



NORTH SHORE MEDICAL CENTER

C. GORDON GRIFFITH CANCER CENTER



2006 Annual Report with statistical data from 2005



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North Shore Medical Center's Cancer Committee is pleased to present the 2006 Cancer Program Annual Report. This report is designed to highlight the events and services of the cancer program over the past year.

Due to the technical improvements and advancements in the Cancer Center through last year, inclusive of IMRT (Intensity Modulated Radiation Therapy) and ultrasound localization, and our ability to contract with HMO's, the Cancer Center had a significant increase (58%) in the number of patients treated.

Founded in 1981, the C. Gordon Griffith Cancer Center primarily serves communities in Dade and Broward counties. The Center provides comprehensive services utilizing a multidisciplinary approach, allowing patients access to state-of-the-art cancer treatment in surgery, IMRT, X-knife Stereotactic Radiosurgery, and chemotherapy.

Other services offered through the Hospital include: early detection programs for breast and prostate cancer, smoking cessation campaign, access to support groups in house or through referrals, bereavement counseling, inpatient hospice and access to home hospice care, physical and occupational therapy, as well as, free transportation to and from the Cancer Center.

The cancer program was surveyed and reaccredited by the American College of Surgeons Commission on Cancer (ACoS) as a Community Hospital Comprehensive Cancer Program. Only one in four hospitals that treat cancer receive this special approval. In order to maintain this approval, NSMC must undergo an on-site review every three years.

Approval by the ACoS is given only to those facilities providing the best in diagnosis and treatment of cancer and that voluntarily commit to undergo a rigorous evaluation process and review of its performance. NSMC has participated and held this accreditation since 1984. This is a commitment to our patients that they will have access to all of the various medical specialists who are involved in diagnosing and treating cancer and recognition of the quality of our comprehensive patient care.

The Cancer Committee is the core of the Cancer Program and is in charge of maintaining high standards of quality care for our patients and for monitoring the program's compliance with ACoS regulations. It also ensures information about clinical trials, education, emotional support and life-long patient follow-up are carried out. The registry staff collects data on type and stage of cancers, treatment results, completion of quality management, improvement activities and continuously monitors the improvement of care.

Weekly cancer conferences are facilitated by the registry department and involve physicians specializing in the diagnosis and treatment of cancer. Cases are presented and discussed, providing the managing physician a compilation of opinions on treatment options for their patients and an educational opportunity to staff members attending the conference. As part of the goals of the cancer committee, we continue to encourage physicians to present at least 51% of prospective cases. In 2005, 91.5% of the cases presented were prospective.

There is a plan to continue improving the technology of the Cancer Center, as well as, increase the number of services offered. Within the next year, the addition of a CT scanner, for simulation and treatment planning, and an HDR (High Dose Rate Brachytherapy) unit, for remote after loading implants, will add to our ability to treat any kind of solid tumor.

As Chairman of the committee, I wish to extend my sincere gratitude to the multidisciplinary team of dedicated physicians, nurses, chaplains, therapists and support staff of the cancer program and C. Gordon Griffith Cancer Center who work together for one common goal – to provide the highest quality of care and compassion for cancer patients.

Jaime Lozano, M.D.
Cancer Committee Chairman

JUNE 2005 TO MAY 2007 CANCER COMMITTEE MEMBERS

PHYSICIAN MEMBERS

Jaime Lozano, M.D.
Chairman

Marie Adam, M.D.
General Surgery

Antonio Burnett, M.D.
Radiology

Gershwin Blyden, M.D.
Hematology / Oncology

Afzal Khan, M.D.
Hematology / Oncology

Adam Gropper, M.D.
Radiology

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Dermatology

Jorge Perez, M.D.
Pathology

Marc Saltzman, M.D.
Oncology

Leon Suissa, M.D.
Oncology

Christopher Vendryes, M.D.
Pain Management

Daniel Weingrad, M.D.
Surgical Oncology

Mark Wickman, M.D.
Urology

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CEO

Manny Linares
COO/CEO as of May 1, 2006

Trini Cartagena
Oncology

Charlotte Dardanello
DCQI

Jacqueline Fleisher
Dietician

Carolyn Gilleland
Administrative Director, Cancer Center

Gary Hershey
Director of Pharmacy Services

Joan Hinkson-Ragoonan
Director of Case Management

Carol Lawrence
Director of Rehabilitation Services

Ron Owens
Director of Imaging Services

Tere Medina
Risk Manager

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Director of Marketing

Marilyn Patalinjug
Clinical Nutrition Manager

Oscar Solares
Director of Radiology & Cardiology Service

Santiago Zapata
Certified Tumor Registrar

NORTH SHORE MEDICAL CENTER

***C. GORDON GRIFFITH CANCER CENTER
TUMOR REGISTRY DIVISION***

JAIME LOZANO, M.D.
MEDICAL DIRECTOR

JAIME LOZANO, M.D.
CANCER PROGRAM LIAISON PHYSICIAN

CAROLYN GILLELAND, MBA/MSN
ADMINISTRATIVE DIRECTOR

SANTIAGO ZAPATA
CERTIFIED TUMOR REGISTRAR

Tumor Registry

The Tumor Registry has been in existence since January 1982. This department is designated to capture a complete summary of patient history, diagnosis, primary site/morphology, treatment, recurrences and status for every cancer patient admitted in the institution. This information becomes a key to enable doctors, researchers, and public health professionals to best understand cancer treatment and trends.

Data maintained in our registry is electronically reported to the Florida Department of Health through the Florida Cancer Data System (FCDS). These data are held in anonymity and shared with the Surveillance Epidemiology Endpoint Registry (SEER) program of the National Cancer Institute to generate the national cancer database. In addition, the Cancer Registry produced reports throughout the year at the request of physicians, administration and ancillary departments for research and planning purposes.

On staff there is one tumor registrar who is an active member of the National Cancer Registrars Association and the Florida Tumor Registrars Association. He attends national and state meetings to keep abreast of the latest changes in the registry field. Registry personnel serve as staff to the Cancer Committee and Oncology Conferences/Tumor Boards and coordinate the implementation of the American College of Surgeon's guidelines.

