



2014 STATISTICAL DATA

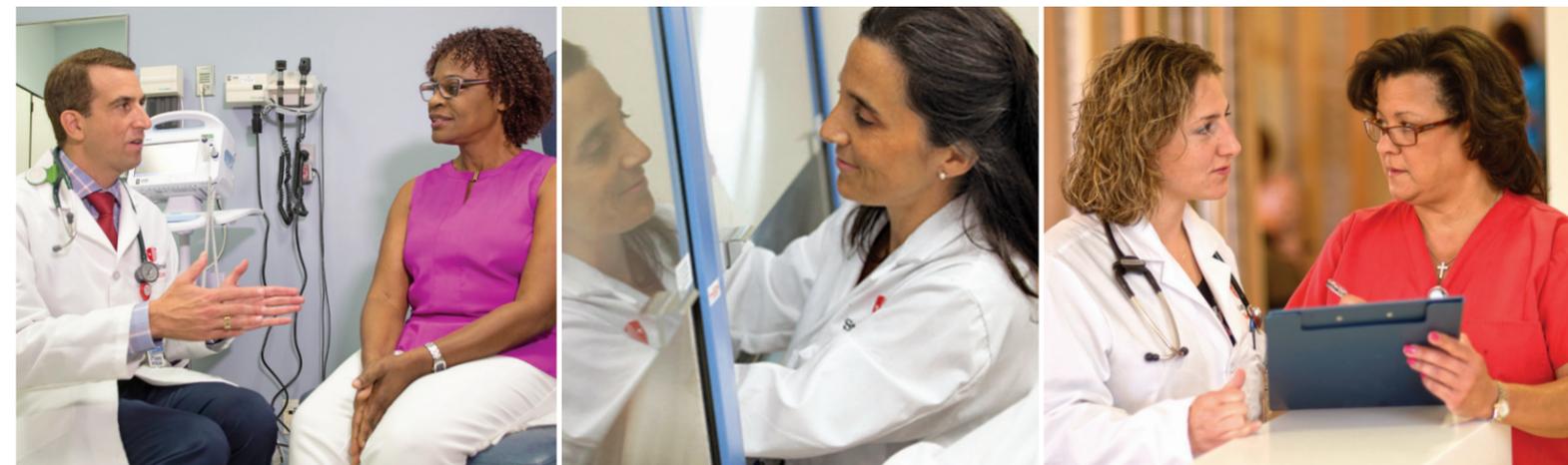
QUALITY AND STANDARDS: WORKING TO MEET AND EXCEED NATIONWIDE QUALITY STANDARDS



cancer.stonybrookmedicine.edu

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The 2015 Cancer Center Quality and Standards Report was developed by Stony Brook Medicine's Cancer Committee and published by the Office of Communications, Stony Brook, NY. ©2016





The mission of Stony Brook University Cancer Center is to reduce the suffering from cancer by providing world-class multidisciplinary care close to home, conducting innovative research, educating patients and healthcare professionals, and partnering with our community to reach the underserved populations.

QUALITY AND STANDARDS: WORKING TO MEET AND EXCEED NATIONWIDE QUALITY STANDARDS

The Cancer Center's departments, tumor boards and committees that consistently ascertain, measure and document the wealth of cancer data and patient information allow our clinicians and healthcare staff to evaluate and plan strategies for improved patient outcomes.



The Cancer Registry Department

The Cancer Registry maintains a data system that stores etiology, treatments and survival information of patients with cancer or benign tumors of the central nervous system. Cancer registrars at Stony Brook Medicine abstract cancer data from patient medical records and enter the data into an electronic database. The information is used to assist Cancer Center leadership and hospital administrators in making decisions about physician recruitment, equipment purchases and patient needs. The data also helps physicians and researchers identify the cause of cancer, environmental risk factors, the effectiveness of treatment and the length of patient survival.

The Cancer Registry Department at Stony Brook Medicine maintains a database of over 62,000 patients. Recently, the cancer registrars added data of over 3,000 patients with cancer treated at Stony Brook in 2014 to the registry database, including 2,199 new patients.

Quality control of cancer data is performed according to national standards. The Cancer Registry regularly submits cancer data to the National Cancer Data Base and the New York State Cancer Registry. Procedures are in place to ensure data security and disaster recovery.

