# MD Anderson Cancer Center at Cooper 2013





Making Cancer History®



Making Cancer History®

Two Cooper Plaza, 400 Haddon Avenue Camden, NJ 08103

Dear Friend,

Today, people use the word "groundbreaking" so frequently that its definition has been diminished. But I can say without qualification that 2013 was truly a *groundbreaking* year for our cancer program.

In 2013 we made meaningful advances in furthering our mission to conquer cancer.

- Early in the year, we began a major restructuring of our administrative leadership and developed a new model for the organization and operations of our clinical services.
- We developed a strategic playbook that will help us grow stronger, smarter and more efficiently while keeping our patients at the forefront of all we do.
- We embarked on a new electronic medical records system and new treatment information management systems.
- In September, we launched our partnership with The University of Texas MD Anderson Cancer Center the nation's leading cancer hospital and embraced a new name and brand identity.
- In October, we opened a new, state-of-the-art cancer center on the Cooper Health Sciences Campus in Camden where we care for more than 100 patients a day.
- We renovated and enhanced cancer services at the Cooper Voorhees Campus with added diagnostic imaging capabilities and the addition of a second linear accelerator for the delivery of radiation treatment.
- We welcomed new, exceptional physicians and surgeons to our team and broadened our offering of clinical programs and treatment options.
- We expanded our reach opening more outpatient offices to provide easier access to care for our patients.
- We unveiled an aggressive new marketing campaign to get the word out about our outstanding programs and services to the residents of South Jersey and beyond.
- And, as the year came to a close, we initiated our first Phase 1 Clinical Trial to study the efficacy of a new cancer treatment option.

It has been an exciting year, one filled with great accomplishments as well as immense personal and professional satisfaction for the members of the MD Anderson Cancer Center at Cooper team. But there is still much work to be done. In the year ahead we will build on the new foundation that we created this year, and move ever forward.

Sincerely,

**Generosa Grana, MD** Director, MD Anderson Cancer Center at Cooper Head, Division of Hematology/Medical Oncology Professor of Medicine Cooper Medical School at Rowan University



### **Cancer Registry Report**

The Cancer Registry is a component of the L cancer program at MD Anderson Cancer Center at Cooper that is responsible for the accurate, timely collection of cancer patient data which is used for evaluation of patient outcomes. The Cancer Registry participates as an American College of Surgeon's (ACoS) Commission on Cancer (CoC) accredited program and the National Accreditation Program for Breast Centers (NAPBC). The CoC is responsible for establishing standards to ensure high quality, multidisciplinary and comprehensive cancer care delivery in hospitals throughout the United States, granting accreditation to only those facilities that have voluntarily committed to provide the best in cancer diagnosis and treatment and are able to comply with the rigorous standards.

The Registry reports specifics of diagnosis, stage of disease, medical history, patient demographics, laboratory data, tissue diagnosis, and medical, radiation, and surgical methods of treatment for each cancer diagnosed at their facility. The data is used to observe cancer trends and provide a research base for studies into the possible causes of cancer with the goal of reducing cancer incidence and death.

Registry data also serves as an ongoing resource to the Cancer Committee in determining the most effective allocation of resources, in determining community education and outreach initiatives and in monitoring program quality.

The Registry provides vital statistics and information to clinicians and researchers as well as local, state and national cancer databases and cancer-related organizations. This contribution of information advances the body of knowledge in the field of cancer and ultimately has a positive impact on cancer patient care.

For Cooper's data to be comparable to those collected at other programs around the country, the registrars adhere to data rules established by the collecting and credentialing organizations.

#### **Cancer Registry Department Staff**

Margaret Carnuccio, CTR, Manager Jacqueline Ellis-Riffle, CTR, Cancer Registrar Annette Harley, CTR, Cancer Registrar Brian Palidar, RHIT, CTR, Cancer Registrar Karen Staller, RHIT, Cancer Registrar

#### Cooper University Hospital Cancer Committee\*

#### REQUIRED Physician Members

**Umar M. Atabek, MD** Cancer Liaison-Surgeon, Surgery Dept.

**Raymond L. Baraldi, MD** Diagnostic Radiology / Nuclear Medicine Dept.

Generosa Grana, MD Hem/Onc - Cancer Chair, Cancer Conf Coordinator

Tamara A. LaCouture, MD Radiation Oncology Dept.

