Study Topic:
Evaluate accuracy of staging and treatment according to national guidelines for Stage III Non-Small Cell Lung Cancer cases.

Study Data:
A review of 12 cases was completed to ensure the AJCC stage was documented and the recommended NCCN Cancer Treatment Guidelines were followed. Dr. Blackburn identified 12 cases diagnosed with NSCLC in 2016. The data was pulled from the electronic medical record as well as the Cancer Registry database.

Assessment:
Treatment According to NCCN Guidelines: Concurrent chemoradiation is the treatment recommended for Stage III NSCLC. Review of the 12 cases revealed 2 of the cases the patients refused partial or all of the recommended treatment, and 1 patient could not tolerate the concurrent therapy recommended.

Staging Documentation and Accuracy: Review of the 12 cases revealed that all 12 cases had physician staging documented in the medical record. All cases were accurate. Two of these cases was found to be Stage IV, and another was Stage IIB when the staging was reviewed.

The abstracts for each case was reviewed for accuracy of documentation. Four cases are not in the registry database yet and 3 cases are still currently undergoing treatment.

<table>
<thead>
<tr>
<th>Summary Item</th>
<th>Number of Patients</th>
<th>Percentage (%)</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases Clinically Staged by Physician</td>
<td>12 / 12</td>
<td>100%</td>
<td>90% of cases staged clinically by a physician</td>
</tr>
<tr>
<td>Physician Staging Accuracy</td>
<td>12 / 12</td>
<td>100%</td>
<td>90% accuracy rate</td>
</tr>
<tr>
<td>Cases with Appropriate Treatment</td>
<td>12 / 12</td>
<td>100%</td>
<td>100% compliance with national treatment guidelines</td>
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Summary of NSCLC Evaluation

<table>
<thead>
<tr>
<th>Cases Staged by the Physician</th>
<th>Physician Staging Accuracy</th>
<th>Cases treated with the recommended NCCN guideline</th>
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</table>
Quality Improvement Coordinator: Christina Huether

Problem Identified:
Evidence-based research has determined that lymphedema is a common, but underreported, long-term, chronic side effect of surgery and radiation therapy affecting approximately 1 in 5 women (Green, 2013). Data collected from the lymphedema clinic has shown low volume of patients seen following breast surgery. Therefore, a quality study was conducted to determine if patients diagnosed with breast cancer had a PT/OT referral following a mastectomy/lumpectomy at Onslow Memorial Hospital.
Onslow Surgical Clinic Care Instructions Following Your Partial Mastectomy with Axillary Lymph Node Dissection

Activities:
Resume your normal activities when you feel comfortable. It is best to remain as active as possible to speed your recovery. It is common to experience some fatigue after surgery. Avoid strenuous activity such as weight lifting, tennis, etc at your surgical site for one week. Perform gentle arm exercises daily and do not “favor” your operative arm to due increased risk of mobility issues post-operatively. No driving for 7 days after surgery. Do not drive if you are taking pain medication other than Tylenol or Ibuprofen. No swimming, tub baths or soaking in a hot tub for 4 weeks. There are no dietary restrictions. Do not smoke as this impairs wound healing.

Surgical Site care:
Remove your dressing 48 hours after surgery. Leave the white paper tapes underneath in place. You may shower after removing the dressing to include washing the wound with soap and water using your hands. Do not scrub the incision. Pat the area dry with a towel. You do not need to recover the wound although some patients find that they feel more comfortable using a light dressing for a few days to absorb any minimal drainage which may occur. Many patients also find that keeping a dressing around the drain exit site is helpful to absorb any drainage which may leak around the tubing. If you use a dressing in this manner change it at least every day. Do not use heating pad or apply an ice pack to the operative site. You may apply deodorant if you are careful to avoid getting it on the wound itself.

Empty the bulbs attached to the drain every 12 hours and measure the fluid output separately from each drain. Please also “strip” each drain each time you empty it to prevent clogging. Keep a record of the output and bring this record with you each time you come to the office for postoperative care. A drain is ready to be removed when its output is 30 mL per 24 hours per drain for 2 consecutive days. Please call the office to inform our staff that you need to come in for drain removal.

Most patients are more comfortable if they wear a supportive, sports-type bra 24/7 for the first few days after surgery. Ice packs may help relieve the discomfort and swelling as well in the first 24 hours. Do not place an ice pack directly on the skin. Do not use a heating pad on the operative sites.
**Medications:**

Use over-the-counter pain medication of your choice such as Aleve, Extra-Strength Tylenol, Motrin, etc. as per the package directions for pain. Take the prescribed narcotic pain control Tylenol #3 or Percocet one to two tablets every six hours as needed for more severe pain not relieved with the over-the-counter medications. Do not take over-the-counter Tylenol if you are taking either Tylenol #3 or Percocet. Again, you cannot drive while taking narcotic pain medication.

