CoC Standard 4.7 Studies of Quality & 4.8 Quality Improvement

Pain Management Project

Selecting the topic

In an effort for the Medical Center of Lewisville to be compliant with the American College of Surgeons Commission on Cancer and improve the quality of care our cancer patients receive, the Cancer Committee selected a study to review the treatment for cancer patients experiencing uncontrolled pain that are admitted to the facility. The baseline results of the study were then compared to nationally ranked and reported HCAHPS scores.

The Commission on Cancer Standard 4.7 states that “the study focuses on areas with problematic quality-related issues relevant to the program and local cancer patient population”.

Necessity

To assist with the early intervention of a patient with uncontrolled pain that is admitted through direct admission or through the Emergency Department to identify areas of opportunity for the improvement of their pain management.

Defining Criteria

Criterion for inclusion was determined utilizing a survey administered by the Oncology/Palliative Care Coordinator for patients experiencing uncontrolled pain management. Inclusion criteria was based on a diagnosis of pain management issues as evidenced by a consultation to the Palliative Care Coordinator for either pain directly or cancer diagnosis that was likely to have pain management issues as a component.

(Addendum A: Tool for Study)

Collecting Data

- Functional pain goal
- Average pre-intervention pain level
- Average post-intervention pain level
- What type of intervention was used most often for the patient
- Cancer diagnosis

**Opportunity for Quality Improvement**

1. Process that we use to treat patients with uncontrolled pain
2. What interventions are we currently using to treat patients with uncontrolled pain management issues?
3. How effective are these interventions in the overall management of the patient’s pain.

**Data Sources**

Medical Center of Lewisville’s electronic medical record system, Meditech, pain management intervention documentation

- HCAHPS survey results for 2014 regarding the patient sensitive indicators for pain management controlled while in the hospital
- 5 point Likert scale pain assessment tool utilized by the Palliative Care Coordinator to assess effectiveness of new intervention

**Literature Review**

In reviewing the HCAHPS survey results for the 3rd and 4th quarter of 2014, with respect to the patient sensitive indicator of pain management controlled while in the hospital, it was found that Medical Center of Lewisville had decreased in the scoring. During the third quarter, MCL was at 68% for pain management controlled, which put it in the 2nd quartile top box or 70% of hospitals had scored higher for this question. In the 4th quarter of 2014, MCL was at 64%, which decreased its quartile ranking to the 1rst quartile ranking, which meant that 91% of other facilities had scored higher. This represented a large opportunity to improve the pain management of patients seen at MCL. According to Bhatnagar and Gupta (2015), cancer pain that cannot be alleviated by traditional analgesics has a direct effect on the quality of life for the cancer patient. They may not be able to make decisions as effectively related to the increased need for narcotic analgesics and that there is an increased need to identify and treat the patients at need for adjunct therapies earlier in their disease process to that they may have the most benefit from them.
When establishing pain relief goals for cancer patients it was determined that in order for an intervention to be effective it must produce a 33% to 50% decrease in the pain intensity (Williams, et al., 2000). This relates to about a 1 to 2 point change on a 10 point scale depending on how severe the pain is to start with.

The goal then for the study would be to choose an intervention that would, in addition to the use of already ordered analgesics, have the effect of reduction of the patient’s overall perceived pain level prior to the intervention and with the use of the intervention compared to the patient’s functional pain goal. The functional pain goal is the number on the 10 point pain scale that the patient would like to keep their pain below so that they may function in activities of daily living.
**Graph A**

This table illustrates aggregate data for patients seen by the Oncology/ Palliative care coordinator, with a cancer history experiencing pain issues from November 17, 2014 - January 15, 2015.

<table>
<thead>
<tr>
<th>Aggregate Pain level assessments on a ten point pain scale</th>
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<tr>
<td>10</td>
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<tr>
<td>Average Functional Pain goal</td>
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**Summary of findings**

On initial review of the data from November 17, 2014 through January 2015, a total number of 19 cancer patients were consulted to be seen by the Oncology/ Palliative Care Coordinator and were cancer patients with pain management issues. The average functional pain goals, the average pre-intervention pain levels, and the average post-intervention pain levels are represented in the table. See Graph A.

