



JOIN THE FIGHT | 2016 ANNUAL REPORT



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Triumph Cancer Navigators help patients and families from the initial diagnosis all the way through surgery, doctor visits, treatments and recovery. Other navigators deployed in communities around the region will have the added responsibility of working with community groups to promote screenings and to educate the public about cancer prevention and early detection.

Cancer navigators assist with all aspects of cancer care, including communicating with the doctor, coordinating transportation, setting up appointment reminders and providing emotional support for patients and their caregivers. They also can help coordinate support services such as treatment planning, prosthesis selection and nutrition counseling, and identify resources for spiritual care, financial assistance and other needs that may arise during treatment.

Triumph offers disease-specific navigators for breast and lung cancer as well as broad-based services that are beneficial for other cancer diagnoses. For clinical trials or other services not available in the region, Triumph navigators will help connect patients with clinicians at Vanderbilt University Medical Center through Mountain States' partnership with the Vanderbilt Health Affiliated Network.

Triumph was developed in collaboration with East Tennessee State University, Vanderbilt Health Affiliated Network, the American Cancer Society and Susan G. Komen for the Cure. There were 652 new cancer patients served by Triumph Navigators from October 2015 to October 2016

Triumph is free of charge to all patients, regardless of whether they choose to receive their treatment at a Mountain States Health Alliance facility.



*Hillary Broyles  
Triumph Cancer Navigator*



*Teresa Payne  
Triumph Cancer Navigator*



The Cancer Committee is formed under the direction of the Bylaws of the Medical Executive Committee and serves to monitor, supervise and encourage improvement in the provision of cancer treatment services at Johnson City Medical Center. The committee has further responsibility for maintaining certification by the American College of Surgeons (ACoS) Commission on Cancer, The Joint Commission, and other professional and accrediting bodies. Quarterly committee meetings provide a forum for communication and collaboration on measures that contribute toward annual goals and standards.

The committee oversees numerous multidisciplinary cancer conferences. A graph showing the number of patients discussed at these conferences is included in this report on page eight.

Dr. Tamra McKenzie continues to serve as the Cancer Liaison Physician from the committee to the Commission on Cancer/American College of Surgeons. She reviews the Cancer Program Practice Profile Reports (CP3R) and submits a report at each quarterly cancer committee meeting. A detailed graph of these measures is included in this report.

The patient navigator program continues to grow. Numerous screening and prevention programs are held at the Health Resource Center in the Johnson City Mall.

The cancer program at Johnson City Medical Center exists to identify and respond to the health care needs of individuals and communities in our region and to assist them in attaining their highest possible level of health. We offer impressive medical and surgical services, as well as numerous ancillary programs for our patients.

**Nathan Floyd, MD**

Johnson City Medical Center  
Cancer Committee Chairman



# DUCTAL CARCINOMA IN SITU

## DCIS Breast Analysis

The anatomic site of the histology reviewed for this annual report chooses ductal carcinoma in situ (DCIS) of the breast. Our index years are 2011 and 2015. Ductal carcinoma in situ is a disease for which a number of divergent techniques of treatment are clinically appropriate. There is a strong influence of clinical judgment and patient preference in the management pattern.

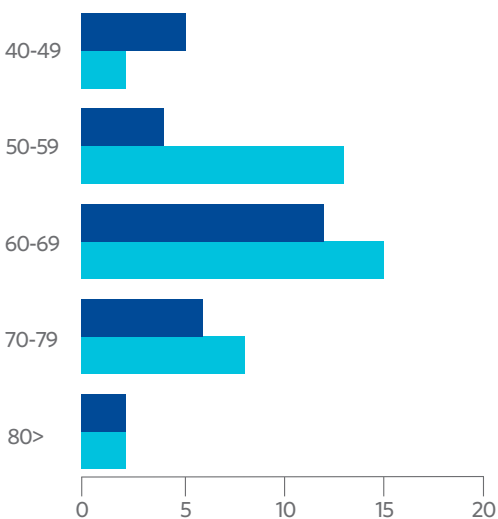
For this reason, we found it interesting to review trends and DCIS management in our institution.

