location of the service, all single site resources are available for referrals for patients within our region.

<b>Services</b>	<b>SMCS</b>	<b>SRMC</b>	<b>SSMC</b>
ACoS Accredited Cancer Center	Y	Y	Y
Blood and Marrow Transplants	Y		
Brachytherapy	Y	Y	Y
Cancer Surgery	Y	Y	Y
Cancer Clinical Trials & Prevention Trials	Y	Y	Y
Cancer Education Programs	Y	Y	Y
Cancer Support Groups	Y	Y	Y
Community Screenings for Cancer	Y	Y	Y
Indoor Pool for Patient/Rehabilitation		Y	
Core Needle Biopsy – Ultrasound	Y	Y	Y
Core Needle Biopsy – Stereotactic	Y	Y	Y
Stereotactic Radiosurgery & Radiotherapy on Site	Y	Y	
Ablation Surgery	Y	Y	Y
Gamma Knife on Site	Y		
Infusion Therapy	Y	Y	Y
Interventional Radiology	Y	Y	Y
Mammography	Y	Y	Y
Minimally Invasive Surgery	Y	Y	Y
Nurse Navigator	Y	Y	Y
Oncology Social Worker	Y	Y	Y
Pediatric Cancer and Surgery	Y	Y	
PET – Positron Emission Tomography on Site	Y	Y	
Image-Guided Prostate Radiation Therapy	Y	Y	Y
Radiation Oncology Service	Y	Y	Y
Thermo Ablation on Site	Y		
IMRT	Y	Y	Y
SPECT	Y	Y	
Tumor Board	Y	Y	Y
Tumor Registry (In-House)	Y	Y	Y
<b>Outpatient Services</b>	<b>SMCS</b>	<b>SRMC</b>	<b>SSMC</b>
Valet Parking	Y	Y	
Comprehensive Breast Center	Y	Y	
Cancer Treatment Center	Y	Y	Y
Chemotherapy Treatment	Y	Y	Y
Home Care & Hospice	Y	Y	Y
Nutrition Services	Y	Y	Y
Palliative Care	Y	Y	Y
Pain Management	Y	Y	Y
Dance Movement	Y		
Music Therapy	Y	Y	
Massage Therapy	Y		
Pet Therapy	Y	Y	

## Annual Summary of Program Activities

### Sutter Medical Center, Sacramento

Gregory Graves, M.D.  
Cancer Center Medical Director  
Oncology Committee Clinical Liaison Physician

At Sutter Cancer Center, Sacramento we continue to provide comprehensive, tumor site specific programs and services designed to address the physical, mental and emotional aspects of cancer care to patients and their caregivers.

2011 has been an active and rewarding year for Sutter Medical Center, Sacramento (SMCS). This year the Cancer Center further refined our specialty team approach started in 2006 by adding 4 additional physicians:

Dr. Gonik, Gynecologic Oncology  
Dr. Kim, Oncology  
Dr. Kiwan, Oncology and Hematology  
Dr. Mourton, Gynecologic Oncology



Further achievements were made this year to include:

- Re-Accreditation with the Commission on Cancer for best practice in our registrar position requirements and our AIM, Palliative Care, and Hospice programs.
- Blood and Marrow Transplant Program received National Marrow Donor Program (NMDP) certification and Center of Excellence status for most payors.
- ACCC publication featuring our CML patient management
- Collaborated with Sutter Medical Foundation on an Integrative Medicine Group appointment series called "Journey Forward"
- Women's Imaging Center opened in the Capitol Pavilion
- Initiation of outpatient Breast surgery at the Capitol Pavilion
- Infusion Center opened it's 3<sup>rd</sup> facility on the 3<sup>rd</sup> floor of the Cancer Center
- First Intrabeam treatments began on November 3, 2011

The cancer center staff continues to participate in numerous community activities in partnership with our local cancer organizations: Claudia Crist, Assistant Administrator was named the Leukemia and Lymphoma Societies "Woman of the Year" raising over \$25,000 dollars in ten weeks. Sutter Cancer Center staff formed numerous teams and raised funds for the Leukemia and Lymphoma Societies "Light the Night", the American Cancer Societies "Making Strides against Breast Cancer", and Komen's "Race for the Cure", as well as held a clothing drive to benefit the American Cancer Society.

Annually the Sutter Cancer Center offers a community educational lecture, the 2011 lecture focused on cancer screening and prevention "Cancer Prevention and Screening: "What is really in it for me?"

Continuing education was provided to our staff on:

- Lung Cancer
- Management of Advanced Pancreatic Neuroendocrine Tumors
- Halaven Phase III Study

- New Therapy Shown to Improve Overall Survival in Metastatic Castration-Resistant Prostate Cancer
- Genomic Profiling in Stage II Colon Cancer
- Staging Conference

The Infusion Centers volume continues to grow with 22,268 patients seen in 2011; this is a 12% visit increase from 2010's 19,637 visits. In addition, the Apheresis Unit saw an increase of HPC collections in 2011 by 21% and 31% for OP TPE procedures.

In the statistical year of 2010, 1875 patients received care at SMCS with 1498 in analytic case volumes. Our site-specific tumor boards presented a total of 483 cases. Our top five diagnoses in 2010 were breast, lung, prostate, colon / rectal, and thyroid.

The Oncology Committee Goals for 2010 included:

- Increase of patient accruals to clinical trials by 10% of 2009
- Achieve National Accreditation Program for Breast Centers
- Re-accreditation with the Foundation for the Accreditation of Cellular Therapy
- Pilot a geriatric oncology clinic for patients over 75 years of age
- Provide a prostate and/or ovarian community event

The momentum we have gained in 2011, bringing new executive and physician leadership along with dedicated and supportive administration allows us to continue to bring individualized care to our cancer patients into the future.

## Sutter Roseville Medical Center

Uma Gowda, MD,  
Oncology Committee Chair  
Medical Director of Oncology

The Sutter Cancer Center, Roseville has long supported a tradition of providing state of the art, interdisciplinary cancer care close to home. As an integral partner in the family of Cancer Services within Sutter Health, SRMC provides comprehensive access to services for our patients, their families and the providers we serve.

