

# Colorectal Oncology Management Team

**OVERVIEW** The Colorectal Oncology Disease Management Team evaluates and manages treatment of patients with colon and rectal cancers, Crohn's disease, familial polyposis, ulcerative colitis, and other diseases of the large bowel. It places an emphasis on early screenings, particularly in high risk groups, and adheres to National Quality Forum guidelines for assessment of quality care.

## Highlights

**Imaging Technology.** The team uses powerful imaging technologies that help surgeons remove disease and spare vital tissue, including endorectal ultrasound, magnifying endoscope, and minimally invasive laparoscopic surgical techniques such as laparoscopic colorectal surgery.

**Clinical Trials.** Patients with Stage II colon cancer can participate in clinical trials in which either surgery alone

or surgery and chemotherapy with 5-FU/leucovorin are used.

**Staging.** Patients with rectal cancer undergo staging via endorectal ultrasound and PET/CT scan or endocoil MR imaging. Treatment consists of combined chemotherapy and radiation.

**Pioneering Approach.** The team is currently using a pioneering approach on tumors that have spread to the abdominal cavity from primary colorectal cancer, gastric cancer, appendiceal cancer, or mesothelioma, which are typically difficult to treat. Called heated intraperitoneal chemotherapy (HIPEC), the procedure is designed to kill any remaining cancer cells after the bulk of the abdominal tumor is removed. This gives patients as high as a 60 percent five-year survival rate. Stony Brook is the only hospital in Suffolk County offering the procedure.

## TEAM MEMBERS

**Surgery:** Roberto Bergamaschi, MD, PhD; Team Leader and Chief, Division of Colon and Rectal Surgery; Marvin L. Corman, MD; Paula I. Denoya, MD; Joshua Karas, MD, Colorectal Surgery Research Fellow; William B. Smithy, MD, Colorectal Fellowship Program Director; Geraldine Massimino, RN, Patient Navigator; Donna Keehner-Nowak, RN; and Patricia Pugliani, PhD, Data Manager

**Gastrointestinal Medicine:** Jonathan Buscaglia, MD; Chris Lascarides, MD; Ramona Rajapakse, MD; Robert Richards, MD; Basil Rigas, MD; and Isabelle Von Althen-Dagum, MD.

**Pathology:** Sui Zee, MD

**Radiology:** Seth O. Mankes, MD

**Radiation Oncology:** Bong Kim, MD

**Medical Hematology/Oncology:** Marisa Siebel, MD, and Shenhong Wu, MD, PhD

**Enterostomal Therapy:** Karen E. Chmiel, RN, and Susan Guschel, RN

## COLON CANCER SITE SURVEY

Colon cancer site survey of cases first diagnosed 2000-2006  
Stony Brook University Medical Center (SBUMC) Cancer Registry  
Data Base (n = 413)  
compared to National Cancer Data Base (NCDB) benchmark data  
USA (n = 503,704 ) and New York State (n = 30,760)  
Colon cancer survival cases diagnosed at SBUMC compared to NCDB  
benchmark data for USA Nationwide and Atlantic Region.

**Q**uality performance in prevention, detection, diagnostic workup, staging, treatment, and follow-up care are top priorities for the Stony Brook University Medical Center (SBUMC) cancer care program clinical staff. Colon cancer together with rectal cancer is the fourth most commonly diagnosed cancer in both men and women, and is among the most common causes of U.S. cancer deaths according to the American Cancer Society (ACS) publication reflecting National

Institutes of Health (NIH) National Cancer Institute (NCI) Surveillance, Epidemiology and End Results (SEER) data. A site specific survey of colon cancer performed using SBUMC cancer registry data compares the patient characteristics of age and stage at diagnosis, gender, histologic cell type, and describes the treatment modalities utilized with American College of Surgeons (ACOS) Commission on Cancer (COC) benchmark data for the diagnosis years 2000 through 2006. The five-year survival rate for colon cancer patients at SBUMC is compared with ACOS COC National Cancer Data Base (NCDB) available data for the diagnosis years of 1998 through 2001. Charts and table compare SBUMC data to NCDB nationwide and New York State-specific data.