Over the years, the cancer registrar's role has been transformed from only data entry to that of a more active and invaluable participant in a hospital's cancer program. Accurately collecting complete cancer data in a timely order is the goal of the Cancer Registry at Stony Brook Medicine. The registry will continue to provide high quality data for the cancer program and the continued improvements of cancer care.

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Tumor Board Schedule 2015		
Bone and Soft Tissue Sarcoma CME	Wednesdays 7 am	Week 4
Breast CME	Fridays 7:30 am	Weekly
Colorectal CME	Mondays 7 am	Weekly
Gynecologic Oncology CME	Wednesdays 7 am	Weeks 1 and 3
Head and Neck, and Thyroid	Tuesdays 7:30 am	Weeks 1 and 3
Leukemia/Lymphoma CME	Fridays 9:30 am	Weekly
Lung CME	Tuesdays 4 pm	Weeks 1 and 3
Melanoma CME	Fridays 7:30 am	Week 4
Neurologic Oncology	Tuesdays 5 pm	Weeks 1 and 3
Pediatric	Mondays 4 pm	Weeks 2 and 4
Upper GI and Liver	Tuesdays 7:30 am	Weekly
Urology CME	Tuesdays 7:30 am	Weeks 2 and 4

Meetings are held in the Pathology Conference Room 766, Hospital Level 2. Exceptions are Melanoma, held in the Surgical Conference Room, Health Sciences, T19-020; Upper GI and Liver in the Radiation Oncology Conference Room; and Bone and Soft Tissue Sarcoma in Health Sciences, Level 3, Lecture Hall 6. Clinical faculty, health science students and clinical staff are invited to attend.

Tumor Board Conferences

Tumor Board conferences are a key component of the Cancer Program and integral to patient management at Stony Brook Medicine. They provide a valued forum for education, consultation and collaboration. Disease Management Teams present cases for diagnostic assessment, while referencing national treatment guidelines, clinical research protocols and other relevant literature for treatment planning, to obtain the best clinical outcome for our patients. In 2015, eight of 12 Tumor Boards offered AMA Category 1 CME credits to eligible attendees.

Quality Management

Stony Brook Cancer Center leadership works to ensure the delivery of safe, effective, efficient and accessible patient care through focused care programs and targeted quality management tools, which encourage the creation, assessment, re-evaluation and redesign of processes and systems. Using input from site-focused Disease Management Teams, data collected on selected indicators are compared on Cancer Services balanced scorecards. Additionally, selected site-focused outcome studies utilizing National Comprehensive Cancer Network® Clinical Practice Guidelines in Oncology and Commission on Cancer Program Standards are reviewed and published annually. The program's effort to monitor quality and improve care is a progressive movement toward a high-reliability organization, error-free over time.

Cancer Liaison Physician

The Cancer Liaison Physician (CLP) is a liaison between Stony Brook Medicine and the community, between the national standards organizations and the hospital, and between the Cancer Committee and various departments at Stony Brook Medicine, and represents the Cancer Center on the Cancer Committee. At Stony Brook Cancer Center, Paula Denoya, MD, serves as the CLP. Her focus is on quality initiatives and the goal of providing patients with advanced treatment options.

The CLP also works with Disease Management Teams to develop best practices, evaluate compliance with adopted guidelines, expand participation in clinical trials and improve quality of care. The liaison works with local agencies and the American Cancer Society on outreach and education priorities, as well as providing direction in accordance with the Commission on Cancer guidelines.

The Cancer Committee

The Cancer Committee is the designated multidisciplinary body for the administrative oversight, development and review of the cancer program at Stony Brook Medicine. The Committee communicates directly with Stony Brook's Medical Board, and its activities and recommendations directly impact programs and activities.

The committee includes representatives from both clinical and supportive areas who are involved with the care of patients with cancer. Physician members include clinicians from the Departments of Medical Oncology, Surgery, Genetics, Radiation Oncology, Pathology, Diagnostic Radiology and Palliative Care. Non-physician members include those from Hospital Administration, Nursing, Social Work, Cancer Registry, Pharmacy, Quality Assurance, Nutrition, Physical

Rehabilitation, Healthcare Teleservices, Clinical Trials, Patient Advocacy and Community Outreach, and the Chaplaincy. The Committee is defined multidisciplinary because of the array of representatives.