### Figure 1

This reveals the age distribution for ductal carcinoma in situ for the years of interest. There is a slightly lower index average age of diagnosis in the newer cohort, but not a meaningful variable.

## Ductal Carcinoma in Situ Distribution by Age

Figure 1

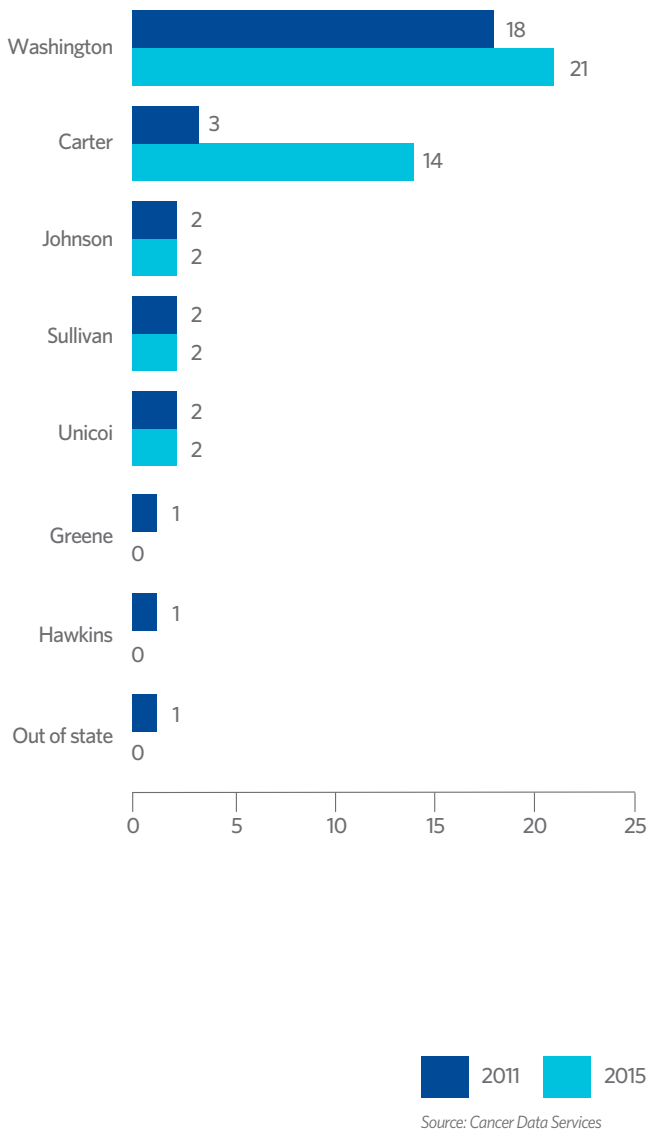


### Figure 2

Our second graph shows the county of residence for patients diagnosed with ductal carcinoma in situ at Johnson City Medical Center.

## Ductal Carcinoma in Situ Distribution by County

Figure 2





### Figure 3

This reveals the specific histology, noting comedo-type ductal carcinoma in situ is the preponderant morphology. Ductal carcinoma in situ not otherwise specified is the second most common histology.

### Figure 4

This reveals the different treatment approaches pursued. In 2011, the majority of patients with ductal carcinoma in situ were managed with excision alone. In 2015, the majority of patients are managed with a combination of surgery, radiation therapy and hormonal therapy.

### Figure 5

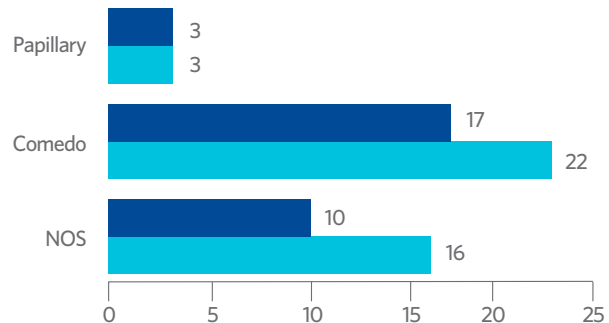
This reveals that all index patients from both years are alive at the time of last analysis.

