Delivering More Tomorrows

ANNUAL REPORT 2012

{based on 2011 statistics}

Martha Jefferson Cancer Care Center

A member of SENTARA®

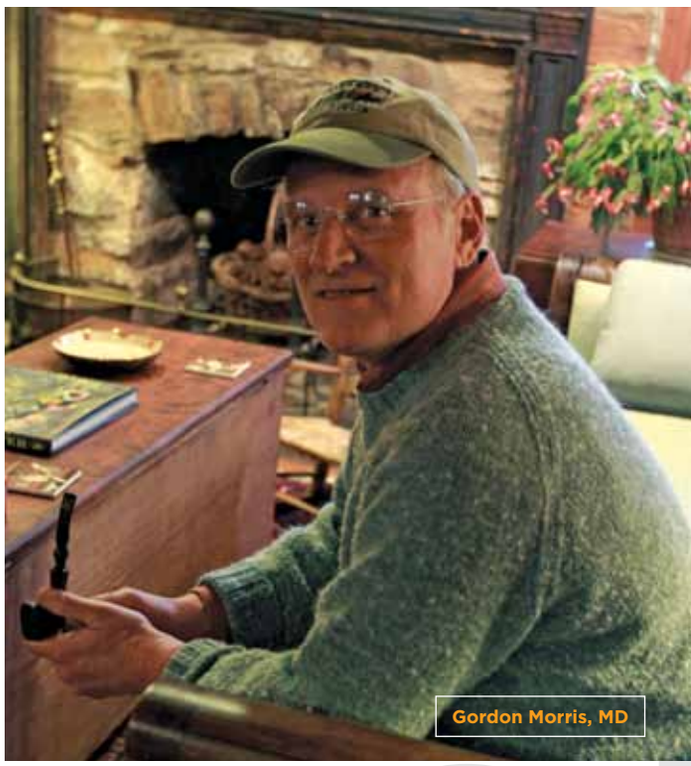
Amy Brown, RN, BSN, OCN, Clin IV, *Infusion Center*

When the Martha Jefferson Cancer Center opened its doors at 459 Locust Avenue in 1992, it was described as a patient-friendly, state-of-the-art facility offering comprehensive services conveniently located under one roof. Twenty years later, the cancer center is still fulfilling its mission of comprehensive, patient-focused care, but what changes the decades have brought! The fledgling service has matured into a robust program, certified by the Commission on Cancer as a Comprehensive Community Cancer Program and, as of August 2012, certified by the National Accreditation Program for Breast Centers (NAPBC).

NAPBC
NATIONAL ACCREDITATION PROGRAM FOR BREAST CENTERS
ACCREDITED BREAST CENTER

THE YEAR IN REVIEW


Erika Struble, MD


Gordon Morris, MD

In addition to an active weekly cancer and breast cancer conference, the Cancer Center boasts a broad array of specialists, including a dedicated thoracic surgeon, neurosurgeons, breast surgeons, gastroenterologists, urologists, otolaryngologists, dermatologists and Mohs surgeons, to complement the general surgeons, hematologist-oncologists, radiation oncologists, pathologists and radiologists essential to cancer care. In addition, working together to provide a comprehensive range of services and helping to maintain the focus on the patient as a whole person is a team of oncology-certified nurses, physical and occupational therapists certified in lymphedema care, speech therapists, certified massage therapists, chaplains, social workers, financial counselors, patient navigators, and a yoga and exercise instructor.

During 2012, 168 cancer cases — more than 15 percent of the total caseload — were presented prospectively at the weekly cancer conferences. The physicians discussed diagnoses and staging and collaborated on vital treatment recommendations for the attending physician to share with the patient. Most frequently considered were breast cancer cases at 97, followed by lung, head and neck, colon and rectal, prostate, and bladder.

Patients participated in several cancer trials in 2012, with 38 new enrollments — exceeding the 2 percent rate required by the Commission on Cancer, and well on the way to the 4 percent rate that will be expected by 2015.

As part of our partnership with other Sentara hospitals, Martha Jefferson Hospital and Rockingham Memorial Hospital jointly purchased a mobile PET/CT unit. The shared arrangement will allow greater flexibility in scheduling when volumes dictate, as well as better control over the patient experience, since the technicians will be Martha

2012 CANCER ANNUAL REPORT


Cancer Conference

Jefferson and Rockingham Memorial employees.

Cancer care is a dynamic service, and nowhere is that more evident than in Radiation Oncology. New technology abounds, and it is the charge of our unique team of specialists — physicians, physicists, dosimetrists, technologists and nurses — to sift through the hype and implement advances that offer patients genuine value. This year, the team adopted the Calypso® system, also known as "GPS for the Body®." Dr. Sylvia Hendrix's comprehensive article on Calypso appears in the spring 2013 issue of *Clinical Front,* but in nontechnical vernacular the system involves placement of electromagnetic transponders in the tumor site. Then at the time of treatment, the radiation therapists utilize the transponders for precise location of the tumor.

Calypso's initial site of focus is the prostate, due to the treatment challenges presented by the gland's mobility. Beacons are first inserted by urologists with guidance from ultrasound. Then, after an individualized treatment plan has been created, the patient begins radiation therapy assured that, regardless of any internal organ movement, the treatment will be delivered precisely to the target. Outcomes reported by early trials indicate a reduction of troublesome side effects — particularly incontinence, impotence and loss of bowel function.


Sylvia Hendrix, MD

In 2013, the team will work on developing Calypso protocols for other cancer sites, including the lungs.

Another technological leap forward at Martha Jefferson is RapidArc radiotherapy, which matches or improves dose precision while enabling treatment times two to eight times shorter than with traditional intensity-modulated radiation therapy (IMRT). Faster treatments offer multiple benefits, increasing patient comfort and reducing the likelihood of unwanted movement during treatment.

But technology was not our only focus in 2012 — bringing in valuable new team members also was a central priority. Dr. Erika Struble joined the Martha Jefferson Medical Oncology team in August. Certified in hematology-oncology, Dr. Struble served as a colonel in the United States Air Force, most recently stationed at the San Antonio Military Medical Center in Texas. During her eight years in oncology, she has treated all types of cancers, but her special interest is in the treatment of breast cancer. In her life outside of work, she brings with her a passion for running and is enjoying the challenges of Charlottesville's hilly topography.

We are also pleased to introduce Martha Thomas, MS, certified genetic counselor. Located on the third floor of the Cancer Center, she accepts physician referrals for patients with an increased risk of hereditary cancer syndromes. Aside from the more common indicators of hereditary breast and colon cancers found in the National Comprehensive Cancer Network guidelines, Ms. Thomas recommends that a number of other genetic "red flags" be considered for referral as well. Among these are a personal or family history of:

- pheochromocytomas
- paragangliomas
- thyroid cancer (especially medullary)
- renal cell cancer (2 or more individuals in a family)
- hysterectomy due to menorrhagia and renal cell cancer
- pediatric and adult cancers
- Ashkenazi (non-Israeli) Jewish ancestry and any cancer
- pancreatic cancer (2 or more individuals in a family)
- pancreatic cancer, melanoma (especially in areas not exposed to the

sun) and/or esophageal cancer, with or without a history of breast cancer
- lung cancer (3 or more individuals in a family, especially if nonsmokers)

Brenda Braxton, CPAT, patient financial counselor for oncology outpatients, has been a tireless advocate for our patients this year. She is currently working with the Martha Jefferson outpatient pharmacy on medication copayment assistance programs, with the goal of avoiding the reimbursement wait time required when a patient must first pay out of pocket. Instead, the pharmacy is reimbursed directly, allowing patients to use their funds for other necessities. Ms. Braxton also spends time searching for drug discount cards and direct-from-the-manufacturer assistance programs, as well as assessing patient eligibility for the hospital financial assistance program. Removing some of the anxiety surrounding financial issues enables patients to save their energy for the most important goal: getting well.

