Cancer Program Annual Report 2016

This report is reflective of the 2015 Statistical Data for The Parrish Medical Center Cancer Program
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Chairman’s Report

By Ashish Dalal, M.D. Board Certified Medical Oncologist

As Chairman of the Parrish Medical Center Cancer Committee, I am pleased to present the 2016 Cancer Program Annual Report. The hospital voluntarily undergoes a rigorous three-year accreditation survey by the American College of Surgeons Commission on Cancer (CoC). Due to our commitment of providing excellence in cancer care, Parrish Medical Center is recognized as a CoC approved Community Cancer program since 1989. Only 30 percent of all hospitals have earned this distinction. This approval helps to insure that our patients receive quality cancer care close to home. To maintain accreditation, we must continue to meet the rigorous standard of the Commission on Cancer on an annual basis.

In July 2016 PMC was surveyed by the Commission on Cancer. CoC Accreditation is the seal of approval for cancer programs from the American College of Surgeons and formally acknowledges Parrish Medical Center’s commitment to providing high-quality cancer care to our community and patients with cancer.

The Cancer Program is governed by a multidisciplinary Cancer Committee that includes board certified oncologist, radiation oncologist, pathologist, surgeons, radiologist, and palliative care physicians, along with oncology nurses, nutritionists, social worker, and other ancillary professionals who ensure Parrish Medical Center offers a coordinated, multidisciplinary, patient and family centered approach, to cancer prevention and treatment. The Committee strives to continually improve patient survival and outcomes to enhance the quality of life for all cancer patients, regardless of diagnosis. These goals are accomplished by an emphasis on wellness, education, prevention, survivorship and monitoring comprehensive quality cancer care. As a healing environment PMC provides for the physical, emotional, and psychosocial care of the patient throughout the cancer disease continuum.

The cancer program and the community have advocated for innovative health initiatives and helped to guide the medical center’s success in exceeding the national best-practice standards for excellence in Cancer Care.

I would like to thank all of the dedicated health care providers and cancer committee members who make sure our objectives are met each year. It is a pleasure to work with these talented individuals in our shared mission of providing quality cancer care.
In 2015 the program received several recognitions and other achievements:

- Parrish Medical Center has devoted significant resources to developing a Breast Center of Excellence.
- Re-accreditation as a Breast Imaging Center of Excellence by the Commission on Quality and Safety and the Commission on Breast Imaging by the American College of Radiology in Mammography, Stereotactic Breast Biopsy, Breast Ultrasound and Ultrasound Guided Breast Biopsy. PMC in one of the hospitals, clinics or health centers in Florida to have been designated a Breast Imaging Center of Excellence and the one of only two in Brevard County.
- Certified Tumor Registrar, Kelly King, CTR.
- Parrish Medical Center has two Certified Breast Cancer Navigators (CBCN). They provide educational and emotional support to patients with a cancer diagnosis and is able to guide the patient and family through treatment options for a new diagnosis or recurrent cancer, reinforcing information given by their physicians and supporting the patient’s decisions.
- We supported the ongoing search for a cure in our continuing partnership with the American Cancer Society.
- The Parrish Infusion Center specializes in intravenous treatments, and its No. 1 goal is convenience. We work with an array of patients who are undergoing treatments such as chemotherapy, pain management or intravenous antibiotics. One hundred and fifty-five patients were served in 2015.
- College of American Pathology (CAP) certification since 1983. By maintaining the highest standards in lab services you can be confident that PMC is committed to quality patient care.
- Not only do we work hard to provide outstanding service to our community, we also support our employees in promoting cancer risk reduction, as well as access to high-quality cancer treatment. Employee “Pink Parties” are offered four times a year to encourage mammography screening. One-hundred and thirty-eight care partners took part in the events in 2015.
• Partnering with Certified Genetic Counselor, Ryan Bisson, of MD Anderson Cancer Center Orlando to provide accurate risk assessment and empathetic genetic counseling to patients with cancer and their families.

• Carolyn Tremblay, PT, DPT, CLT, Certified Lymphedema Therapist joined the Cancer team in 2016. Carolyn has completed a specialized training course to receive a certification in the treatment and management of lymphedema.

• Implemented a low-dose CT lung screening program in Diagnostic Imaging for high risk patients. Patients can self-refer if they have a strong family history of lung cancer, known chemical exposure or a suspicion of cancer. In 2015, twenty-four lung screenings have been completed. Two patients were recommended for short-term follow-up.

Parrish Medical Center has a culture of quality improvement and service excellence. This environment inspires and challenges the cancer program to provide services that go beyond the standard of care, to be a service line leader that provides safe, effective, superior care. In 2015 the quality initiatives and goals focused on early detection, timeliness of services, treatment and supportive services. Ensuring patients get treatment according to national guidelines in a timely fashion is the key for improving quality of care and improved survival.

The following outcomes were achieved:

• Parrish Medical Center ranked in the top 25 percentile in timeliness of care among all other Clinical Breast Centers across the country that serves a similar size and population according to the National Quality Measures of the Breast Consortium. Parrish is doing better than 70% of the reporting centers for the length of time between screenings and biopsies. We have continued to improve outcomes by enhancing access to breast cancer services through ensuring that any women with a positive breast finding will receive further diagnosis and treatment on a timely basis.