In 2010 our cancer registry reported 1347 patients seen at our facility, 909 of which were analytic patients. The most frequently seen cancers at our facility were Breast 273, Lung 136, Colorectal 133, Skin 85 and Prostate 72. Our weekly tumor board presented 192 patients for review at tumor board and 70 patients were presented at our breast conference.



Our Oncology Committee Goals for 2010 included both studies of quality and outcomes and patient care improvements. In addition to participating in the regional analysis of colorectal cancers, our site completed an Analysis of the Impact of the USPSTF Recommendations for Breast Cancer Screening in Women 40-49. We evaluated women, ages 40-49, who underwent breast biopsy in our center, between 2006-2009. The objectives were to: 1) Define the population identified with cancer or high risk/precancerous lesions, 2) Define whether the patient presented from screening mammography vs. palpable lump, 3) Define the stage at presentation and 4) Retrospectively apply the USPSTF guidelines to determine potential missed cancers. The review demonstrated 17.3% (26/150) of women diagnosed with cancer in our breast center from 2006 to 2009 were between the ages of 40-49. 10% (15/150) presented with palpable lumps, while 7.3% (11/150) of women were diagnosed following screening mammography. For women, ages 40 – 49, diagnosed with cancer, 42.3 % (11/26) presented with an abnormal screening mammogram. Screening mammography in women between ages 40 – 49, led to the identification of seven women at high risk for breast cancer. There was extensive discussion of the data and findings. The Cancer Committee agreed that they currently supported continuing the ACS guidelines for mammography, aware that this remains a subject of much conversation and debate. These findings were presented by members of our Breast Center Team and the National Consortium of Breast Center meeting.

Patient care improvements included creating standardized, pre-printed order sets for Intraperitoneal Chemotherapy for Ovarian Cancer and order sets for leukemia/lymphoma, testicular cancer and sarcoma. These order sets were developed to improve physician, nursing and pharmacy practice and ultimately improve patient safety and patient satisfaction with timeliness of treatment.

2011 saw the anniversary of the Prostate Seed Brachytherapy Implant Program. Dr. Seth Rosenthal, M.D., presented multiple presentations to the community and the medical staff re: prostate cancer and the treatment regimens open to men with this disease. The Sutter Roseville Foundation purchased new ultrasound equipment to use for this procedure.

Our cancer program is well supported by an experienced and collaborative group of sub-specialty physicians, as well as an entire team of professionals devoted to the diverse and various needs of cancer patients. 2011 was a very successful year for our cancer program. We continue to grow, expand, explore and improve to meet the needs of our patients.

## Sutter Solano Medical Center

Patricia Seid, M.D., Medical Director

The Sutter Solano Cancer Center (SSCC) is a community cancer program that is committed to serving its local residents with a high level of specialized care, as well as providing an entry point to subspecialized care from tertiary affiliates when necessary. SSCC houses medical oncology, radiation oncology, outpatient infusion, clinical trials, and genetic counseling in one outpatient building. The top 5 diagnoses are breast, lung, prostate, colorectal and uterine cancers. In the statistical year 2010, over 470 cancer patients received care at Sutter Solano Medical Center, with 367 of these being analytic.



In 2011, SSCC focused on enhancing support services to cancer patients by increasing utilization of nurse navigation and social work services, as well as continuing to offer dietary consultation on a routine basis.

2011 represents the first full year of SSCC's nurse navigation program. During this year the navigator was responsible for identifying and supporting every newly diagnosed breast cancer patient, as well as patients with other cancers with high needs. With the navigator focused on breast services, the center was able to reduce the average time from abnormal mammogram to biopsy by 33%, as well as to reduce the average time from breast biopsy to treatment by over 33%. This was achieved through direct navigation services, as well as identification of areas where best practices could be applied. For example, reflex testing from abnormal screening mammogram to diagnostic mammogram was implemented. SSCC successfully increased clinical trial enrollment by 29% compared to 2010 and met the ACOS goal of enrolling 2% of patients. In addition, the cancer center supported education for certification of its clinical trials research assistant.

SSCC continued weekly multidisciplinary tumor boards during which 96% of cases presented were prospective. Monthly educational opportunities were offered to physicians and other clinicians. This included partnering with Sutter Medical Center Sacramento in providing lectures from neurosurgery and surgical oncology.

The radiation oncology department completed a significant software upgrade to Varian's Aria platform. One of the major benefits from the upgrade included transitioning to state of the art treatment planning algorithm (AAA) which provides greater accuracy in calculating doses within the lung.

SSCC continued their close partnership with the local community in the following ways.

- Major sponsor of the American Cancer Society's Vallejo Relay for Life Survivors Tent. SSCC.
- Twice monthly support groups and educational seminars for Sutter and non-Sutter patients and their families through the Cancer Support Community.
- Initiated new screening program for colorectal cancer by providing screening kits to eligible patients in the local area that were overdue for screening. A greater than 40% return rate was achieved through this program.
- Provided prostate cancer screening event in October, during which 46 men from the community were screened. SSCC coordinated follow up needs for uninsured patients with abnormal results.

# Colorectal Cancer (2001 – 2010)

## Focus for Sutter Health Sacramento Sierra Region (SHSSR)

According to the American Cancer Society Facts and Figures for 2010, colon cancer is the third most common cancer among men and women and 91% of colorectal cases are diagnosed in individuals 50 or older. Colorectal cancer was the fourth most common cancer treated at all three facilities included in this report. In an effort to enhance the overall care provided to cancer patients, The Oncology Committees of each affiliate committed to a collaborative analysis of colorectal data to assess and compare colorectal cancer characteristics and outcomes for patients in our counties.