Roland Schwarting, MD Chief of Pathology

#### REQUIRED Non-Physician Members

Margaret Carnuccio, CTR Manager, Cancer Registry

Dana F. Clark, MS, MS Genetics Counselor

Jackie Ellis-Mullin, CTR Cancer Registry OA Coordinator

Kim Krieger, BA, CCRP Hem-Onc Research Dept. Francis DelRossi, CSW Social Worker & Psychosocial Services Coordinator

**Dianne Hyman, MSN, RN, OCN** Quality Improvement Coordinator/ PI Representative

**Evelyn Robles-Rodriguez, APN-C** Community Outreach Coordinator

Barbara Sproge, MSN Palliative Care Educator

Amy Starling, MHSA, BBA Administrator of Cancer Program

Carol Stratton, MSPT, ATC, CLT Director, Rehabilitation Services

Wendy Topeka, MSN Clinical Director Outpatient Infusion

#### **Other Attendees**

**Colleen Thornton, ACS rep.** American Cancer Society

Jaime Austino, MSN GU & Head/Neck Nurse Navigator

Lindsay Bagell DeLuca Social Worker Kristin L. Brill, MD NAPBC Representative/ Breast Surgeon

**Tondalya DeShields, RN** Clinical Educator, Oncology Outreach Team

Angela Frantz, RN Breast RN, Navigator

Annette Harley, CTR Cancer Registry

Lesley A. Hughes, MD Radiation Oncology Dept

Susan Hunter, AP-N Advanced Practice Nurse, Hem/Onc Dept.

Michael Kalfin, MPH Director of Business Operations

Bob Lumpe Pastoral Care

Lisa McLaughlin, MSW, LSW Social Worker

Alicia Michaux, RD Outpatient Nutritionist, Food & Nutrition

#### \*Committee members at time of publication.

Cori McMahan, PsyD Director, Behavorial Medicine, Hem/Onc Dept.

Dianne Moore, RN, MSN Clinical Nurse Manager, 9N/9S

Alice O'Brien, RN Leuk/Lymph Nurse Navigator

Brian Palidar, CTR Cancer Registry

Arthur Schantz, MD Pathology Dept.

Karen Staller, RHIT Cancer Registry

Ann Steffney, MSN, RN, OCN Clinical Director Patient Services

Pat Stienes, RT Radiology Director

Leslie Tarr, MSW Social Worker

Colleen Tegeler, RN Radiation Oncology

Jackie Tubens, MSN GI Nurse Navigator

Charu Vora, MSN Lung Nurse Navigator



**Top Five Cancer Sites** TOTAL ANALYTICAL CASES 2001-2012

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Breast	201	219	268	313	286	347	386	384	351	377	385	421
Lung	110	108	97	122	154	172	206	159	181	174	188	202
Corpus Uterus	60	76	78	95	91	114	145	126	154	150	182	161
Colon/Rectum	94	94	99	104	109	127	154	117	142	121	130	126
Prostate	91	108	86	144	128	168	174	118	82	90	114	79