Multidisciplinary Tumor Board meetings were held weekly and by working closely with pathology and radiology, the registry receives referrals for recently diagnosed cancer cases. The multi-modality staff in attendance discusses the current treatment options available and makes recommendations. Last year, 91.5% of all the cases were prospective cases.

The primary site table summarizes all cases entered into the NSMC Tumor Registry in 2005 by class, sex, AJCC staging (at the time of diagnosis), and shows all major organ systems as well as sub-sites, within each system. The number of cases with "Unk Stage" includes class 3 cases (Diagnosis and all of the first course of treatment was performed elsewhere), which explains the significantly high number. **Table I.**

Table I. Primary site tabulation for total cases 2005 at NSMC

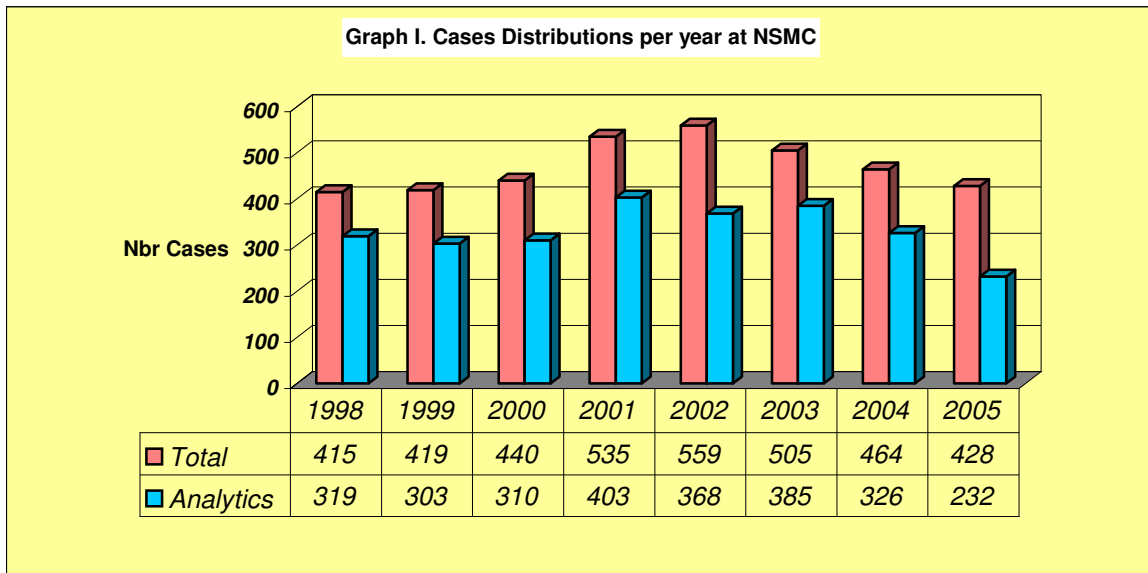
	TOTAL	CLASS		SEX		STAGE						
		A	N/A	M	F	0	I	II	III	IV	UNK	N/A
ALL SITES	428	232	196	216	212	12	51	58	23	45	176	63
ORAL CAVITY	7	5	2	6	1	0	1	1	1	2	2	0
LIP	0	0	0	0	0	0	0	0	0	0	0	0
TONGUE	4	3	1	3	1	0	0	1	1	1	1	0
OROPHARYNX	0	0	0	0	0	0	0	0	0	0	0	0
HYPOPHARYNX	2	1	1	2	0	0	1	0	0	0	1	0
OTHER	1	1	0	1	0	0	0	0	0	1	0	0
DIGESTIVE SYSTEM	87	57	30	47	40	6	17	3	9	11	38	3
ESOPHAGUS	2	2	0	1	1	0	0	0	1	1	0	0
STOMACH	17	9	8	7	10	1	3	0	0	2	10	1
COLON	42	26	16	25	17	3	11	2	3	3	20	0
RECTUM	5	4	1	3	2	2	0	0	1	1	1	0
ANUS/ANAL CANAL	3	2	1	1	2	0	0	1	1	0	1	0
LIVER	6	4	2	5	1	0	1	0	1	0	3	1
PANCREAS	8	6	2	2	6	0	1	0	1	3	3	0
OTHER	4	4	0	3	1	0	1	0	1	1	0	1
RESPIRATORY SYSTEM	69	36	33	41	28	0	6	3	8	19	32	1
NASAL/SINUS	0	0	0	0	0	0	0	0	0	0	0	0
LARYNX	11	6	5	10	1	0	3	0	1	2	5	0
LUNG/BRONCHUS	57	29	28	30	27	0	3	2	7	17	27	1
OTHER	1	1	0	1	0	0	0	1	0	0	0	0
BLOOD & BONE MARROW	20	6	14	4	16	0	0	0	0	0	0	20
LEUKEMIA	7	3	4	0	7	0	0	0	0	0	0	7
MULTIPLE MYELOMA	9	2	7	3	6	0	0	0	0	0	0	9
OTHER	4	1	3	1	3	0	0	0	0	0	0	4
BONE	1	0	1	0	1	0	0	0	0	0	1	0
CONNECT/SOFT TISSUE	4	3	1	2	2	0	1	1	0	0	2	0
SKIN	5	0	5	5	0	0	0	0	0	0	3	2
MELANOMA	2	0	2	2	0	0	0	0	0	0	2	0
OTHER	3	0	3	3	0	0	0	0	0	0	1	2
BREAST	74	45	29	2	72	6	13	19	3	4	29	0
FEMALE GENITAL	14	6	8	0	14	0	3	0	0	1	10	0
CERVIX UTERI	1	0	1	0	1	0	0	0	0	0	1	0
CORPUS UTERI	8	4	4	0	8	0	3	0	0	0	5	0
OVARY	2	1	1	0	2	0	0	0	0	0	2	0
VULVA	3	1	2	0	3	0	0	0	0	1	2	0
MALE GENITAL	72	34	38	72	0	0	0	29	1	3	39	0
PROSTATE	71	33	38	71	0	0	0	29	1	3	38	0
PENIS	1	1	0	1	0	0	0	0	0	0	1	0
URINARY SYSTEM	17	9	8	11	6	0	8	1	0	1	7	0
BLADDER	12	6	6	7	5	0	5	1	0	1	5	0
KIDNEY/RENAL	5	3	2	4	1	0	3	0	0	0	2	0
BRAIN & CNS	18	13	5	6	12	0	0	0	0	0	0	18
BRAIN (BENIGN)	2	1	1	1	1	0	0	0	0	0	0	2
BRAIN (MALIGNANT)	6	3	3	3	3	0	0	0	0	0	0	6
OTHER	10	9	1	2	8	0	0	0	0	0	0	10
ENDOCRINE	10	8	2	4	6	0	2	0	0	0	1	7
THYROID	3	2	1	1	2	0	2	0	0	0	1	0
OTHER	7	6	1	3	4	0	0	0	0	0	0	7
LYMPHATIC SYSTEM	21	7	14	12	9	0	0	1	1	4	12	3
HODGKIN'S DISEASE	3	1	2	0	3	0	0	0	1	0	2	0
NON-HODGKIN'S	18	6	12	12	6	0	0	1	0	4	10	3
UNKNOWN PRIMARY	9	3	6	4	5	0	0	0	0	0	0	9
OTHER/ILL-DEFINED	0	0	0	0	0	0	0	0	0	0	0	0