We were curious to note that a greater fraction of patients in 2015 were treated with surgery, plus radiation and hormonal therapy. It is possible that this change is related to the younger age at diagnosis for the 2015 cohort. Present established guidelines are more likely to encourage local excision only for older patients based on the natural history of the condition.

It is also possible that the increasing fraction of patients receiving radiation therapy is related to our institution's more frequent pursuit of hypofractionated radiation treatment schedules. In 2011, patients with ductal carcinoma in situ who received external beam radiation therapy would routinely receive six weeks of daily treatment, whereas in 2015 some patients were treated with partial breast irradiation techniques, taking one week to deliver. Most patients were treated with conventional

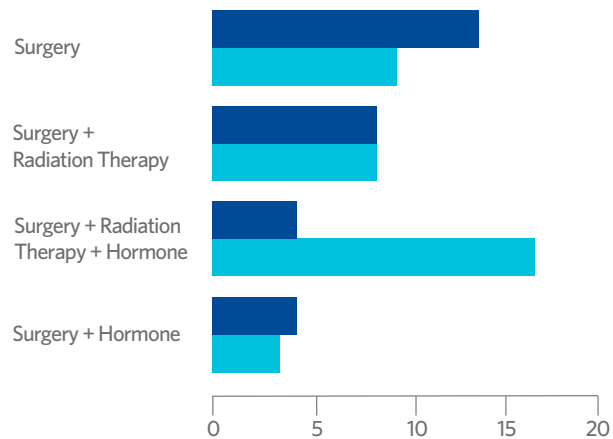
## Ductal Carcinoma in Situ Distribution by Specific Histology

Figure 3



## Ductal Carcinoma in Situ Distribution by Treatment

Figure 4



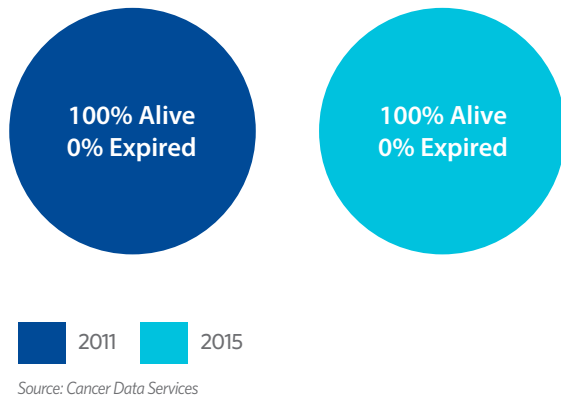
2011 2015

Source: Cancer Data Services



## Ductal Carcinoma in Situ Distribution by Vital Status

Figure 5



external beam hypofractionated schedules requiring only three weeks. It is possible that the more convenient dose schedules for these patients allowed a higher percentage of patients to pursue this combination of therapy.

These hypotheses are difficult to test based on our data set, but will be important to us as we consider inpatient education and in pursuit of cost-efficient disease management strategies.

ACoS Quality Improvement Standard 4.5 applies to patients with ductal carcinoma in situ. This standard requires the image- or palpation-guided needle biopsy, by core or fine needle aspiration, to be performed to establish the diagnosis prior to formal surgical treatment of breast cancer. In 2011, thirty patients met the diagnostic criteria with 28 of them having a biopsy prior to definitive surgery. In 2015, 41 patients met the index criteria with 38 of them having had biopsy prior to definitive surgery.

### [nBx] (Quality Improvement, Standard 4.5)

Image or palpation-guided needle biopsy (core or FNA) performed to establish diagnosis prior to surgical treatment of breast cancer.