Overall patient satisfaction is an important goal at the Cancer Center. In 2012, both Radiation Oncology and the Infusion Center received the Professional Research Consultants 5-star award for patient satisfaction, while Cornell 2, our inpatient oncology unit, received Sentara's Patients' Choice Award.

And finally, mention of 2012 would not be complete without recognizing the retirement of a much beloved member of the cancer care team, Dr. Gordon Morris. Joining the Martha Jefferson Medical staff in 1984, Dr. Morris was one of the original founders of the Cancer Care Center. He was well-known by his patients for his kind and personalized care, often giving them his home phone number in case of questions or worries. It was a lifeline to his patients, for few have more worries than a newly diagnosed cancer patient. His smiling face and legendary practical jokes between he and other physicians have been greatly missed at the cancer center. Best wishes to him for a long and adventurous retirement!

Faye Satterly,
BSN, RN, MFA, CRNI
Director of Cancer Services and Patient-Centered Care

2012 CANCER COMMITTEE MEMBERS

Robert Pritchard, MD, Medical Oncologist, Chair

Christopher Willms, MD, General and Thoracic Surgeon, Cancer Liaison Physician

Ann Atwell, MSW, Cancer Center Social Worker

Maria Barnes, CTR, Cancer Registrar

Jonathan Ciambotti, MD, Radiologist

Setour Dillard, RN, OCN, Nurse Manager, Cornell 2

Mina Ford, MSN, RN, AOCN, Palliative Care

Janelle Gorski, MSN, RN, ANP-BC, Cancer Resource Center Navigator

Michele Howe, PT, CLT-LANA, Certified Lymphedema Therapist

Kim Lavin, MSN, MPH, Director of Performance Improvement

Joyce Miller, PhD, Cancer Program Manager

Patricia Mitchell, RN, Sr. Clinical Research Nurse

Faye Satterly, BSN, RN, MFA, CRNI, Director of Cancer Services

Janet Silvester, MBA, RPh, Director of Pharmacy and Emergency Services

Suzanne Hilton Smith, BS, MCM, Chaplain

Cynthia Spaulding, MD, Radiation Oncologist

Laura Spinelli, MD, Pathologist

AD HOC MEMBERS

Amy Black, MSN, RN, CNAA, VP, Chief Nurse Executive

Julian Fagerli, MD, Urologist

Maya Ghaemmaghami, MD, Medical Oncologist

Sylvia Hendrix, MD, Radiation Oncologist

John Jones, MD, Breast Surgeon

Daniel Landes, MD, Otolaryngologist

Rebecca Lewis, CTR, Cancer Registrar

Jan Lugar, Manager, Radiation Oncology

Meg McIntire, OTL, CHT, CLT, Certified Hand and Lymphedema Therapist

LaDonna Winegar Mowry, Manager, Medical Oncology Practice and Infusion Center

Mary Beth Revak, BSN, RN, CBCN, OCN, Women's Health Liaison

Linda Sommers, MD, Breast Surgeon

CANCER COMMITTEE APPOINTMENTS

Robert Pritchard, MD
Chair

Christopher Willms, MD
Cancer Liaison Physician

Joyce Miller, PhD
Cancer Conference Coordinator

Ann Atwell, MSW
Psychosocial Services Coordinator

Maria Barnes, CTR
Quality of Cancer Registry Data Coordinator

Janelle Gorski, MSN, RN, ANP-BC
Community Outreach Coordinator

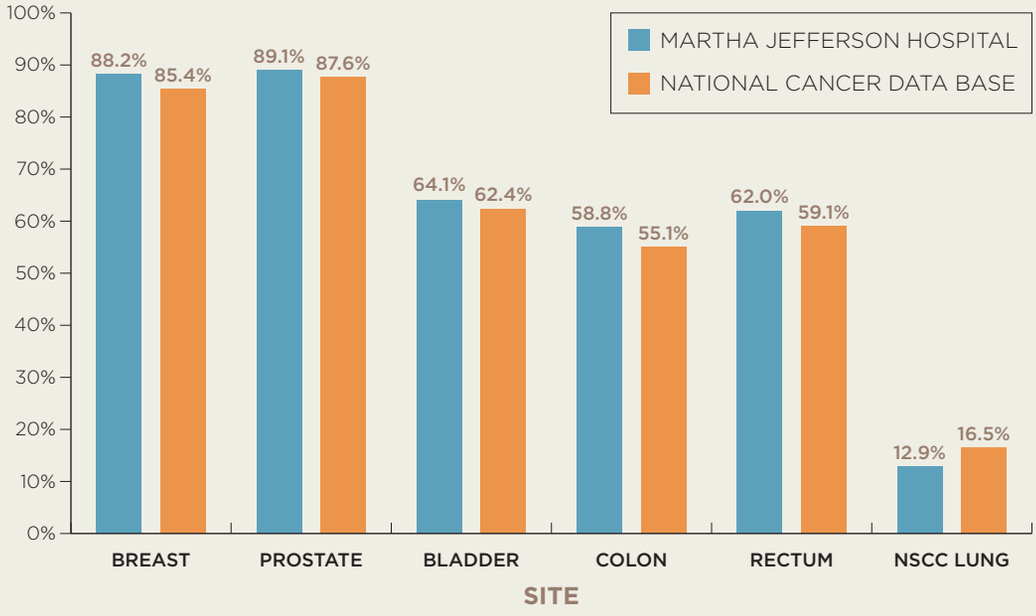
Kim Lavin, MSN, MPH
Quality Improvement Coordinator