The most frequently prescribed treatments were surgery and radiation alone, with 64 and 27 cases, respectively. Some other treatment combinations were also seen. The non-treated cases category has increased when compared with 64 in 2003 and 63 in 2004. “All Others” represent patients that received any other combination not shown on **Table II**. This table excludes all benign tumors, which reduces the total of analytical cases from 232 to 217.

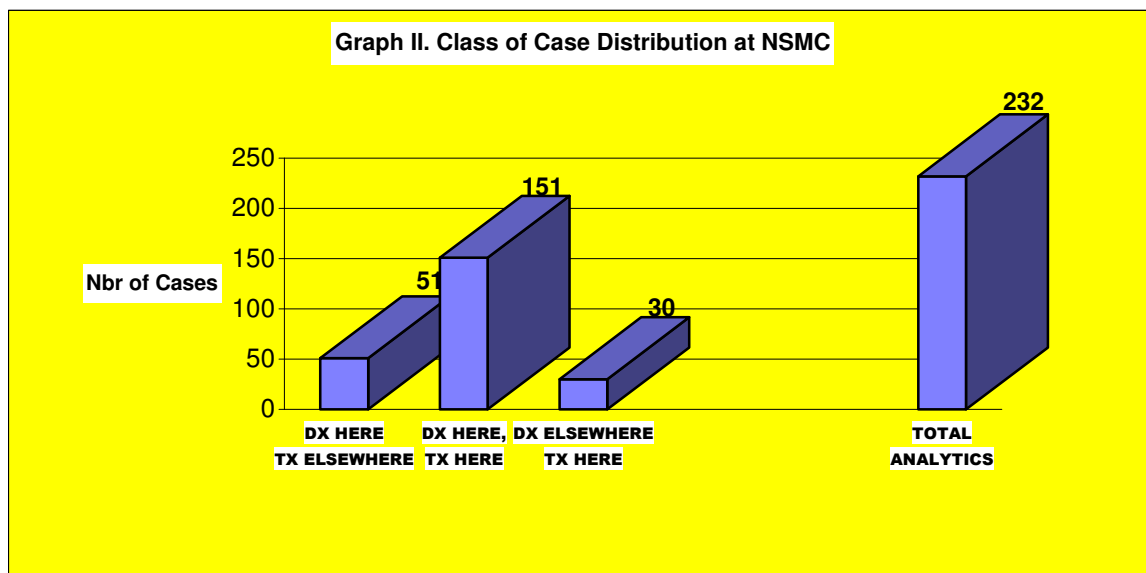
Table II. Analytic cases by first course treatment

SITE NAME	NBR CASES	NONE	SURG	RAD	CHEMO	SURG/CHEM	ALL OTHERS
BASE OF TONGUE	1	0	1	0	0	0	0
OTHER PARTS OF TONGUE	2	0	0	1	1	0	0
FLOOR OF MOUTH	1	1	0	0	0	0	0
HYPOPHARYNX	1	1	0	0	0	0	0
ESOPHAGUS	2	2	0	0	0	0	0
STOMACH	10	7	3	0	0	0	0
SMALL INTESTINE	3	1	1	0	0	0	1
COLON	26	7	16	0	0	3	0
RECTOSIGMOID JUNCTION	1	0	0	0	1	0	0
RECTUM	3	1	2	0	0	0	1
ANUS & ANAL CANAL	2	1	0	0	0	0	0
LIVER & BILE DUCTS	4	3	0	0	1	0	0
OTHER BILIARY TRACT	1	1	0	0	0	0	0
PANCREAS	6	4	1	1	0	0	0
OTHER DIGESTIVE ORGANS	1	0	1	0	0	0	0
LARYNX	6	0	1	3	0	0	2
BRONCHUS & LUNG	29	12	2	5	5	0	5
HEART MEDIASTIUM PLEURA	1	1	0	0	0	0	0
BLOOD & BONE MARROW	5	4	0	0	0	0	1
SOFT TISSUE	4	2	2	0	0	0	0
BREAST	45	7	21	1	2	7	7
VULVA	2	0	0	0	1	0	1
CORPUS UTERI	4	2	2	0	0	0	0
OVARY	1	1	0	0	0	0	0
PENIS	1	0	1	0	0	0	0
PROSTATE GLAND	33	5	3	13	2	0	10
KIDNEY	3	2	1	0	0	0	0
URINARY BLADDER	6	1	4	0	0	0	1
BRAIN	3	2	0	1	0	0	0
THYROID GLAND	2	0	2	0	0	0	0
LYMPH NODES	4	2	0	2	0	0	0
UNK PRIMARY	4	4	0	0	0	0	0
OVERALL TOTALS	217	74	64	27	13	10	29