• Timeliness between screening mammogram and diagnostic mammogram was an average of 5 days in 2015.

• Timeliness between diagnostic mammogram and definitive diagnosis was an average of 11 days in 2015.

Recognizing that each person is unique, the cancer program strives to provide patient-centered care by developing a partnership with key community services that assist in providing the best quality care to the individuals we serve. These partnerships allow for care that reflects the
individual's wishes, wants, and preferences and the insight gained through this process allows for programs, education, and support specific to the community needs.

Patient services provided through partnerships for 2015 include:

- The American Cancer Society (ACS) partnerships assist in leveraging resources and expertise to advance identified initiatives. The Cancer Care boutique provides a pampering environment with the resources to help cancer patients adjust to the psychosocial effects of cancer. Focus is on a patient’s self-esteem and well-being by providing wigs, turbans, hats, bras, and prostheses. The boutique is available to patients with all types of cancer through the resources provided by the American Cancer Society. In 2015 the Cancer Boutique served 68 patients, most of which were either uninsured or had Medicaid coverage only. For Brevard County, there were 149 patients referred to ACS, and 22 of these patients were uninsured or had Medicaid coverage only. PMC is the largest referring facility in the county ensuring these patients receive the services they need.
  - Look Good Feel Better
  - Support Groups
  - Parrish Partners
  - Cancer Boutique
  - Relay for Life
  - Making Strides

Stewardship

- Jess Parrish Foundation provided $35,000.00 in free screening mammograms. Over 70 patients were served in 2015.
The Titusville Fire & Emergency Services presented Jess Parrish Medical Foundation (JPMF) with a check for $1,500. Proceeds will benefit cancer care programs at Parrish Medical Center.

Community Outreach

- 2015 Survivors Day was held in Partnership with local community partner.
- Round table discussion with community partners, the Florida Department of Health Brevard County (FDOH Brevard) and the Florida Breast and Cervical Cancer Early Detection Program (FBCCEDP) we are able to provide services to uninsured and underinsured women in our community. The goal is to communicate and develop services by providing screenings, diagnostics and follow-up mammograms.

Ashish Dalal, MD  
Cancer Committee Chairman  
Medical Oncology

Site Study: Colon Cancer

Overview:
According to the NCCN, Colorectal Cancer is the fourth most frequently diagnosed cancer and the second leading cause of cancer death in the United States. In 2015, as estimated 93,090 new cases of colon cancer and approximately 39,610 cases of rectal cancer will occur. During the same year, an estimated 49,700 people will die of colon and rectal cancer combined. Despite these high numbers, the incidence of colorectal cancer per 100,000 people decreased from 60.5 in 1976 to 46.4 in 2005. The incidence of colorectal cancer decreased at a rate of 4% per year or greater between 2008 and 2011, and in addition, the mortality rate in 2011 was down by 47% from its peak mortality rate. These improvements in incidence of and mortality from colorectal cancer are thought to be a result of cancer prevention and earlier diagnosis through screening better treatment modalities.

Despite the observed improvements in the overall colorectal cancer incidence rate, a retrospective cohort study of the SEER colorectal cancer registry found that the incidence of colorectal cancer in patients younger than 50 had been increasing. The study authors estimate that the incidence rates for colon and rectal cancers will increase by 90% and 124% respectively, for patients 20-34 years by 2030.
The NCCN Clinical Practice Guidelines in Oncology for Colon Cancer begins with the clinical presentation of the patient to the primary care physician or gastroenterologist and address diagnosis, pathologic staging, surgical management, perioperative treatment, patient surveillance, management of recurrent and metastatic disease, and survivorship.

Table 1: Age at diagnosis for colon cancer at Parrish Medical Center in 2015

<table>
<thead>
<tr>
<th>AGE at Diagnosis</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-29</td>
<td>1%</td>
</tr>
<tr>
<td>30-39</td>
<td>2%</td>
</tr>
<tr>
<td>40-49</td>
<td>11%</td>
</tr>
<tr>
<td>50-59</td>
<td>11%</td>
</tr>
<tr>
<td>60-69</td>
<td>21%</td>
</tr>
<tr>
<td>70-79</td>
<td>31%</td>
</tr>
<tr>
<td>80-89</td>
<td>16%</td>
</tr>
<tr>
<td>90+</td>
<td>5%</td>
</tr>
</tbody>
</table>

Table 2: Age at diagnosis for colon cancer patients in the United States at Community Hospitals

<table>
<thead>
<tr>
<th>Colon Cancers</th>
<th>Age at diagnosis in 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Data from all States</td>
</tr>
<tr>
<td>&gt;90</td>
<td>4%</td>
</tr>
<tr>
<td>20-29</td>
<td>1%</td>
</tr>
<tr>
<td>30-39</td>
<td>2%</td>
</tr>
<tr>
<td>40-49</td>
<td>6%</td>
</tr>
<tr>
<td>50-59</td>
<td>17%</td>
</tr>
<tr>
<td>60-69</td>
<td>26%</td>
</tr>
<tr>
<td>70-79</td>
<td>25%</td>
</tr>
<tr>
<td>80-89</td>
<td>19%</td>
</tr>
</tbody>
</table>

Risk Assessment:

Approximately 20% of cases of colon cancer are associated with familiar clustering and first-degree relatives of patients with colorectal adenomas or invasive colorectal cancer are at
increased risk for colorectal cancer. Genetic susceptibility to colorectal cancer includes inherited syndromes, such as Lynch syndrome and familial adenomatous polyposis. Therefore, it is recommended that all patients be queried regarding their family history and considered for risk assessment.