Patricia Mitchell, RN
Clinical Research Coordinator

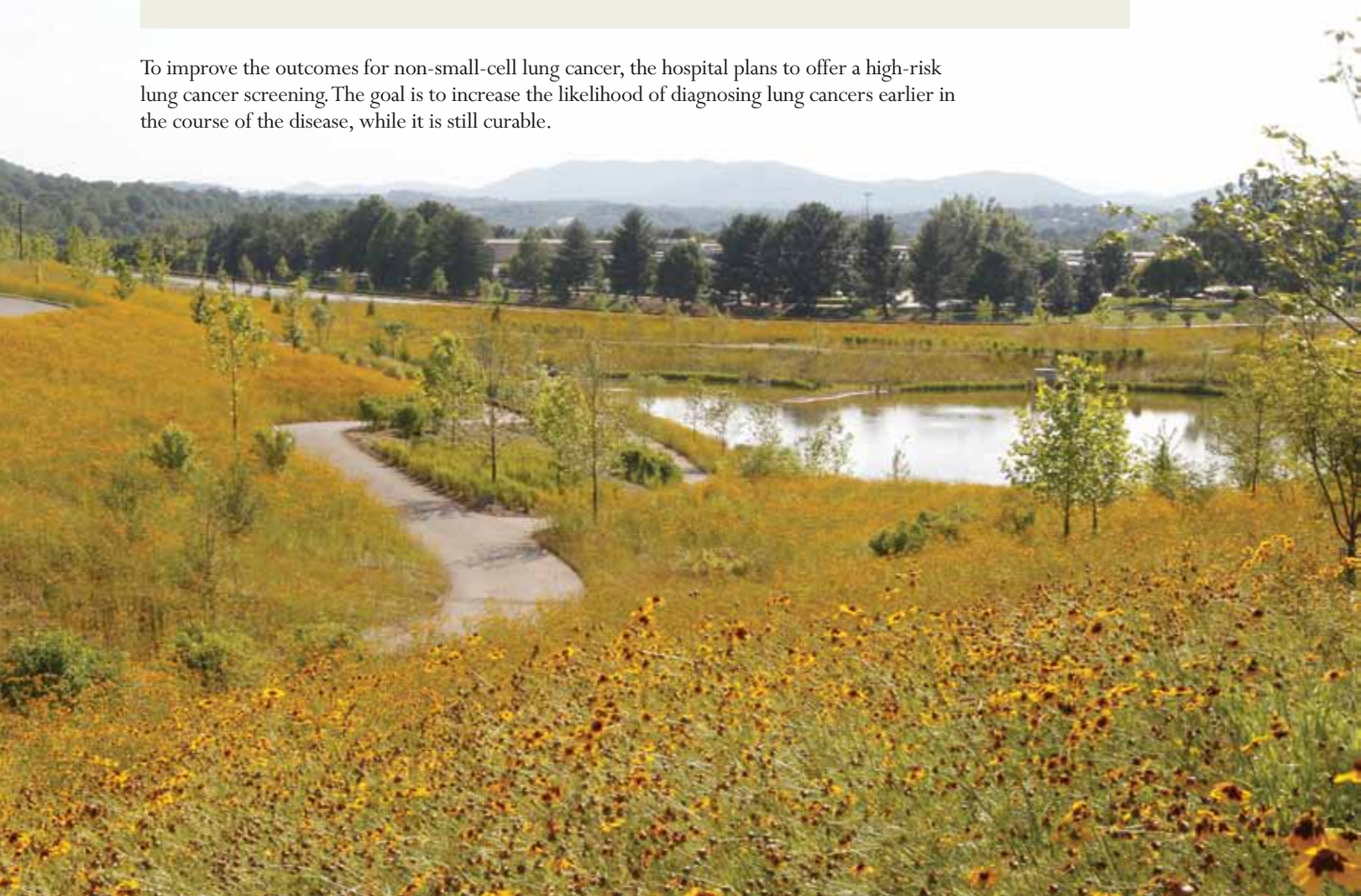
SURVIVAL DATA

Each year, we compare the Martha Jefferson Cancer Center five-year survival rates with those of the National Cancer Data Base (NCDB). The most recent information available concerns cancers diagnosed in 2003, 2004 and 2005. The graph below (Figure A) demonstrates that Martha Jefferson survival outcomes remain comparatively strong in most of the major cancer sites.

Figure A. Observed Five-Year Survival Rates By Site Based On Cases Diagnosed 2003-05

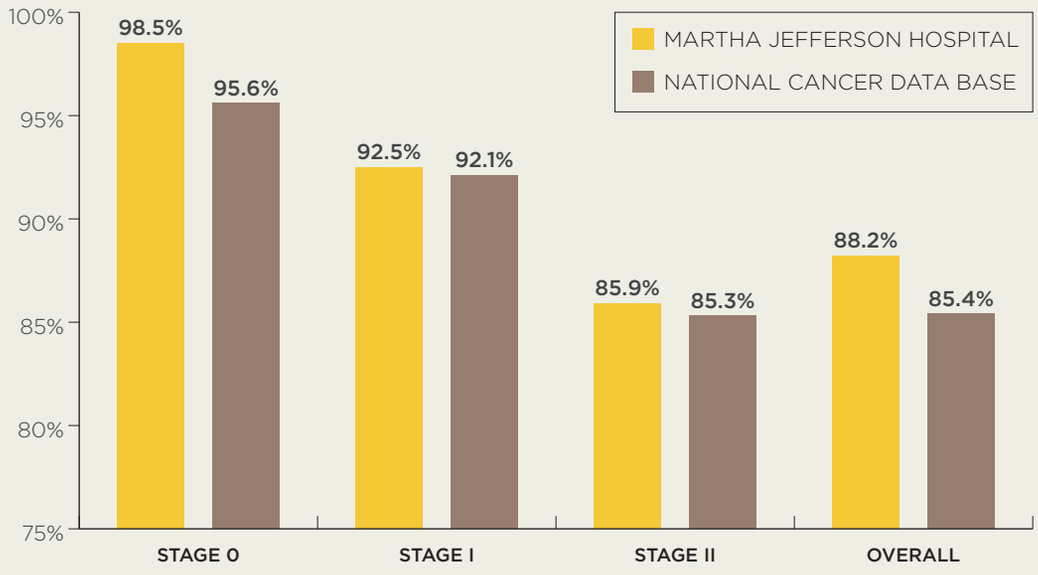


To improve the outcomes for non-small-cell lung cancer, the hospital plans to offer a high-risk lung cancer screening. The goal is to increase the likelihood of diagnosing lung cancers earlier in the course of the disease, while it is still curable.



BREAST CANCER SERVICES

Figure 1. Observed Five-Year Breast Cancer Survival Rates Based on Cases Diagnosed 2003-05



As is evident above, our breast cancer survival outcomes remain comparatively strong (Figure 1).

2012 brought a new recognition of our breast cancer program. In August, after submitting copious documentation and receiving a surveyor visit, the Martha Jefferson Breast Health program was awarded full accreditation by the National Accreditation Program for Breast Centers (NAPBC), and Martha Jefferson is now one of 27 NAPBC-accredited breast centers in Virginia. Certification recognizes the comprehensive treatment modalities available and the collaboration of the many specialist physicians and staff in achieving the highest-quality care. Special notice is due to Joyce Miller, PhD, cancer program manager, who spent many hours gathering and submitting the necessary paperwork for the accreditation application, as well as overseeing the quality initiatives.

As part of the accreditation, Martha Jefferson was surveyed on 28 program standards and 17 program components. The Breast Cancer Committee directed the preparation for this survey and monitored the following areas:

- Breast-conserving surgery rate for Stages 0, I and II
- Sentinel lymph node biopsy rate for Stages I and II
- Needle biopsy rate as initial diagnostic approach

Also assessed was patient navigation services, referrals for reconstructive surgery, breast-specific multidisciplinary cancer conference, clinical trial accrual and quality improvements.


John Jones, MD,
Linda Sommers, MD

Figure 2 represents the results of our accountability measures for breast cancer cases per the National Cancer Data Base (NCDB) based on data submitted by the cancer registry staff.

In 2012, the Medical Imaging Department performed 25,282 mammograms, the most of any hospital in the Sentara system. The number of exams represented a 5.3 percent increase over 2011.

Figure 2. Breast Accountability Measures, Based on 2010 Data

Measure	Expected Performance Rate	Calculated Performance Rate (95% CI)
HT	90%	97.0 (92.9-100)
BCS	90%	91.3 (83.2-99.4)
MAC	90%	100

HT = Tamoxifen *or third-generation aromatase inhibitor* is considered or administered within 1 year (365 days) of diagnosis for women with AJCC T1cNoMo, or Stage II or III hormone receptor positive breast cancer.

BCS = Radiation therapy is administered within 1 year (365 days) of diagnosis for women under age 70 receiving breast-conserving surgery for breast cancer.

MAC = Combination chemotherapy is considered or administered within 4 months (120 days) of diagnosis for women under 70 with AJCC T1cNoMo, or Stage II or III hormone receptor negative breast cancer.

Jackie Holbert, RN, Clin III
Glenda Bittner, RN, OCN, Clin III

Michele, Howe, PT, CLT-LANA

Lymphedema Prevention and Treatment

Lymphedema is observed across the spectrum in cancer patients. The good news is that with the current trend of lumpectomy combined with sentinel lymph node biopsy, the incidence of upper extremity lymphedema following breast surgery has decreased — a huge benefit to breast cancer patients. However, breast and truncal lymphedema can also occur as a consequence of radiation therapy. This may go undetected and untreated, much to the patient's discomfort.

To alleviate lymphedema-related suffering, the Martha Jefferson Rehab Department has a number of treatment options to offer, according to Michele Howe, PT, CLT-LANA. The team also addresses scar tissue, range of motion, strength and fatigue — all side effects frequently reported following cancer treatment. Emotional support is key in encouraging patients to progress in their rehab despite periodic setbacks.