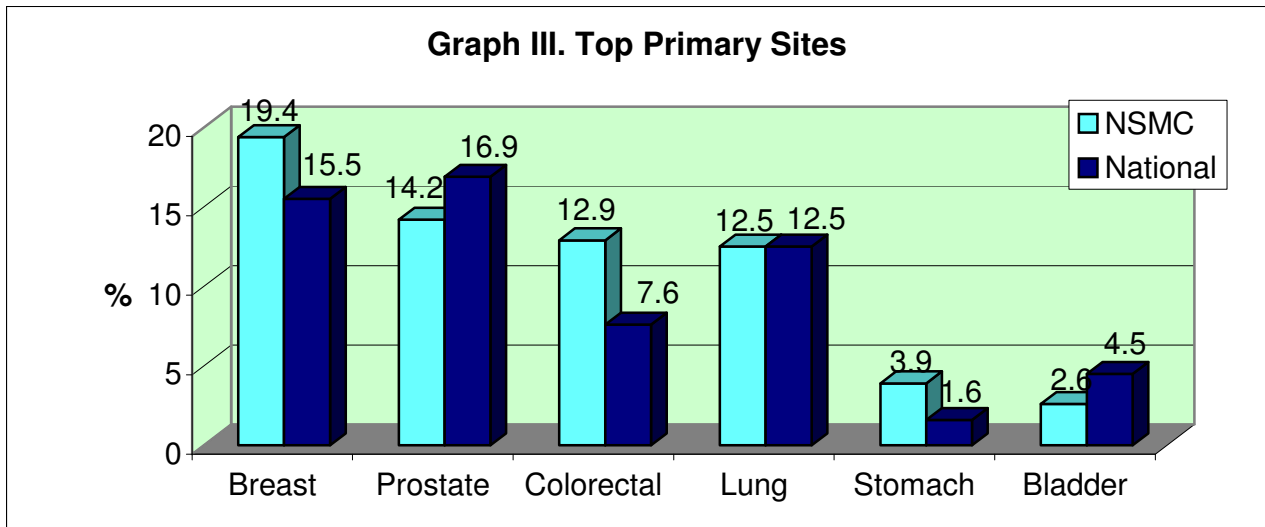
In the year 2005, a total of 428 cases were added to the registry, 232 were analytic.
Graph I.



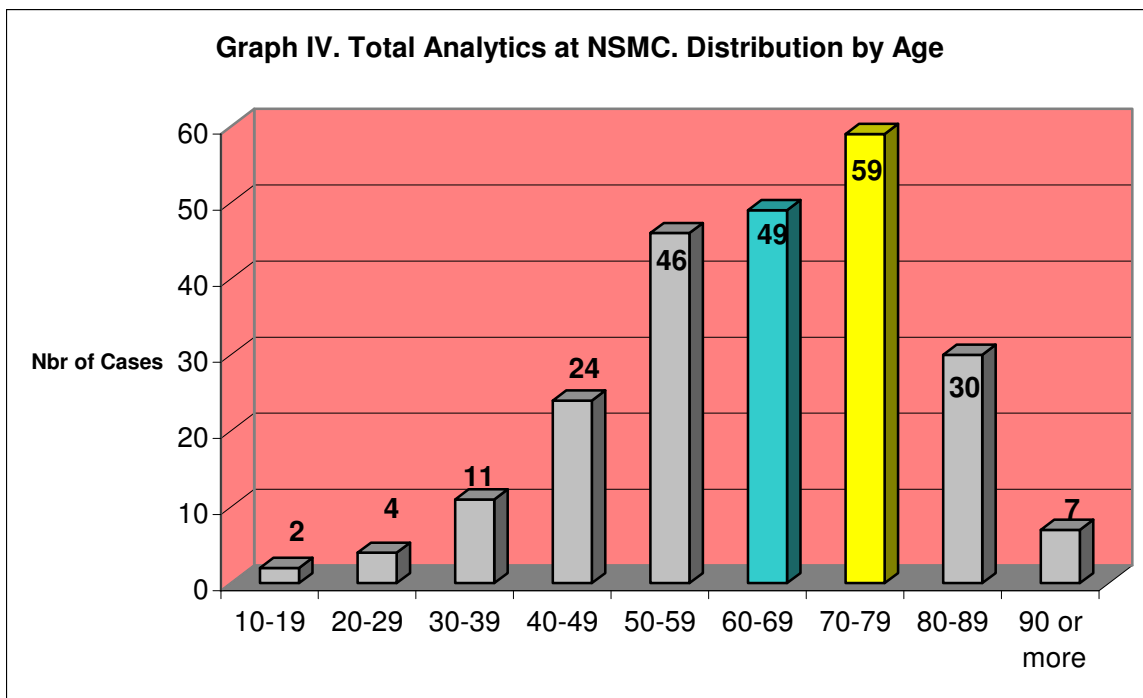
The graph on class of case displays the distribution of analytic cases. In 2005, 151 of the cases entered into the Tumor Registry were diagnosed here and treated at NSMC. Fifty-one patients were diagnosed here but treated elsewhere. Thirty patients were diagnosed elsewhere and treated in this institution. **Graph II.**



