

2016 CANCER PROGRAM ANNUAL REPORT

# Hollings Cancer Center

*A National Cancer Institute-Designated Cancer Center*



**MUSC Health**

Medical University of South Carolina

Changing What's Possible

## From the Leadership



David T. Marshall,  
M.D., MS,  
Cancer Program  
Committee Chair

At MUSC Hollings Cancer Center, we positively impact the care of cancer patients throughout the Lowcountry and the state of South Carolina, not just with the highest quality oncology services, but also through innovative collaborative research efforts, outstanding professional education programs and many statewide cancer prevention programs. While striving to achieve this mission, we are pleased to present to you the 2016 Annual Cancer Program Report recognizing the hard work and many achievements of the Cancer Program Committee at Hollings Cancer Center.



James Brook, MBA,  
Administrator,  
Oncology Service Line

As one of the leading cancer treatment centers in the Southeast, Hollings Cancer Center combines the full range of cancer specialties – including medical oncology, radiation oncology, surgical oncology, and reconstructive surgery – to deliver the highest level of care to our patients. The center employs twelve nurse navigators who guide patients through the process of diagnosis and treatment. Hollings Cancer Center is home to more than 120 scientists from numerous disciplines conducting research and collaborating on better ways to prevent, detect, diagnose and treat this complex disease.

Additionally, Hollings Cancer Center is the only National Cancer Institute (NCI)-designated center in South Carolina. Choosing Hollings Cancer Center gives patients access to nationally renowned teams of physicians and scientists equipped with the resources to fight cancer, with cutting-edge technology and new medications not available at other centers. As one of the elite NCI-designated cancer centers in the nation, we have received the highest level of recognition from the federal government's principal agency for cancer research for the work we do.

Receiving a cancer diagnosis is a difficult time in anyone's life. At Hollings Cancer Center, our compassion extends beyond the scope of medical services to resources that help our patients and their families sustain hope. Along with state-of-the-art treatments, Hollings assists patients in dealing with the financial, physical and emotional aspects of having cancer.

Some of the additional patient resources Hollings Cancer Center provides include:

- Financial Counseling
- Genetic Counseling
- Interfaith Oncology Chaplain
- Hollings Cafe
- Nutrition Services
- Patient/Family Resource Center
- Psychological Support Services
- Social Work
- Support Groups
- Smoking Cessation Clinic

The past year was filled with outstanding accomplishments, and we are proud of the continual efforts shown by everyone associated with Hollings Cancer Center to serve our patients well, at every phase of the management of their cancer. As we expand our services and outreach in the upcoming year, we will continue to work to reduce the burden of cancer on the citizens of the great state of South Carolina.



Dr. Carolyn Britten  
Associate Director,  
Clinical Investigations

## Our Commitment to Quality Care Includes:

- Hollings Cancer Center offers patients state-of-the-art therapies, treatments and technologies, including Tomotherapy, TrueBeam STx, the Leksell Gamma Knife Perfexion and the da Vinci Robotic Surgical System
- MUSC is one of a small number of health care centers in the nation offering orthopaedic/sarcoma oncology care
- We offer South Carolina's first, largest and most comprehensive adult blood and bone marrow transplant program and the only pediatric blood and marrow transplant program
- MUSC is one of only a few centers in the Southeast using the video-assisted thoracic surgery (VATS) technique in a large percentage of cases
- Our Advanced Breast Reconstruction Program uses the revolutionary DIEP (Deep Inferior Epigastric Perforation) technique
- We are the only center in South Carolina performing surgery for prostate cancer in four different ways: robotic, perineal, retropubic and laparoscopic
- Hollings Cancer Center has one of the world's most renowned Endoscopic Ultrasound (EUS) facilities
- MUSC offers the most comprehensive program for advanced melanoma care in South Carolina
- In collaboration with MUSC's Children's Hospital, we treat a large percentage of all South Carolina children battling cancer

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# HCC CANCER PROGRAM COMMITTEE

Cancer Program Committee Chair, Radiation Oncology  
Cancer Liaison Physician, Urology  
Palliative Care Representative  
Surgery

Diagnostic Radiology  
Medical Oncology  
Pathology

Administrator, HCC Oncology Service Line  
Quality of Cancer Registry Data Program Coordinator  
Community Outreach Coordinator

Genetic Counselor  
Social Work  
Oncology Pharmacy Services  
Oncology and Medical-Surgical Services Business Manager  
Psychosocial Representative  
Rehab/Physical Therapy

Cancer Conference Activity Coordinator  
Quality Improvement Coordinator, PI/QM Professional  
American Cancer Society Representative  
Clinical Research Data Manager  
Nurse Manager, HCC Clinics

Chaplain  
Oncology Dietitian

David Marshall, M.D., Jennifer Harper, MD  
Sandip Prasad, M.D.

Pat Coyne, RN, Maribeth Bosshardt, MD  
E. Ramsay Camp, M.D., MSCR  
Stephen Savage, M.D.

Madelene Lewis, M.D., Seth Stalcup, M.D.  
Paul O'Brien, M.D., Daniel Reuben, MD  
M. Timothy Smith, M.D.

David Lewin, M.D.

James Brook, MBA

Linda Cope, CTR, Kammy Rebl, CTR

Melanie Slan

Coretta Magwood, MBA, BHS

Karen Baker, MS

Renea Bligen, LISW, Kesha Graham, LISW

Carolyn Bondarenka, PharmD, MBA, BCPS

Alan Edwards, MHA

Stacey Maurer, PhD, Wendy Balliet, PhD

Renee B. Garrison, PT, MHS, MTC

Dave Comeau, PT

Helen Gosnell, CTR

Jennifer Hooks, MBA, Mike Roudabush

Ashley Cashion

Terri Matson, CCRP, Susan Shannon

Tess Morris, RN

Katherine Wanstall, RN, ONS

Rev. Nancy Pelligrini

Michael Stafford, RD, CSO, LD

# Accreditations, Awards and Recognitions

Hollings Cancer Center is one of fewer than 70 cancer centers in the nation – and the only one in South Carolina – to receive a designation from the National Cancer Institute.

2013: Hollings was awarded a Three-Year Accreditation with Commendation by the Commission on Cancer (CoC) of the American College of Surgeons (Continuously Accredited since 1936).