**Action Plan**

1. Interventions that we use to adjunct the medication management of cancer patients with unmanaged pain.
   a. Outcome-There was not a specific intervention and/or protocol for treating cancer patients with unmanaged pain.

2. What interventions are available that could be used as adjunct therapy for the cancer patient with unmanaged pain that was non-pharmacologic?
   a. Outcome-Volunteers from the Yoga Bridge (yoga for cancer) organization can assist with teaching patient’s non-pharmacologic relaxation techniques (Mindfulness, Breathing/Relaxation and Self-compassion) to use in addition to their medication management.
Recommendations

1. Perform study to assess if our current practice is meeting the pain management needs of cancer patients and the Quality Outcomes Coordinator presented information on performing study to Cancer committee on January 8th 2015.

2. Recommendation by the Cancer Committee on January 8, 2015 to pursue the addition of the Yoga Bridge instructors to begin seeing patients once they are approved to be hospital volunteers. The volunteers would see the patients that had been screened by the Oncology/Palliative Care Coordinator. These patients would consent to the education by the Yoga Bridge Volunteer and receive an 8-10 minute education from the volunteer throughout their hospital stay.

3. At the April 9th meeting it was reported to the Cancer committee that the Yoga Bridge volunteers were due to attend Lewisville’s orientation for hospital volunteers as well as completion of the education materials that were to be given to the patients.(See addendum c).

4. At the July 9th meeting of the Cancer committee the results of the patients seen by the Yoga Bridge volunteers was reported. The recommendation was made to expand the patient population from exclusively cancer patients to all palliative care patients experiencing pain management issues. It was decided to continue monitoring and to report to the December 2015 Cancer Committee the results of the pain study in summation.
From the data collected (see Graph B), a total of 9 patients agreed to and were seen for Relaxation Techniques education from the Yoga Bridge hospital volunteers. The average functional pain goal for this group was 3, the average overall reported pain score of the patients prior to receiving their relaxation techniques education was 7.8 and the average overall reported pain scale score for the patients after receiving the relaxation techniques education was 2. This study was limited due to the total number of patients seen during the time of the study but the effectiveness of the results obtain is positive.

References


HCAHPS survey results for Medical Center of Lewisville for Quarter 3 and Quarter 4 of 2014.

Addendum B: Scale developed in conjunction with assessment recommendation guidelines from the National Comprehensive Cancer Network *http://www.nccn.org/professionals/physician_gls/pdf/pain.pdf
Addendum A: Tool for Study

Standard 4.7 Quality Study

Oncology Patient’s *functional pain goal vs actual pain score tracking*

<table>
<thead>
<tr>
<th>Pt</th>
<th>MR/Account#</th>
<th>Cancer DX</th>
<th>Functional Pain Goal</th>
<th>Average Pre-Intervention Pain score</th>
<th>Average Post-Intervention Pain score</th>
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Addendum B – Post intervention survey tool

2015 Cancer Committee Pain Assessment Tool

**Functional Pain Goal**

What would you rate your overall pain score prior to receiving your relaxation techniques education?  
(Enter a numeric value 1-10)  
______________

What would you rate your overall pain score when you used the relaxation techniques that you learned?  
(Enter numeric value 1-10)  
______________

Scale developed in conjunction with assessment recommendation guidelines from the National Comprehensive Cancer

<table>
<thead>
<tr>
<th>How would you rate our effectiveness in treating your breakthrough pain?</th>
<th>Very disappointed based on my expectations</th>
<th>Somewhat disappointed based on my expectations</th>
<th>Neutral feelings based on my expectations</th>
<th>Somewhat satisfied based on my expectations</th>
<th>Very satisfied based on my expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>How would you rate the treatments that we are currently using to treat your pain?</td>
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<td>How would you rate the level at which your comfort has been managed this stay?</td>
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<tr>
<td>How would you rate your satisfaction with your pain relief when you receive treatment for your pain?</td>
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<tr>
<td>How would you rate your satisfaction with your pain relief while using the relaxation techniques?</td>
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Addendum C – Release of liability for Yoga Bridge Volunteer