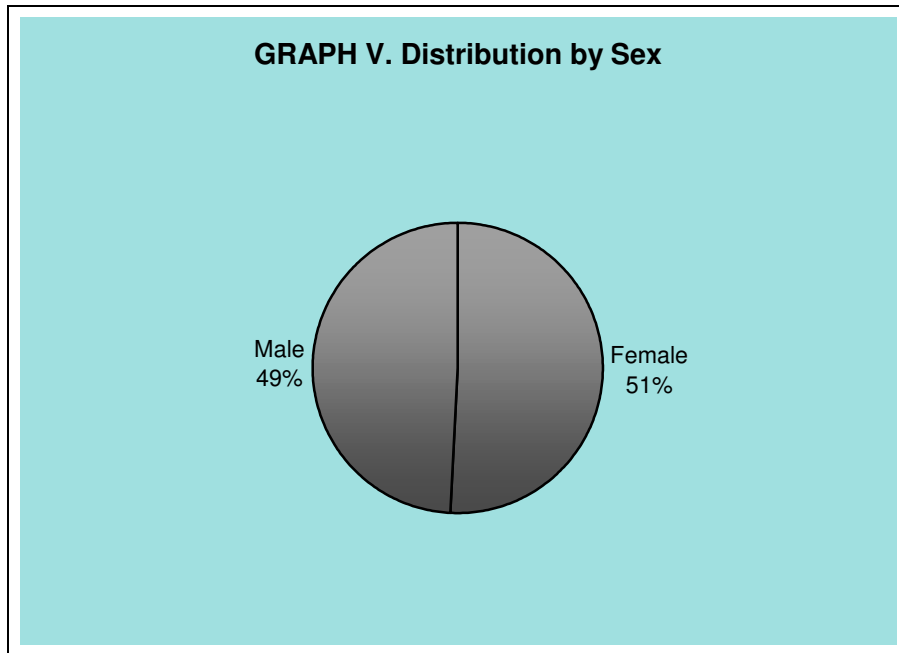
Breast cancer was the leading cancer diagnosed at NSMC in 2005, representing 19.4% of the cancers diagnosed, followed by prostate, colorectal, lung, stomach, and bladder. Prostate cancer was the second most frequent cancer diagnosed, at 14.2%. (**Graph III**).



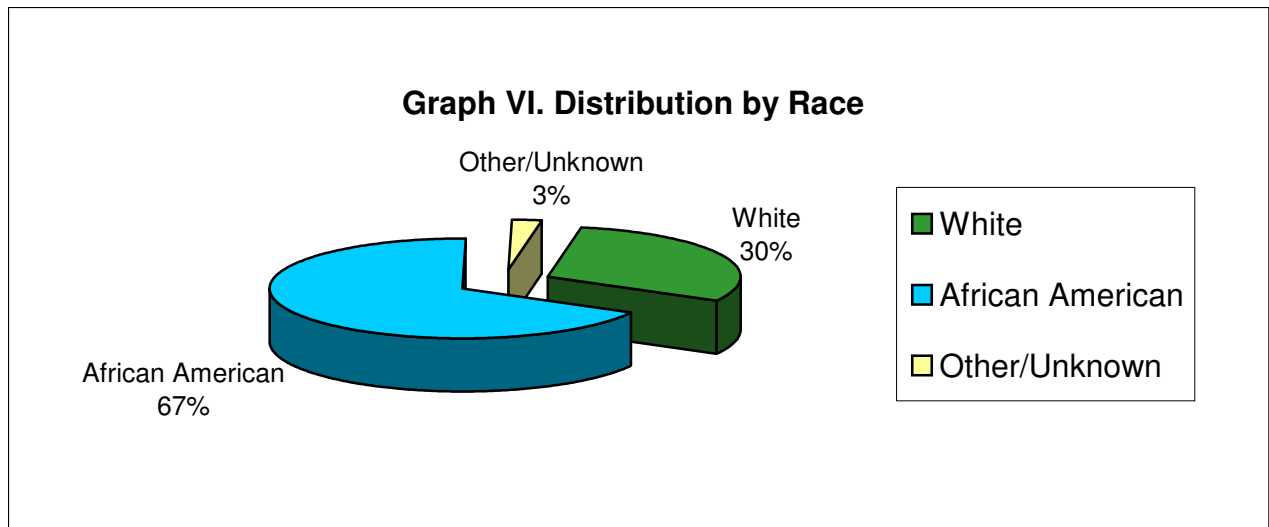
The age group at diagnosis for both sexes peaks at the 70-79 category with 59 cases followed by the 60-69 category with 49 cases. **Graph IV**.



Of the analytic cases, there were more females (118) than males (114). **Graph V.**

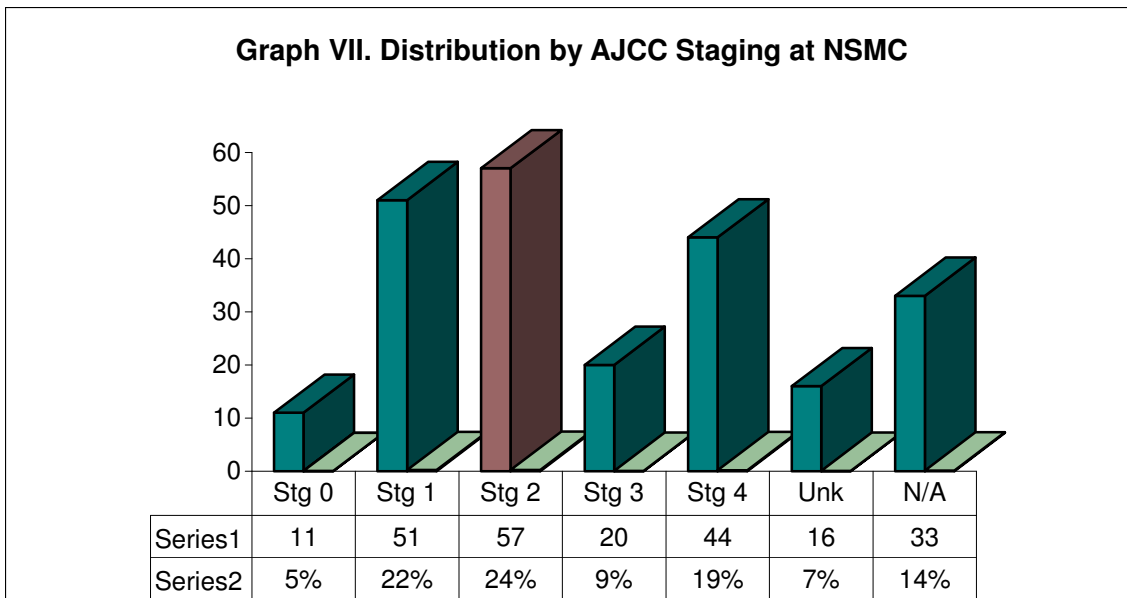


The race distribution for 2005 indicates that 67% of the cancer patients were African-American, 30% were White, and 3% was listed as other or unknown. **Graph VI.**

