BREAST CANCER SITE SURVEY

Breast cancer site survey of cases first diagnosed 2000-2006 Stony Brook University Medical Center (SBUMC) Cancer Registry Data Base (n = 2,375)

compared to National Cancer Data Base (NCDB) benchmark data USA (n = 1,217,647) and New York State (n = 82,660)

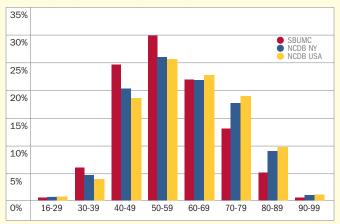
Breast cancer survival cases diagnosed 1998-2001 at SBUMC (n=1,344) compared to NCDB benchmark data for USA Nationwide (1,344 hospitals n=555,078) and Atlantic Region (188 hospitals in NY, NJ, PA n=88,844).

Preast cancer is the most frequently diagnosed cancer in women and is expected to be the second leading cause of cancer deaths in women in the United States in 2009, 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. Early detection through screening has been shown to reduce mortality from cancer of the breast. American Cancer Society screening guidelines recommend annual mammography for average-risk women age 40 years and older, and breast self-examination for women beginning in the early 20s. SBUMC offers breast health education through our community outreach programs.

A site-specific survey of breast cancer performed using SBUMC cancer registry data compares the patient characteristics of age and stage at diagnosis and histological 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 breast 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 tables demonstrate SBUMC compared to NCDB nationwide and New York State specific data. Charted data for the study period show trends in age at diagnosis with patients seen at SBUMC presenting with a breast cancer diagnosis at an earlier age than nationally and in New York State. Twenty-three percent of our patients presented with AJCC TNM Stage 0 in situ breast cancers, and 38% presented with Stage 1, demonstrating 61% with an early stage diagnosis. The histological cell types for this group of breast cancer patients seen at SBUMC were various and included duct carcinoma in 54%, lobular carcinoma alone in 10%, and combined duct and lobular carcinoma in 12%, with other specified types represented in 24% of cases. Treatment modalities for breast cancer at SBUMC included surgical resection in 92.4% of patients, radiation therapy in 56%, hormones in 32%, and adjuvant or

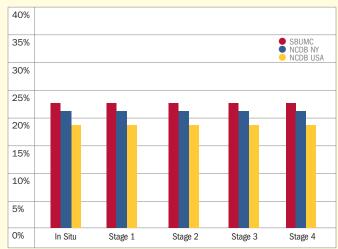
Breast Cancer: Age at Diagnosis

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



Breast Cancer: Stage at Diagnosis

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



Breast 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
Duct Carcinoma	54%	62%	67%
Lobular Carcinoma, NOS	10%	11%	9%
Duct and Lobular Carcinoma	12%	9%	6%
Other Specified Types	24%	18%	18%

BREAST CANCER SITE SURVEY

neo-adjuvant chemotherapy 22%, and supportive and palliative care alone in 7%. According to the 2009 Centers for Disease Control and Prevention National Center for Health Statistics, breast cancer will be second only to lung cancer for women in 2009. Our survival chart shows the percentage of deaths from all causes, and compares SBUMC to NCDB data reported from hospital cancer registries nationwide and in New York State by stage at diagnosis. The NCCN clinical practice guidelines, which offer algorithms for the histological diagnosis, workup, staging, primary treatment, risk reduction, and surveillance follow-up are referenced for management of breast cancer patients. These guidelines include a section on survivorship and genetic testing.

Quality performance in prevention, detection, diagnostic workup, staging, treatment, and follow-up care are top priorities for the Stony Brook University Medical Center cancer care program clinical staff. The National Quality Forum (NQF) brought public and private payers together with consumers, researchers, and clinicians to broaden consensus on performance measures for breast cancer. The performance rates shown in ACOS COC Program Practice Profile Reports match the specifications of the breast 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 toward Pay for Performance (P4P), these reports provide COC-approved programs with the ability to examine program-specific breast cancer care.

Site survey prepared by the Cancer Registry Department, Stony Brook University Medical Center, September 2009.

Breast Cancer: Treatment Modalities

Utilized alone or in combination during the first course of planning and treatment at SBUMC during 2000–2006

- Surgery = 92.4%
- · Radiation therapy = 56%
- Hormone therapy = 32%
- · Chemotherapy = 22%
- Palliative and supportive therapy alone = 7%

Breast Cancer 5-Year Survival by Stage

Patients diagnosed in 1998–2001 Stony Brook University Medical Center SBUMC (n= 1,389) compared to National Cancer Data Base (NCDB) USA (1,344 Hospitals, n= 555,078) and NCDB Atlantic Region (NCDB AR) (188 Hospitals in NY, NJ, PA, n= 88,844). All causes.

	In Situ	Stage 1	Stage 2	Stage 3	Stage 4	All Stages
SBUMC	93.3%	90.7%	85.4%	63.4%	23.5%	85%
NCDB USA	95.1%	90.9%	82.2%	56.4%	18.6%	83.9%
NCDB AR	95.5%	90.9%	82.3%	54.9%	18.1%	83.9%
NCDB 95% Confidence Interval	94.9- 95.2	90.8- 91	82- 82.4	55.9- 57	18- 19.2	83.8- 84

Breast Cancer: Quality Indicators

Stony Brook University Medical Center (SBUMC) during 2004–2008

National Quality Forum (NQF) performance measurement indicators:

- Radiation therapy is administered within 1 year of diagnosis for women under age 70 receiving breast conservation surgery for breast cancer [BCS/RT].
- Combination chemotherapy is considered or administered within 4 months of diagnosis for women under 70 with AJCC T1c N0 M0 or Stage 2 or 3 ER or PR negative breast cancer [MAC].
- Hormone therapy or aromatase inhibitor is considered or administered within 1 year of diagnosis for women with AJCC T1c NO MO, or Stage 2 or 3 ER and/or PR positive breast cancer [HT].

NQF Indicator	2004	2005	2006	2007	2008
Radiation therapy following breast conservation surgery	96.1%	98.6%	97.1%	96.9%	99%
Adjuvant chemotherapy for ER/PR negative T1c or Stage 2 or 3	96.1%	96.1%	100%	100%	100%
Adjuvant hormone or aromatase inhibitor therapy for ER/PR positive T1c or Stage 2 or 3	96.5%	94.4%	96%	96%	96.7%