2012 Breast Cancer Committee Members

Linda Sommers, MD
Breast Surgeon, Chair

Jonathan Ciambotti, MD
Radiologist

Janelle Gorski, MSN, RN, ANP-BC
Cancer Center Nurse Navigator

Sue Hunt
Director of Medical Imaging

John Jones, MD
Breast Surgeon

Joyce Miller, PhD
Cancer Program Manager

Patricia Mitchell, RN
Sr. Clinical Research Nurse

J. Mark Prichard, MD
Medical Oncologist

Robert Pritchard, MD
Medical Oncologist

Mary Beth Revak, BSN, RN, CBCN, OCN
Women's Health Liaison

Faye Satterly, BSN, RN, MFA, CRNI
Director of Cancer Care Services

Cynthia Spaulding, MD
Radiation Oncologist

Laura Spinelli, MD
Pathologist

Victoria Vastine, MD
Reconstructive Surgeon

Ad Hoc Members

Maria Barnes, CTR,
Cancer Registrar

Maya Ghaemmaghami, MD,
Medical Oncologist

Michele Howe, PT, CLT-LANA
Certified Lymphedema Therapist

Rebecca Lewis, CTR
Cancer Registrar

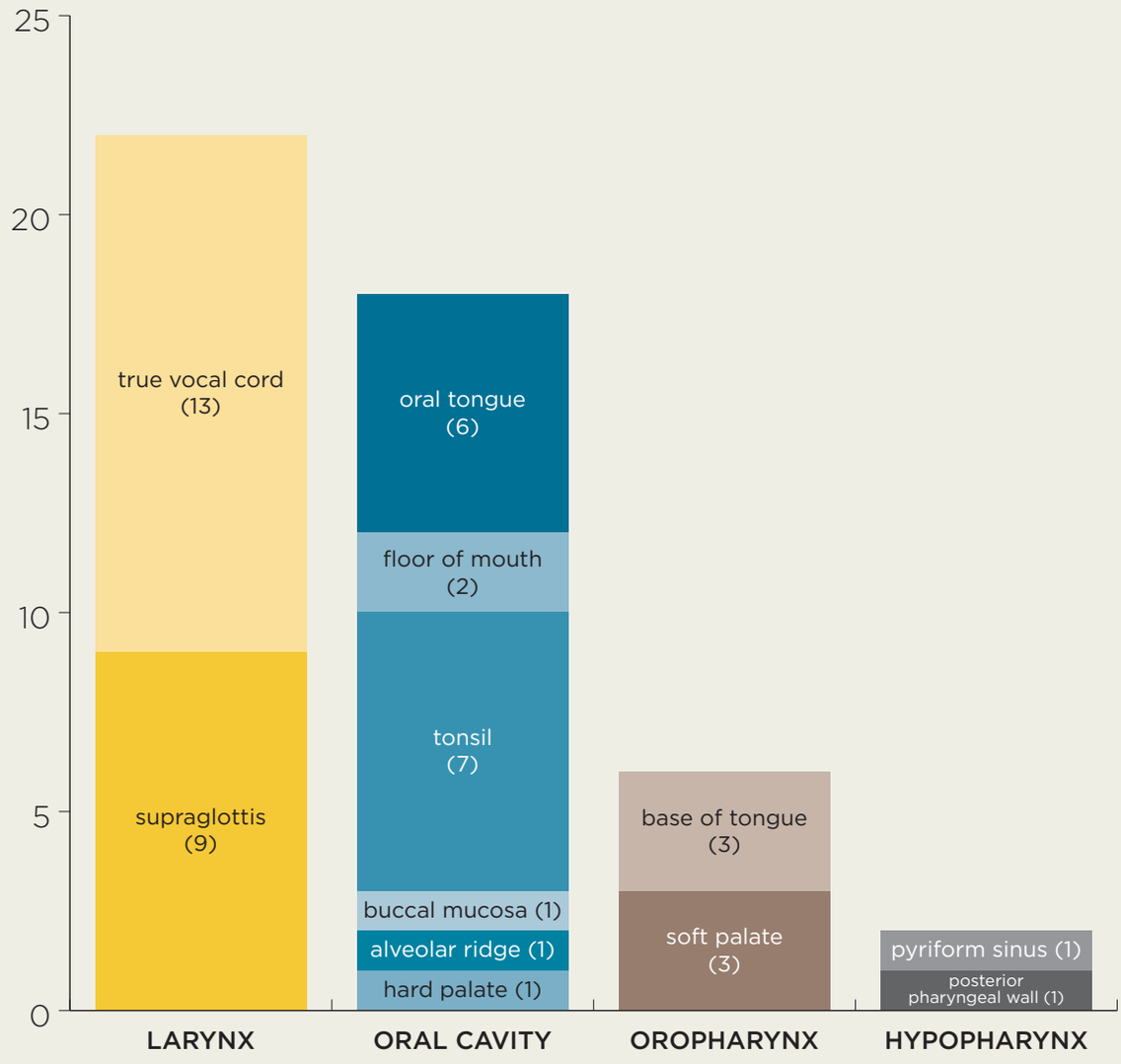
Meg McIntire, OTL, CHT, CLT
Certified Hand and Lymphedema Therapist

HEAD AND NECK CANCER

A Study of Cancer of the Head and Neck at Martha Jefferson Cancer Center, 2003-05

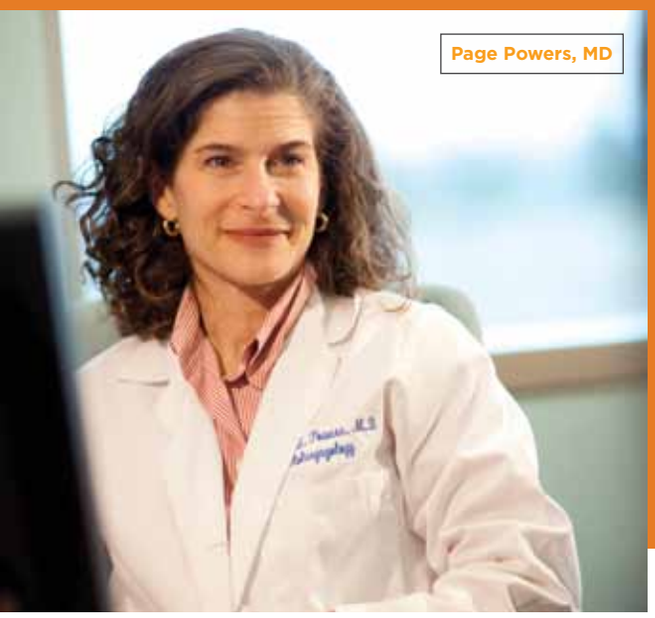
This study is a review of 48 patients with squamous-cell carcinomas of the oral cavity, oropharynx, hypopharynx and larynx diagnosed at Martha Jefferson from 2003 to 2005 (Figure 1).

Figure 1. Sites of Head and Neck Cancer for 48 Patients



While cancers of the head and neck comprise just 3 percent of malignancies in the United States, the stakes are high for patients, as these cancers can interfere with the ability to eat, swallow and talk. In addition to cure, treatment goals include preservation of the patient's functional status whenever possible. Much of the innovation in overall cancer treatment, in fact, has been based on optimization of the very challenging treatment of patients with head and neck cancer. When we make real advances in treating patients with hard-to-treat cancers, we can apply those improvements to the management of many other types of cancer.

At Martha Jefferson we have a multidisciplinary team — including head and neck cancer surgeons, radiation oncologists, medical oncologists, and diagnostic radiologists — dedicated to the care of patients with head and neck cancer. Nurses and a social worker also are important members of the treatment team. Critical support services include individual nutritional counseling, swallowing and speech therapy,



Page Powers, MD

Erika Struble, MD,
Mark Prichard, MD,
Robert Pritchard, MD

lymphedema therapy, and smoking-cessation classes.