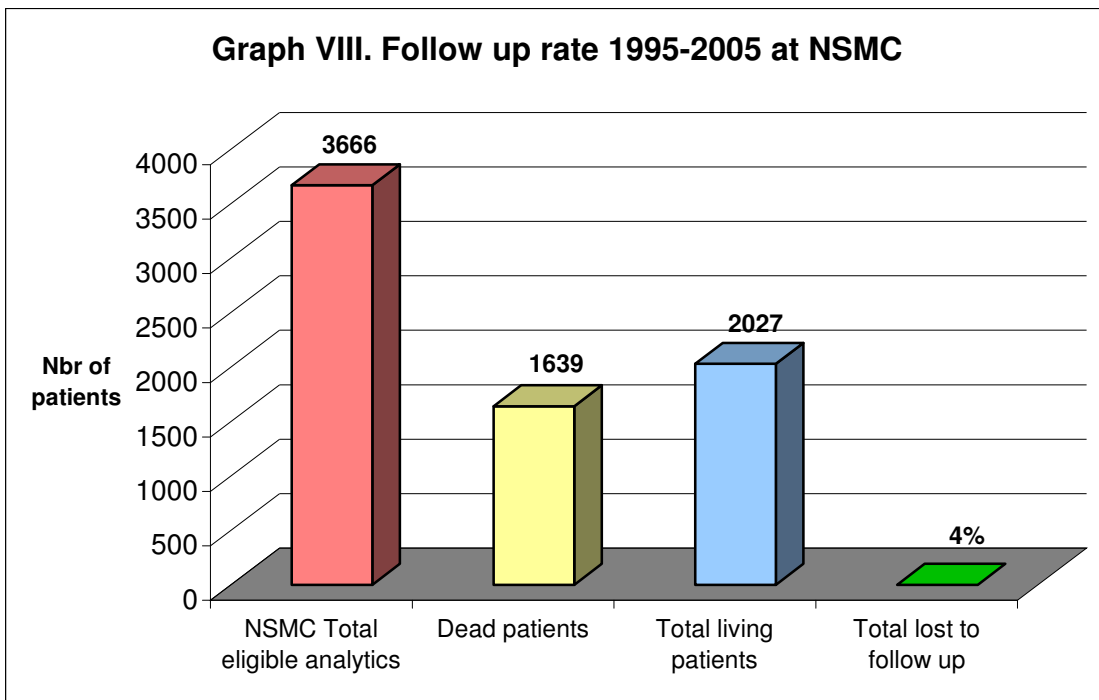


The American Joint Commission on Cancer (AJCC) TNM Staging System is used for all applicable cancer sites. A TNM staging form is made part of the medical records to ensure compliance and accuracy of staging.

Of all 2005 analytic cases, 119 of them were diagnosed at Stages 0, I, or II. These are considered to be potentially curable. More advanced stages of cancers, stage III and IV, totaled (64). Sixteen patients were staged Unknown representing cases in which certain criteria did not meet the staging standards, or there was not enough information at the time of diagnosis. Thirty-three of the cases were staged as Non-applicable, representing cases for which there is not an AJCC staging requirement.
Graph VII.



In accordance with the American College of Surgeons and the Florida Cancer Data Systems (FCDS), each patient is provided with an annual lifetime follow-up service that is essential to evaluate cancer care outcomes. It also provides an automatic reminder to both physician and patient to schedule regular physician exams. The Cancer Registry follows close to 4,000 patients annually throughout Florida and the United States where our patients reside. The registry has kept satisfactory follow up rates for the last five years. **Graph VIII.**



Bladder Cancer at North Shore Medical Center, 2000-2005

The incidence rate of bladder cancer has stabilized from 1986-2001, however, according to the American Cancer Society 63,210 new cases will be diagnosed with bladder cancer in 2005, and of those about 13,180 will die of the disease. Bladder cancer is the fifth most commonly diagnosed cancer in the United States. Bladder cancer incidence is about four times higher in men than in women and two times higher in whites than in African Americans.

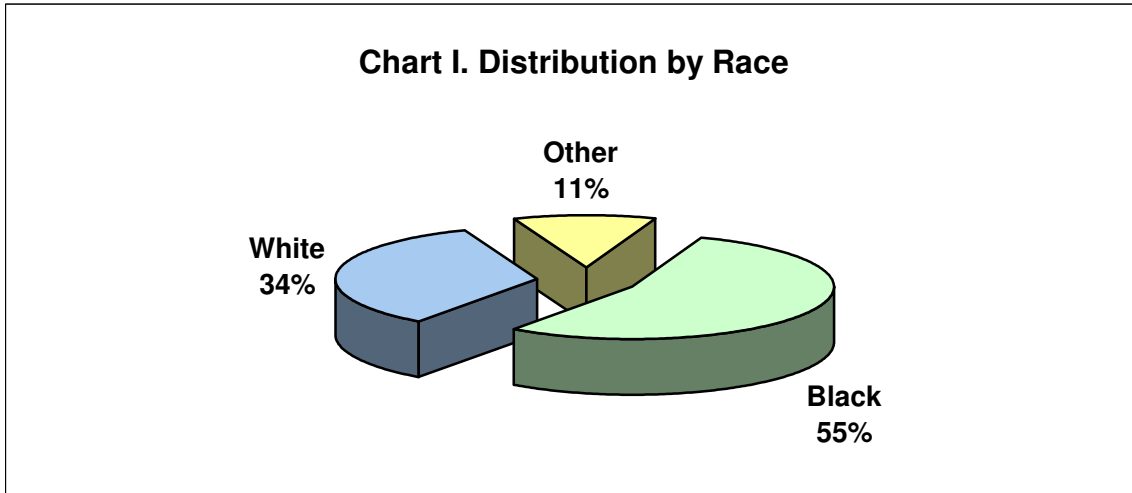
Smoking is the greatest risk factor for bladder cancer. Smokers experience twice the risk of bladder cancer than nonsmokers. Smoking is estimated to be accountable for about 48% of bladder cancer deaths among men and 28% among women. Other risk factors include industries that work with dye, rubber, or leather. Recent studies suggested that drinking more fluids and eating more vegetables might lower the risk of bladder cancer.