The National Quality Forum (NQF) brought public and private payers together with consumers, researchers, and clinicians to broaden consensus on performance measures for colon and other cancers. The performance rates shown in ACOS COC Program

## COLON CANCER SITE SURVEY

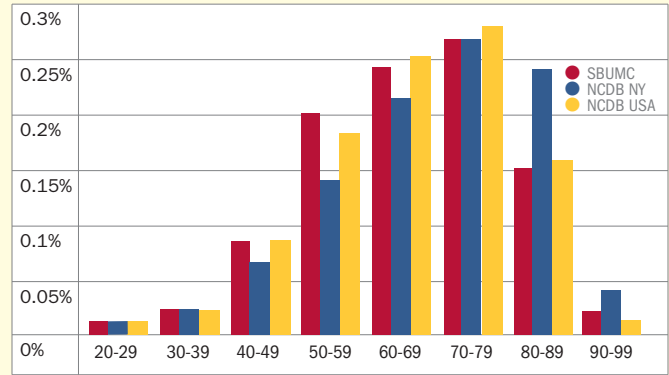
Practice Profile Reports match the specifications of the colon cancer care measures endorsed by the NQF in April 2007. The Commission on Cancer has actively engaged hospitals with approved cancer programs in this process. The COC has instituted a facility feedback mechanism to promote awareness of the importance of charting and coding accuracy in line with evidence based practice guidelines. In light of the national movement towards Pay for Performance (P4P), these reports provide COC-approved programs with the ability to examine program-specific colon cancer care.

Colon cancers are more successfully treated when detected early. Screening tests that can detect colon polyps before they become cancerous or at an early stage are colonoscopy and fecal occult blood testing, and should begin at age 50 for people of average risk. Through outreach, education, and cutting-edge technology, SBUMC offers our community colon cancer education and detection programs. SBUMC participates in cancer control activities and offers colonoscopy screening programs and clinical trials. Charted data for the study period show gender trends were consistent in that among patients with colon cancer, 51% were females, compared to 49% males. Trends in age at diagnosis show patients at SBUMC presented with a colon cancer diagnosis at an earlier age than nationally and in New York State. The high percentage of late stage patients seen at SBUMC in 2000 through 2006 reflects referrals for clinical trial protocols available to that population. Treatment modalities for colon cancer at SBUMC included surgical resection in 74% of patients, adjuvant chemotherapy for lymph node positive patients following surgery and neo-adjuvant chemotherapy in 23%, radiation therapy in 11%, and supportive and palliative care alone in 14%. Palliative care specialists are available to patients at initial presentation and to supplement and provide continued care through our specialized Survivorship and Supportive Care Program. The histologic cell types in the patients with colon cancer seen at SBUMC included adenocarcinoma (71%), mucinous adenocarcinoma (10%) and other specified types (4%). At SBUMC, 15% of patients presented with an adenocarcinoma arising in a polyp, compared to 12% recorded in New York State and 13% nationwide. According to the New York State Cancer Registry, the colon cancer mortality estimates for Suffolk County, New York are 118 males and 129 females, per 100,000 population. The survival data chart by stage at diagnosis and overall stages, for deaths from all causes, compares SBUMC to NCDB data reported from hospital cancer registries nationwide and in New York State.

*Prepared by the Cancer Registry Department at Stony Brook University Medical Center.*

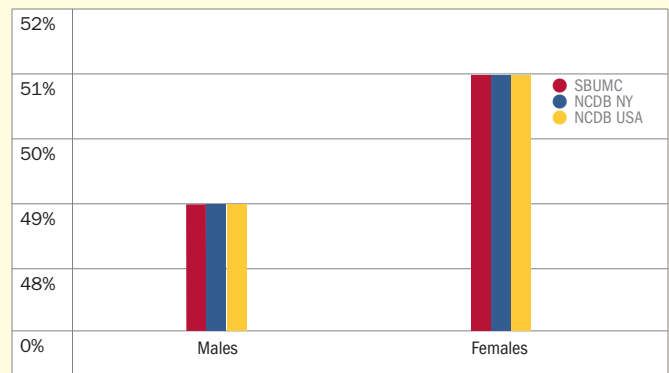
### Colon Cancer: Age at Diagnosis

Stony Brook University Medical Center (SBUMC) vs. National Cancer Data Base (NCDB) NY and USA (2000–2006)