2016 - 2017: MUSC Health has been ranked #47 for cancer care in the U.S. News & World Report's 2016-2017 edition of America's Best Hospitals.

Our Comprehensive Breast Care Program is accredited by the National Accreditation Program for Breast Centers (NAPBC).

Our breast imaging staff was awarded a Breast Imaging Center of Excellence designation by the American College of Radiology (ACR).

2011: The Jenny Sullivan Sanford Melanoma & Skin Cancer Program was named a Melanoma Center of Excellence (MCE) by the Melanoma Hope Network

The Blood and Bone Marrow Transplant adult and pediatric programs have been accredited by The Foundation for the Accreditation of Cellular Therapy since 2003.

MUSC has been awarded with Magnet Recognition®, an acknowledgment of quality patient care, nursing excellence and innovations in professional nursing practice.



A Cancer Center Designated by the National Cancer Institute



## Quality of Care

The ACoS Commission on Cancer provides tools to accredited facilities to help facilities improve the quality of their patient care. Two of those tools are the Rapid Quality Reporting System (RQRS) and Cancer Program Practice Profile Reports (CP<sup>3</sup>R). RQRS provides real-time tracking of treatments recommended by evidence-based standards. RQRS helps facilities evaluate the timeliness of cancer treatment given at their facilities. Participation in RQRS is voluntary. MUSC chooses to participate in RQRS because of our commitment to quality patient care.

CP<sup>3</sup>R reports give a summary of treatment and are used by facilities to monitor the use of evidence-based guidelines. MUSC has a higher rate of eligible patients receiving recommended treatments than national benchmarks (rate for all CoC accredited facilities).

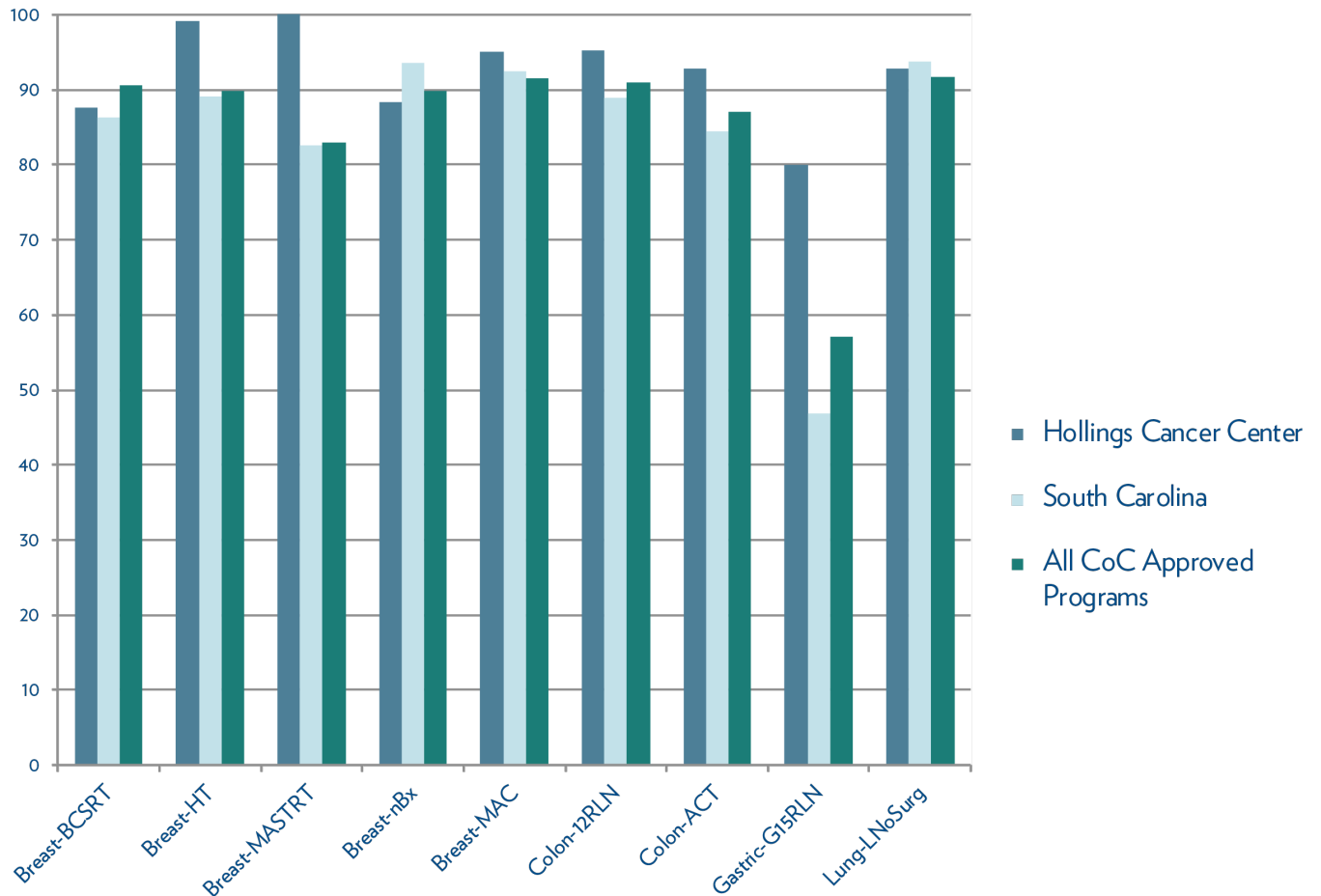
The chart on the following page contains the most recent CP<sup>3</sup>R data from the Commission on Cancer for patients treated at MUSC in calendar year 2013. Hollings Cancer Center compares favorably with all Commission on Cancer facilities and the South Carolina state average.