Signs and symptoms of bladder cancer include blood in the urine and increased frequency of urination. Bladder cancer is diagnosed by examination of the bladder wall with a cystoscope. These tests are not recommended for screening people at average risk, but are used for people at increased risk due to occupational exposure, or the follow up after bladder cancer treatment to detect recurrence or secondary tumors.

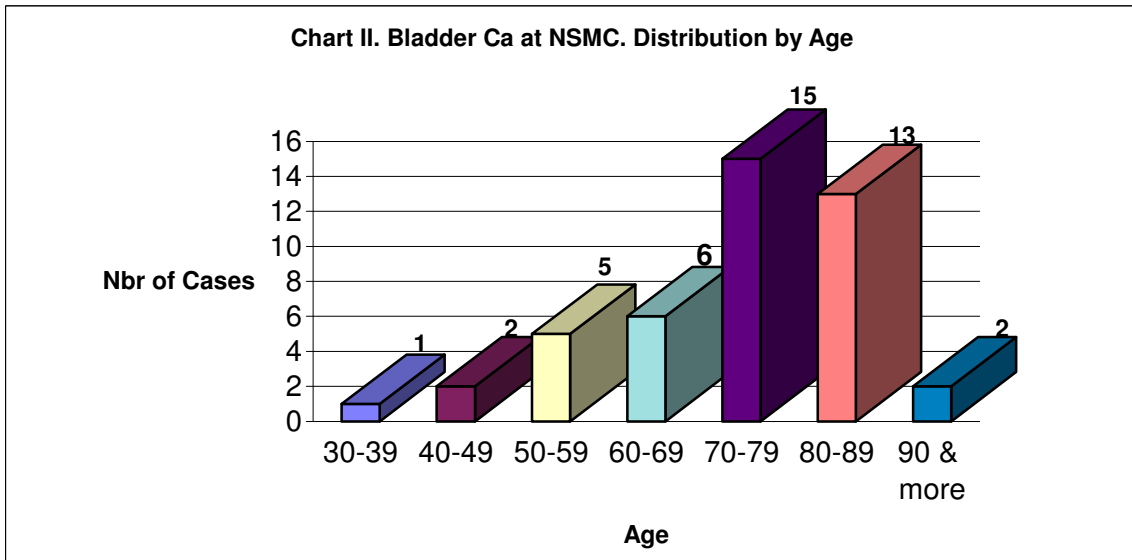
Surgery is the most common treatment for bladder cancer. It is used alone or in combination in more than 90% of cases. For cancers that have not spread immunotherapy or chemotherapy directly into the bladder may also be used for treatment. Chemotherapy alone or with radiation before cystectomy (bladder removal) has improved some treatment results.

Nationwide the 5-year survival rate is 82% for all patients with bladder cancer. At North Shore Medical Center we have an 81% 5-year survival rate. When bladder cancer is detected at an early stage the 5-year relative survival rate is 94%, according to nationwide statistics. In our facility our 5-year relative survival rate is 89%. After the cancer has spread to regional and distant stages the rate drops to 49% and 6%, respectively. At North Shore Medical Center the regional and distant 5-year survival rate is 44% and 3%, respectively. Survival continues to decline beyond five years to 75% at 10 years and 70% at 15 years after diagnosis.

During the period from 2000-2005, a total of 44 patients were diagnosed and treated with bladder cancer at North Shore Medical Center. The majority of cases (55%) were among the black population (**Chart I**). The white population was represented by 34%, and the rest of the percentage (11%) was related to other races.



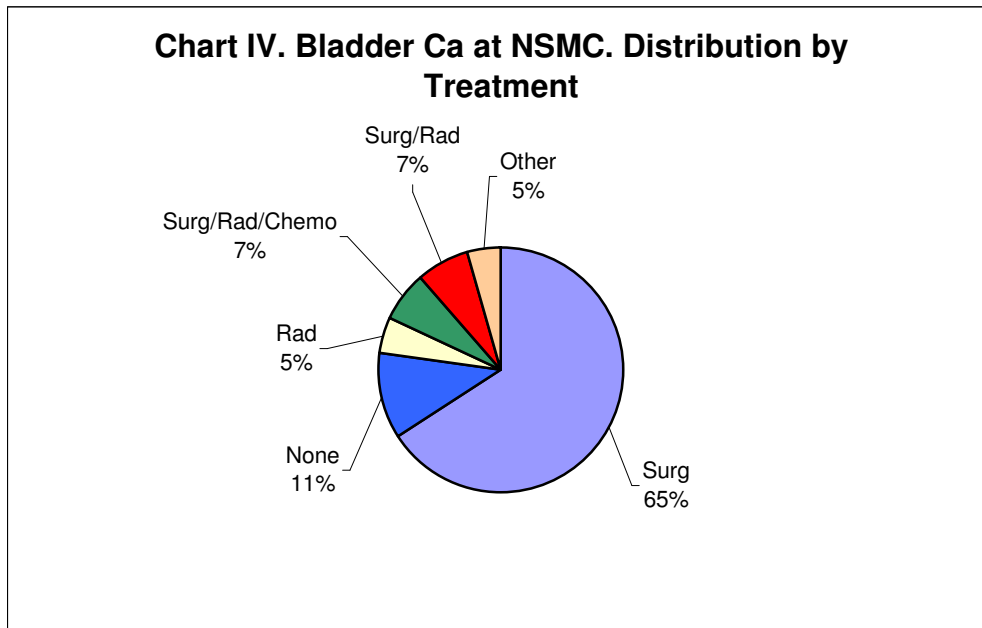
The age of presentation at diagnosis was peaking from 70 to 89 years old (**Chart II**). The highest number of cases (15) was between 70 and 79 years old. Followed by 13 cases between 80-89 years old, and 6 cases between 60-69 years old.