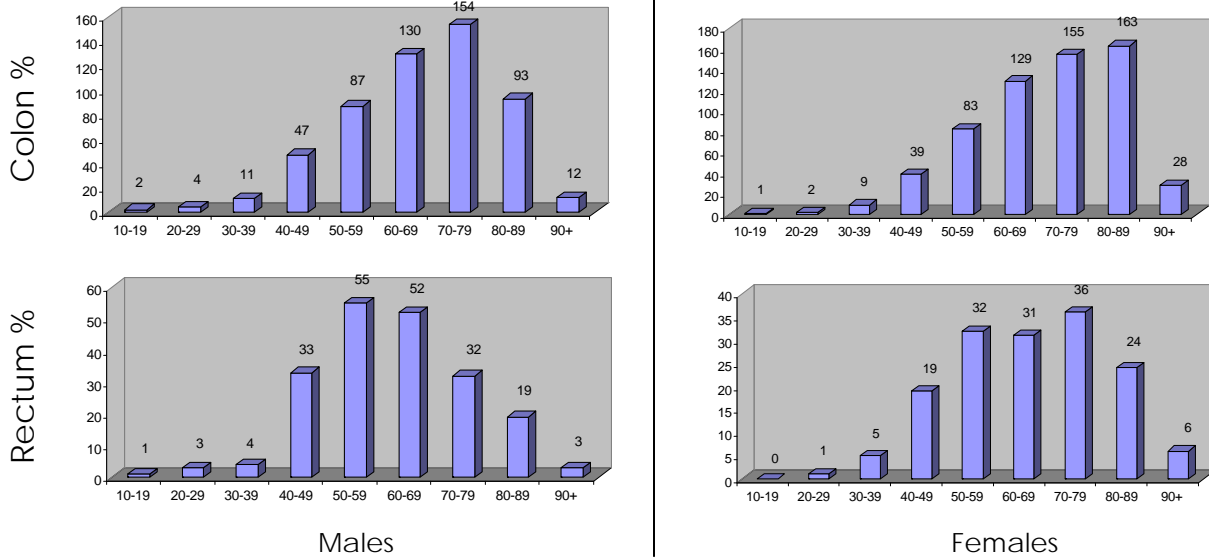
### Age at Diagnosis: FIGURE 1

The median age for colon cancer was 70-79 for both genders. Colon cancer is diagnosed at a slightly older age in females than males.

Rectal cancer shows a median age range for both genders was 60-69. Women’s median age was older than males for rectal cancers. Males showed as many diagnosed in 40-49 range as in 70-79 range, with a median age slightly above 59. Females showed a much higher number occurred in 70-79 range with a median in the high 60-69 range.

Colorectal cancer for both males and females showed that 87.9% were diagnosed after the age of 50. This is a 2.1% decline from data reviewed in 2008. Overall, SHSSR affiliates median age is higher than the general population where the average age at diagnosis is 65.

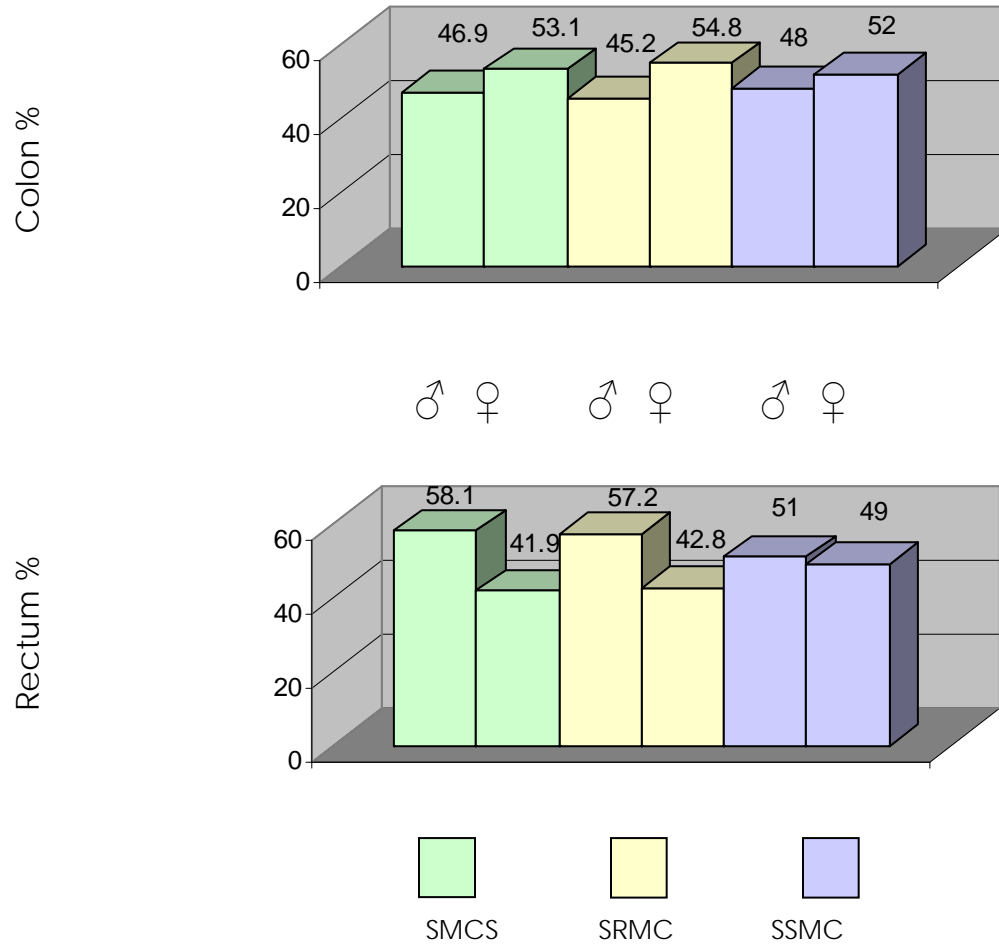
Age at Diagnosis by Site: FIGURE 1



**Gender Ratio by Site: FIGURE 2**

Looking at colon cancer, females outnumbered males 53% vs. 47%. A trend in the opposite direction was seen in rectal cancer, where females were outnumbered 45% vs. 55% for males.