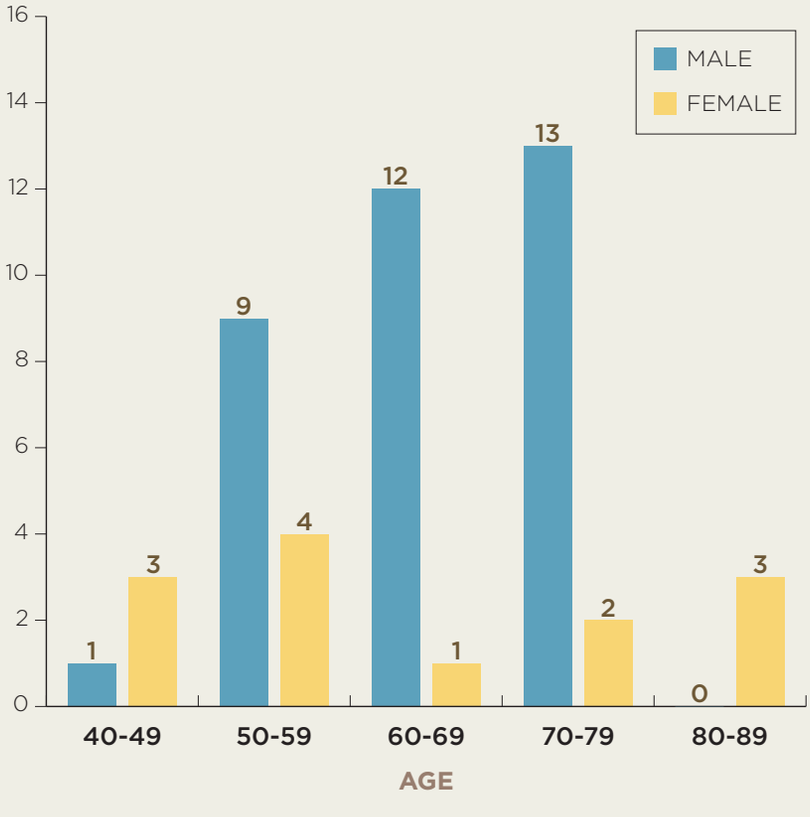
According to the National Cancer Institute, at least 75 percent of head and neck cancers are caused by tobacco and alcohol use. In the U.S. we are seeing an increasing incidence of cancers of the oropharynx in younger patients related to human papilloma virus infection. Common symptoms/signs of head and neck cancer are persistent hoarseness, difficulty or pain with swallowing, and/or a lump in the neck.

Patients in our study ranged in age from 41 to 82 years, with a male predominance, in keeping with national demographics (Figure 2). The distribution by stage is: Stage 0: 4; Stage I: 13; Stage II: 10; Stage III: 8; Stage IVA: 10; and Stage IVB with distant metastases: 3 (Figure 3). Stage IVA comprises a very interesting group of patients who have locally advanced cancers, often with bulky neck nodes, but no evidence of metastatic disease.

Treatment for our head and neck cancer patients was highly individualized based on the location of the cancer and the stage. A few patients with very early-stage cancers were treated with limited surgery. Seventeen percent of patients — primarily those with Stage 0-I laryngeal cancers — were treated with radiotherapy alone (Figure 4). Most patients received combined modality therapy with radiotherapy and chemotherapy, sometimes followed by surgery. Of the three patients with Stage IVB disease, two received palliative chemotherapy and one received palliative radiotherapy, dying four to 28 months after diagnosis.

Treatment provided a local control rate of 100 percent for the Stage 0 patients. Patients with laryngeal cancer had 100 percent local control, with all patients maintaining a functional larynx. For the 35 patients who received radiotherapy as primary treatment or part of their combined modality treatment, local

Figure 2. Diagnosis by Sex and Age, 2003-05



control rate in the primary site was 94 percent, and regional control in the neck was also 94 percent. For the seven patients with bulky IVA disease who completed treatment, the loco-regional control rate was remarkable at 86 percent. Two of the patients with IVA disease died shortly after their diagnosis (one from a separate lung cancer) and did not receive treatment for their head and neck cancer. As reported above, second primary cancers were a cause of death for some members of our group, with patients dying of primary lung cancer, other head and neck cancers (not an uncommon occurrence in the setting of tobacco abuse), bladder cancer, ovarian cancer, and lymphoma.

The overall survival rates (reflecting death due to all causes, not just from cancer of the head and neck) of our Martha Jefferson head and neck cancer patients compare favorably with the national statistics both by stage and overall (Figure 5).

Figure 3. Stage at Diagnosis, 2003-05

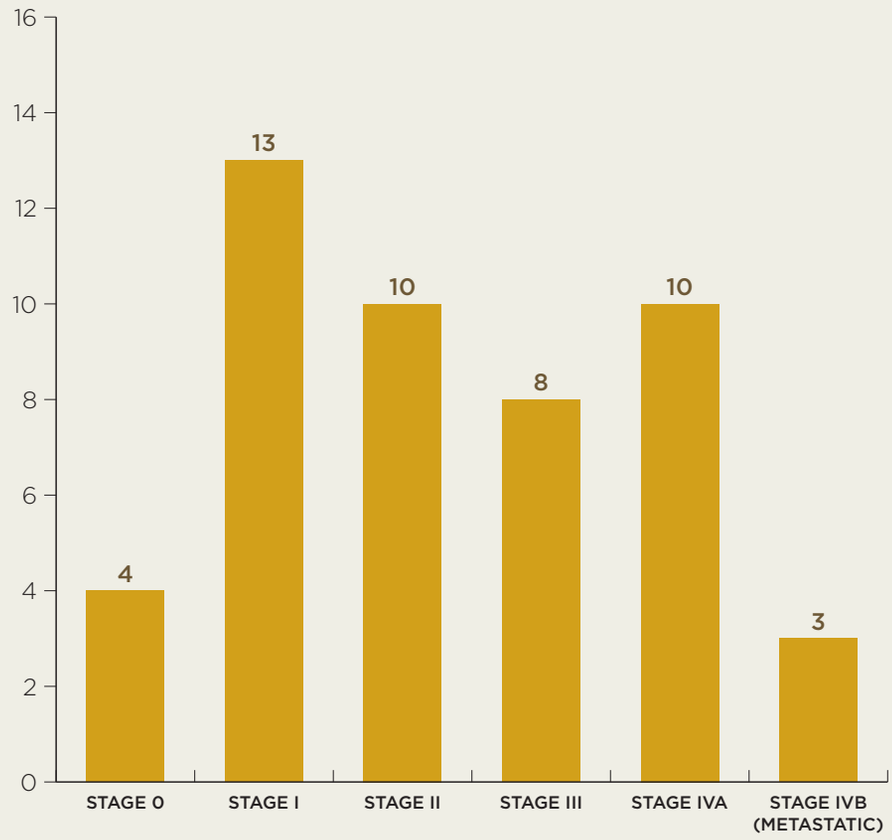
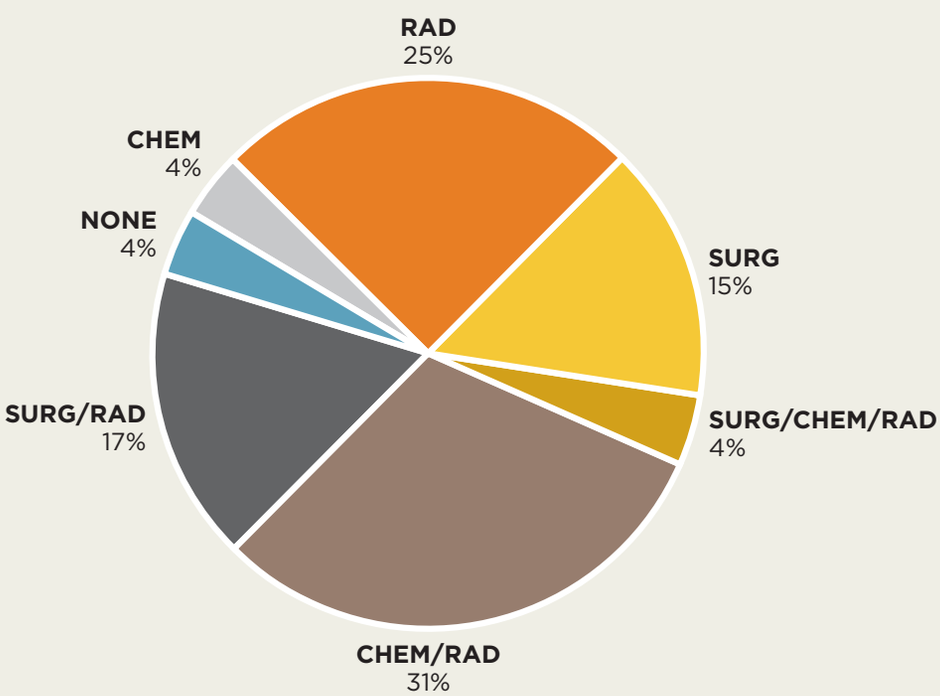