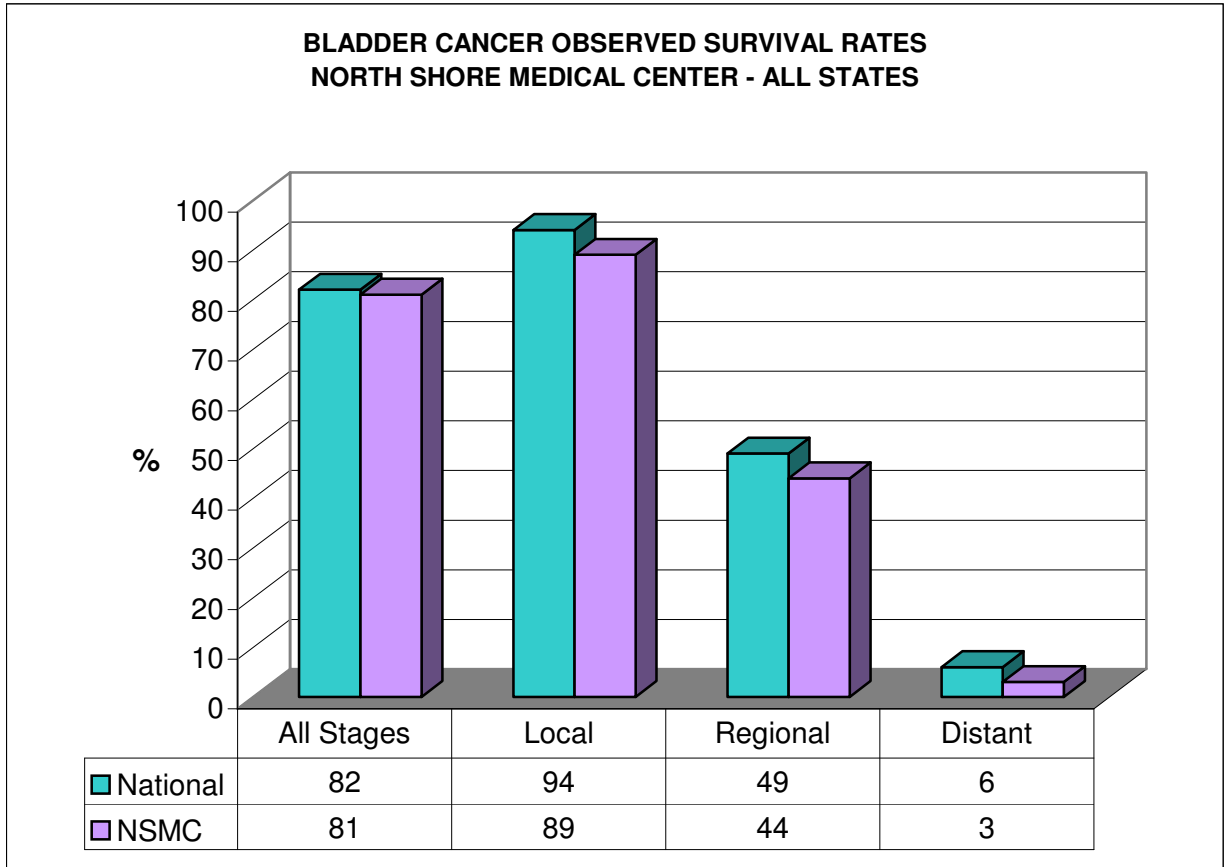
Overall, 71% of our bladder cancer patients had localized stage disease. There were 8 patients (18%) with regional stage, 2 patients (5%) with distant stage. Three percent of the cases were un-staged (Chart III).

Chart III. Bladder Ca at NSMC. Distribution by Stage		
Stage	N0.	%
Local	31	71 %
Regional	8	18 %
Distant	2	5 %
Unknown	3	6 %

Treatment distribution (Chart IV) shows that surgery was the treatment most frequently utilized. The second most popular treatment was radiation combined either with surgery or surgery and chemo. Radiation alone was 5% of the cases. The other 11% (5 cases) did not receive any treatment either for being under watchful waiting conditions or because they decided to be treated at another facility.



North Shore Medical Center's five-year relative survival rates by stage, diagnosed from 1995-2000 were 89% for local stage, 44% for regional stage and 3% for distant stage. In comparison to National statistics, NSMC was very similar. **Chart V.**



Source: Surveillance, Epidemiology, and End Results (SEER) Program.

Chart V

Definitions

Analytic: A case that was either initially diagnosed or received all or part of the first course of treatment at the reporting institution.

Non-analytic: Patient diagnosed and received all of the first course of treatment at another institution, patients diagnosed at autopsy, and patients diagnosed and treated at the reporting facility before the registry's reference day.

Stage: The Tumor Registry collects the staging by using the Tumor, Nodes and Metastasis (TNM) system from the American Joint Committee on Cancer, and Local, Regional or Distant from (SEER) Surveillance, Epidemiology and End Results Program. **Stage 0** = In-situ, **Stage 1** = Local, **Stage 2** = Regional/Direct Extension, **Stage 3** = Regional/Nodes Only, **Stage 4** = Regional/Direct Extension & Nodes.

First course of treatment: Includes all methods of treatments recorded in the treatment plan and administered to the patient before disease progression or recurrence.

Survival: Survival is calculated from the date of best confirmation of diagnosis to the date of last contact for analytic cases.

Successful follow up: Is the percent of dead and living patients that were contacted by the Tumor Registry in the last 12 months. It is required to use registry data for survival analysis.

Lost to follow up: Is the percent of patients that have not been contacted by the Tumor Registry in the last 15 months. They are also known as "delinquent cases".

References:

- American Cancer Society Cancer Facts & Figures 2005.
- Cancer Rates and Risks 4th Edition.
- National Cancer Institute Fact Book 2004.
- Website information: <http://www.ncbi.nlm.nih.gov/PubMed/>,
http://www.cancer.gov/cancer_information/,
<http://www.cancer.org/docroot/home/index.asp>.