Lynch syndrome is the most common form of genetically determined colon cancer predisposition, account for 2-4% of all colorectal cancer cases. The hereditary syndrome results from germline mutations in DNA mismatch repair (MMR) genes. Testing the BRAF gene for mutation is indicated when immunohistochemically analysis shows that MLH1 protein expression is absent in the tumor.

Other Risk Factors for Colorectal Cancer:

Individuals with inflammatory bowel disease are at an increased risk for colorectal cancer. Other risk factors include smoking, consumption of red meat and processed meat, alcohol consumption, diabetes mellitus, low levels of physical activity, metabolic syndrome and obesity/high body mass index. In fact, in the EPIC cohort of almost 350,000 individuals, those who adhered to 5 healthy lifestyle factors (healthy weight, physical activity, non-smoking, limited alcohol consumption, healthy diet) had a lower risk-hazard ratio.

Table 3: 2015 Colon Cancer: Distribution by Sex at Parrish Medical Center

![2015 Colon Cancer: Sex Distribution](image)
Screening:

A *screening test* is used to look for a disease when a person doesn’t have symptoms. When a person has symptoms, *diagnostic tests* are used to find out the cause of the symptoms. Colorectal cancer almost always develops from *precancerous polyps* (abnormal growths) in the colon or rectum. Screening can find precancerous polyps, so that they can be removed before they turn into cancer. Screening tests can also find colorectal cancer early, when treatment works best.

Regular screening, beginning at age 50, is the key to preventing colorectal cancer. The U.S. Preventive Services Task Force (USPSTF) recommends that adults age 50 to 75 be screened for colorectal cancer, and that adults age 76 to 85 ask their doctor if they should be screened. You should begin screening for colorectal cancer soon after turning 50, and then continue getting screened at regular intervals. However, you may need to be tested earlier than 50, or more often than other people, if—

- You or a close relative have had colorectal polyps or colorectal cancer.
- You have an inflammatory bowel disease, such as Crohn’s disease or ulcerative colitis.
- You have a genetic syndrome such as familial adenomatous polyposis (FAP) or hereditary non-polyposis colorectal cancer (Lynch syndrome).
Speak with your doctor about when you should begin screening and how often you should be tested.

**Table 3: Characteristics of Colorectal Cancer Screening Strategies**

<table>
<thead>
<tr>
<th>Screening Method</th>
<th>Frequency</th>
<th>Evidence of Efficacy</th>
<th>Other Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stool-Based Tests</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FiOBT</td>
<td>Every year</td>
<td>RCTs with mortality end points: High-sensitivity versions (e.g., Hemoccult SENSA) have superior test performance characteristics than older tests (e.g., Hemoccult II)</td>
<td>Does not require bowel preparation, anesthesia, or transportation to and from the screening examination (test is performed at home)</td>
</tr>
<tr>
<td>FIT</td>
<td>Every year</td>
<td>Test characteristic studies: Improved accuracy compared with FOBT Can be done with a single specimen</td>
<td>Does not require bowel preparation, anesthesia, or transportation to and from the screening examination (test is performed at home)</td>
</tr>
<tr>
<td>FIT-DNA</td>
<td>Every 1 or 3 y</td>
<td>Test characteristic studies: Specificity is lower than for FIT, resulting in more false-positive results, more diagnostic colonoscopies, and more associated adverse events per screening test Improved sensitivity compared with FIT per single screening test</td>
<td>There is insufficient evidence about appropriate longitudinal follow-up of abnormal findings after a negative diagnostic colonoscopy; may potentially lead to overly intensive surveillance due to provider and patient concerns over the genetic component of the test</td>
</tr>
</tbody>
</table>
### Direct Visualization Tests

<table>
<thead>
<tr>
<th>Test</th>
<th>Frequency</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colonoscopy</td>
<td>Every 10 y</td>
<td>Prospective cohort study with mortality end point. Requires less frequent screening. Screening and diagnostic follow-up of positive results can be performed during the same examination.</td>
</tr>
<tr>
<td>CT colonography</td>
<td>Every 5 y</td>
<td>Test characteristic studies. There is insufficient evidence about the potential harms of associated extra-colonic findings, which are common.</td>
</tr>
<tr>
<td>Flexible sigmoidoscopy</td>
<td>Every 5 y</td>
<td>RCTs with mortality end points: Modeling suggests it provides less benefit than when combined with FIT or compared with other strategies.</td>
</tr>
<tr>
<td>Flexible sigmoidoscopy with FIT</td>
<td>Flexible sigmoidoscopy every 10 y plus FIT every year</td>
<td>RCT with mortality end point (subgroup analysis). Test availability has declined in the United States. Potentially attractive option for patients who want endoscopic screening but want to limit exposure to colonoscopy.</td>
</tr>
</tbody>
</table>

Table 5: Colorectal Cancer Screening Strategies.