Charged with providing leadership, the Cancer Committee plans, initiates, stimulates and assesses the institution's cancer-related activities in accordance with the Commission on Cancer requirements for cancer program accreditation. Also under the leadership of the Cancer Committee, the cancer conference coordinator implemented various cancer site-specific tumor boards throughout the year that attract medical students, faculty, researchers and community physicians who are interested in continuing medical education topics.

2015 Cancer Committee

Physician Members

Ghassan Samara, MD, Surgery, *Committee Chair*
Samuel Ryu, MD, Radiation Oncology, *Co-Chair*
Paula Denoya, MD, Surgery, *Cancer Liaison Physician*

Lea Baer, MD/Alison Stopeck, MD,
 Hematology/Oncology, *Data Quality Coordinator*

Minsig Choi, MD/Yue Zhang, MD,
 Medical Oncology, *Cancer Conference Coordinator*

James Davis, MD/Meenakshi Singh, MD, Pathology

Lynn Hallarman, MD/Samantha Nagengast, MD,
 Palliative Care

Melissa Henretta, MD, MPH/Joyce Varughese-Raju, MD,
 Gynecologic Oncology

Berrin Monteleone, MD/Gwen Goldstein, MS, CGC,
 Genetics

Valmore Suprenant, MD/Andrew Maleson, MD,
 Diagnostic Radiology

Edward Valentine, MD, MS/Bong Kim, MD,
 Radiation Oncology

Non-Physician Members

Xuan Barzilay, MBA, CTR/Helen Vasquez, CTR,
 Cancer Registry, *Committee Coordinator*

Linda Bily, MA/Mari Martinez, Patient Advocacy and Community Outreach, *Community Outreach Coordinator*

Patricia A. Doty, RN, MS, ACNS-BC, OCN/ Taylor Adamo, RN, BS, BMTCN, Oncology Nursing

Jennifer Fitzgibbon, MS, RD/Michelle Stevens, NP, Oncology Nutrition

Jeannie Gaspard, RN, MSN, OCN, NEA-BC/ Ernest Conforti, MBA, MS, CPC, CCS, Administration, *Cancer Program Administrator*

Jennifer Hofecker, MSA/ Kim Lyktey, RN,
 Clinical Trials, *Clinical Trials Research Coordinator*

Susan McCarthy, LMSW/ Mohini Jose, MSW,
 Social Work, *Psychosocial Services Coordinator*

Christine Northam-Schuhmacher, RN, BSN, MS/ Grace Propper, MS, RN, CPNP, NNP-BC,
 Quality Management, *Quality Improvement Coordinator*

Father Patrick Okafor, Chaplaincy

Candiano Rienzie, DPT/Lindsey Fan, DPT, Physical Rehabilitation

Rodina Taylor-Thomas, Healthcare Teleservices

Dawn Tropeano/Amanda Schnipper, American Cancer Society

Scot Weber, RPh, Pharmacy

Breast Cancer Site Survey

Breast cancer remains the most common life-threatening cancer diagnosed in women in the United States. In 2015, over 230,000 new cases of invasive breast cancer were diagnosed in women and 2,350 cases in men. An additional 60,000 women were diagnosed with non-invasive or in situ breast cancer in 2015. Thus, breast cancer represents 29 percent of all cancers diagnosed in women and less than 1 percent of cancers in men. When the data is finalized, it is expected that more than 40,000 women will have died of breast cancer in 2015, representing approximately 15 percent of all cancer-related deaths in women. The rates of breast cancer incidence in the last 10 years have been relatively flat. However, the rates of death from breast cancer have steadily decreased over the last 25 years.

White women have a higher incidence of breast cancer compared to black women, which is thought to reflect both increased diagnosis (i.e., more frequent mammograms) as well as environmental risk factors (i.e., delayed child

birth, greater use of hormone replacement therapy and lower likelihood of breast feeding). Black women have a higher risk of death from breast cancer compared to white woman even after controlling for their higher stage at presentation and co-morbidities. Black women are more likely to develop triple negative breast cancer due to inherent differences in tumor aggressiveness. This may account for some of the disparities in treatment outcomes.