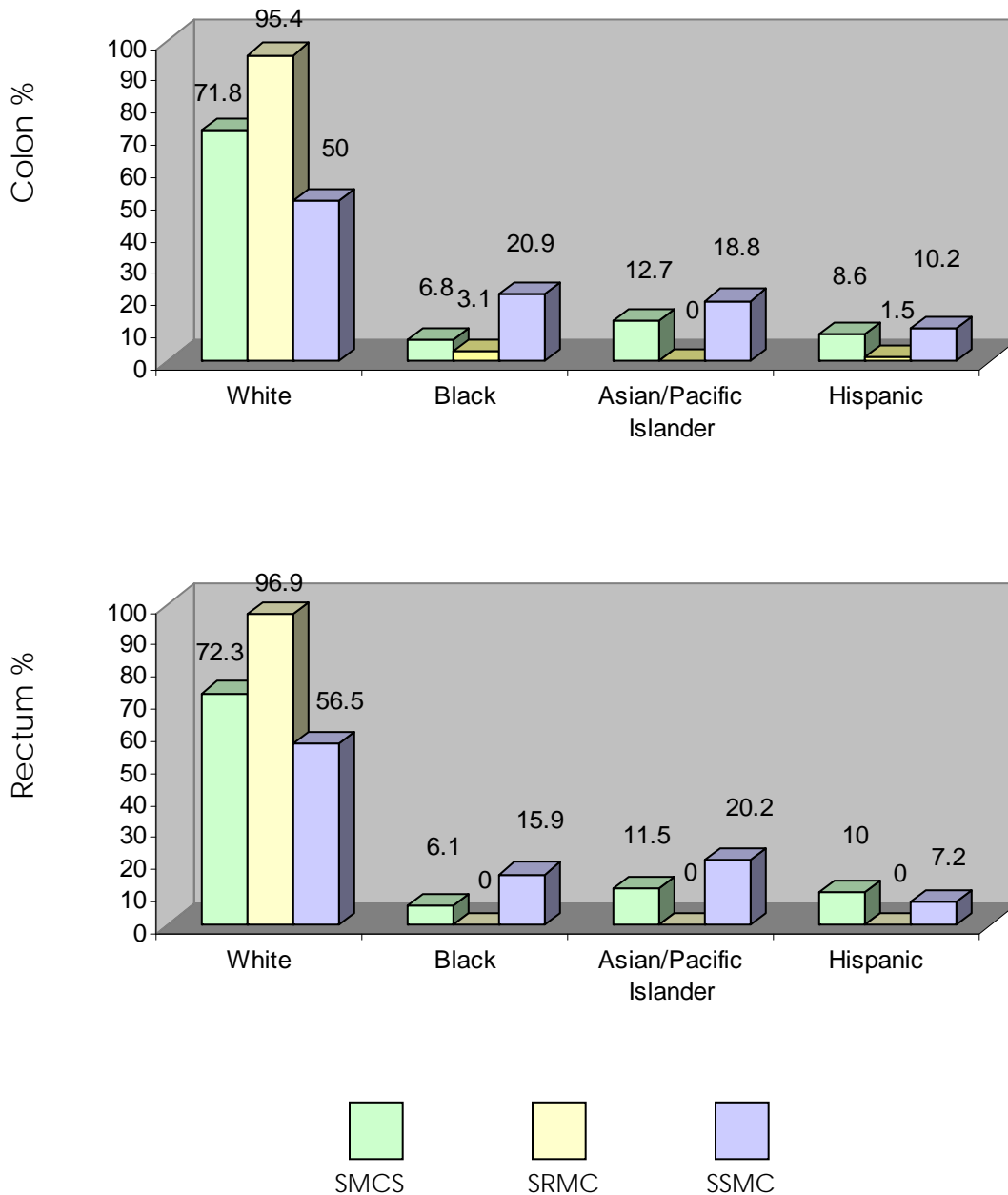
Gender Ratio by Site: FIGURE 2



**Race/Ethnicity: FIGURE 3**

Colon and rectal cancer showed nearly identical patterns of race distribution, with differences among institutions probably reflecting the demographics of the patient populations served. Overall, 74% of Sutter Health Sacramento Sierra Region (SHSSR) colorectal cancer patients were Caucasian. SSMC has the lowest percentage of Caucasian (50-56.5%) due to a large African-American and Asian population. SMCS and SRMC had a higher percentage of Caucasian, reflecting a lower percentage of African-American and Asian population.