Resume all of your normal prescription medications after your surgery unless instructed otherwise.

You may experience constipation after surgery while taking pain medications. If using a narcotic on a regular basis, take a stool softener such as Colace twice a day. It is helpful to stay hydrated by drinking lots of fluids. Walking is also helpful and is good exercise after surgery. If you need extra help, use Milk of Magnesia according to the directions on the package.

**Follow-up:**

Call our office at (910) 353-7848 to make a follow-up appointment in 10-14 days. Your doctor will call to discuss the pathology report with you as soon as it is available.
Study Methodology and Criteria for Evaluation:
A qualitative study was conducted from a list of patients from 2016 and 2017 in the cancer registry with a breast cancer diagnosis who had a mastectomy or lumpectomy at Onslow Memorial Hospital. A comparison was made from a list of patients seen at the lymphedema clinic to determine how many patients were seen post-procedure.

National Benchmark or Guideline for Comparison:
There is no national benchmark for lymphedema referrals at this time. NCCN guidelines for surveillance and follow up recommends “Educate, monitor, and refer for lymphedema management”.

Analysis of Study Findings and Results:
The study looked at thirty-three breast cancer cases with diagnoses of Malignant Neoplasm of either breast and Invasive Ductal Carcinoma, one case was excluded for a stage 0 breast cancer diagnosis. There were ten cases excluded from the study due to a diagnostic procedure only (ex. Mammogram, needle core biopsies). There were twenty-two mastectomies/lumpectomies and fourteen of those cases were performed at Onslow Memorial Hospital. There were three OT/PT referrals that were found out of the thirteen cases (one patient requested referral to Wilmington and the other requested a referral to Greenville).

The study also looked at whether patients had received education on lymphedema at discharge. The result indicated no specific information about lymphedema was given to the patient at discharge in the after-care instructions. The results of this study indicated opportunity for improvement in our OT/PT referrals and lymphedema education after breast surgery in order for our patients to recognize the signs and symptoms.

<table>
<thead>
<tr>
<th>Lymphedema Study</th>
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<tbody>
<tr>
<td>Number of mastectomies/lumpectomies performed at Onslow</td>
</tr>
<tr>
<td>Education on lymphedema</td>
</tr>
<tr>
<td>Referral for OT/PT evaluation post procedure</td>
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- **3**
- **14**
Comparison of Data with National Benchmark or Guideline:
Study results has indicated an under-utilization of referrals and lack of education regarding lymphedema.

Corrective Action Plan and Follow up Actions:
Action plan will be education to the providers to order PT/OT referrals for all mastectomy/lumpectomy patients. Evidence-based research has shown the benefits of beginning rehabilitation immediately after breast cancer surgery for improving motor function (Yamamoto, Sinko, Suga, Tsubota, Sueoka, Yoshikawa & Kon, 2016).

Secondly, lymphedema education will be included in the post-discharge information following breast surgery.
Describe Quality Improvement:
Quality Improvement will be to include PT/OT referral on the post-mastectomy order set. The Clinical Practice Council has reviewed and approved the order set. Secondly, post discharge instructions at Onslow Memorial surgical units and Onslow Surgical Clinic will include lymphedema education. This education will be built into Meditech as an intervention for nursing staff to document. The below graphs illustrate the improvement of the referrals over the year. The quality improvement will be monitored with the implementation and utilization of the post mastectomy order and education intervention to ensure progress.
2017 Cancer Screening and Prevention Programs
Colon Cancer Screening Event

Colon Cancer is one of the top cancer sites at Onslow Memorial Hospital (health disparities, uninsured, underinsured and underserved).

Summary of Activity:
Over the month of March, participants would come to Onslow Diagnostics to pick up a hemmocult stool screening kit. They would take the kit home, collect the specimen and bring the kit back into Onslow Diagnostics for resulting.