### MD Anderson Cancer Center at Cooper

2012 ANALYTIC CASE DISTRIBUTION – BY SITE, SEX, AJCC STAGE

Primary Site	Total	Sex		AJCC Stage							
	Cases	Male	Female	Stage O	Stage I	Stage II	Stage III	Stage IV	88	Unk	
ORAL CAVITY & PHARYNX	28	14	14	0	1	0	7	19	0	1	
Tongue	5	2	3	0	0	0	2	3	0	0	
Salivary Glands	2	1	1	0	0	0	0	1	0	1	
Floor of Mouth	1	1	0	0	0	0	0	1	0	0	
Gum & Other Mouth	1	1	0	0	0	0	0	1	0	0	
Nasopharynx	4	1	3	0	0	0	2	2	0	0	
Tonsil	7	3	4	0	0	0	3	4	0	0	
Oropharynx	2	1	1	0	0	0	0	2	0	0	
Hypopharynx	6	4	2	0	1	0	0	5	0	0	
DIGESTIVE SYSTEM	312	155	157	11	57	82	57	64	5	36	
Esophagus	18	10	8	0	3	5	3	3	0	4	
Stomach	25	17	8	0	6	4	7	4	0	4	
Small Intestine	11	7	4	0	4	3	0	3	0	1	
Colon Excluding Rectum	84	38	46	4	22	21	13	17	0	7	
Rectum & Rectosigmoid	42	24	18	4	13	7	10	4	0	4	
Anus, Anal Canal & Anorectum	9	3	6	1	0	4	2	1	1	0	
Liver & Intrahepatic Bile Duct	18	16	2	0	6	3	2	4	0	3	
Gallbladder	10	5	5	1	0	1	5	3	0	0	
Other Biliary	16	7	9	1	2	5	2	2	0	4	
Pancreas	65	26	39	0	1	28	5	21	1	9	
Retroperitoneum	1	1	0	0	0	1	0	0	0	0	
Peritoneum, Omentum & Mesentery	10	0	10	0	0	0	8	2	0	0	
Other Digestive Organs	3	1	2	0	0	0	0	0	3	0	
RESPIRATORY SYSTEM	209	104	105	3	54	6	48	81	0	17	
Nose, Nasal Cavity & Middle Ear	1	1	0	0	0	0	1	0	0	0	
Larynx	6	5	1	0	1	0	2	3	0	0	
Lung & Bronchus	202	98	104	3	53	6	45	78	0	17	
BONES & JOINTS	15	9	6	0	6	6	0	1	0	2	
Bones & Joints	15	9	6	0	6	6	0	1	0	2	
SOFT TISSUE	22	11	11	0	6	4	8	2	1	1	
Soft Tissue (including Heart)	22	11	11	0	6	4	8	2	1	1	
SKIN Excluding Basal & Squamous	35	17	18	0	13	10	8	3	1	0	
Melanoma – Skin	30	16	14	0	10	10	7	3	0	0	
Other Non-Epithelial Skin	5	1	4	0	3	0	1	0	1	0	
BREAST	429	2	427	96	174	98	40	12	0	9	
Breast	429	2	427	96	174	98	40	12	0	9	

MD Anderson Cancer Center at Cooper 2012 ANALYTIC CASE DISTRIBUTION – BY SITE, SEX, AJCC STAGE (continued)

Primary Site	Total	Sex		AJCC Stage							
	Cases	Male	Female	Stage O	Stage I	Stage II	Stage III	Stage IV	88	Unk	
FEMALE GENITAL SYSTEM	264	0	264	1	158	24	55	18	2	6	
Cervix Uteri	37	0	37	0	15	6	12	4	0	0	
Corpus & Uterus, NOS	161	0	161	0	118	13	14	11	1	4	
Ovary	45	0	45	0	13	2	27	2	0	1	
Vagina	5	0	5	0	1	1	1	0	1	1	
Vulva	15	0	15	1	10	2	1	1	0	0	
Other Female Genital Organs	1	0	1	0	1	0	0	0	0	0	
MALE GENITAL SYSTEM	84	84	0	0	19	49	4	6	0	6	
Prostate	79	79	0	0	15	49	4	6	0	5	
Testis	5	5	0	0	4	0	0	0	0	1	
URINARY SYSTEM	85	56	29	17	36	15	5	9	1	2	
Urinary Bladder	36	28	8	15	7	11	0	2	1	0	
Kidney & Renal Pelvis	47	27	20	2	28	3	5	7	0	2	
Ureter	2	1	1	0	1	1	0	0	0	0	
BRAIN & OTHER NERVOUS SYSTEM	52	20	32	0	0	0	0	0	52	0	
Brain	20	11	9	0	0	0	0	0	20	0	
Cranial Nerves Other Nervous System	32	9	23	0	0	0	0	0	32	0	
ENDOCRINE SYSTEM	79	21	58	0	48	4	8	6	10	3	
Thyroid	69	19	50	0	48	4	8	6	0	3	
Other Endocrine including Thymus	10	2	8	0	0	0	0	0	10	0	
LYMPHOMA	60	27	33	0	19	12	6	8	0	15	
Hodgkin Lymphoma	12	6	6	0	1	3	4	1	0	3	
Non-Hodgkin Lymphoma	48	21	27	0	18	9	2	7	0	12	
MYELOMA	14	9	5	0	0	0	0	0	14	0	
Myeloma	14	9	5	0	0	0	0	0	14	0	
LEUKEMIA	28	14	14	0	0	0	0	0	28	0	
Lymphocytic Leukemia	12	7	5	0	0	0	0	0	12	0	
Myeloid & Monocytic Leukemia	15	7	8	0	0	0	0	0	15	0	
Other Leukemia	1	0	1	0	0	0	0	0	1	0	
MESOTHELIOMA	3	2	1	0	1	0	1	1	0	0	
Mesothelioma	3	2	1	0	1	0	1	1	0	0	
KAPOSI SARCOMA	1	1	0	0	0	0	0	0	1	0	
Kaposi Sarcoma	1	1	0	0	0	0	0	0	1	0	
MISCELLANEOUS	26	13	13	0	0	0	0	0	26	0	
Miscellaneous	26	13	13	0	0	0	0	0	26	0	
Total	1,746	559	1,187	128	592	310	247	230	141	98	