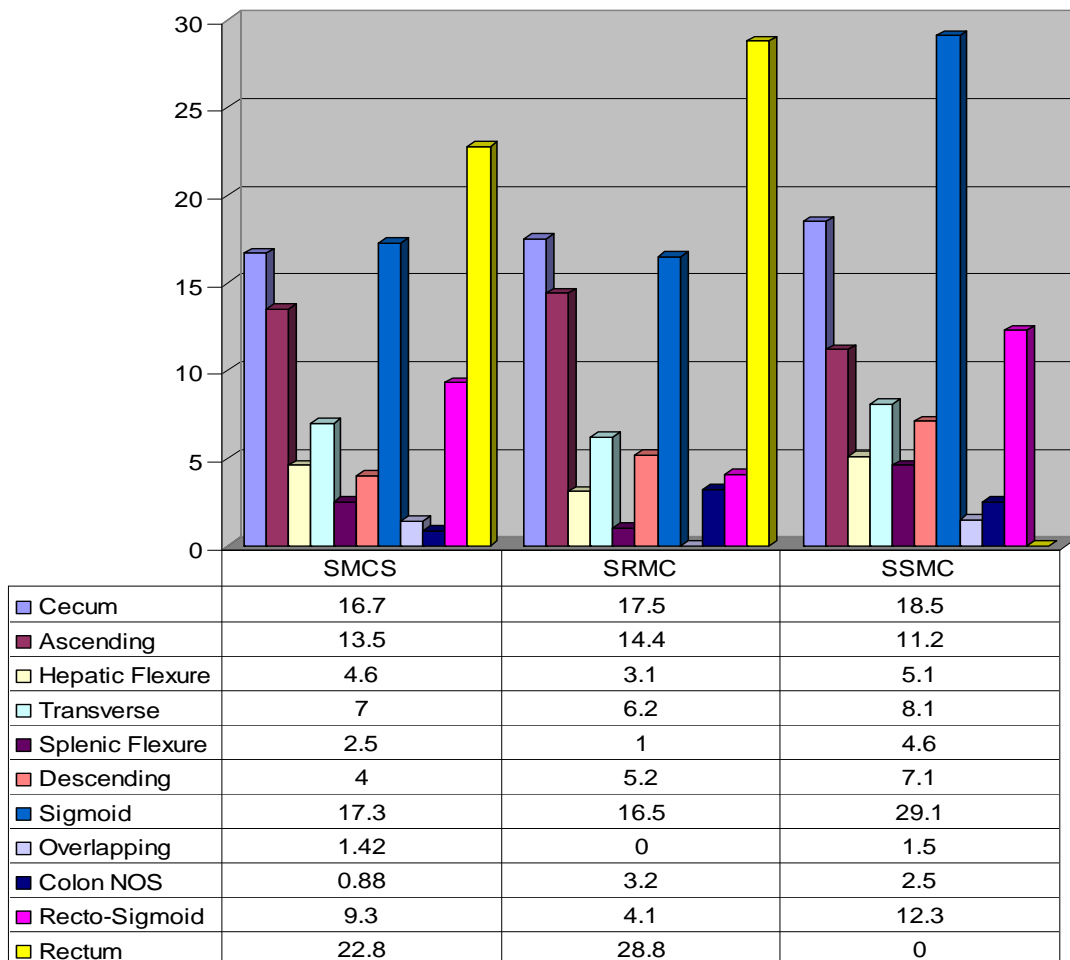
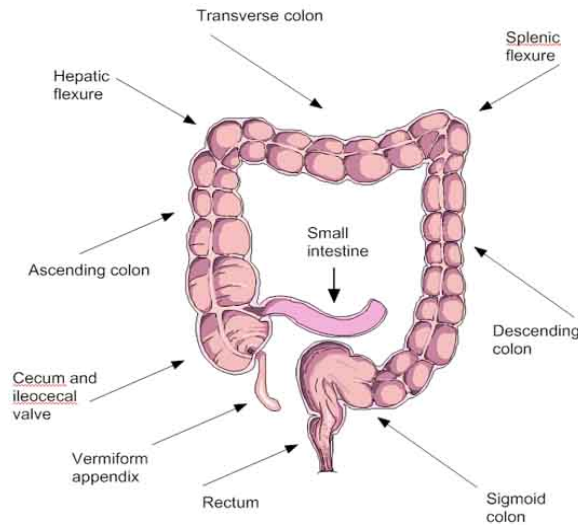
Race/Ethnicity: FIGURE 3



**Site Distribution: FIGURE 4**

Overall, sigmoid was 20% with rectum and cecum both in the 17% range. A combination of rectal, rectal-sigmoid, sigmoid, and descending can make up 52.2% of the cancers. Cancers of the cecum, ascending, transverse, and hepatic flexure totaled 41.9%.