**2011:** 30 patients met criteria with 28 having biopsy

**2015:** 41 patients met criteria with 38 having biopsy

### Kyle T. Colvett, M.D.

Johnson City Medical Center

Radiation Oncologist



The American College of Surgeons Commission on Cancer, a national accrediting body for cancer programs, developed evidence-based measures or Cancer Program Practice Profile Reports. As a CoC accredited facility, Johnson City Medical Center tracks these measures and our cancer liaison physician reviews the results on a quarterly basis to assess performance. Provided below is the most recent CoC data (2014) comparing Johnson City Medical Center to facilities in the state of Tennessee and all other CoC-accredited programs.

The abbreviations in the graph represent the following:

**[nBx]** Image or palpation-guided needle biopsy (core or VNA) performed to establish diagnosis prior to surgical treatment of breast cancer.  
Required percentage: 80%

**[MASRT]** Radiation therapy is considered or administered following any mastectomy within one year (365 days) of diagnosis of breast cancer for women with less than four positive regional lymph nodes.  
Required percentage: 90%

**[BCS/RT]** Radiation therapy is administered within one year (365 days) of diagnosis for women under age 70 receiving breast conserving surgery for breast cancer.  
Required percentage: 90%

**[HT]** Tamoxifen or third generation aromatase inhibitor is considered or administered within one year (365 days) of diagnosis for women with AJCC T1c N0 M0, or Stage II or III ER and/or PR positive breast cancer.  
Required percentage: 90%

**[12RLN]** At least 12 regional lymph nodes are removed and pathologically examined for resected colon cancer.  
Required percentage: 85%

**[RECRCTCT]** Preoperative chemotherapy and radiation are administered for clinical AJCC T3N0, T4 N0 or Stage III; or postoperative chemo and radiation are administered within 180 days of diagnosis for clinical AJCC T1-2N0 with pathologic AJCC T3 N0, T4 N0, or Stage III; or treatment is considered for patients under the age of 80 receiving resection for rectal cancer.  
Required percentage: 85%

**[G15RLN]** At least 15 regional lymph nodes are removed and pathologically examined for resected gastric cancer.  
Required percentage: 80%