### Staging:

The 7th edition of the AJCC Cancer Staging Manual includes several modifications to the colon cancer TNM staging system. Stage II disease is now subdivided into IIA (T3 lesion that invade through the muscularis propria into pericolorectal tissues, IIB (T4 lesion where tumor directly invades or is adherent to other organs or structures). The definitions of N1 and N2 disease have also been revised to reflect the prognostic impact of the number of involved regional...
lymph nodes, (N1a (1 positive node) N1b (2-3 positive lymph nodes), and N2a ((4-6 positive nodes) and N2b (7 or more positive lymph nodes). In addition, tumor deposit in the suberosa, mesentery, or non-peritonealized pericolic or perirectal tissues without regional nodal metastasis have been classified as N1c.

Based of these new changes, stage III disease has been revised to more accurately reflect the complex biologic relationship between the extent of tumor invasion and the number of affected lymph node,(T1, N2a or III B (T2, N2a or T1, N2b). In addition, T4b, N1 disease is now included under stage IIIc, because outcomes for these patients were found to be similar to those observed for patients with T3-4, N2 lesions.

Stage VI disease is characterized by the presence of 1 or more distant metastases and is designated as M1 disease is now dichotomized into M1a and M1b according to whether metastasis is confined to 1 or more than one organ.

Table 6: 2015 Colon Cancer Diagnosis Stage at Parrish Medical Center
Table 7: 2014 Colon Cancer Diagnosis Stage at Community Hospitals in the United States

Pathology:

Colorectal cancers are usually staged after surgical exploration of the abdomen and pathologic examination of the surgical specimen. Criteria in the report should include: grade of the cancer, depth of penetration, and extension into adjacent structures (T); number of regional lymph nodes evaluated, number of positive regional lymph nodes (N); an assessment of the presence of distant metastases to other organs, to the peritoneum or an abdominal structure, or in non-regional lymph nodes (M), the status of proximal, distal, and radial margins, lymphovascular invasion, perineural invasion (PNI), and extra nodal tumor deposits.

Adenocarcinomas of the Small Bowel and Appendix:

Adenocarcinomas of the small bowel and appendix are rare cancers and no NCCN guidelines exist. Acknowledging the lack of high-level data, the NCCN recommends that adenocarcinomas of the small bowel or appendix be treated with systemic chemotherapy as per NCCN Guidelines for Colorectal Cancer.

Clinical Presentation and Treatment of Non-metastatic Disease:

Mark the polyp site during colonoscopy or within 2 weeks of the polypectomy if deemed necessary by the surgeon. Before making a decision about surgical resection, review the pathology and consult with the patient. In patients with invasive cancer in a pedunculated or...
sessile polyp (adenoma), no additional surgery is required if the polyp has been completely resected and has favorable histologic features. Colectomy is also an option. If the polyp specimen is fragmented, the margins cannot be assessed, or the specimen shows unfavorable histopathology, colectomy with en-bloc removal of lymph nodes is recommended. Adjunctive chemotherapy is not recommended for patients with stage I lesions.

**Workup and management of Invasive Non-metastatic Colon Cancer:**

Patients who present with invasive colon cancer appropriate for resection require a complete staging workup, including pathologic review, total colonoscopy, CBC, Chemistry profile, CEA, baseline ST scans of the chest, abdomen, and pelvis. Ct should be with IV contrast.

**Surgical Management:**

For resectable non-metastatic colon cancer, the preferred surgical procedure is colectomy with en-bloc removal of the regional lymph nodes. The extent of colectomy should be based on the tumor location, resecting the portion of bowel and arterial arcade containing the regional lymph nodes. Resection must be complete to be considered curative, and positive lymph nodes left behind indicate an incomplete (R2) resection. A complete mesocolic excision (CME) with central vascular ligation resulted in greater mesentery and lymph node yields that the high tie surgery.

Laparoscopic Colectomy is an option in the surgical management of colon cancer. After many studies, the NCCN panel recommends that laparoscopic-assisted colectomy be considered only by surgeons experienced in the technique. A thorough abdominal exploration is required as part of the procedure.

**Adjuvant Chemotherapy for Resectable Colon Cancer:**

- Patients with stage I disease and patients with MSI-high, low risk stage II disease do not require any adjuvant therapy.

- Patients with low-risk stage II disease can be enrolled in a clinical trial, observed without any chemotherapy, or considered for capecitabine or 5-FU/ Leucovorin. No FOLFOX for stage II disease without high-risk features.

- Patients with high-risk stage II disease can be considered for adjuvant chemotherapy with 5-FU/ LV, capecitabine, FOLFOX, Cape/Ox, FLOX. Observation without adjuvant therapy is also an option.
For patients with stage III disease, the NCCN recommends 6 months of adjuvant chemotherapy after primary surgical treatment. FOLFOX or CapeOx are both category 1 and preferred. Single agent capecitabine or 5-FU/LV for patients whom oxaliplatin therapy is believed to be inappropriate.

Principles of the Management of Metastatic Disease:

Approximately 50-60% of patients diagnosed with colorectal cancer develop colorectal metastasis, and 80-90% of these patients have unresectable metastatic disease. It has been estimated that more than half of patients who die of colorectal cancer have liver metastases at autopsy.

Surgical Management of Colorectal Metastases:

If resectable, then surgical resection for liver and lung metastases is appropriate. Increasing the 5 year survival rate, but evidence supporting this is limited. The standard of care for patients with resectable metastatic disease is surgical resection. If resection is not feasible, image-guided ablation or stereotactic body radiation therapy are reasonable options.