Dr. E. Ramsay Camp  
Associate Professor, Surgery



Measure	Description
Breast BCSRT	Breast radiation treatment is given after breast conserving surgery
Breast HT	Hormone therapy prescribed for women with hormone receptor positive breast cancer that is stage 1-3
Breast MAC	Chemotherapy is given to women with hormone receptor negative breast cancer that is stage 1-3
Breast MASRT	Radiation treatment is given following mastectomy for women with 4 or more positive regional lymph nodes
Breast nBx	Imaging or palpation guided biopsy is performed to establish the diagnosis of breast cancer
Colon 12RL	At least 12 lymph nodes are removed and examined for colon cancer treated with surgery
Colon ACT	Chemotherapy is given after surgery to patients with stage 3 colon cancer
Gastric G15RLN	At least 15 lymph nodes are removed and examined for gastric cancer treated with surgery
Lung-NoSurg	Surgery is not the first course of treatment for lung cancer with metastasis to mediastinal or subcarinal lymph nodes on the same side as the primary tumor with no distant metastases

## 2014 CP<sup>3</sup>R Measures Comparison



# Cancer Data Management

## The Hollings Cancer Center Data Registry

The Cancer Registry is the data collection component of the Cancer Program. Cancer registries across the country share a core mission, performed by data specialists trained as Certified Tumor Registrars (CTRs). CTRs do the work of translating the medical narratives of cancer patients into a searchable database. The purpose for collecting information about cancer is to identify better ways to prevent and treat cancer.

Every cancer patient has a story that can contribute to the national effort to understand and fight this disease. These stories begin with a diagnosis. The diagnosis determines what the next chapters will hold for each patient because the type of cancer will dictate the treatment plan. Treatments may include chemotherapy, radiation, surgery, or a combination of these.

CTRs document the type of cancer and treatments in addition to outcomes for our patients. By combining information from so many patients, we can begin to see trends. Collecting this type of information about treatment types and patient outcomes helps physicians develop more effective treatment plans and improve cancer patient care.

Other data items which are recorded relate to patient lifestyle (such as smoking history) or relate to nature of the cancer (such as molecular markers). Documenting these types of characteristics assists public health officials in identifying risk factors for cancer.

The Cancer Registry is a depository of confidential patient information and adheres to strict rules to ensure patient confidentiality while still providing vital information. Cancer Registry data goes through electronic edits as well a quality review process conducted by HCC physicians. In today's healthcare environment decisions are data-driven and the use of cancer registry data serves our doctors and administrators.

The MUSC cancer registry most often provides data in summary form, such as the example shown below. Summary data do not include any data field that could result in the identification of a given patient. This type of de-identified data is used for cancer program development, cancer research and quality improvement studies.

The Cancer Registry team of seven CTRs and a follow-up coordinator is highly motivated to make their daily work be of real service to the community of cancer patients, clinicians and researchers.

### Cancer Data Management Activity MUSC 2015 Statistical Year

<b>Total Cases</b>	<b>4912</b>
<b>Analytic Cases</b>	<b>3018</b>
<b>Follow-up Rate-5 Year (Target 90%)</b>	<b>93.6%</b>
<b>Follow-up Rate-Reference Year 2000 (Target 80%)</b>	<b>89.3%</b>
<b>Clinical Trials Accrual</b>	<b>24%</b>
<b>Complete Database-Reference Year 2000</b>	<b>56,255</b>





“

We didn't like the options they were giving us, so we went looking for someone who specializes in kidney cancer and a place that could offer us a better option, our research led us to the Hollings Cancer Center.

Al Harman, Kidney Cancer Survivor

”

er  
ORS  
R FISH RULER  
ng.sc.gov

Bag Limit  
Black Sea B.  
Bluefish - 15  
Cobia - 2  
King Mackerel  
Weakfish - 1  
Wreckhead - 1  
Wahoo - 2

THE INTERNATIONAL  
TROUT & SALMON  
FISH ASSOCIATION  
MEMBER

ASSOCIATION FISH FOR  
RECREATIONAL FISHERIES MUST  
BE AT LEAST 8 INCH LONG AND  
WEIGH MORE THAN 50 GMS PER  
SPECIES

How to  
Measure  
a Fish

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THE  
PALMETTO

## Cancer Registry Data (July 1, 2014-June 30, 2015)

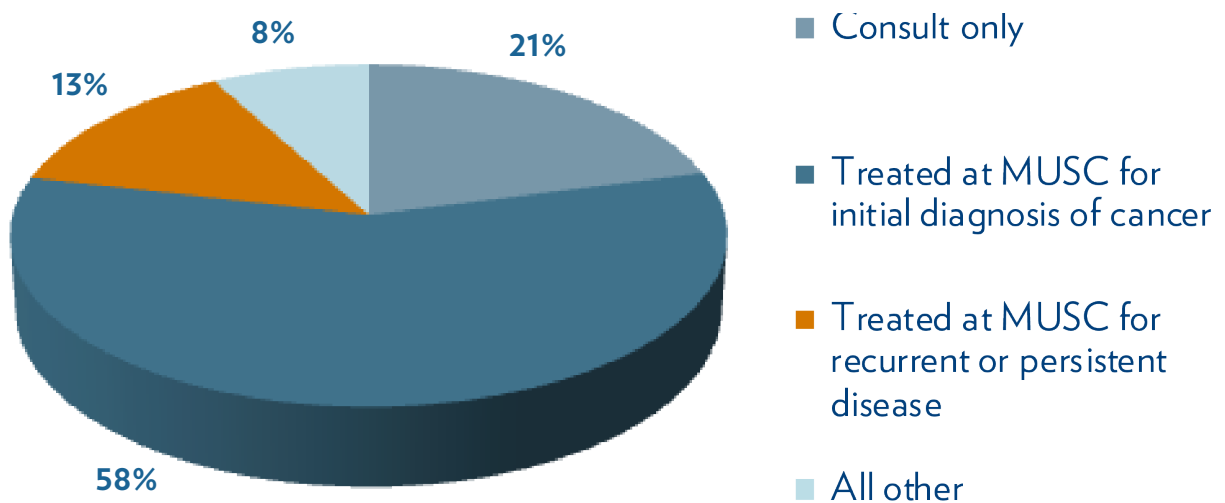
Hollings Cancer Center plays many different roles in cancer patient care. Hollings Cancer Center physicians may be involved in the diagnosis and/or treatment of the patient during the initial diagnosis of cancer. These patients' cases are described as analytic because they are used for analysis of treatment effectiveness. Our physicians may also see patients during the initial diagnosis of cancer for second opinions or specialized diagnostic tests. Patients who are initially diagnosed and treated elsewhere may come to MUSC for management of recurrent or persistent disease. These cases are described as non-analytic.