### **Measuring Quality**

How do patients know if they are receiving good quality healthcare?

*How do physicians and nurses identify the steps that need to be taken for better patient outcomes?* 

And how do insurers and employers determine whether they are paying for the best care that science, skill, and compassion can provide?

### Performance measures

Performance measures give the health care community a way to assess quality of care provided against recognized standards. While quality measures come from many sources, those endorsed by the National Quality Forum (NQF) have become established as among the best. A NQF endorsement reflects rigorous scientific and evidence-based review, input from patients and their families, and the perspectives of people throughout the health care industry.

One of the ways Cooper University Health Care assesses the quality of the care we give to our cancer patients is to compare our performance in NQF standards to those of other hospitals in New Jersey and the United States.

NQF has established six measures for quality care in breast, colon and rectal cancer. Below you will find how Cooper compares to other hospitals in New Jersey and across the U.S. in these critical performance measures.

Cooper performed significantly above both the statewide and the U.S. norms.

### Performance for NOF Breast Care Measures



# National Standard for Breast Conserving Surgery and Radiation Therapy

Radiation therapy is administered within one year (365 days) of diagnosis for women under the age of 70 receiving breast conserving surgery for breast cancer. Cooper's compliance with this standard was at 91%, compared to the state norm of 88.8% and the national norm of 90.7%.



# National Standard for Chemotherapy in hormone receptor negative breast cancer patients

Combination chemotherapy is considered or administered within 4 months (120 days) of diagnosis for women under the age of 70 with AJCC T1cN0M0, or stage II or III hormone receptor negative breast cancer. Cooper's compliance with this standard was at 95.8%, compared to the state average of 84.3% and national norm of 91.4%.



National Standard for Tamoxifen or third generation aromatase inhibitor in hormone receptor positive breast cancer patients Tamoxifen or third generation aromatase inhibitor is considered or administered within one year (365 days) of diagnosis for women with AJCC T1cN0M0, or stage I hormone receptor positive breast cancer. Cooper's compliance with this standard was at 91.9%, compared to the state norm of 83% and the national norm of 87.6%.

### Performance for Colon and Rectal Cancer NOF Measures



# National Standard for Regional Lymph Nodes in Surgically Resected Patients

At least 12 regional lymph nodes are removed and pathologically examined for resected colon cancer. The compliance rate for Cooper was at 87.2%, compared to the state norm or 88.6% and the national norm of 87.8%.



# National Standard for Adjuvant Chemotherapy for Node Positive Patients

Adjuvant chemotherapy is considered or administered within four months (120 days) of diagnosis for patients under the age of 80 with AJCC stage III (lymph node positive) colon cancer. The compliance rate for Cooper was at 100% compared to the state norm of 85.7% and the national norm of 88.3%.