Hepatic Arterial Infusion:

Placement of a hepatic arterial port or implantable pump during surgical intervention for liver resection with subsequent infusion of chemotherapy directed to the liver metastases through the hepatic artery.

Arterially Directed Embolic Therapy:

Transarterial chemoembolization involves hepatic artery catheterization to cause vessel occlusion with locally delivered chemotherapy.

Liver-Directed Radiation:

Liver-directed radiation therapies include arterial radioembolization with microspheres and conformal (stereotactic) EBRT. EBRT to the metastatic site can be considered in highly selected cases in which the patient has a limited number of liver or lung metastases or the patient is symptomatic or in the setting of a clinical trial.

Chemotherapy per NCCN Guidelines for Metastatic Disease:

Therapy after Progression: NCCN Guidelines
Post Treatment Surveillance:

After curative intent surgery and adjuvant chemotherapy, post treatment surveillance of patients with colorectal cancer is performed to evaluate for possible therapeutic complications, discover a recurrence that is potentially resectable for cure, and identify new metachronous neoplasms at a pre-invasive stage. Analysis showed that 80% of recurrences occurred in the first 3 years and 95% of recurrences occurred in the first 5 years.

Surveillance for Loco-regional Disease

- Stage I: colonoscopy at 1 year, repeat in 3 years and then again in 5 years
- Stage II and III: History and physical every 3-6 months for 2 years then every 6 months for 5 years. A CEA test is recommended at baseline and every 3-6 months for 2 years then every 6 months for a total of 5 years. Colonoscopy 1 year after resection then repeats in 3 years and again in 5 years thereafter. Chest, abdomen, and pelvic CT scans are recommended every 6 months to 12 months for up to 5 years.

Survivorship:

Post-treatment surveillance for all patients also includes survivorship care plan involving disease-preventive measures, such as

- Immunizations
- Early disease detection through periodic screening for second primary cancers (breast, cervical, prostate)
- Routine good medical care and monitoring
- Maintain a therapeutic relationship with primary doctor throughout a lifetime
- Monitor for chronic diarrhea or incontinence
- Peripheral Neuropathy
- Fatigue, insomnia, cognitive dysfunction and emotional or social distress.
- Lifestyle changes: 1. Smoking cessation
  2. Maintaining healthy weight BMI
  3. Regular exercise and good dietary decisions
  4. Diet with more fruit and vegetables, poultry, and fish: less red
Meat and sweets, higher intact of milk and calcium

**Estimated New Cancer Cases* in the US in 2015**

<table>
<thead>
<tr>
<th>Site</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prostate</td>
<td>26%</td>
<td>29%</td>
</tr>
<tr>
<td>Lung &amp; bronchus</td>
<td>14%</td>
<td>13%</td>
</tr>
<tr>
<td>Colon &amp; rectum</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>Urinary bladder</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Melanoma of skin</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>Non-Hodgkin lymphoma</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>Kidney &amp; renal pelvis</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>Oral cavity &amp; pharynx</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>Leukemia</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>Liver &amp; intrahepatic bile duct</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>All other sites</td>
<td>21%</td>
<td>21%</td>
</tr>
</tbody>
</table>

*Excludes basal cell and squamous cell skin cancers and in situ carcinoma except urinary bladder.

Table 8: Estimated New Cancer Cases in the US in 2015. (ACS, 2015).

**Community Outreach Activity Report:**

Parrish Medical Center’s Cancer Program follows evidence-based screening guidelines as outlined by the NCCN, the American Cancer Society, and the American Society of Clinical Oncology.

Parrish offers a variety of free screenings, for example, as part of the Colon Cancer Prevention and Screening Program, we offer free hem occult testing kits and our nurse navigator follows up with the patients and their physicians on any positive results.

**Colon Screening**

**2016:** 25 iFOBT were provided at Community Health Fairs

**2015/2016** Our Breast Cancer Prevention and Screening Program offers free and reduced cost screening and diagnostic mammograms for those in need through the Jess Parrish Medical
Foundation. All positive results are followed up by a certified breast health navigator and assistance is given throughout cancer journey.

**2016: JPMF vouchers (Sept 2015 thru Nov 2016): 42**

<table>
<thead>
<tr>
<th>Employee Mamma Stats</th>
<th>Pts</th>
<th>Callback</th>
<th>BiRads 1-2</th>
<th>BiRads 3</th>
<th>BiRads 4-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 2016</td>
<td>22</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
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<tr>
<td>April 2016</td>
<td>24</td>
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<td>July 2016</td>
<td>21</td>
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<tr>
<td>Oct 2016</td>
<td>71</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>0</td>
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<tr>
<td>Totals</td>
<td>138</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 9: Employee mammogram program

Our lung cancer screening is in its infancy and in 2017 more focus will be in maintaining our screening but improving access and to educate physician offices and community partners on the benefits of early lung cancer detection. One of our Cancer Program Goals is to modify and increase lung cancer screening.

**Lung Screening at PMC:**

2013: 44 completed, 11 positive  
2014: 52 completed, 12 positive  
2015: 22 completed, 4 positive  
2016: 14 completed, 2 positive

We work very closely with our community partners and make sure all of our patients have access to a primary care provider if any screenings are positive and follow-up is required. Brevard Health Alliance provides sliding scale fees for primary care in North Brevard and is a tremendous community partner.