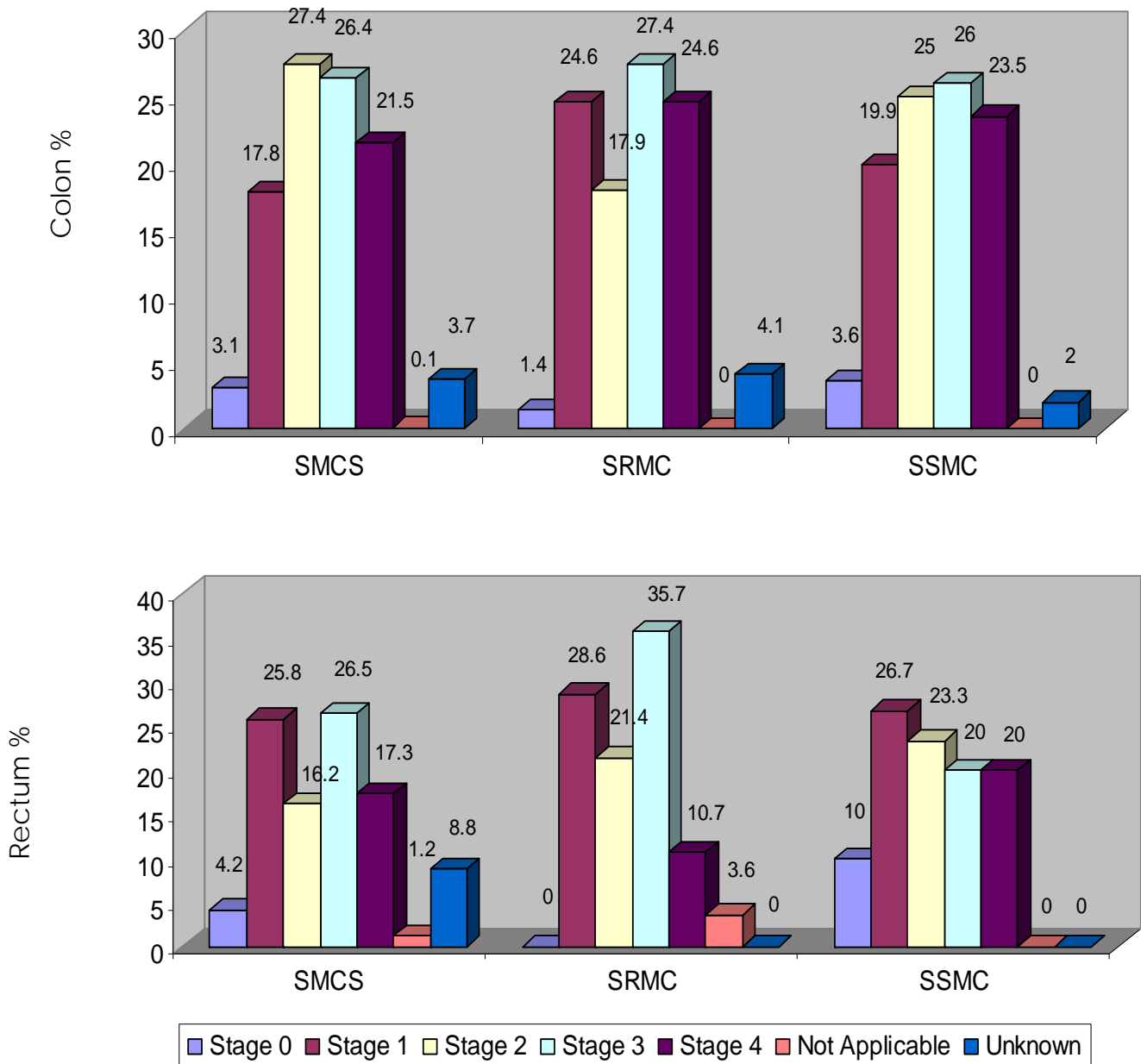
Site Distribution: FIGURE 4



**Stage at Diagnosis by Site FIGURE 5**

A review of stage at diagnosis shows little variability among the Sutter Health Sacramento Sierra Region (SHSSR) institutions and is consistent with literature. Overall, invasive colon cancers were diagnosed more commonly at stage 2 at (23.4%), while most invasive rectal tumors were diagnosed at stage I (27.0%) and 23.2% of Sutter colon cancers patients and 16.0% of rectal cancer patients presented with stage 4.

Stage at Diagnosis by Site: FIGURE 5

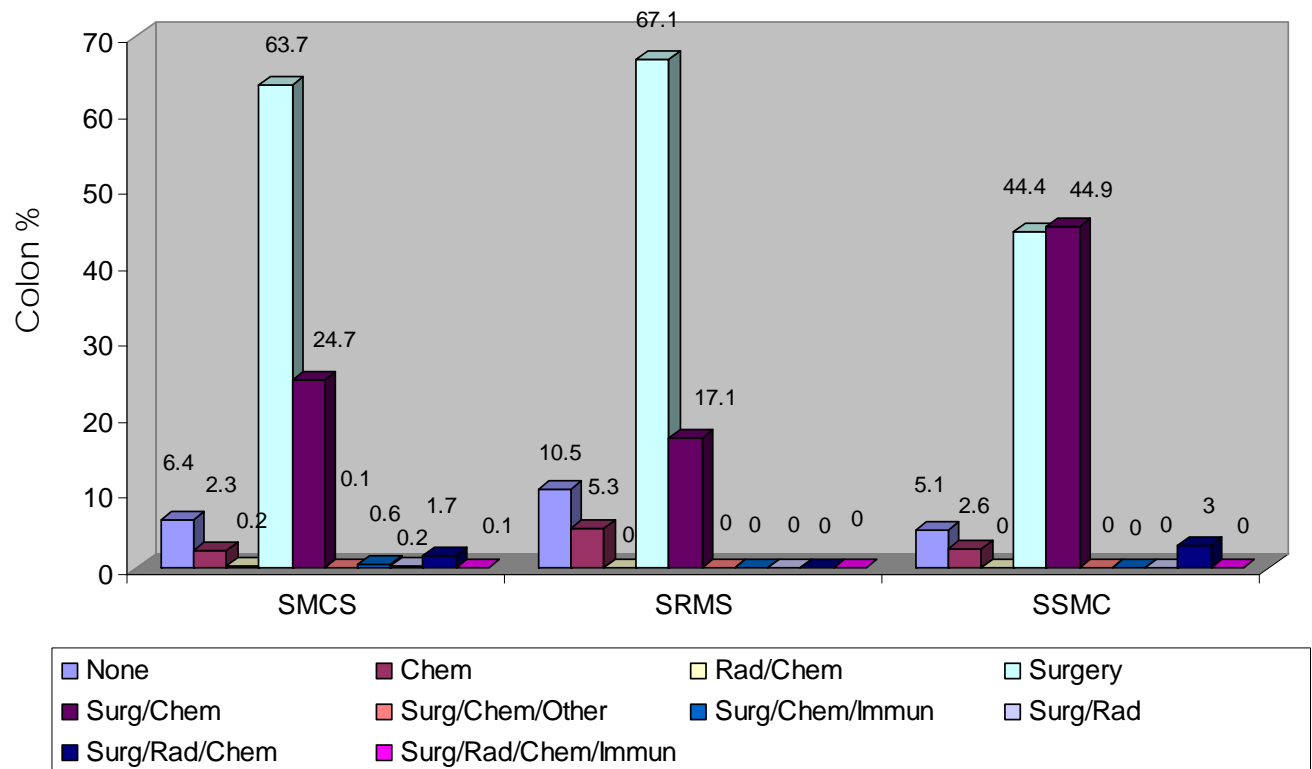


**Treatment Modalities: FIGURE 6**

Treatment modalities utilized in the treatment of colorectal cancer were generally similar in the Sutter Health Sacramento Sierra Region (SHSSR) institutions. Data shows 58% of colon cancer patients were treated with surgery alone and 29% with a combination of surgery and chemotherapy.

The data shows that SSMC utilizes surgery + chemotherapy to a larger extent than SMCS and SRMC, where surgery alone predominates. We presume that per NCCN guidelines stage I colon cancers are treated with surgery alone and stage III or higher would generally include chemotherapy. SSMC analyzed stage II colon cancer data further, which revealed a surprisingly high proportion of stage II colon cancer patients with high risk features. Specifically, 43 of 49 (88%) stage II patients had at least one high risk feature (grade 3 or 4, <12 LN removed, LVI, PNI, obstruction). More than one half of these patients had more than one adverse feature present. This would explain the apparent increased utilization of chemotherapy at SSMC compared to SMCS and SRMC. This type of difference may also explain a lower survival rate at SSMC when compared to SMCS and SRMC stage for stage.