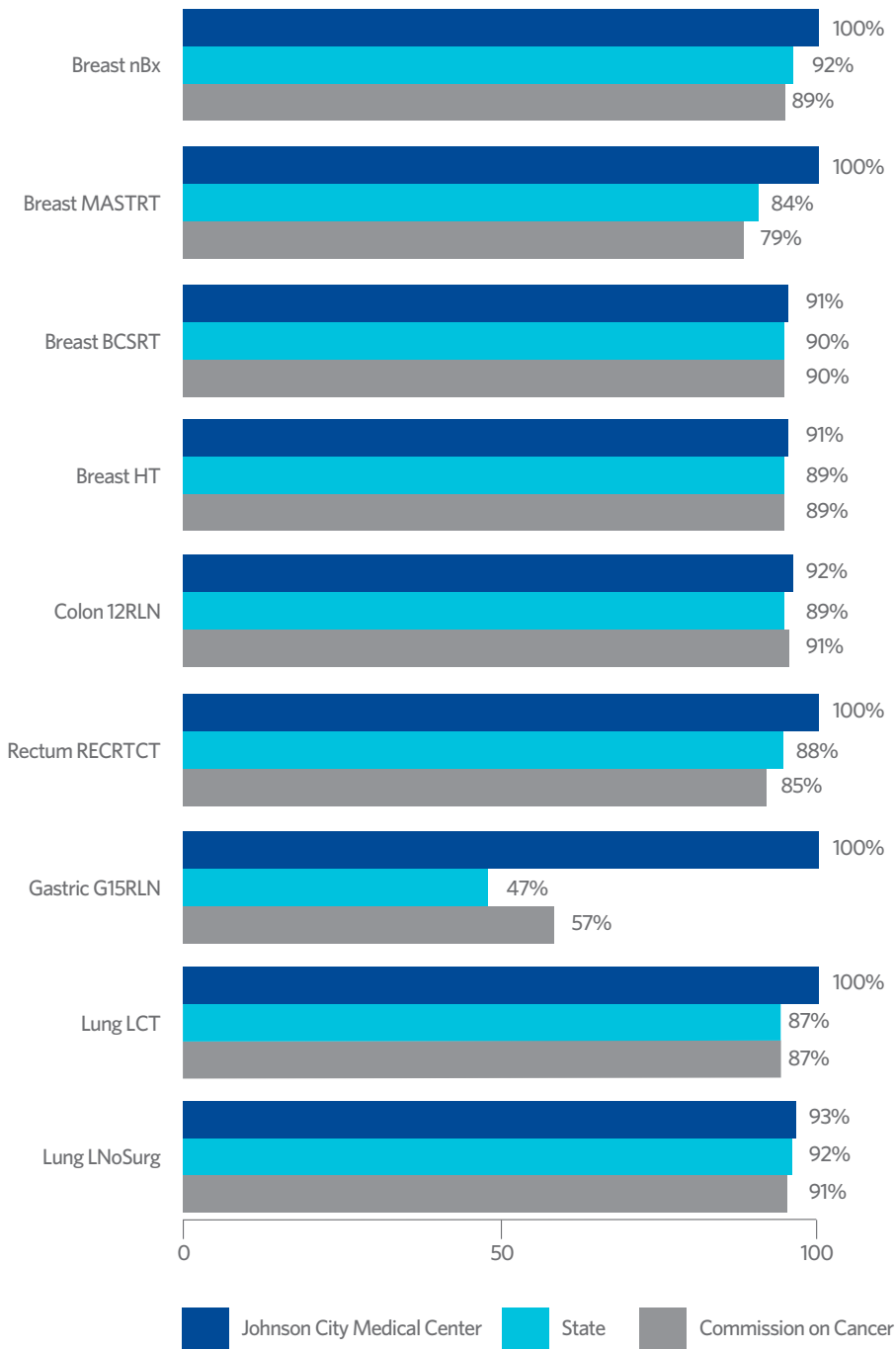
**[LCT]** Systemic chemotherapy is administered within four months to day preoperatively or day of surgery to six months postoperatively, or it is considered for surgically resected cases with pathologic lymph node-positive (pN1) and (pN2) NSCLC.  
Required percentage: 85%