Request for Relaxation Techniques Teaching

Date: ______________________ Room Number: ______________________

Patient Name: ___________________________________________________

(Please Place Patient sticker here)

I request a visit for the purpose of teaching/reviewing of relaxation techniques with the Yoga-Bridge Volunteer. I waive any and all claims, demands, losses, and causes of action against The Medical Center of Lewisville and its staff from any liability or harm resulting from a visit by the Yoga-Bridge volunteer. Relaxation techniques teaching may include but is not limited to Breathing Relaxation, Self-Compassion, and Mindfulness: Body Scan.

_____ I understand that the Yoga-Bridge Volunteer has not been made aware of my full medical history, only that I have the opportunity for improvement in my pain and that I have a cancer diagnosis.

_____ I understand that I have not been asked to stop/discontinue/alter any other pain management regimes or care provided by my specialty or primary care physician.

_____ I give my consent to the Yoga-Bridge Volunteer to provide initial relaxation techniques teaching and follow up teachings during my current hospital stay.

Patient’s Name (please print): __________________________________________

Signature of Patient or legal representative: ______________________________

Signature of Yoga-Bridge Volunteer: ____________________________________
CoC Standard 4.7 Studies of Quality & 4.8 Quality Improvements

Low Dose CT Education Project

Selecting the topic

During the December 2014 Cancer Committee meeting at Medical Center of Lewisville it was proposed by the Quality Improvement Coordinator, Holli Thornhill, that the committee reviews recommendations and guidelines regarding Low Dose CT lung screenings for our population of patients at high risk for developing lung cancer. It was agreed by the committee that we should conduct a study and assessment of patients that meet required criteria for high risk and the recommendations should be shared with the community by the hospital as a process improvement project.

Necessity

Given that lung cancer has the highest cancer-related mortality rate in Denton County according to the Texas Department of State Health Services, the committee considered conducting a review of patients that meet criteria for annual low-dose CT screenings and providing education regarding lung screening a way to meet the community needs. Establishing a structure and workflow for a lung clinic was established as a priority for 2015. Therefore the Committee and Quality Improvement Coordinator would develop a collection and tracking process to review all patients admitted to the facility that meet high risk criteria and qualify to have a Low dose CT screening. Patients that were appropriate would receive and benefit from education provided by the Nurse Navigator regarding the screening.

Literature Review

A review of information and recommendations were conducted. Resources and references include the American Lung Association, U.S. Preventative Services Task Force, National Comprehensive Cancer Network, Centers for Medicare and Medicaid, and the American Cancer Society.

Defining Criteria

At the January 2015 Cancer Committee meeting after the data had been researched it was found that the current National Comprehensive Cancer Network had published guidelines regarding low dose CT scanning recommendations for patients that fell within a risk group. This would include patients from age 55-74, greater than 30 pack year history of smoking and smoking cessation less than 15 years or
those that were greater than 50 years of age and had one additional risk factor other than second hand smoke. Additionally, recommendations from the United States Preventive Services Task Force were reviewed which recommended annual screening for lung cancer via the low-dose computed tomography and to discontinue the screening when the patient had reaching greater than 15 year of not smoking. It was decided at this meeting that patients that currently smoke or have a history of smoking would be filtered into a report for the Nurse Navigator to review additional criteria, such as number years the patient smoked and how much. Based on the Nurse Navigators review, the patients would then be selected to receive education on Low Dose CT screening.