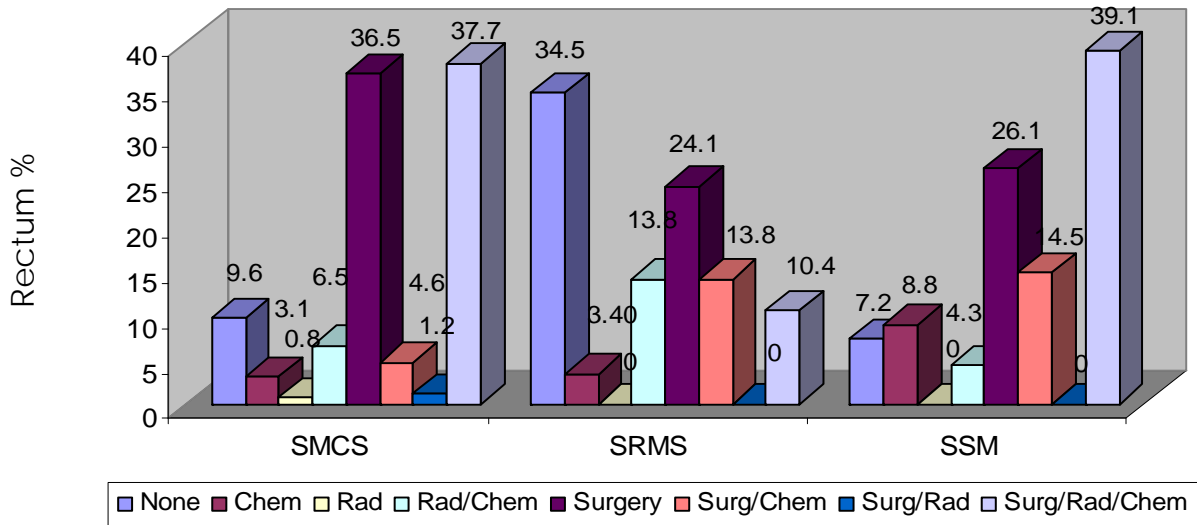
Treatment Modalities: FIGURE 6



**Treatment Modalities: FIGURE 6, cont.**

For rectal cancer, 29% of patients were treated with surgery alone and another 29% with some type of combination therapy.

Treatment Modalities: FIGURE 6

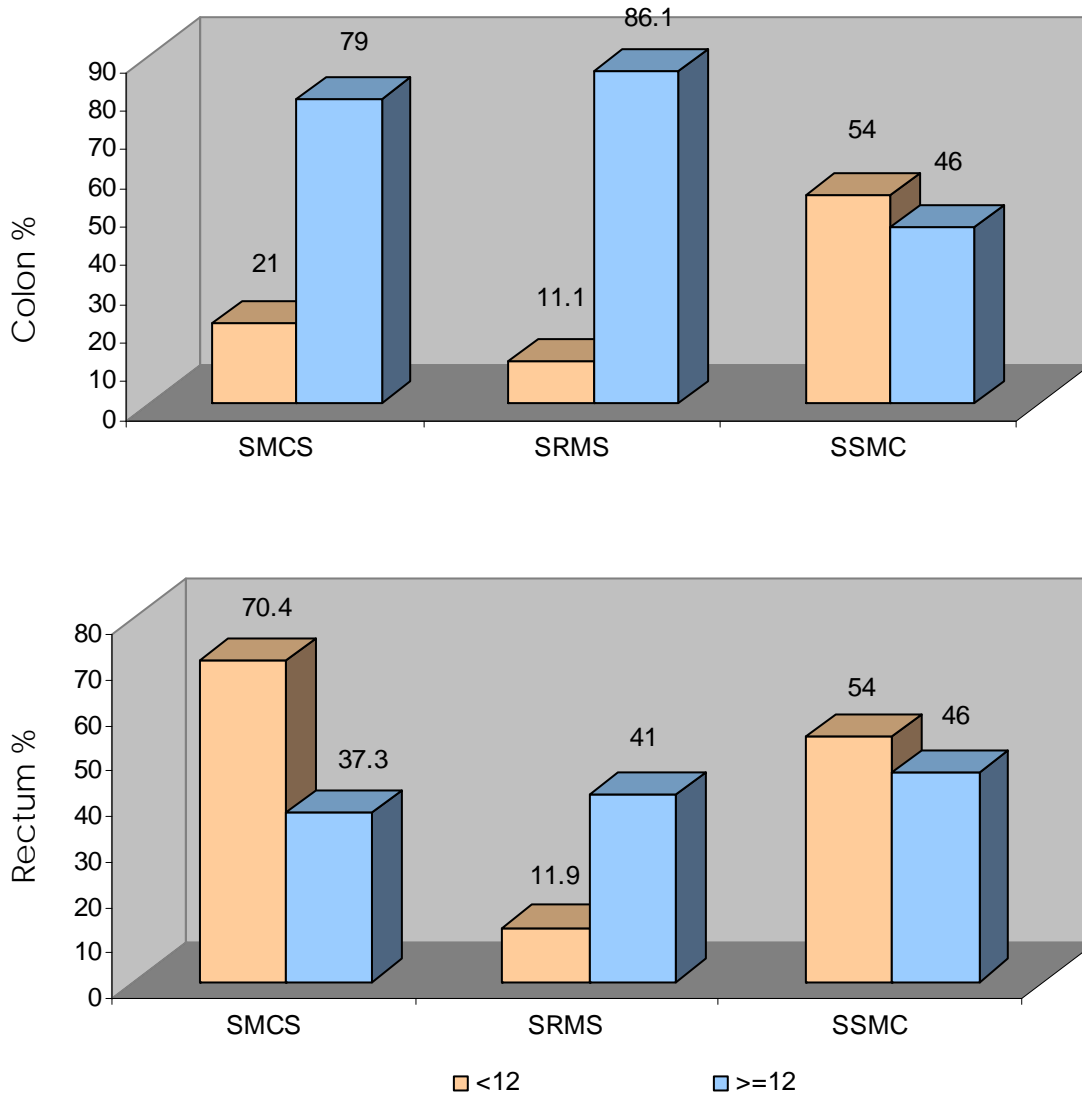


**Number of Nodes Harvested: FIGURE 7**

National average shows that 75% of nodes are harvested. Among the three (3) Sutter Health Sacramento Sierra Region (SHSSR) institutions, data shows 70% of colon cancer patients had 12 or more nodes harvested. In rectal cancer patients, only 41% harvested 12 or more nodes.