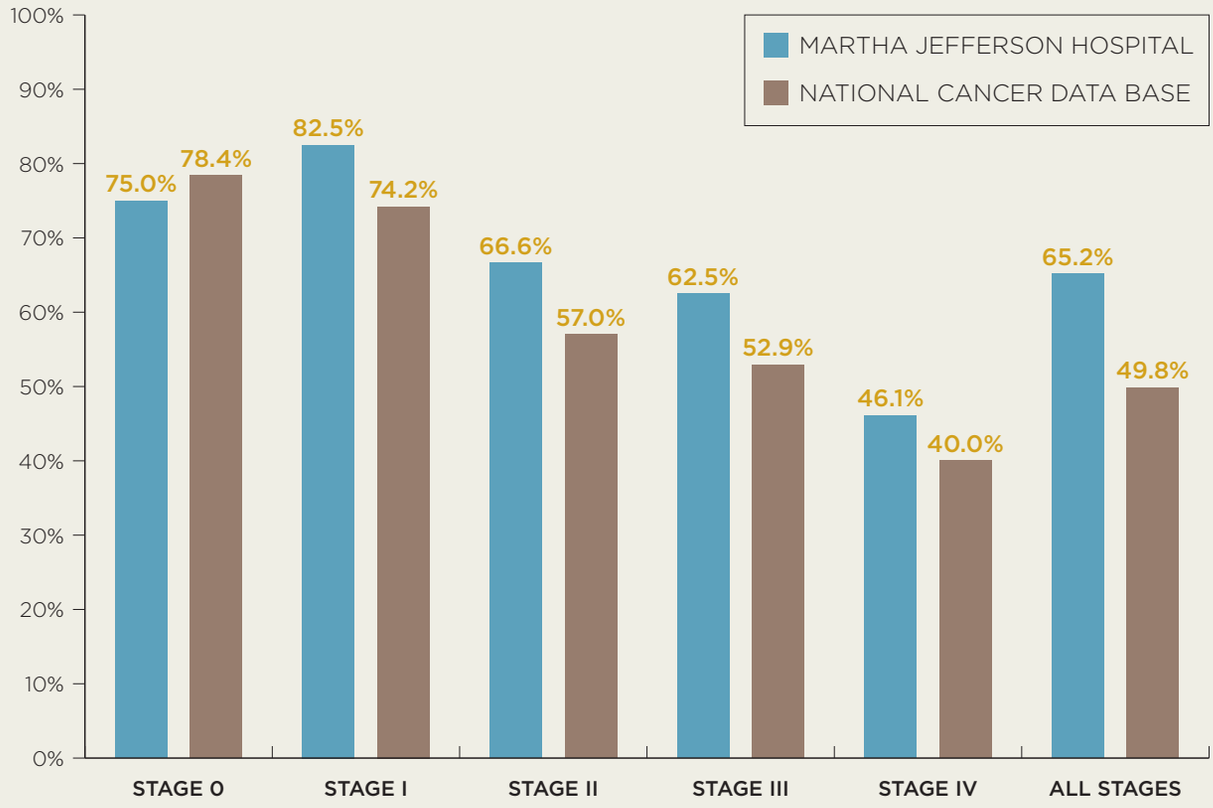
Figure 4. Treatment Modality for Cases Diagnosed 2003-05



Treatment was difficult for many of the patients, who often experienced painful mucositis, trouble swallowing, weight loss, dry mouth and altered taste. Supportive care is essential, including close monitoring of the patient during treatment, to optimize pain control, hydration and nutritional status. Frequent communication among caregivers is our modus operandi. Psychological support is also very important for both patients and family members.

The excellent loco-regional control and survival rates reflect our philosophy of aggressive combined modality therapy for patients with advanced disease. Many patients (17) received amifostine during treatment

Figure 5. Survival Compared to National Based on Cases Diagnosed 2003-05



to help preserve salivary gland function. Intensity-modulated radiotherapy, which provides improved targeting with higher doses to the tumor and less irradiation of normal tissues, was implemented in 2003.

We continue to take advantage of new technology to improve the care of our head and neck cancer patients. In Radiation Oncology we have implemented RapidArc radiotherapy, which allows a reduction in daily treatment time for head and neck cancer patients, from 20 minutes to less than 10 minutes. We also utilize image-guided radiotherapy, which allows us to optimize targeting on a daily basis with real-time physician monitoring.

In the Cancer Center, we have recently completed a quality initiative to improve the feeding tube placement experience for patients receiving this form of nutritional support. We now also have a nurse navigator to help ease the treatment process for our head and neck cancer patients.

Cynthia Spaulding, MD
Radiation Oncologist

It Takes a Team

A team approach to cancer care is vital, due to the complexity of the disease and its presentation, and particularly so with head and neck cancers. Treatment for head and neck cancers often involves two or three modalities, with frequent communication required between care providers and constant surveillance to help patients navigate the often difficult and debilitating side effects. Nurses, the social worker, the speech pathologist, the patient financial counselor, dieticians, physical and occupational therapists, gastroenterologists, otolaryngologists, and medical and radiation oncologists are all essential members of the team at various points along the continuum.

Sadly, 2012 saw the passing of one of the early practitioners in head and neck cancer treatment at Martha Jefferson, Dr. Charles Johnson III. Dr. Johnson was an active member of the Cancer Committee, a strong proponent of continuous quality improvement and a vocal supporter of Martha Jefferson nursing. He practiced for more than 20 years at Ear, Nose and Throat Consultants of Virginia, along with Drs. Eastham and Sydnor and, more recently, Dr. Blaine. The contributions to patient care of Dr. Johnson and his partners are evident in the Cancer Center's excellent survival outcomes.