For the purposes of the project, it was decided that these patients could be identified based on their self-reported smoking history that is obtained on admission and their age range of 55-74. These patients could be reviewed for appropriateness using an assessment survey administered by the Nurse Navigator and then educated regarding the process and benefits of early screening for lung cancer using the low dose CT. Data was gathered by the Quality Improvement Coordinator regarding the number of patients that potentially could be educated based on the inclusion criteria of smoking history and age. Baseline data was reviewed from a four month period of time from 06/01/14 – 09/30/14 and it was determined that 192 patients could have been screened for potential education regarding the LDCT screening.

The age range of 55-74 was the original recommendation by the U.S. task force and our original plan for this project. However, in February we changed the age range to 55-77 because that is what Medicare agreed they would cover.

**Collecting Data**

Baseline data collected from 06/01/14 - 09/30/14

![Bar Chart]

<table>
<thead>
<tr>
<th>Month</th>
<th>Number of Patients</th>
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<tbody>
<tr>
<td>June</td>
<td>42</td>
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<tr>
<td>July</td>
<td>68</td>
</tr>
<tr>
<td>August</td>
<td>39</td>
</tr>
<tr>
<td>September</td>
<td>43</td>
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</table>
In evaluating the data and feasibility of the proposed project, the decision was made at the January 2015 Cancer Committee to approve the project with a goal of providing education to at least 80% of admitted patients, identified as those at high risk for lung cancer. Education will be provided to appropriate patients throughout the facility, Monday through Friday by the Nurse Navigator over the course of the project. End date of project to be considered and determined after several months of data has been collected and analyzed.
Summary of Findings

A total of 132 patients were identified during the course of the project as needing education regarding low dose CT screening. Of those 132, 121 were educated for a total of 91.6% of the patients identified allowing the Lung Navigator to provide them with the education which met the goal of 80% set out by the Cancer Committee in January 2015. Of note, the average age of the person’s identified for this project were 64.7, which puts them in the middle range or the recommended age range identified by both the NCCN and the U.S. Preventative Services task force, the average smoking years for those that were currently smoking was 43.2 and the average current packs per day of the current smokers was 1.18 packs.

References


Texas Department of State Health Services (2014) *Texas Selected Cancer Facts*
CoC Standard 4.8 Quality Improvement continued

**Lymphedema Therapy Project**

The Medical Center of Lewisville Oncology Services and Outpatient Rehabilitation Services recognized the need for lymphedema therapy in our community. Patients suffering from lymphedema were waiting for therapy appointments, traveling relatively lengthy distances, or not receiving any treatment as recommended by their physician due to the lack of readily available therapy services in our community. One of our therapists, Christina Mark, has a passion for helping patients with lymphedema and understands the importance of treatment in the early stages. Christina put forth the extra effort, with the support of the hospital, to achieve her lymphedema certification in 2015. The Outpatient Rehab Center arranged for all the necessary supplies and resources for her to begin treating patients and offer services five days a week. She has also agreed to begin educational consults regarding the prevention of lymphedema for patients in the hospital that have undergone surgery. Christina’s abilities are allowing the hospital to offer more comprehensive care for the Medical Center of Lewisville and neighboring facilities as well.

**Breast Cancer Support Group Project**

The HCA/Sarah Cannon Nurse Navigators recognized the benefits of a local support group and assessed that there were no groups readily available in the immediate community. With breast cancer being the highest incidence, and the complexity of treatment and survivorship, a group specific to women with newly diagnosed breast cancer and their caregivers was decided as the target audience. The Nurse Navigators understood the anxiety the participants experienced about entering into their plan of care and wanted the women to begin the group simultaneously with their treatment.

The group offered guest speakers and educational topics each session in six and eight week classes. The classes had a progressive impact on the oncology program and community based on the positive feedback from the class participants with verbal affirmations and anonymous upbeat evaluations which measured the effectiveness of the group. In addition to becoming more informed from the educational topics, many of the women have formed bonds with other class members and remained friends which have nourished their emotional needs as well.

The Nurse Navigators plan to continue the classes in 2016 and enhance the evaluation process further with a formal research program that will utilize a quality of life survey to help measure the optimistic effect the group will make on the patient’s lives as they thrive through their battle with breast cancer.