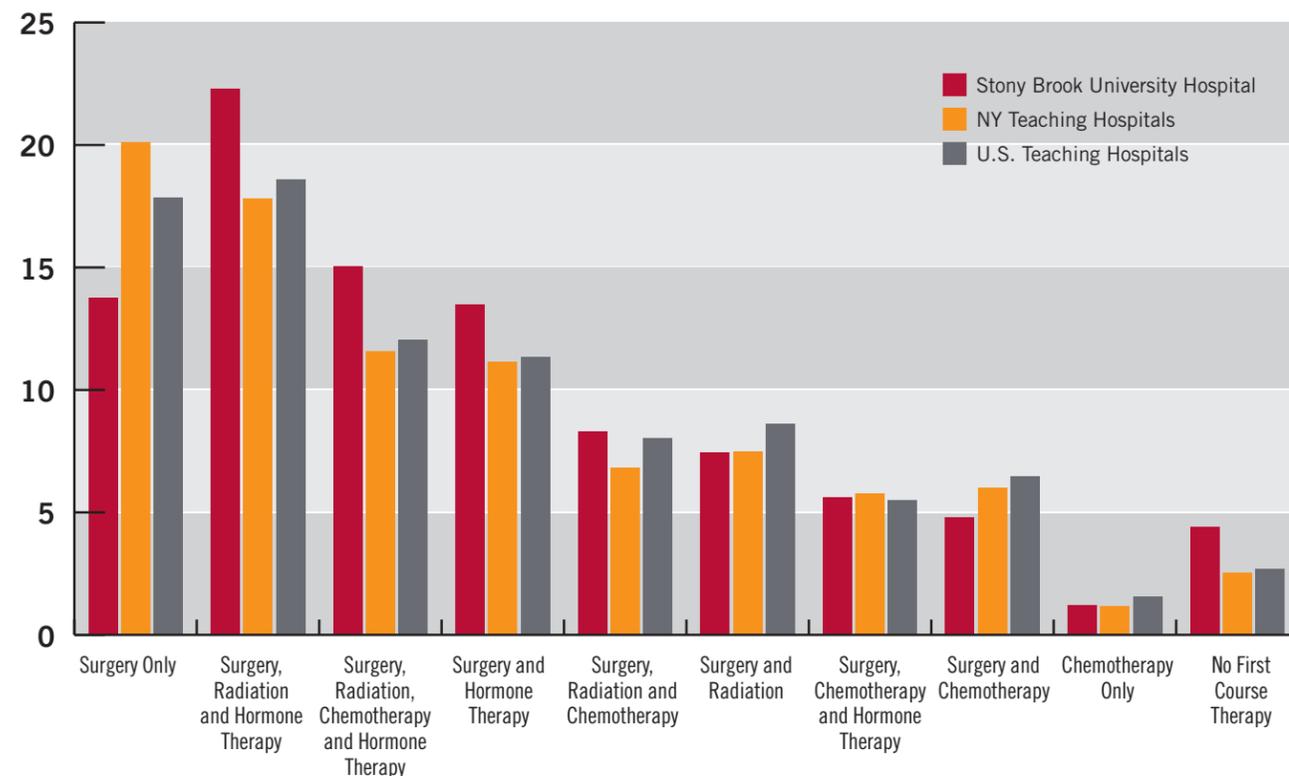
Mutations of the breast cancer (BRCA)1 and BRCA2 genes account for approximately 5-10 percent of all breast cancers diagnosed in the US. Women with a BRCA1 mutation have an approximately 55-65 percent lifetime risk of developing breast cancer, while women with a BRCA 2 mutation have an approximate 45 percent risk. An increased risk of ovarian cancer is also found in BRCA carriers. One in 40 people of Ashkenazi Jewish descent carry a BRCA mutation. Other risk factors for breast cancer include:

- mutations in other genes including TP53 (Li-Fraumeni syndrome), CHEK2, ATM, CDH1, PALB2
- family history of breast cancer in a first-degree relative
- radiation to the chest or face before age 30
- longer estrogen exposure (i.e., early menarche or late menopause),
- being over 30 years of age at the time of a first live birth
- hormone replacement therapy with a progestin
- obesity or significant adult weight gain
- dense breasts