### National Standard for Radiation Therapy of Stage III Rectal Cancer

Radiation therapy is considered or administered within six months (180 days) of diagnosis for patients under the age of 80 with clinical or pathologic AJCC T4N0Mo or stage III receiving surgical resection for rectal cancer. The compliance rate for Cooper was at 100%, compared to the state norm of 92.9% and the national norm 92.6%.

### Lung Cancer Report



**Priya C. Singh, MD** Hematologist/Medical Oncologist Lung Cancer Program MD Anderson Cancer Center at Cooper

Assistant Professor of Medicine Cooper Medical School of Rowan University

### Epidemiology

Lung cancer remains the leading cause of cancer related mortality both in the United States and worldwide and in both men and women. It is estimated that 228,190 new cases of lung cancer (118,080 in men and 110,110 in women) were diagnosed in 2013 and 159,480 will die of lung cancer. More men than women will die from lung cancer; 87,260 and 72,220 respectively. In the state of New Jersey there are 5,960 estimated new cases of lung cancer and 4,060 deaths estimated in 2013.

### **Risk Factors**

The primary risk factor for lung cancer is tobacco smoke, and the risk of lung cancer increases with the number of packs of cigarettes smoked per day and the number of years spent smoking. Exposure to second hand tobacco smoke, radon gas and asbestos also increases the relative risk of developing lung cancer. In rare cases, chronic lung inflammation, lung scarring from tuberculosis, and exposure to carcinogenic chemicals such as arsenic, bis (chloromethyl) ether, polycyclic aromatic hydrocarbons, chromium, nickel, cadmium, beryllium, and silica can cause lung cancer.

### **Survival**

The overall five-year survival for all stages of lung cancer is 15%. This number has remained constant over the past three decades. Surgery is the only curative modality for lung cancer, although a small percentage of patients with late stage disease will survive more than 5 years with treatment. Five-year survival for pathologic stage I A/B patients is 75/71%, stage II A/B is 58/49%, stage IIIA 23%, and stage IIIB/IV < 5%.





AJCC Stage at Diagnosis



### Screening

Late diagnosis has been a major obstacle in improving lung cancer outcomes; however, in 2010, the National Lung Screening Trial (NLST) showed survival benefit for low dose CAT scans as a screening study for lung cancer. This large randomized controlled trial showed a 20% decrease in lung cancer mortality in high risk individuals screened with low dose CAT scans compared to those screened with chest x-rays. High risk individuals in the trial were aged 55-74 years with a 30-pack year of current or former tobacco use. To prevent one death from lung cancer, 320 high risk individuals must be screened.

### **Cooper Tumor Registry**

In 2012, 182 patients received all or a portion of their treatment for lung cancer at Cooper. A little over 50% of those were from Camden County and the majority of the other patients were from Burlington and Gloucester counties. These figures have remained relatively unchanged over the past decade.

At Cooper, the average age at diagnosis of lung cancer was slightly younger in the 6th decade of life, compared to the national average age at diagnosis in the 7th decade. The age at diagnosis in different age groups was consistent with that nationally reported by the National Cancer Data Base (NCDB).



Patient demographics were fairly similar except for the higher percentage of blacks treated at Cooper. Nationwide in 2011, 82% of those diagnosed with non small cell lung cancer were white, 11.3% were black and 3% were Hispanic. At Cooper in 2012, 71% were white, 22% were black and less than 5% were classified as Hispanic. This is not surprising since a significant portion of the Cooper patient base is drawn from the city of Camden, which has a largely black and Hispanic population.

The staging at diagnosis at Cooper was similar to national data with most lung cancer patients presenting at stage III and IV from 2000-2011, however in 2012 more patients were diagnosed at stage I. There may be a shift in stage at diagnosis with a greater number of patients diagnosed in stage I since low dose CAT scan screening is being increasingly used. The NCDB has not published data for 2012 to assess if this change in staging is occurring nationwide.





#### Treatment

Surgical resection was performed in 259 of the 1423 Cooper lung cancer patients from 2001-2011(17%) and surgery was the only form of therapy in 14%. 41% received radiotherapy as part of their treatment and 34% received chemotherapy. Fifteen percent of Cooper patients received no therapy for their lung cancer from 2001-2011.