**[LNoSurg]** Surgery is not the first course of treatment for cN2 M0 lung cases.  
Required percentage: 85%





## Cancer Program Practice Profile Measures

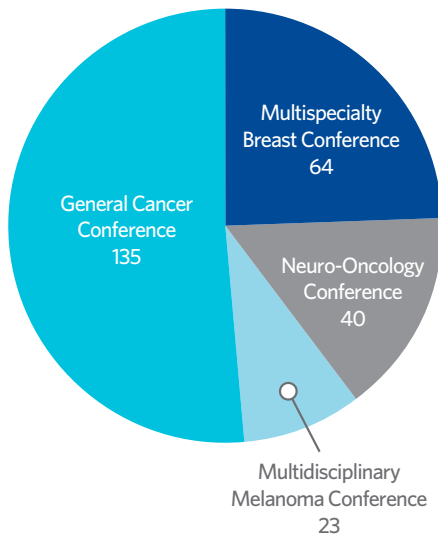


Source: Based on Commission on Cancer 2014 Data



## Cases Discussed at Multidisciplinary Conferences 2015

Source: Cancer Data Services





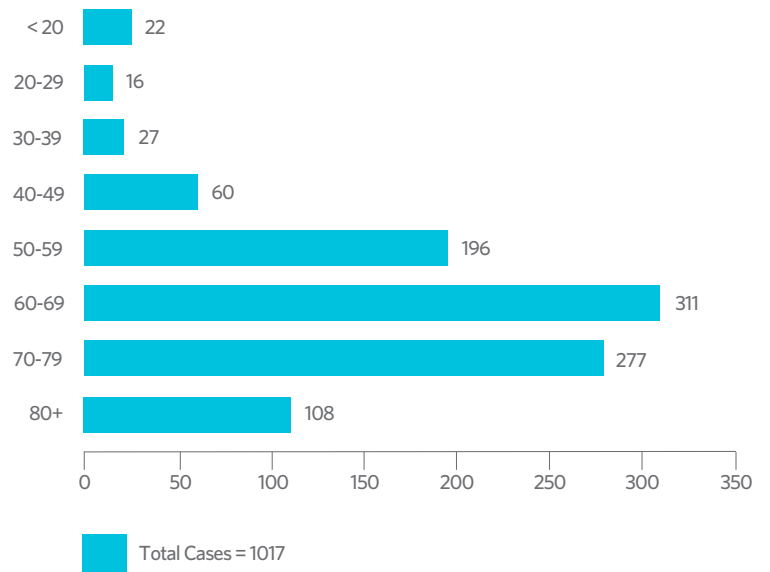
## Cancer Cases for 2015 at Johnson City Medical Center

In 2015, 1088 new cancer cases were diagnosed and/or treated at Johnson City Medical Center. Of these cases, 95 percent were analytic, meaning they received all or part of their first course of therapy at the Regional Cancer Center. Non-analytic cases, those initially treated elsewhere and referred here for recurrences or subsequent therapy, represented 5 percent of the total.

The top five sites of cancer diagnosed at Johnson City Medical Center in 2015 were lung, breast, colorectal, brain and lymphoma. The most common cancer for females was breast cancer and for males was lung cancer.

The majority of patients were between 60 and 69 years of age at time of diagnosis.