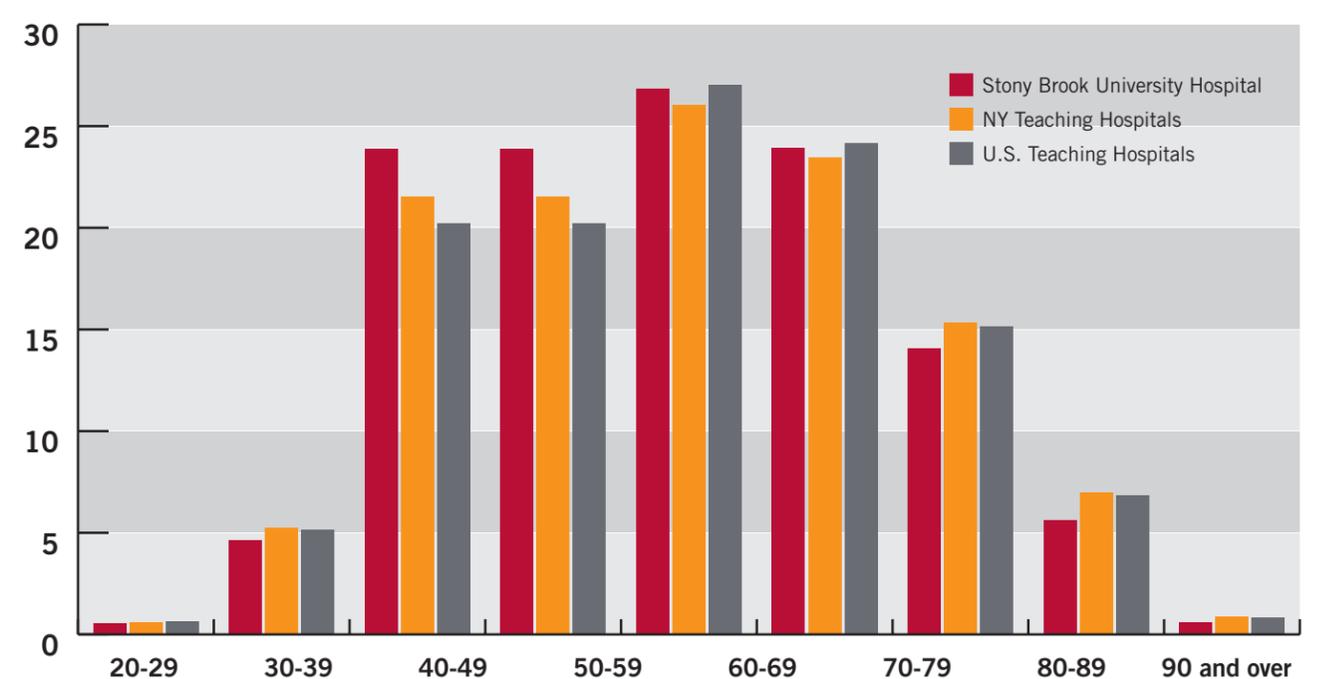
Advancements in targeted treatment, especially regarding HER2-positive cancers, has led to marked improvements in cure rates for women with early-stage breast cancer. This significant upturn is reflected in five-year survival rates, which rose from 75 percent (1975-1977) to 91 percent (2004-2010). In addition, improved mammography techniques, such as digital mammography and digital breast tomosynthesis, also known as 3D mammography, have yielded improved rates of early detection and lower false-positive results.

The median age at breast cancer diagnosis is approximately 61 years in the U.S. with Stony Brook seeing a slightly younger population consistent with the population of Suffolk County. In addition, the population seen is predominantly white with a small number of Hispanic and black patients reflecting the demographics of Suffolk County. Patients largely present with early stage disease, including over 24 percent presenting with in situ disease only, reflective of the excellent access to screening programs present on Long Island and the generally knowledgeable patient base. Patients with breast cancer treated at Stony Brook are also more likely to undergo surgery with radiation therapy rather than surgery alone. This suggests patients are undergoing more breast conservative therapy compared to other providers in NY State or U.S. teaching hospitals. This is particularly noteworthy as breast conservative therapy is comparable to mastectomy with regard to overall survival and is less traumatic and deforming to the patient and thus the preferable option when possible.