PRIMARY SITE TABULATION FOR 2011 CASELOAD

PRIMARY SITE	TOTAL	CLASS		SEX		AJCC STAGE GROUP						
		A	N/A	M	F	0	I	II	III	IV	UNK	N/A
Oral cavity	**20**	**15**	**5**	**14**	**6**	**0**	**4**	**5**	**0**	**8**	**3**	**0**
Lip	3	2	1	3	0	0	0	1	0	0	2	0
Tongue	7	4	3	5	2	0	1	2	0	3	1	0
Oropharynx	1	1	0	1	0	0	0	0	0	1	0	0
Hypopharynx	0	0	0	0	0	0	0	0	0	0	0	0
Other	9	8	1	5	4	0	3	2	0	4	0	0
Digestive system	**145**	**135**	**10**	**82**	**63**	**8**	**30**	**24**	**22**	**35**	**22**	**4**
Esophagus	7	7	0	5	2	1	0	2	1	1	2	0
Stomach	17	16	1	9	8	0	3	1	3	7	3	0
Colon	58	56	2	27	31	3	16	11	11	10	7	0
Rectum	26	21	5	17	9	3	11	5	1	2	4	0
Anus/anal canal	2	2	0	1	1	0	0	1	1	0	0	0
Liver	10	9	1	8	2	0	0	0	3	3	4	0
Pancreas	14	14	0	9	5	0	0	3	1	9	1	0
Other	11	10	1	6	5	1	0	1	1	3	1	4
Respiratory system	**112**	**107**	**5**	**61**	**51**	**0**	**24**	**13**	**21**	**41**	**11**	**2**
Nasal/sinus	3	2	1	2	1	0	2	0	0	0	0	1
Larynx	7	7	0	6	1	0	4	1	1	0	1	0
Lung/bronchus	99	95	4	50	49	0	18	12	19	41	9	0
Other	3	3	0	3	0	0	0	0	1	0	1	1
Blood & bone marrow	**30**	**25**	**5**	**18**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**30**
Leukemia	13	10	3	9	4	0	0	0	0	0	0	13
Multiple myeloma	10	9	1	6	4	0	0	0	0	0	0	10
Other	7	6	1	3	4	0	0	0	0	0	0	7
Bone	**1**	**1**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**
Connect/soft tissue	**5**	**4**	**1**	**2**	**3**	**0**	**0**	**2**	**0**	**1**	**2**	**0**
Skin	**51**	**16**	**35**	**31**	**20**	**9**	**8**	**2**	**1**	**3**	**27**	**1**
Melanoma	49	15	34	30	19	9	8	2	0	3	27	0
Other	2	1	1	1	1	0	0	0	1	0	0	1
Breast	**185**	**180**	**5**	**4**	**181**	**41**	**70**	**42**	**10**	**6**	**16**	**0**
Female genital	**38**	**22**	**16**	**0**	**38**	**0**	**15**	**0**	**1**	**3**	**19**	**0**
Cervix uteri	4	0	4	0	4	0	1	0	0	0	3	0
Corpus uteri	25	15	10	0	25	0	11	0	0	0	14	0
Ovary	8	7	1	0	8	0	3	0	1	3	1	0
Vulva	1	0	1	0	1	0	0	0	0	0	1	0
Other	0	0	0	0	0	0	0	0	0	0	0	0
Male genital	**115**	**72**	**43**	**115**	**0**	**0**	**19**	**45**	**6**	**6**	**39**	**0**
Prostate	108	65	43	108	0	0	14	44	5	6	39	0
Testis	5	5	0	5	0	0	5	0	0	0	0	0
Other	2	2	0	2	0	0	0	1	1	0	0	0
Urinary system	**70**	**69**	**1**	**49**	**21**	**31**	**20**	**6**	**3**	**6**	**4**	**0**
Bladder	48	48	0	34	14	30	8	6	1	0	3	0
Kidney/renal	19	18	1	13	6	0	11	0	1	6	1	0
Other	3	3	0	2	1	1	1	0	1	0	0	0
Brain & CNS	**13**	**13**	**0**	**5**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**13**
Brain (benign)	2	2	0	0	2	0	0	0	0	0	0	2
Brain (malignant)	9	9	0	5	4	0	0	0	0	0	0	9
Other	2	2	0	0	2	0	0	0	0	0	0	2

PRIMARY SITE	TOTAL	CLASS		SEX		AJCC STAGE GROUP						
		A	N/A	M	F	0	I	II	III	IV	UNK	N/A
Endocrine	**15**	**14**	**1**	**0**	**15**	**0**	**8**	**2**	**2**	**0**	**3**	**0**
Thyroid	15	14	1	0	15	0	8	2	2	0	3	0
Other	0	0	0	0	0	0	0	0	0	0	0	0
Lymphatic system	**47**	**44**	**3**	**23**	**24**	**0**	**8**	**3**	**8**	**21**	**7**	**0**
Hodgkin's Disease	6	6	0	4	2	0	1	0	2	2	1	0
Non-Hodgkin's	41	38	3	19	22	0	7	3	6	19	6	0
Unknown primary	**14**	**13**	**1**	**6**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**14**
Other/ill-defined	**2**	**1**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**

Number of cases excluded: 12
This report EXCLUDES CA in-situ cervix cases, squamous- and basal-cell skin cases, and intraepithelial neoplasia cases.

Edna Wood,
Cancer Care Shop Coordinator

In 2011 a total of 863 cases of cancer were registered at Martha Jefferson Hospital, of which 731 were analytical cases. Analytical cases include patients who were diagnosed and/or received their first course of therapy at Martha Jefferson Hospital. This number compares to 854 analytical cases in the previous year (Figure 1), representing a 14 percent decrease.

Cancer remains largely a disease of an aging population. The median age at diagnosis of patients at Martha Jefferson Hospital was greater than 70. Approximately 70 percent of patients were aged 60 and older at the time of diagnosis; 54 percent were aged 70 and older (Figure 2). On average, women were a bit older at the time of diagnosis, compared to men.

The most commonly treated cancers at Martha Jefferson Hospital continue to reflect both recent local and national trends. The five most common cancer diagnoses in 2011, as in previous years, were cancers of the breast (25 percent), lung (13 percent), colorectal (10.5 percent), prostate (9 percent) and bladder (6.5 percent). Fifty-six percent of patients were diagnosed with early-stage disease (defined as Stage 0, I, or II), when chances for cure are greatest (Figure 3). This number is stable in comparison to recent years (range: 55-61 percent).

A major emphasis of the cancer program at Martha Jefferson Hospital remains comprehensive and multidisciplinary care of patients. In 2011 nearly half of patients were treated with more than one modality, including some combination of surgery, radiation treatment and chemotherapy (Figure 4). Optimizing patient outcomes requires the coordination of

Figure 1. New Analytic Cancer Cases by Year

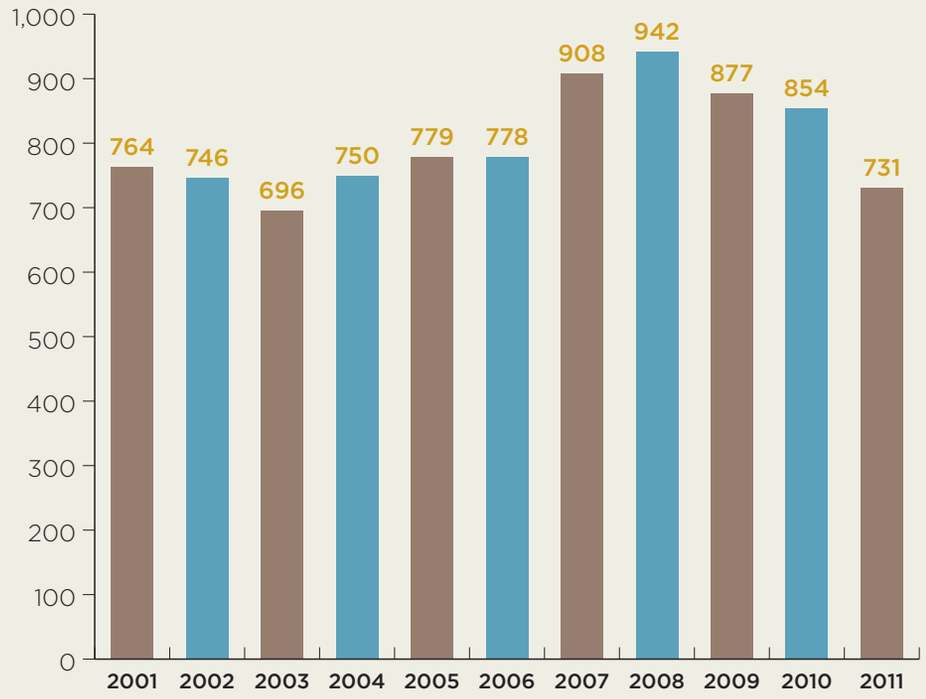
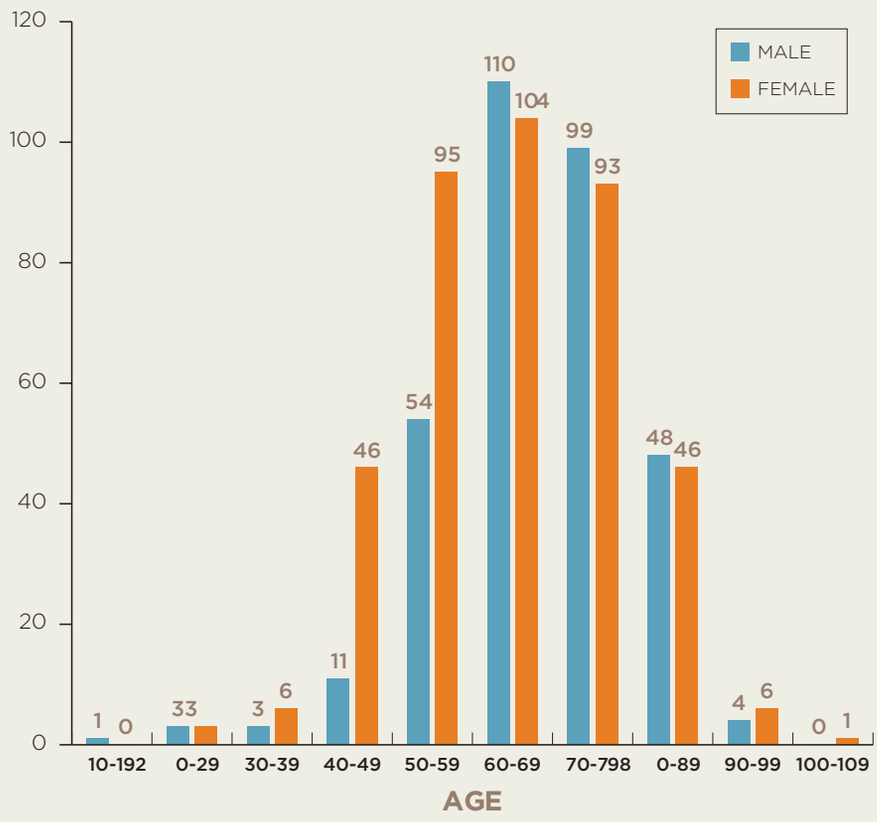