### In the following chart:

**Consult Only** — patient was initially diagnosed at MUSC or came to MUSC for a second opinion, but received their treatment elsewhere.

**All Other** — patients are followed at MUSC for a history of cancer only (no active disease) or patients followed at MUSC as required by the South Carolina Central Cancer Registry.

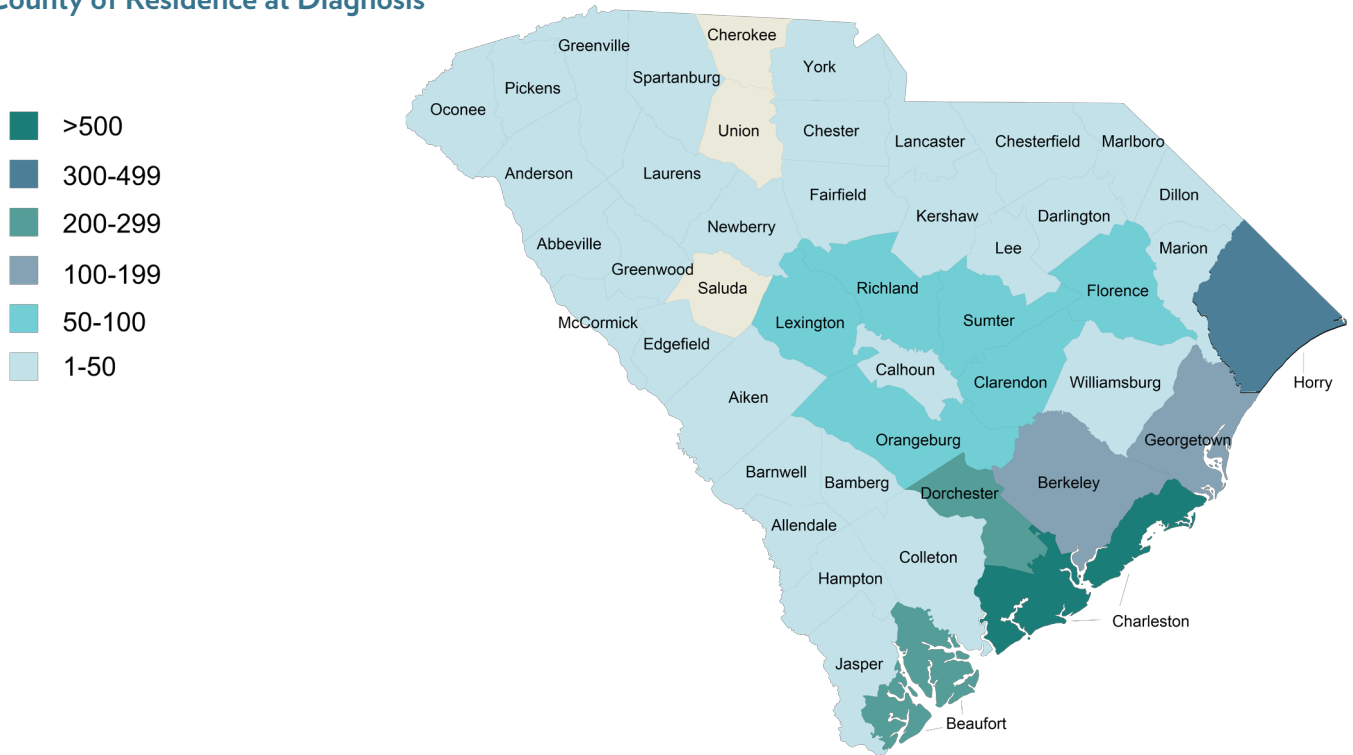
## Hollings Cancer Center's Role in Patient Care



Total cases: 4,912

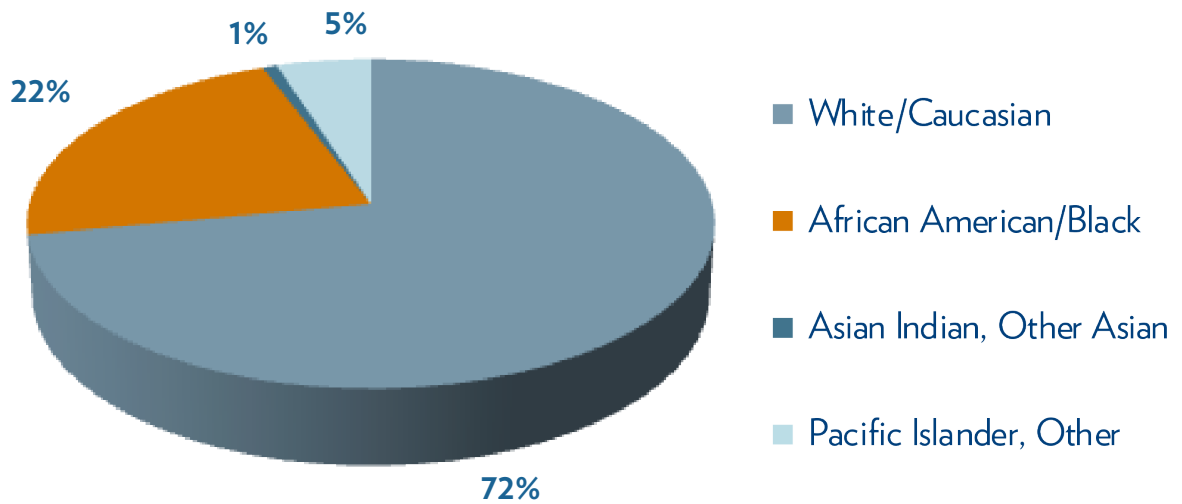
# Demographic Distribution (Analytic)