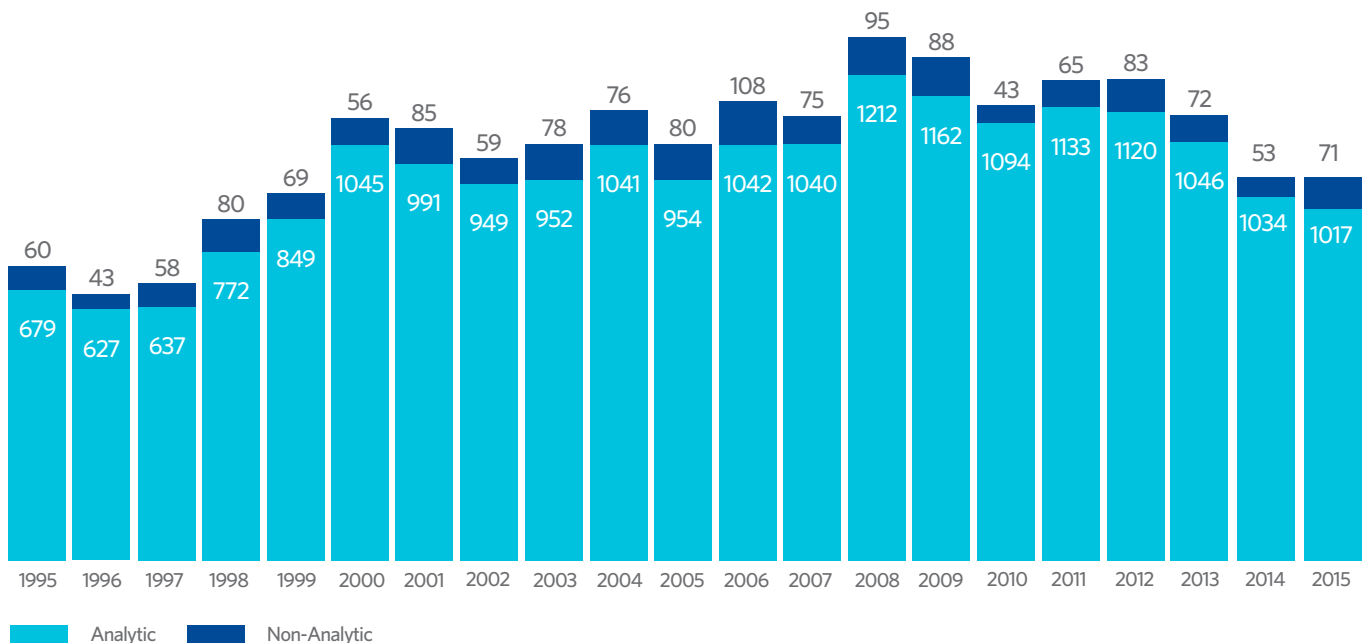
## Analytic Cases Distribution by Age



Source: Cancer Data Services

## Annual JCMC Cancer Cases

Analytic & Non-Analytic



Source: Cancer Data Services

# INCIDENCE OF CANCER BY SITE



PRIMARY SITE	TOTAL CASES	ANALYTIC	NON-ANALYTIC
<b>Oral Cavity &amp; Pharynx</b>	<b>42</b>	<b>40</b>	<b>2</b>
<b>Digestive System</b>			
<i>Esophagus</i>	18	18	-
<i>Stomach</i>	15	14	1
<i>Colon</i>	43	39	4
<i>Rectum</i>	29	26	3
<i>Liver/Biliary</i>	28	27	1
<i>Pancreas</i>	34	33	1
<i>Other Digestive</i>	14	12	2
<b>Respiratory System</b>			
<i>Larynx</i>	17	16	1
<i>Lung</i>	246	242	4
<i>Other Respiratory</i>	3	3	-
<b>Melanoma</b>	<b>24</b>	<b>18</b>	<b>6</b>
<b>Connective Tissue</b>	<b>8</b>	<b>8</b>	<b>-</b>
<b>Breast</b>	<b>215</b>	<b>209</b>	<b>6</b>
<b>Genitourinary System</b>			
<i>Cervix Uteri</i>	9	8	1
<i>Corpus Uteri</i>	13	12	1
<i>Ovary</i>	8	6	2
<i>Other Female</i>	2	-	2
<i>Prostate</i>	38	31	7
<i>Other Male</i>	6	5	1
<i>Kidney</i>	31	29	2
<i>Urinary Bladder</i>	22	18	4
<i>Other Urinary</i>	1	1	-
<b>Brain</b>	<b>50</b>	<b>47</b>	<b>3</b>
<b>Endocrine System</b>			
<i>Thyroid Gland</i>	19	18	1
<i>Other Endocrine</i>	9	9	-
<b>Lymphoma</b>	<b>48</b>	<b>42</b>	<b>6</b>
<b>Bone</b>	<b>3</b>	<b>3</b>	<b>-</b>
<i>Leukemia</i>	35	32	3
<i>Multiple Myeloma</i>	13	10	3
<b>Other &amp; Unspecified Sites</b>	<b>18</b>	<b>14</b>	<b>4</b>
<b>Primary Unknown</b>	<b>27</b>	<b>27</b>	<b>-</b>
<b>Totals</b>	<b>1,088</b>	<b>1,017</b>	<b>71</b>



Thanks to all volunteers and participants who helped make these 2016 events successful.

### **March**

March is colon cancer awareness month.

On March 13, 2016, Pleasant Valley Church of the Brethren in Jonesborough, TN hosted a colon cancer awareness walk. The staff of the Regional Cancer Center at Johnson City Medical Center was present and handed out educational material to those who were present and participated in the walk.

### **April**

On April 16, 2016, the Regional Cancer Center at Johnson City Medical Center held its first ever “Save Our Smiles” aimed at speaking with children ages 8-15 about head and neck cancers. Representatives from ETSU’s dental hygiene program, football team, and basketball team came out to Carver Park to help educate the community on steps to take on how to prevent head and neck cancers. Multiple door prizes were handed out with the grand prize being a bicycle donated by Triumph.

### **May**

May 6, 2016 was First Friday Skin Cancer Awareness event. Several staff of the Regional Cancer Center at JCMC talked with the public in downtown Johnson City about wearing sunscreen and how to identify skin lesions. Materials, water & UV beads were given to participants.