In 2012, surgical resection was performed in 37 of the 182 Cooper lung cancer patients (20%) and surgery was the only form of therapy in 18%. 40% received radiotherapy as part of their treatment and 47% received chemotherapy. Fourteen percent of Cooper patients received no therapy for their lung cancer in 2012.

Nationwide data 2001-2011 showed that surgical resection was performed in 25% of patients and surgery was the only form of therapy in 20%. 38% received radiotherapy as part of their treatment and 42% received chemotherapy.

Survival statistics from the NCDB for non-small cell lung cancer patients are presented in Figure 7, while survival for all Cooper patients seen in 2003-2006 is shown in Figure 8. When Cooper survival data was compared to NCDB data from 2003-2006, 5-year survival was slightly higher for all stages of lung cancer treated at Cooper as follows: stage I 53.3% (versus 46.8% NCDB); stage II there were too few cases at Cooper to be analyzed; stage III 12.6% (versus 11.2% NCDB) and stage IV 5.1% (versus 2.7% NCDB).

Also of note is the difference in patients receiving surgery as their initial therapy for lung cancer: 5% fewer patients at Cooper had surgery. Multiple publications have documented that blacks (especially black males) are significantly less likely to have surgery for lung cancer than other racial/ethnic groups, however in spite of this, survival was slightly better at Cooper than national averages. Surgery has increased as the sole treatment modality from 14% to 18% and this may be the case with increasing use of CT screening.

### Comprehensive Lung Cancer Care

MD Anderson at Cooper is South Jersey's leading provider in the detection, diagnosis and treatment of lung cancer. MD Anderson at Cooper's Lung Cancer Center combines state-of-the-art, compassionate medical care with innovative science to provide the best possible outcomes for patients.

MD Anderson at Cooper's reputation for excellence can be attributed to our multidisciplinary approach to lung cancer care. Each of our patients is under the care of an entire team of experts, consisting of:





- Thoracic surgeons
- Medical oncologists
- Radiation oncologists
- Pulmonary medicine specialists
- Interventional pulmonologists
- Pathologists
- Radiologists
- Nurse navigator
- Nurse practitioner
- Clinical research coordinators
- Social workers
- Palliative care team

Our multidisciplinary lung cancer team meets once weekly to review cases to provide each patient with a comprehensive evaluation and an individualized treatment plan.

More recently MD Anderson at Cooper has committed to the improvement in lung cancer care in South Jersey through developing an interventional diagnostic program with fellowship trained interventional pulmonologists. MD Anderson at Cooper is the only South Jersey hospital performing endobronchial ultrasound (EBUS)-guided bronchoscopy. This minimally invasive procedure enables physicians to safely, accurately, and quickly biopsy previously difficult-to-access lymph nodes and chest abnormalities.

When appropriate, MD Anderson at Cooper thoracic surgeons offer minimally-invasive surgical procedures, including robotic-assisted lobectomy as well as thorascopic lobectomy (Video-Assisted Thoracic Surgery or VATS). MD Anderson at Cooper lung surgeons have performed more lung cancer surgeries using the da Vinci<sup>®</sup> robot than any other hospital in South Jersey.

MD Anderson at Cooper offers a full spectrum of radiation oncology treatment options including external beam radiation therapy and CyberKnife radiosurgery. The CyberKnife system is designed to pinpoint and destroy tumors using high doses of radiation with sub-millimeter accuracy.

Our medical oncologists offer patients the most advanced chemotherapy treatments and access to groundbreaking clinical trials that give patients options that may not be available elsewhere in the region. In 2012, four patients who met eligibility criteria were enrolled in clinical trials.

The center is seeing a shift in more stage I lung cancers diagnosed and this may be from the implementation of low dose CT screening for lung cancer. MD Anderson at Cooper has a high risk lung cancer screening program and has screened approximately 20 patients since its inception.



Making Cancer History®

MD Anderson Cancer Center at Cooper Two Cooper Plaza, 400 Haddon Avenue Camden, NJ 08103

1.855.MDA.COOPER (1.855.632.2667) • MDAndersonCooper.org