## County of Residence at Diagnosis



# Ethnologic Distribution (Analytic)

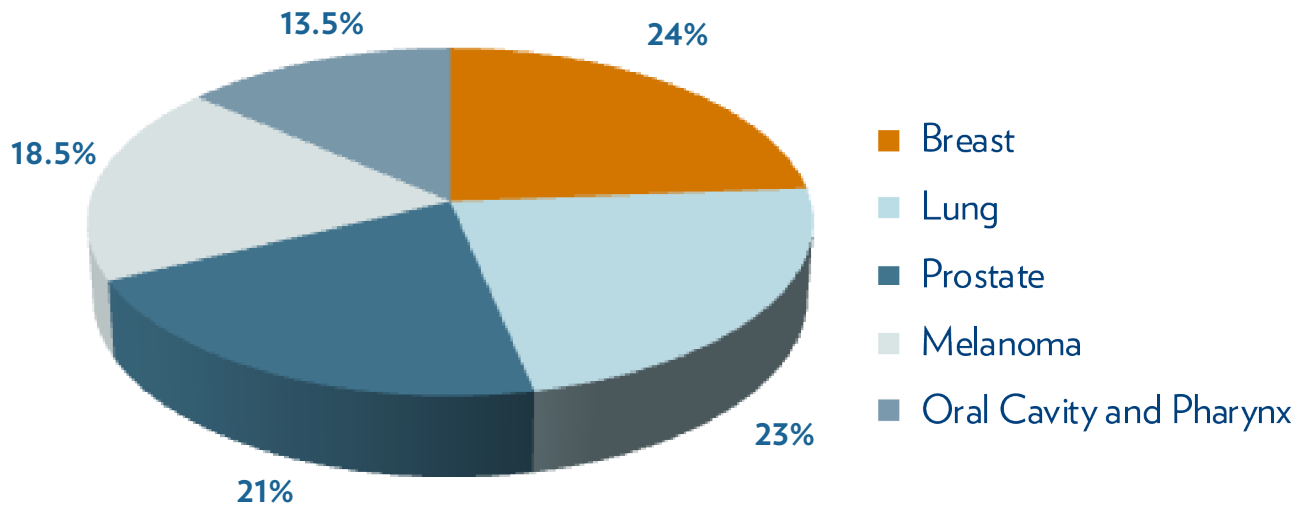
## Race (Analytic)



# Most Common Types of Cancer Seen at MUSC

July 1, 2014-June 30, 2015 (Analytic)

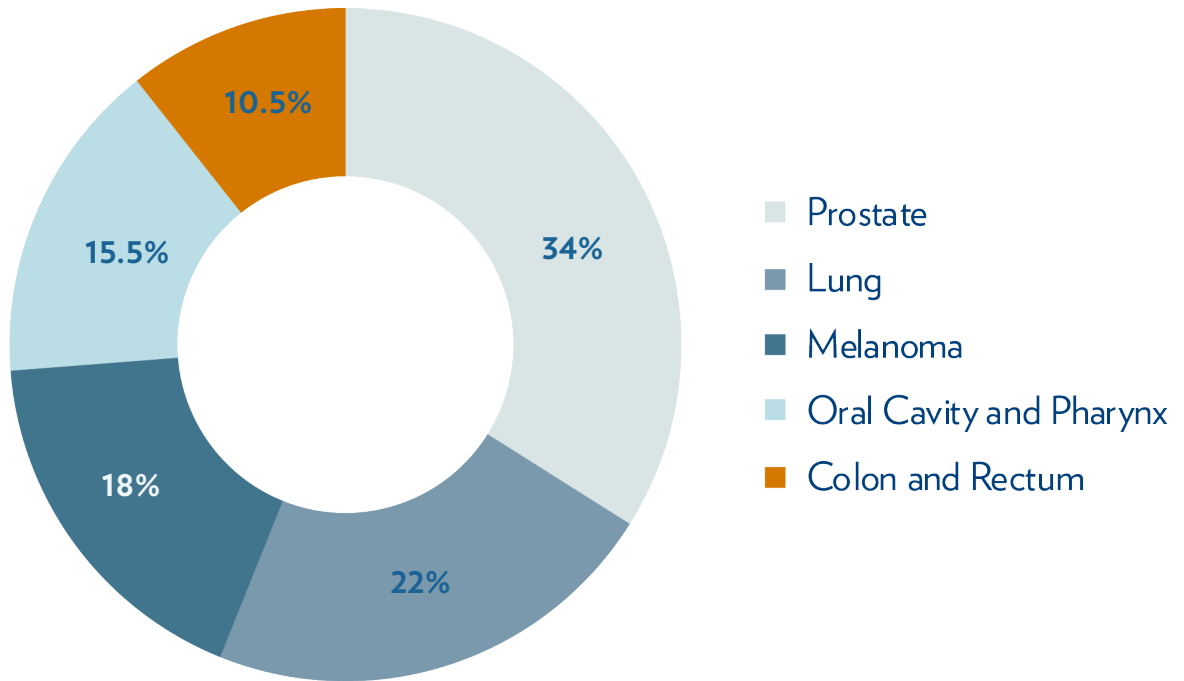
## Top 5 Primary Sites (Analytic)



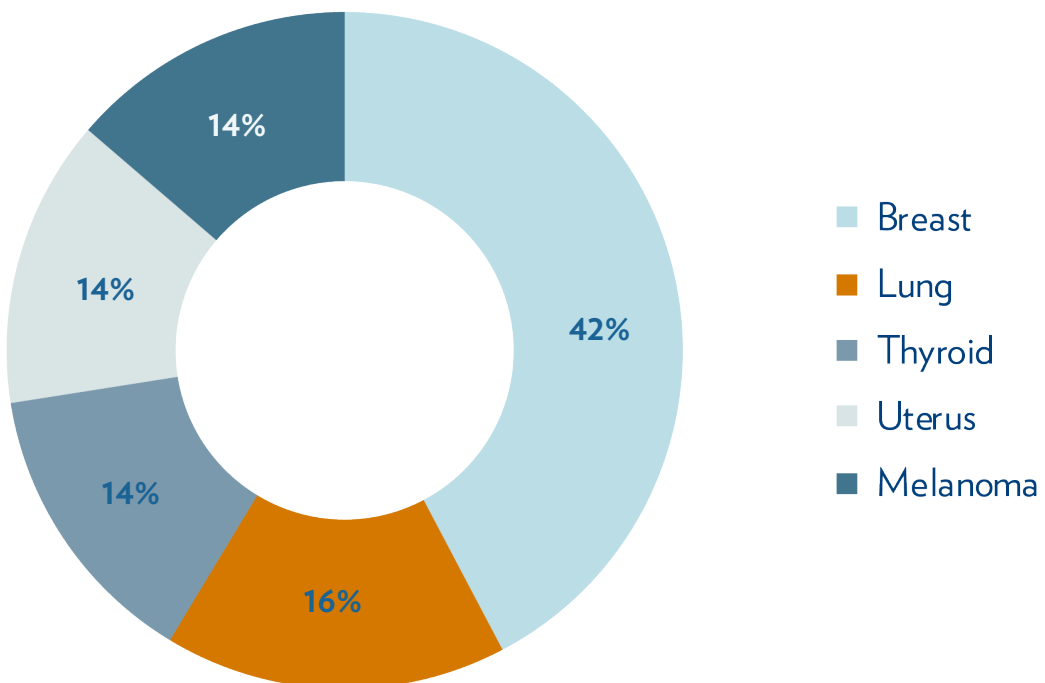
Dr. David T. Marshall  
Professor, Radiation Oncology