Parrish Medical Health System provides many opportunities for prevention and screening education. We worked with the County and Titusville City employees and provide two health fairs each year for each area. We provide education on prevention of cancers, screening information and vouchers for those who qualify for screenings but are unable to afford them. Parrish Cancer Program has been involved with the Martin Luther King Day Celebrations for the last three years. Each year education and free screening hemoccult testing and mammogram
vouchers are given for those who meet the screening criteria and are unable to afford the tests. We have had 20 screening mammograms completed because of this program in the last two years, and no follow-up has been needed.

Each year participates in “Sun Days”, Florida and North Brevard is notorious for sun bathing and skin cancers. During our “Sun Days” we meet at a local beach with Eastern Florida State College nursing students and give out information on proper sun health protection and sun screening. Games are played with children on how to be “Sun Smart”, Slip on a shirt, Slop on sunscreen, Slap on a hat, wrap on sunglasses rely races. We took this approach for fun and games to the local Football and Cheerleading fields and it was a great success. We look forward to 2017 and increasing our Community outreach in the county ball fields and bleachers.

Our Cancer Outreach Program goals are to reach out to the community and to provide free screening to those in need and educational opportunities in the schools, playgrounds, Boys and Girls Clubs. We want to take the message of prevention and screening to the area churches and charity organizations throughout North Brevard and assist in making screening easy and affordable. Our community Needs Assessment for 2016 compelled us to focus on colorectal screening and tobacco cessation programs for our community, and we these areas will be incorporated for outreach goals in 2017.

Community Outreach Coordinator,
Dr. Germaine Blaine M.D., M.P.H.

Cancer Liaison Report

Dr. James Giebink is a board-certified radiation oncologist and voluntarily serves as the cancer liaison physician (CLP) for the hospital’s cancer program.

As CLP, Dr. Giebink provides leadership and supervision in monitoring and overseeing activities to improve the quality of the hospital’s cancer program. This includes evaluating and analyzing Parrish Medical Center’s cancer program performance using National Cancer Data Base (NCDB) data and regularly reporting her analysis of NCDB data to the hospital’s cancer committee at large. The CLP serves as the official physician liaison to the Commission on Cancer, the entity overseeing accreditation for the hospital’s cancer program.
Quality Control Plan Annual Report:

Dr. Giebink evaluated 10% of analytical cases; they consisted of six breasts, six colon, five lung, five bladder and two esophageal. There were 192 analytical cases in 2015. Findings concluded that the abstracting was accurate and collaborative staging was proficient. Recommendations were given to the Cancer Committee to assist with timeliness of abstracting and assistance with staging from the managing physician.

Cancer Registry Report

According to the National Institutes of Health, cancer is the second leading cause of death among Americans. Doctors, researchers, and public health officials are working endlessly to change this fact by improving cancer prevention and treatment, but ultimately hoping to find a cure for cancer. The starting point for the work of doctors, researchers and public health officials is the Cancer Registrar.

All over America, and in your community, cancer registrars are working to gather information from every cancer patient on all aspects of their disease. As each patient’s data becomes combined with that from other patients and from other communities, the entire medical community now can understand more and more about cancer.

The cancer registry is the cornerstone of the cancer program at PMC with the focus to exceed the expectations of the American College of Surgeons Commission on Cancer standards and fulfill the cancer committee’s vision. The registry collects, manages, and analyzes statistical and quality data on all cancer patients diagnosed and/or treated at Parrish Medical Center.

The cancer registrar at Parrish Medical Center’s cancer program is a certified tumor registrar (CTR) who continually participates in ongoing cancer-related education at the local, state and national levels to maintain and increase knowledge of various treatments and to keep abreast of changes in state laws and/or statutes, assist with the annual report, provide supportive documentation for compliance with CoC standards, and is responsible for submitting accurate and timely data to the Florida Cancer Data System (FCDS) and the National Cancer Database (NCDB) who use this data to determine future therapies, cancer patient survival rates, and efficacy of current therapies.
2015 Registry Data Summary

Registry Data Activity
The registrar provides data reports for the cancer committee. This data is used by Parrish Medical Center’s staff to evaluate clinical outcomes, develop therapeutic protocols for treatment, clinical trials feasibility, and quality assurance studies.

Follow Up Rate
Follow-up is important for tracking of vital status and cancer status. The registry maintains lifetime follow-up on all analytic patients entered into the database. This includes tracking and updating any additional treatments received, monitoring current cancer status and documenting last date of contact with the patient.

Cancer Conference Activity
Cancer conferences provide our cancer specialists with a forum to collaboratively discuss the clinical stage of the disease, the different treatment options mandated by national treatment guidelines on an individual patient in order to provide excellence in patient care.

Parrish Medical Center cancer conferences are held twice-monthly. The cancer Coordinator coordinates the meetings, gathers the information required for discussion, including medical history, pertinent pathology and radiology material for review. Multi-disciplinary cancer conferences are attended by surgeons, medical oncologists, radiation oncologists, pathologists and radiologists. Both prospective and retrospective cases are discussed.

The American College of Surgeons requires that the number of cases presented annually is proportional to 10% of the analytic caseload. There were a total of 17 Cancer Conferences in 2015 with a total of 68 cases presented and 61 of those cases were prospective.