Tools offered:
Poster presentation with the “Colon Cancer Screening” and the “Screening Helps Prevent colorectal Cancer” handouts from the CDC

Dates Performed:
March 6-April 14, 2017

Screening Results:
- 111 screenings were performed
- 5 positive screenings and 106 negative screenings
- Out of the 111 screenings 43 had never had a colonoscopy before and were within the guidelines for having a colonoscopy
- There were 10 participants that were overdue to have their colonoscopy. We had conversations with each of these individuals (except for 6 that have been unavailable to contact) discussing the importance of a colonoscopy and that this screening did not take the place of the colonoscopy
- 58 participants were within the guidelines of having a colonoscopy. These people were encouraged to continue with their colonoscopies

Update reported on October 31, 2017:
Completed follow up phone calls. 7 indicated that they have had a colonoscopy since the screenings (all were clear but one who had polyps removed), 3 have a colonoscopy scheduled and 2 completed the Cologuard and their physician did not indicate further testing. Some reasons for not getting a colonoscopy included:
- Forgot, will schedule
- No insurance
- No money for the deductible
- No plans on having it done
- Plans to schedule soon
- Moving soon and will schedule when gets a new doctor
- Declining health
- Moved
- Had surgery, will schedule
- Will schedule next year
- Can’t drink prep
Cervical Cancer Prevention Presentation

Activities:
Janis Cox, RNC, CNM, MSN discusses the anatomy, pap smears, risk factors for cervical cancer and prevention tips to include the HPV vaccine. Presentation held at Onslow Memorial Hospital in the Education Department.

Date Held: November 2, 2017

Guideline Used: American Cancer Society

Summary of Effectiveness:
Participants were asked to complete a pre and post test to determine an increase in knowledge based on the presentation. On the pretest the results were:
- Question 1: 50% answered right, 25% wrong and 25% no answer.
- Question 2: 50% right, 50% wrong.
- Question 3: 50% right, 50% no answer.
- Question 4: 50% right, 50% wrong.
- Questions 5: 75% right and 25% no answer.

On the post-test the results were:
- Question 1: 100% correct
- Question 2: 75% right, 25% wrong
- Questions 3: 100% right
- Question 4: 75% right, 25% wrong
- Questions 5: 100% right.

100% of the participants indicated that they learned something new about Cervical Cancer prevention through this presentation.
Update on the Management of Pancreatic Cancer Meeting

Objectives:
1. Discuss diagnostic challenges and review navigation of the AJCC Staging Guidelines
2. Review prognostic indicators and implications for management
3. Review evidence-based national guidelines for advances in treatment planning

Date Held: December 4, 2017

Participation:
- 12 Physicians
- 1 Nurse
- 3 Allied Health Representatives
Breast Cancer Screening Event

Onslow Memorial held its fourth annual Free Clinical Breast Exam Screening Event on October 21, 2017 to women in the community 18 and older. As clinical breast exams are an important part of early breast cancer detection, offering free clinical breast exams was one of the many efforts Onslow took to encourage women in the community to take action during Breast Cancer Awareness Month. Exams were facilitated by OMH nurses and nurse practitioners. Routine mammograms, especially 3-D mammograms, were also promoted.

Screening Results:

• 40 screenings were performed
• 32 screenings were normal, 4 probably benign needing follow up in 3-6 months and 4 with a mass or other findings
• 16 or 40% of the participants do not have insurance
• Out of the 4 with a mass or other finding, 3 (75%) do not have insurance
• Participants were referred to the BCCCP Program at Goshen Clinic for follow up
• One participant has insurance but no provider
• These participants will also be followed up by Discharge Planning
• Out of the 4 with finding probably benign, 1 (25%) does not have insurance. This patient was referred to the BCCCP Program at Goshen Clinic for follow up
• Patients with insurance will follow up with primary care physicians as well as Discharge Planning
• We had 26 more patients than last year (2016) which was a 77% increase
• Next year, we plan to still focus on increasing number of participants with no insurance. We would also like to encourage men who may have concerns attend
Skin Cancer Screening Event

Onslow County has almost twice as many melanoma-related cancer deaths as the state average. To help raise awareness and educate the community around the importance of skin cancer prevention and early detection, Central Coast Dermatology, in collaboration with Onslow Memorial Hospital, offered a free Skin Cancer Screening Event on June 14, 2017. Screenings were facilitated by Dr. Daniel Abraham, DO and all members of the community were encouraged to attend, especially those uninsured or underinsured.

Screening Results:
- 36 people seen
- 18 requiring follow up
  - 5-within the next 1-2 months
  - 1-within the next 12 months
  - 12-biopsy recommended
- 7 people made an appointment with Dr. Abraham’s office for follow up
- 44% of those who participated did not have insurance and will be followed by discharge planning to look at any resources they may have for follow up
Our dedication to the comfort and care of our cancer patients aligns with our hospital mission as a journey to embrace the passion of sensing the needs of others in order to create and enhance service excellence by fostering teamwork, building patient loyalty, and celebrating the joy of caring.