## Top 5 Cancer Sites for Males (Analytic)

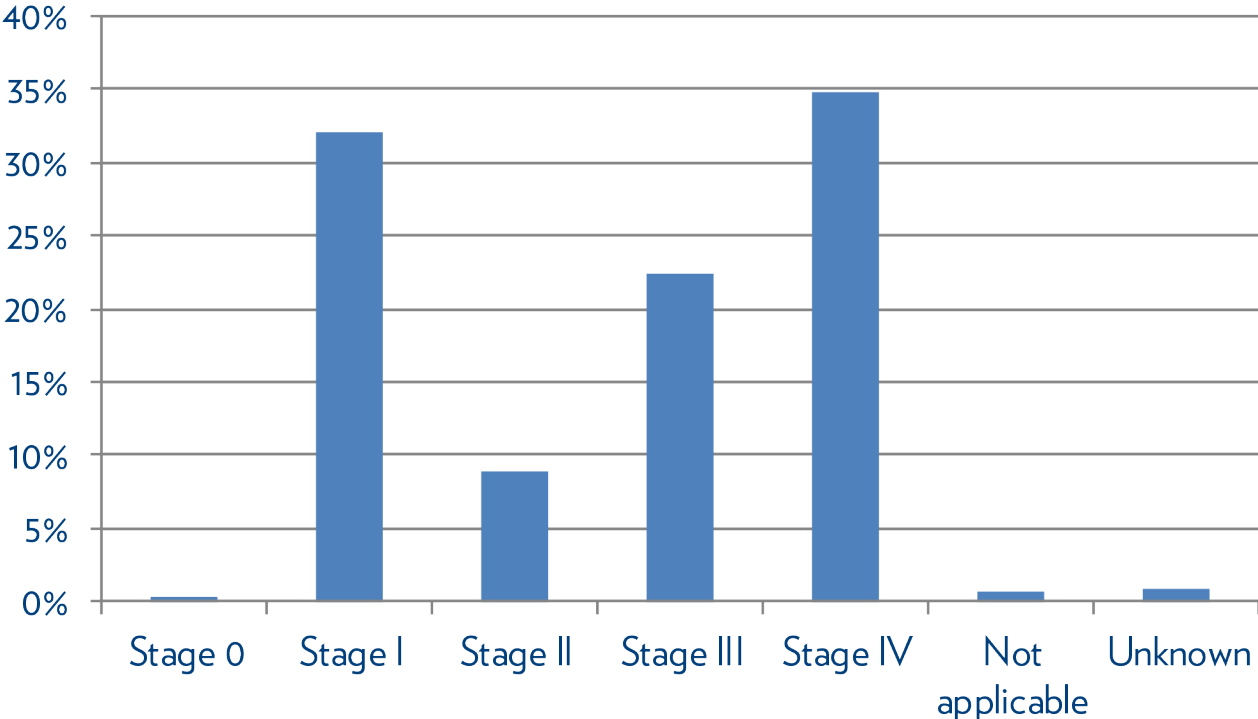


## Top 5 Cancer Sites for Females (Analytic)

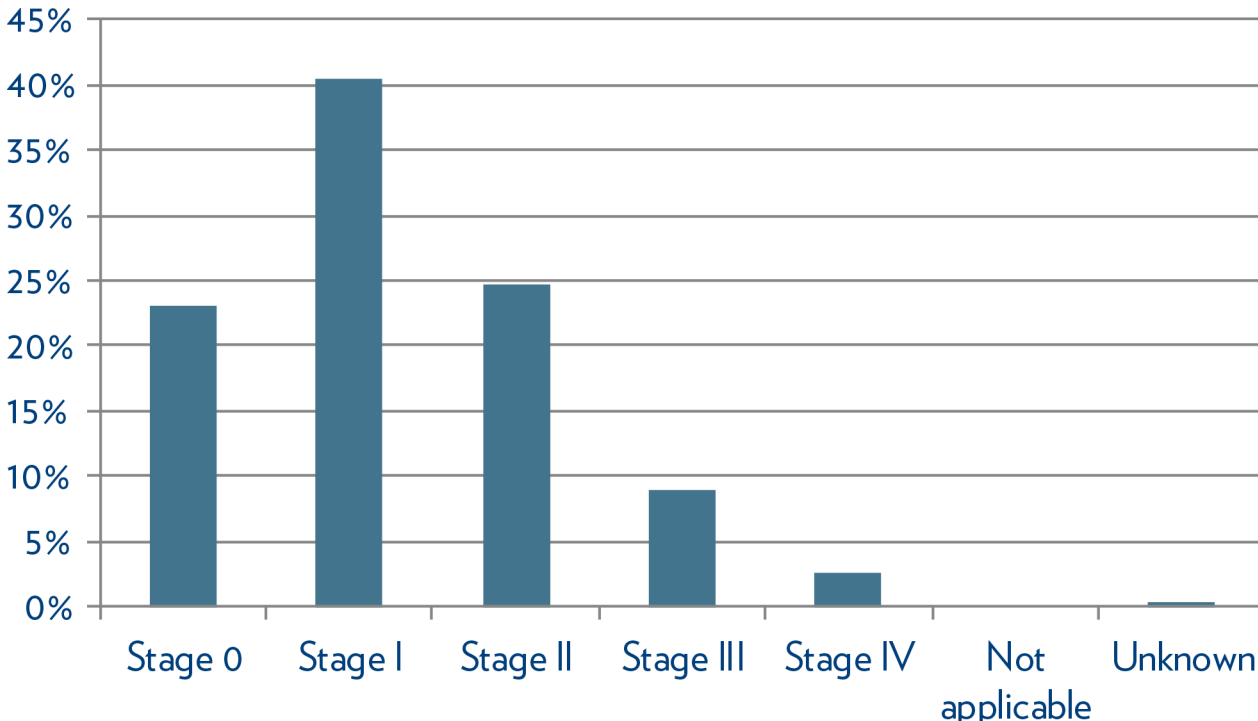