Quality of Data in the Cancer Registry
The cancer registrar continually strives for data quality through a variety of monitoring systems. In 2015, a minimum of 10% of the newly diagnosed cases were reviewed by the cancer liaison physician who verified the accurate recording of class of case, primary site, histology, stage of disease, collaborative stage, first course of treatment, and timeliness.

In addition to the CLP review, the cancer registry software has extensive built-in validation edits at the time of data entry that contribute to high quality data.
**Incidence**

A total of 298 cases were entered into the data base for 2015. The five most frequent analytical sites were breast, bronchus/lung, colon, urinary bladder, and rectum.

Table 11: Incidence of all Cancers

Table 12: Age at diagnosis of cancer
Table 13: Sex distribution of cancer cases

Table 14: Newly diagnosed cancer patients by race

**2015 Community Outreach**

<table>
<thead>
<tr>
<th>Event Name</th>
<th>Date</th>
<th>Focus/Topic</th>
<th>Population Served</th>
<th># of Attendees</th>
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<tr>
<td>Men’s Health Event, St. James Missionary church</td>
<td>11/01/2014</td>
<td>Screening/Prevention Awareness</td>
<td>Community</td>
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<td>Men’s Health Awareness Day</td>
<td>11/08/14</td>
<td>Screening, Prevention/Awareness</td>
<td>Community</td>
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<td>Event</td>
<td>Date</td>
<td>Type</td>
<td>Description</td>
<td>Participants</td>
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<td>--------------------------------------------</td>
<td>------------</td>
<td>-----------------------------</td>
<td>------------------------------</td>
<td>--------------</td>
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<tr>
<td>Look Good...Feel Better</td>
<td>Bi-Monthly</td>
<td>Survivor Support</td>
<td>Survivors</td>
<td>13</td>
</tr>
<tr>
<td>Parrish Partners</td>
<td>Monthly</td>
<td>Survivor Support</td>
<td>Survivors</td>
<td>120</td>
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<td>Employees' Mammo Day</td>
<td>Quarterly</td>
<td>Breast Screenings</td>
<td>Care Partners</td>
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<td>MLK Health Fair</td>
<td>1/19/2015</td>
<td>Cancer Prevention/Awareness</td>
<td>AA Community</td>
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<td>Skin Cancer Awareness</td>
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<td>Knight's Enterprise</td>
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<td>Prevention/Awareness</td>
<td>Community</td>
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<td>Relay for Life</td>
<td>5/2/2015</td>
<td>Survivor Celebration</td>
<td>Survivors/Families</td>
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<td>2014 Survivor Celebration</td>
<td>10/24/2015</td>
<td>Survivor’s Rock</td>
<td>Survivors</td>
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<td>Making Strides</td>
<td>10/24/2015</td>
<td>Survivor Celebration</td>
<td>Community</td>
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<td>Brevard County Health Fair</td>
<td>09/17/2015</td>
<td>Prevention/awareness</td>
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<td>City of Titusville</td>
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<td>Colon Screenings</td>
<td>Community</td>
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<td>Gift of Light</td>
<td>12/05/2015</td>
<td>Cancer Prevention/Awareness</td>
<td>Community</td>
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</table>

Table 15: Community Outreach

**2015 Cancer Education Seminars**

1. June 16, 2015: Colon Cancer Update  Dr. Dalal
2. August 18, 2015: Dr. Chiappori: Patient-focused Care in Advanced NSCLC: Formulating Optimal Management Strategies
3. September 15, 2015; Dr. Krop, MD. PhD: Focus on the Management of Metastatic Breast Cancer
2015 Cancer Committee Program Goals

2015 Cancer Program Goals

1. Clinical Goal:
   Participate in one e-Tumor Board with Mayo Clinic in 2015

2. Programmatic Goal:
   a. Automate referral process for lymphedema consult for cancer patients with lymph node removal.
   b. Evaluate use of “My Journey Forward” as survivorship plan

2015 Patient Outcome Goals

Prevention Programs: Standard 4.1

1. Offer at least 1 community program on nutrition and cancer
2. Promote Safe Sun education and practices during outdoor events.

Screening Programs: Standard 4.2

1. Offer at least two breast cancer screening programs.
2. Offer at least one colon screening event

Quality Report: Standard 4.3

1. a. Quarterly Registry Quality Reports are shared with the Cancer Committee.

Accountability Measure: Standard 4.4

1. Use Breast e-QuIP data to monitor and evaluate breast indicators to maintain at least a 90% performance rating
a. Image or palpation-guided needle biopsy (core or FNA) is performed to establish diagnosis of breast cancer

b. Radiation is administered within 1 year (365 days) of diagnosis of breast cancer for women with > 4 positive regional lymph nodes

c. Tamoxifen or third generation aromatase inhibitor is considered or administered within one year of diagnosis for women with AJCC Stage IC, II or III hormone receptor positive breast cancer. (HT)

2. Non-Small Cell Lung Cancer (NSCLC)
Systemic chemotherapy is administered within 4 months to day preoperatively or day of surgery to 6 months post operatively, or it is considered for surgically resected cases with pathologic lymph node (pN1) and (pN2) NSCLC.

Quality Improvement Measure: Standard 4.5

1. Use Colon e-QuIP data to monitor and evaluate colon indicators
2. Improve lymph node (at least 12) removal for pathological review to at least 80% performance rate.