Breast Cancer: Treatment Modalities 2003-2013



Breast Cancer: Age at Diagnosis 2003-2013

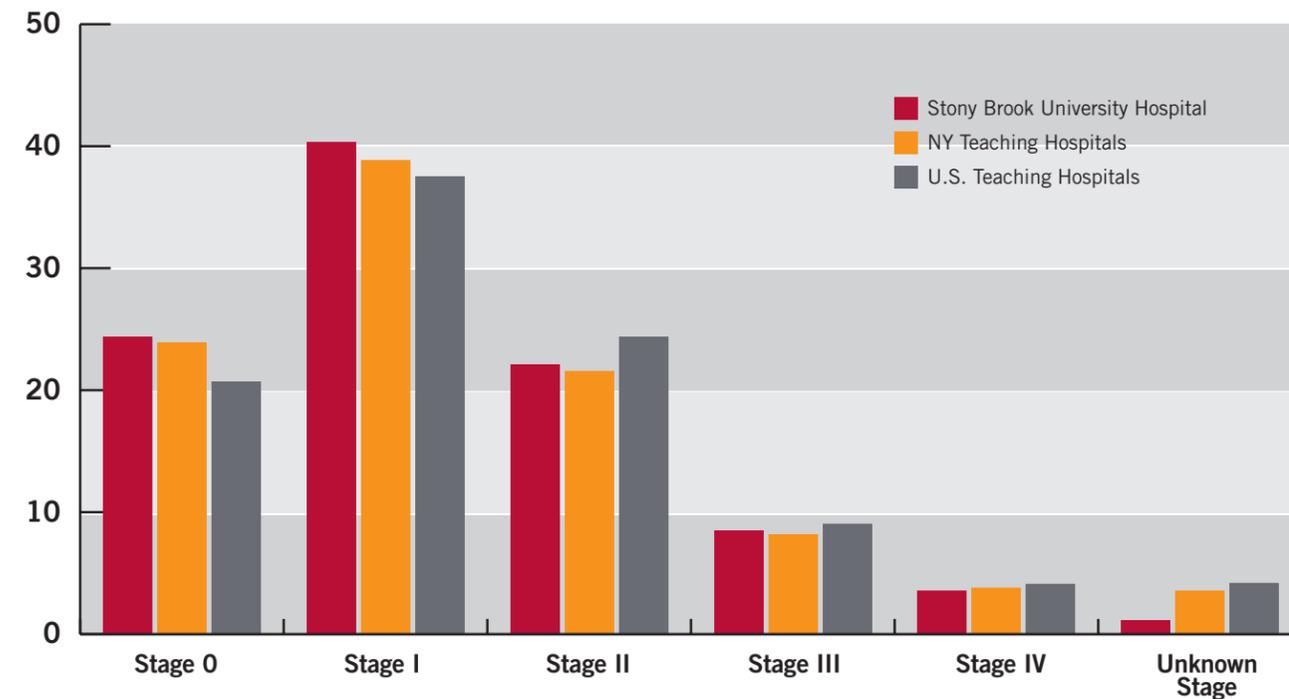


2014 Cancer Site Distribution

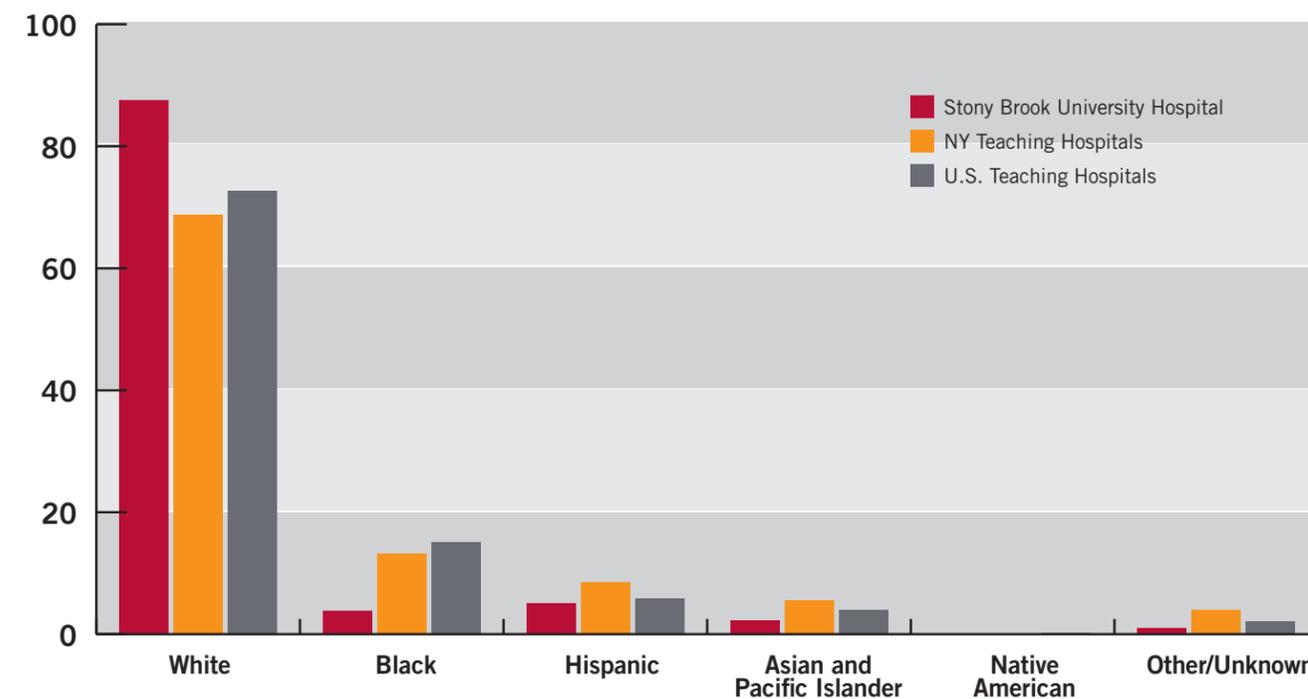
PRIMARY SITE	TOTAL	PATIENT TYPES		SEX		AJCC STAGE GROUP*						
		New	Re-tx	Males	Females	In situ	Stage I	Stage II	Stage III	Stage IV	Unknown	N/A
ALL SITES	3168	2293	875	1398	1770	265	817	373	310	380	479	544
ORAL CAVITY	53	38	15	30	23	0	7	7	6	16	17	0
LIP	2	2	0	2	0	0	0	1	0	0	1	0
TONGUE	12	9	3	5	7	0	3	1	3	3	2	0
OROPHARYNX	2	1	1	1	1	0	0	0	1	0	1	0
HYPOPHARYNX	1	1	0	1	0	0	0	0	0	1	0	0
OTHER	36	25	11	21	15	0	4	5	2	12	13	0
DIGESTIVE SYSTEM	450	304	146	272	178	9	72	95	76	94	93	11
ESOPHAGUS	37	21	16	32	5	2	3	7	8	6	11	0
STOMACH	41	25	16	28	13	0	8	3	11	11	8	0
COLON	115	71	44	59	56	4	21	24	20	26	20	0
RECTUM	37	23	14	23	14	2	8	5	8	5	9	0
ANUS/ANAL CANAL	8	4	4	1	7	0	0	0	4	1	2	1
LIVER	47	34	13	34	13	0	7	8	8	6	13	5
PANCREAS	115	89	26	68	47	1	16	41	12	26	19	0
OTHER	50	37	13	27	23	0	9	7	5	13	11	5
RESPIRATORY SYSTEM	332	241	91	170	162	1	69	27	64	119	51	1
NASAL/SINUS	3	1	2	3	0	0	0	0	0	1	1	1
LARYNX	13	6	7	11	2	0	2	2	2	3	4	0
LUNG/BRONCHUS	312	230	82	153	159	1	66	25	62	113	45	0
OTHER	4	4	0	3	1	0	1	0	0	2	1	0
BLOOD & BONE MARROW	204	114	90	114	90	0	1	0	0	0	0	203
LEUKEMIA	119	73	46	67	52	0	1	0	0	0	0	118
MULTIPLE MYELOMA	62	33	29	33	29	0	0	0	0	0	0	62
OTHER	23	8	15	14	9	0	0	0	0	0	0	23