# Stage of Disease at Diagnosis (Analytic)

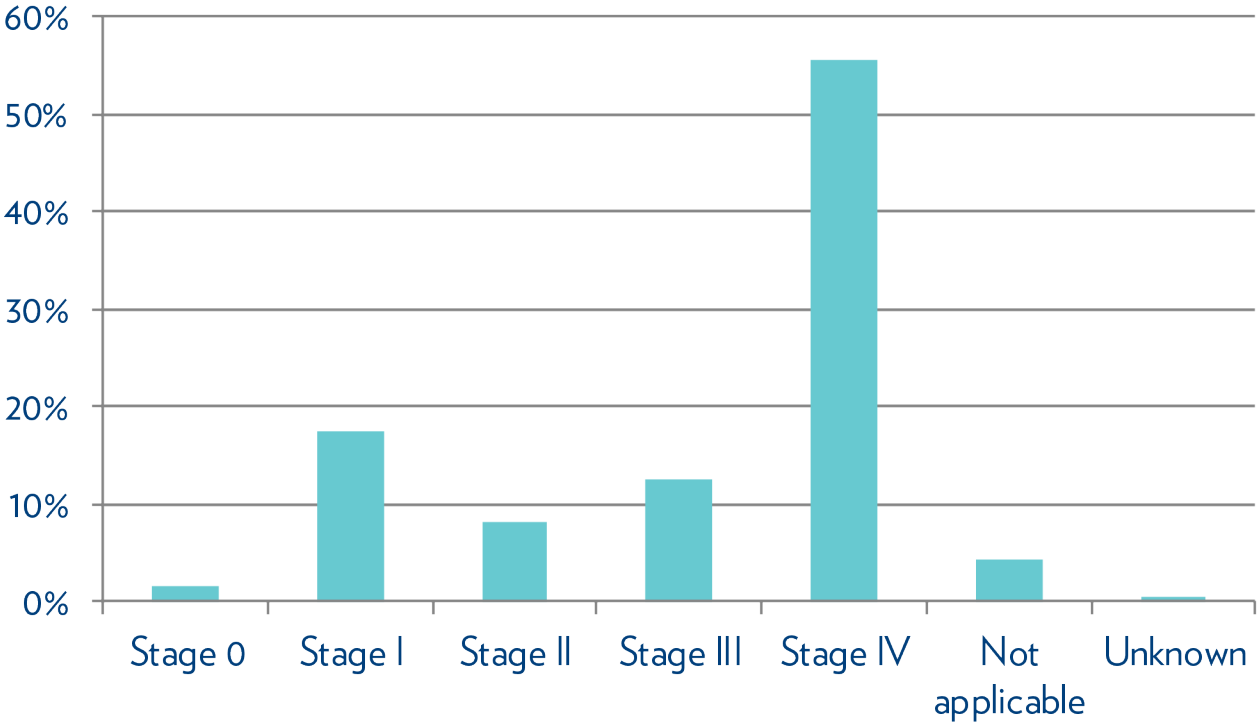
## Lung and Bronchus Cancer Stage at Diagnosis