In 2002, SSMC's number of specimen with <12 nodes was 83%. Since that time, the institution has focused to maximize the number of nodes found both during surgery and during pathologic processing. In 2008 data in CP3R shows the percentage decreased dramatically to 17%. However, data from earlier years continues to skew SSMC overall percentage.

Number of Nodes Harvested: FIGURE 7



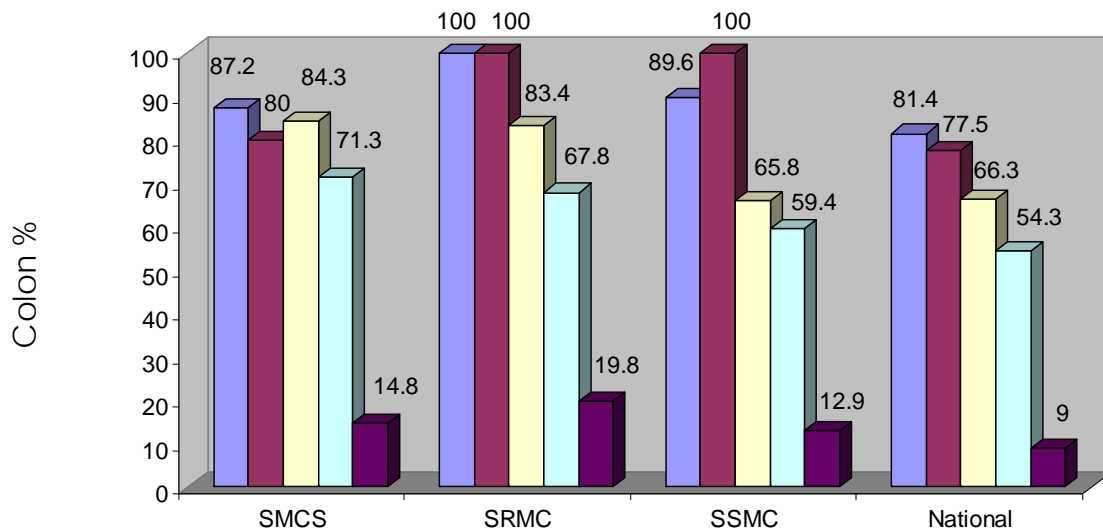
**Five-Year Survival: FIGURE 8**

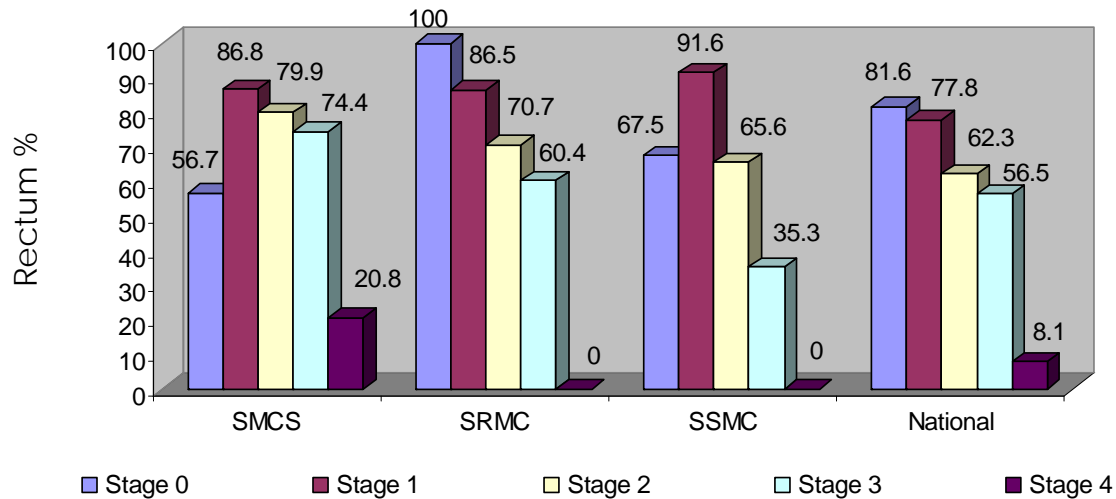
Overall, the average five-year survival rate for all stages within the Sutter Health Sacramento Sierra Region (SHSSR) for colon cancer is 69.1% in comparison to the National average of 54.9%.

The overall average within the Sutter Health Sacramento Sierra Region (SHSSR) for rectal is 59.7% in comparison to the National average of 58.6%.

Stage for stage, all sites compare favorably to national averages. However, amongst the three sites evaluated, SSMC has somewhat lower survival statistics. This can be explained by differences within stage as described in Figure 6. Additionally, as noted in Figure 3 SSMC has a much higher ethnic diversity. This includes a relatively high proportion of African American patients, who are known to have a 20% higher mortality rate from colorectal cancers compared to Whites. SSMC also cares for a relatively large percentage of patients without insurance or without a primary care physician which leads to more cancers presenting through the emergency department because of symptoms such as obstruction. Such socioeconomic factors likely contribute to an overall lower survival stage for stage. Because of this, SSMC launched an outreach service in 2010 whereby SSMC partnered with local primary care physicians to identify patients who were overdue for colorectal screening and provide them with a fecal occult blood test kits.

**Five-Year Relative Survival: FIGURE 8**





Numbers of Patients Evaluated Per Institutions, Site, and Total:

Institution	Colon	Rectal	Total
SMCS	881	260	1,141
SRMC	73	28	101
SSMC	196	69	265

Sutter Health Sacramento Sierra Region (SHSSR) reviews relative data which must be interpreted with caution. The relative survival rate facilitates comparisons of survival data from different groups of patients by taking into consideration the likelihood that patients in a given age group will die from causes unrelated to their cancer. Relative survival adjusts the actual observed survival rates of a given patient population for the population's age and gender structure relative to a "standard" U.S. population. This adjustment does not take into account factors such as race and socioeconomic status, which are known to affect survival rates for persons with colorectal cancer.

### Conclusion

Colon cancer continues to impact the lives of our patients. Sutter Sacramento, Roseville and Solano have demonstrated results consistent with national data. We are committed to working with our oncology and primary care partners to continue to improve results and the lives of the patients we serve.