BONE	7	6	1	2	5	0	3	1	0	2	1	0
CONNECT/SOFT TISSUE	30	24	6	22	8	0	5	8	5	3	5	4
SKIN	202	185	17	129	73	63	68	15	13	5	36	2
MELANOMA	194	178	16	124	70	63	65	15	12	5	34	0
OTHER	8	7	1	5	3	0	3	0	1	0	2	2
BREAST	575	452	123	5	570	131	212	89	30	32	81	0
FEMALE GENITAL	196	144	52	0	196	5	93	9	33	12	40	4
CERVIX UTERI	31	24	7	0	31	0	11	5	8	3	4	0
CORPUS UTERI	109	80	29	0	109	2	66	2	8	5	24	2
OVARY	43	30	13	0	43	0	12	1	16	4	10	0
VULVA	5	4	1	0	5	1	2	1	1	0	0	0
OTHER	8	6	2	0	8	2	2	0	0	0	2	2
MALE GENITAL	218	136	82	218	0	3	52	71	11	31	49	1
PROSTATE	197	119	78	197	0	0	41	71	10	31	44	0
TESTIS	13	11	2	13	0	0	8	0	1	0	4	0
OTHER	8	6	2	8	0	3	3	0	0	0	1	1
URINARY SYSTEM	246	194	52	171	75	53	90	22	16	24	34	7
BLADDER	113	78	35	83	30	37	23	16	5	11	21	0
KIDNEY/RENAL	112	96	16	73	39	5	66	4	10	13	12	2
OTHER	21	20	1	15	6	11	1	2	1	0	1	5
BRAIN & CNS	202	131	71	73	129	0	0	0	0	0	0	202
BRAIN (BENIGN)	9	6	3	5	4	0	0	0	0	0	0	9
BRAIN (MALIGNANT)	56	43	13	28	28	0	0	0	0	0	0	56
OTHER	137	82	55	40	97	0	0	0	0	0	0	137
ENDOCRINE	243	190	53	72	171	0	107	13	34	13	24	52
THYROID	191	161	30	50	141	0	107	13	34	13	24	0
OTHER	52	29	23	22	30	0	0	0	0	0	0	52
LYMPHATIC SYSTEM	148	87	61	89	59	0	36	16	21	25	46	4
HODGKIN'S DISEASE	20	16	4	14	6	0	4	7	2	3	3	1
NON-HODGKIN'S	128	71	57	75	53	0	32	9	19	22	43	3
UNKNOWN PRIMARY	50	37	13	26	24	0	0	0	0	0	0	50
OTHER/ILL-DEFINED	12	10	2	5	7	0	2	0	1	4	2	3