Assessment of Evaluation and Treatment Planning: Standard 4.6

1. A study is performed by a MD member of the cancer committee of at least 10% (random) of annual analytic case load is completed and reviewed for concordance with the evidence-based national treatment guidelines.

Studies of Quality: Standard 4.7

1. Complete DMAIC for lymphedema referral process for cancer patients with lymph node removal
   a. Goal: 20% of cancer patients with lymph node will have a lymphedema referral by end of 2015
2. Complete a DMAIC for psychosocial services offered to newly diagnosed cancer patients.
   a. Goal: 50% of breast cancer patients will have a psychosocial referral by end of 2015

Quality Improvement: Standard 4.8

1. Develop and implement a process to ensure at least 20% of patients diagnosed with breast cancer have a “My Journey Foreword” survivorship plan.
2015 Cancer Committee Membership

The Cancer Committee is composed of representatives of primary and specialty care physicians, as well as team members involved in the care of cancer patients. The multidisciplinary committee meets at least quarterly to review and evaluate the quality and direction of the overall cancer program.

Cancer Committee Chairman
Ashish V. Dalal, MD

Cancer Liaison Physician
Germaine Blaine, MD, MPH

Administration
Chris McAlpine, VP

General Surgery
John M. Zambos, MD

Radiation Oncology
James Giebink, MD

Pathology
Pedro Carmona, MD

Diagnostic Radiologist
John Mayer, MD

Community Outreach Coordinator
Elizabeth Galfo, MD

Quality Improvement
Gloria Velez, ARNP, MSN, AOCN, CPHQ

Oncology Nursing
Marsha Richardson, RN, MSN, CBCN, ONC

Quality Risk Management
Anna Maynard, RN

Certified Cancer Registrar
Kelly King, CTR

Palliative Care
Terry Donovan, RN, MSN

Psychosocial Services
Helen Duane, LCSW

Communication & Service Excellence
Jo Connell

Oncology Nurse
Leah Haley, RT

Food & Nutrition
Suzanne Comer, OTR/L, CLT

Pharmacy
Jeff Ruff, Pharm D

Laboratory
Rene Pulido, MT

Pastoral Services
Rev. Jerald Smith, D.Min

Case Management
Linda Slover, RN

Home Health
Nora Fetherman, RN

Pastoral Services
Gina Becker / Hildelenia Cuevas

Quality Risk Management
Jo Connell

Certified Cancer Registrar
Shannon Luker, RN / Terrilyn Holtkamp, RN
Glossary of Terms

**Analytic** – A cancer that is reportable to the Florida Cancer Data System and National Cancer Data Base. Cases that are initially diagnosed and/or received all or part of the first course of treatment at PMC.

**American College of Surgeons (ACoS)** – Dedicated to improving the care of the surgical patient and safeguarding standards of care in an optimal and ethical practice environment.

**Commission on Cancer (CoC)** – Sets standards for quality multi-disciplinary cancer care delivery primarily in hospital settings; surveys hospitals to assess compliance with those standards; collects standardized and quality data from approved hospitals to measure treatment patterns and outcomes; and uses the data to evaluate hospital provider performance.

**Florida Cancer Data System (FCDS)** – A statewide Florida cancer registry which has been collecting data since 1981. The database contains over 2,700,000 cancer incidence records.

**National Cancer Data Base (NCDB)** – Nationwide oncology outcomes database for over 1,500 hospitals in 50 states. The NCDB was founded as a joint project of the ACoS, Commission on Cancer and the American Cancer Society.

**Non-Analytic** – Cancer cases primarily diagnosed and treated elsewhere, and/or receiving subsequent care at PMC.
References

National Cancer Data Base (NCDB) Commission on Cancer, 2015

American Cancer Society, Cancer Facts & Figures, 2015

National Comprehensive Cancer Network, NCCN Guidelines, 2015

Centers for Disease Control and Prevention, 2014

Florida Cancer Data System and Office of Vital Statistics, 2014
PMC Benchmarks

Patient treatment and survival outcomes presented in this publication have been compared to state and national statistics for comparable healthcare institutions.

The statistical data presented by Parrish Medical Center in this report have been benchmarked against data collected by the following sources:

- Commission on Cancer
- SEER
- FCDS
- American Cancer Society
- NCDB
- NCCN
Awards and Accreditation

Commission on Cancer
The Commission on Cancer (CoC) is a consortium of professional organizations dedicated to improving survival and quality of life for cancer patients through standard-setting, prevention, research, education, and the monitoring of comprehensive quality care.

American College of Radiology
The Breast Imaging Center of Excellence (BICOE) designation is awarded to breast imaging centers that achieve excellence by seeking and earning accreditation in all of the ACR’s voluntary breast-imaging accreditation programs and modules, in addition to the mandatory Mammography Accreditation Program.

College of American Pathologists
The CAP Laboratory Accreditation Program is an internationally recognized program and the only one of its kind that utilizes teams of practicing laboratory professionals as inspectors. Designed to go well beyond regulatory compliance, the program helps laboratories achieve the highest standards of excellence to positively impact patient care.

Joint Commission
Joint Commission accreditation means your organization complies with the highest national standards for safety and quality of care and is committed to continually improving Patient care.