### **June**

On June 4, 2016, the 8th Annual Hope on Wheels Motorcycle Poker Run was held. This event raises money for Circle of Hope, which benefits cancer patients throughout Mountain States Health Alliance. This year over \$13,000 was raised.

On June 16, 2016, the Regional Cancer Center at Johnson City Medical Center partnered with the Johnson City Senior Citizens’ Center to celebrate cancer survivors. This year’s event had a cancer survivor storyteller and an art project. Food City dietitian, Elizabeth Hall, and Amanda Hudson presented as the master of ceremony. The event concluded with door prizes after dinner.

On June 25, 2016, Relay for Life was held at Winged Deer Park in Johnson City. Several team members from Regional Cancer Center at Johnson City Medical Center helped the survivors register for the event and participated in the event activities.

### **October**

On October 3, 2016, the breast cancer nurse navigator and oncology social worker went on local TV to discuss breast cancer events in the area and educate the public regarding breast cancer navigation.

On October 20, 2016, the nurse practitioner and oncology social worker spoke at “High Five and Winning” breast cancer celebration at the Senior Citizen’s Center on healthy eating tips and Breast cancer and body image.

On October 22, 2016, American Cancer Society’s Bark for Life was held in downtown Jonesborough. Several team members and dogs fundraised for this event to help fund cancer research.



October 23, 2016 was the Susan G. Komen Race for the Cure, the Practice Administrator and Triumph Director participated in the Annual Susan G. Komen Race for the Cure that helps raise awareness regarding breast cancer.

On October 30, 2016, several team members helped setup and participate in the Making Strides against Breast Cancer fundraiser, which helps raise awareness about breast cancer and celebrates those who have faced breast cancer.

### **November**

On November 9, 2016, staff at the Regional Cancer Center at Johnson City Medical Center set up a table at the Mountain States' sponsored Chamber of Commerce breakfast to help raise awareness about the dangers of lung cancer.

On November 10, 2016, Radiation Oncology and the Regional Cancer Center at Johnson City Medical Center hosted the 2nd annual "Shine a Light" event, which promotes destigmatizing lung cancer and brings awareness to lung cancer and prevention of the disease.

From November 17-18, 2016, the nurse educator and lung cancer navigator participated in the Pulmonary Symposium and set up a table to help educate and destigmatize lung cancer.

On November 18, 2016, the oncology social worker was asked to be part of a Health Care Professional Panel at East Tennessee State University to help answer questions from aspiring health care professionals.

Throughout the month of November, the Regional Cancer Center at Johnson City Medical Center team members collected food and money to give 14 families Thanksgiving dinner.

### **December**

Throughout the month of December, team members adopted 18 "Christmas Tree Kids" which are children and grandchildren of patients, to brighten their Christmas Season.



## Required Physician Members

Nathan Floyd, MD	<i>Radiation Oncology/Chairman</i>
Kyle Colvett, MD	<i>Radiation Oncology</i>
Patrick Costello, MD	<i>Pathology</i>
Devapiran Jaishankar, MD	<i>Medical Oncology</i>
James Koonce, MD	<i>Radiology</i>
Tamra McKenzie, MD	<i>Surgical Oncology/CLP</i>

## Required Non-Physician Members

Shannon Bradley	<i>Rehab Services</i>
Anna Butler	<i>Palliative Care/Hospice</i>
Stacie Davis	<i>Oncology Nursing</i>
Kathryn Wilhoit	<i>Health Resource Center</i>
Amanda Hudson	<i>Social Services</i>
Sherry Hyder	<i>Cancer Data Services</i>
Nonna Stepanov, MD	<i>Clinical Research</i>
Tony Benton	<i>Administration</i>

## Additional Members

Bonnie Dunham	<i>Nutritional Services</i>
Amy Fields	<i>American Cancer Society</i>
Gary Metcalf	<i>Pastoral Services</i>
Brent Moseley	<i>Patient Navigation Services</i>

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