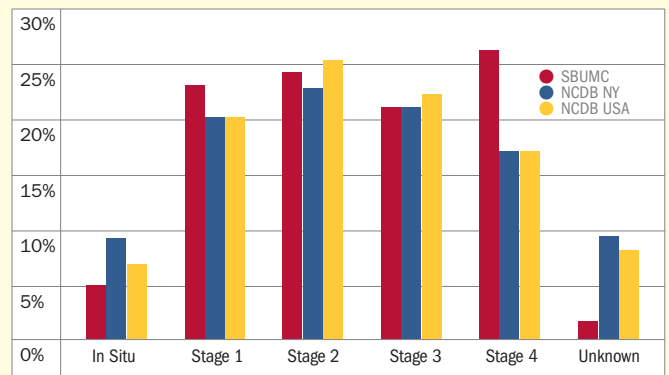
### Colon Cancer: Gender Incidence

Stony Brook University Medical Center (SBUMC) vs. National Cancer Data Base (NCDB) NY and USA (2000–2006)



### Colon Cancer: Stage at Diagnosis

Stony Brook University Medical Center (SBUMC) vs. National Cancer Data Base (NCDB) NY and USA (2000–2006)



**Colon Cancer: Histology**

Stony Brook University Medical Center (SBUMC) vs. National Cancer Data Base (NCDB) NY and USA (2000–2006)

Histology	SBUMC	NCDB NY	NCDB USA
Adenocarcinoma NOS	71%	67%	68%
Adenocarcinoma Arising in Polyp	15%	12%	13%
Mucinous Adenocarcinoma	10%	8%	8%
Other Specified Types	4%	13%	11%

**Colon Cancer: Treatments**

Utilized within 4 months of diagnosis Stony Brook University Medical Center (SBUMC) 2000-2006

- Surgery = 74%
- Chemotherapy = 23%
- Radiation therapy = 11%
- Palliative and supportive therapy alone = 14%

**Colon Cancer 5-Year Survival by Stage**

Patients diagnosed in 1998–2001. Stony Brook University Medical Center (SBUMC) (n= 269 ) compared to National Cancer Data Base (NCDB) USA (n=211,071) and NCDB Atlantic Region (NCDB AR) (n= 34,722). All causes.

	In Situ	Stage 1	Stage 2	Stage 3	Stage 4	All Stages
SBUMC	77.1%	70.6%	69.6%	50.4%	4.9%	44.9%
NCDB USA	77.8%	74.4%	63.9%	49.9%	6.6%	52.1%
NCDB AR	78.5%	75.5%	63.4%	48.9%	6.3%	51.9%
NCDB 95% Confidence Interval	77.8–79.2	74.4–75.3	63.5–64.4	49.4–50.3	6.3–6.8	51.4–52.5

**National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology™ Colon Cancer**

Colorectal cancer is the fourth most frequently diagnosed cancer and the second leading cause of cancer death in the United States. In 2009, an estimated 106,100 new cases of colon cancer and approximately 40,870 cases of rectal cancer will occur, and 49,920 people will die from colon and rectal cancer. Despite these statistics, mortality from colon cancer has decreased slightly over the past 30 years, possibly because of earlier diagnosis through screening and better treatment modalities. The NCCN clinical practice guidelines for managing colon cancer begin with the clinical presentation of the patient to the primary care physician or gastroenterologist and address diagnosis, pathologic staging, surgical management, adjuvant treatment, management of recurrent and metastatic disease, and patient surveillance. Guidelines also include a section on survivorship and new recommendations for KRAS mutation testing.

Reference: *Journal of the National Comprehensive Cancer Network*, Volume 7, Number 8, September 2009.

**Colon Cancer: Quality Indicators**

National Quality Forum (NQF) performance measurement indicators:

- Adjuvant chemotherapy is considered or administered within 4 months (120 days) of diagnosis for patients under the age of 80 with AJCC Stage III (lymph node positive) colon cancer. [ACT]
- At least 12 regional lymph nodes are removed and pathologically examined for resected colon cancer. [12RLN]

NQF Indicator	2004	2005	2006	2007	2008
Adjuvant chemotherapy considered/received	100%/72%	100%/92%	100%/60%	100%/67%	100%/86%
12 or more regional lymph nodes resected	86%	81%	78%	72%	93%