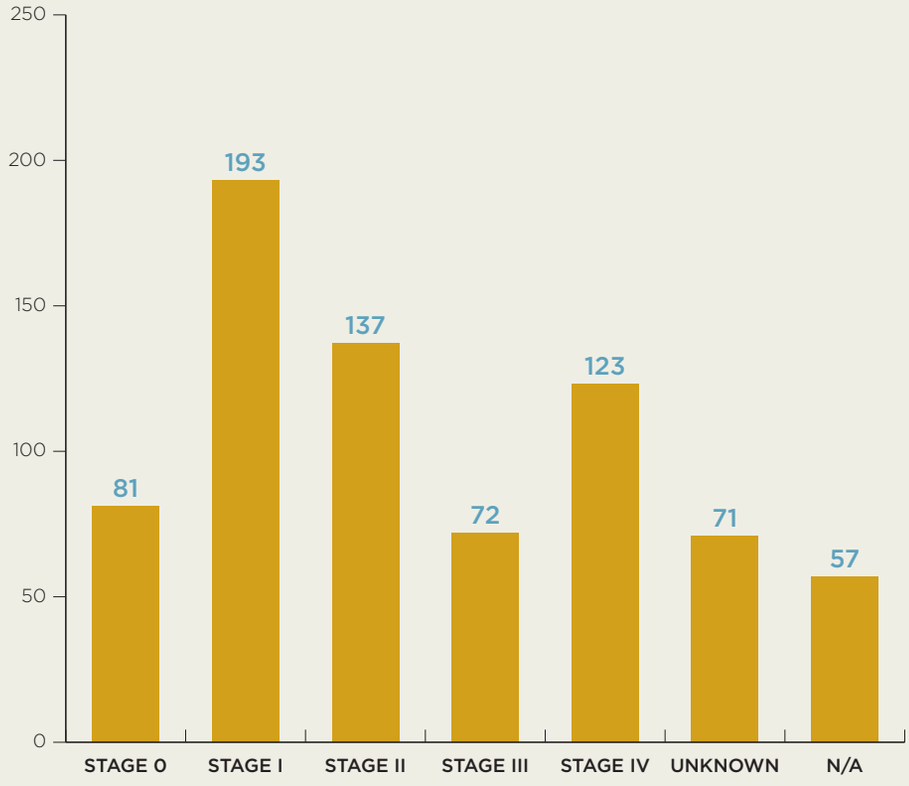
Figure 2. Gender by Age Group



care across these disciplines, and this is reflected in the survival experience for patients cared for at Martha Jefferson Hospital. Overall survival rates for patients cared for at Martha Jefferson remains as good as — and often better than — state and national averages (see Figure 4).

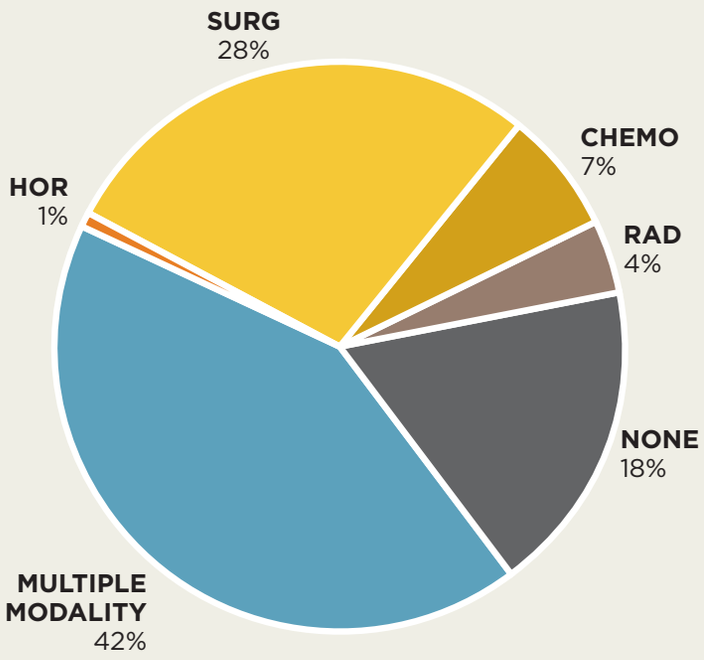
Robert Pritchard, MD
Hematology and Oncology

Figure 3. TNM Stage Group Distribution Graph, 2011 Cases



Lila Smith, RN, BSN

Figure 4. Rx Modality



Cancer Care at Martha Jefferson Hospital

Philanthropy at Martha Jefferson Cancer

Center helps support our mission and the exceptional, compassionate care given to each patient. Whether supplementing our technological resources or our softer services, philanthropy provides programs that facilitate patient comfort during challenging times.

Massage therapy may seem like a spa luxury, but for our patients undergoing cancer treatment, it is an integral and reassuring part of their care. Intended to enhance relaxation and an overall sense of well-being, seated massage, given by a certified massage therapist, is available to our patients three days a week. More than 1200 complimentary massages were given last year to grateful patients and/or their caregivers.

Palliative Care is another program supported by philanthropy. This consultative service helps provide relief of troubling symptoms for patients suffering chronic or advanced illness. Palliative Care does not replace other medical treatment, but rather is given simultaneously, and unlike hospice, is not restricted to the last six months of life. It addresses a variety of physical, emotional and spiritual needs including assistance with difficult conversations.

For all of our services, and especially Cancer Care, patient comfort is essential to achieving the best possible outcomes. Through the support offered by our community, we are able to provide personalized care and help our patients truly feel better.

Enhancing the Caring Tradition Through *Philanthropy*

Philanthropy enhances the Caring Tradition through support for Celebration of Life, Caring Embrace and free biannual breast health screenings as well as funding the Palliative Care program.

2012

Martha Jefferson Cancer Care Center

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