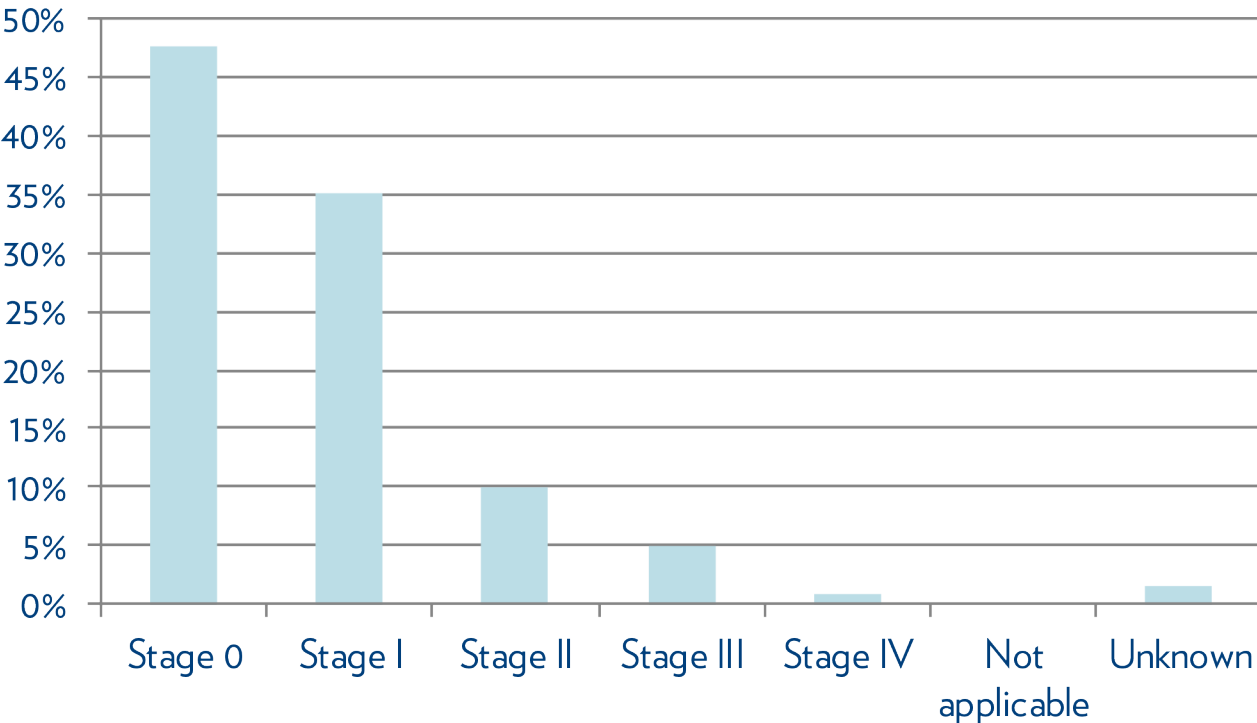
## Breast Cancer Stage at Diagnosis



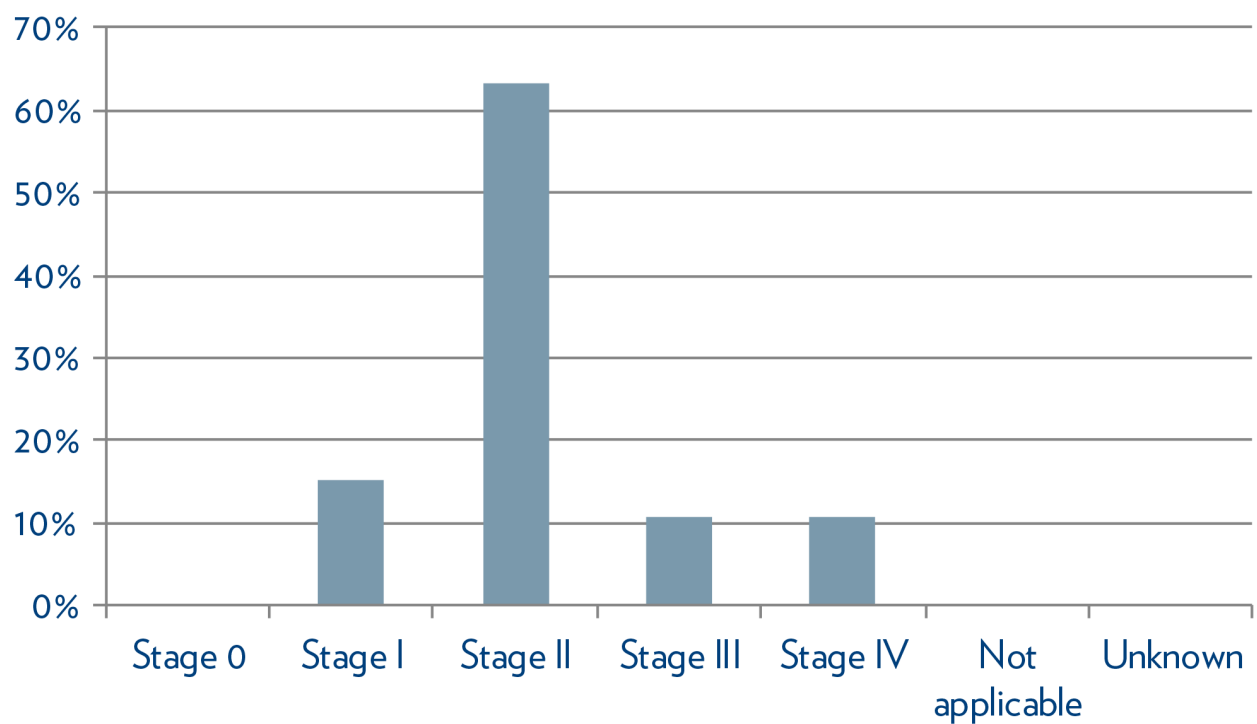
**Oral Cavity and Pharynx Cancer Stage at Diagnosis**



**Melanoma Stage at Diagnosis**



## Prostate Cancer Stage at Diagnosis





## **Content Coordination**

Helen Gosnell, CTR

Linda Cope, CTR

## **Data Analysis and Content Contribution**

Helen Gosnell, CTR

Grace Hummel, Strategic Communications, Hollings Cancer Center



The Hollings Cancer Center  
Pearlstone Healing Garden

## Additional Resources

### FOR INFORMATION ABOUT CANCER AND SURVIVORSHIP PROGRAMS:

#### The American Cancer Society

[www.cancer.org](http://www.cancer.org)

#### CANCERcare

[www.cancercares.org](http://www.cancercares.org)

#### The Livestrong Foundation

[www.livestrong.org](http://www.livestrong.org)

### FOR INFORMATION ABOUT CANCER DIAGNOSIS AND TREATMENT OR QUALITY OF CARE, VISIT:

#### American College of Radiology

[www.acr.org/quality-safety/accreditation](http://www.acr.org/quality-safety/accreditation)

#### American College of Surgeons Commission on Cancer

[www.facs.org/cancer](http://www.facs.org/cancer)

#### American Society of Clinical Oncology

[www.asco.org](http://www.asco.org)

#### Breast Imaging Center of Excellence

[www.acr.org/quality-safety/accreditation/bicoe](http://www.acr.org/quality-safety/accreditation/bicoe)

#### Centers for Medicare and Medicaid Services

[www.cms.gov](http://www.cms.gov)

#### National Accreditation Program for Breast Centers

[www.accreditedbreastcenters.org](http://www.accreditedbreastcenters.org)

#### National Cancer Institute

[www.cancer.gov](http://www.cancer.gov)

#### National Comprehensive Cancer Network

[www.nccn.org](http://www.nccn.org)

#### National Quality Forum (NQF)

[www.qualityforum.org](http://www.qualityforum.org)

#### Oncology Nursing Society


[www.ons.org](http://www.ons.org)

#### South Carolina Cancer Alliance

[www.sccanceralliance.org](http://www.sccanceralliance.org)

#### SC DHEC Central Cancer Registry

[www.scdhec.gov/Health/DiseasesandConditions/Cancer](http://www.scdhec.gov/Health/DiseasesandConditions/Cancer)



Dr. Jennifer Young Pierce  
Associate Professor,  
Gynecologic Oncology



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Dr. Brenda Hoffman, Professor  
Gastroenterology & Hepatology



Changing What's Possible