Number of cases excluded: 138
This report EXCLUDES CA in-situ cervix cases, squamous and basal cell skin cases, and intraepithelial neoplasia cases.

Breast Cancer: TNM Stage at Diagnosis 2003-2013



Breast Cancer: Race/Ethnicity Distribution 2003-2013



Cancer Center Phone Numbers

Phone numbers are in the 631 area code unless otherwise stated.

Cancer Center.....	638-1000
Cancer Helpline.....	(800) 862-2215
Cancer Registry.....	444-9844
Cancer Survivorship Program.....	638-1000
Carol M. Baldwin Breast Care Center.....	638-1000
Chaplaincy.....	444-7775
Child Life Program.....	444-3840
Clinical Trials.....	638-0839
Colorectal Surgery.....	444-1825
Dermatology.....	444-4200
Diagnostic Radiology.....	638-2121
Gastrointestinal Oncology.....	444-8052
Gynecologic Oncology.....	638-1000
Head and Neck Oncology.....	444-8410
HealthConnect.....	444-4000
Hematology/Oncology.....	638-1000
Leukemia/Lymphoma/Transplant.....	638-1000
Lung Cancer Evaluation Center.....	444-2981
Neurosurgical Oncology.....	444-1210
Nursing Administration.....	444-2780
Nutrition.....	638-1000
Pain Management Services.....	638-0800
Palliative Care.....	444-2052
Pathology.....	444-2222
Patient Education Services.....	638-1000
Pediatric Hematology/Oncology.....	444-7720
Physical and Lymphedema Therapy.....	444-4240
Preventive Medicine.....	444-2190
Radiation Oncology.....	444-2200
Social Work Services.....	444-2552
Support Groups.....	444-4000
Surgical Oncology.....	638-1000
Urologic Oncology.....	444-1948



Lynn Hallarman, MD, with patient Judith Pacifico Larkin



Charles Mazzaresse, MPS, RT(R)(CT)(CV), Associate Director, Outpatient Imaging Services, prepares a patient for a CT scan as part of the lung cancer screening program



Brittany Carroll