Impact of the Breast Cancer Care Measures Pilot Study on Quality-Improvement Initiatives

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As a participant in the ONS Foundation–supported Breast Cancer Care Quality Measures Set in 2010, the Edward Cancer Center (ECC) identified gaps in patient assessment. Sleep-wake disturbance and distress were two common areas that were lacking consistent assessment when nurses saw patients during their visits. Another issue is the lack of standard methods of practice or a standardized tool. The ECC, in collaboration with Edward Diabetes Center, Linden Oaks Hospital, and other outpatient offices, adopted the use of the Patient Health Questionnaire-9 depression screening tool. The ECC also modified the intervention recommendations to meet the needs of the oncology population. As a result of the findings in the pilot, the ECC was able to implement an evidence-based practice change to improve the overall quality of patient care and provide earlier intervention in an effort to further improve patient outcomes.

The ONS Foundation and the Joint Commission partnered in the ONS Foundation–supported Breast Cancer Care (BCC) Quality Measures Set (Fessele, Yendro, & Mallory, 2014) in 2010 to evaluate the pilot sites’ performance on selected measures and to identify opportunities for quality improvement in cancer care. As a participant in the pilot, the Edward Cancer Center (ECC) in Naperville, Illinois, was able to obtain measurable data on performance and establish goals for quality improvements and practice change at the ECC.

The BCC pilot study took place from August to December 2010. At that time, the symptom assessment tool used was the Common Terminology Criteria for Adverse Events (CTCAE) (U.S. Department of Health and Human Services [USDHHS], 2006) via a toxicity flow sheet. In terms of anxiety and depression, the grading can be more subjective (none, mild, moderate, severe) based on the nurse’s interpretation of a patient response. In addition, the toxicity assessment is only used for active treatment patients, so all patients are not assessed consistently in these categories unless specifically noted in the physician progress note. Completion of the pilot revealed low scores in the assessment of distress, fatigue, and sleep-wake disturbance. These measures were found to be a common weakness in many oncology practices. Subsequent to the BCC pilot study, the ECC implemented the CTCAE, version 4.0 (USDHHS, 2009).

Assessment and Documentation of Symptoms

The approach for how to improve assessment and documentation of distress, fatigue, and sleep-wake disturbance is challenging. Numerous tools are available, and variance is found depending on the tool a practice selects. In 2011, a team of nurses applied to the ONS Foundation Institute for Evidence-Based Practice Change, and when the team was accepted, it used the information from the BCC pilot to select a project for process improvement. The team selected depression assessment and screening for their evidence-based project. The team leading the initiative was comprised of a nurse practitioner, a staff nurse, and the director of the cancer center, who has a background in nursing.

When researching the literature, several depression screening tools were identified as appropriate to implement into practice (Fulcher, Badger, Gunter, Marrs, & Reese, 2008). After looking into the options for screening tools, it was discovered that several departments within the healthcare organization were already using...
the Patient Health Questionnaire (PHQ-9) tool (Pfizer, Inc., 2002) (see Figure 1). With the movement to an electronic medical record approaching, it was evident that a standard tool needed to be used in the organization to provide continuity and a higher quality of care for patients. Another important factor was that the PHQ-9 also asks about fatigue and sleep-wake disturbance to encompass several of the measures that needed to be addressed. The patient responds to a set of standardized questions, and a numeric score is generated to indicate the appropriate intervention. Scores range from 0–27, where a score of 10 or higher indicates depression (Kroenke & Spitzer, 2002). Another range of measure is grading depression severity by scores of 5, 10, 15, and 20 defined as mild, moderate, moderately severe, and severe, respectively (Kroenke & Spitzer, 2002).

### TABLE 1. Patient Health Questionnaire-9 Depression Scale Interventions

<table>
<thead>
<tr>
<th>Score</th>
<th>Treatment Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–4</td>
<td>Give patient support services flyer.</td>
</tr>
<tr>
<td>5–9</td>
<td>Recheck next visit, and review support services flyer.</td>
</tr>
<tr>
<td>10–14</td>
<td>Contact social worker (or designated personnel) for follow-up with patient, and consider initiation of antidepressant with doctor or nurse practitioner.</td>
</tr>
<tr>
<td>15–19</td>
<td>Call social worker (or designated personnel), refer to therapist, and initiate antidepressant.</td>
</tr>
<tr>
<td>20–27</td>
<td>Call social worker (or designated personnel), and do not allow patient to leave center until social worker can evaluate. Possible referral to hospital liaison.</td>
</tr>
</tbody>
</table>

For patients who are actively suicidal, contact the hospital and escort patient to the emergency department. If it appears that patient will not cooperate, contact ambulance services for transportation. 

Note: Based on information from Kroenke et al., 2001. 

Note: Courtesy of Edward Cancer Center. Used with permission.

### Implementing Assessment Into Practice

Once the PHQ-9 depression screening tool was chosen, the team collaborated with other departments using the tool to assist with implementing it into practice. The ECC team joined the Edward Diabetes Center in a study developed on nurse’s comfort level in assessing depression in patients. Staff education was provided on depression in cancer, the use of the tool, how to assess and document, and the established interventions and workflow process. A two-week pilot was conducted in one of the physician clinics, an evaluation of the process was done, and feedback obtained from staff. Working another task into the nurse’s workflow was a concern, and staff questioned which patients would be screened, who would screen, and who would initiate the interventions. Staff also questioned what resources would be available and who would be the key team members. A trial process was established on how the PHQ-9 would be used in the clinic. All patients with cancer were given the PHQ-9 at their physician visit.

Over the last two weeks, how often have you been bothered by any of the following problems?

<table>
<thead>
<tr>
<th>Question</th>
<th>Not at all</th>
<th>Several days</th>
<th>More than half the days</th>
<th>Nearly every day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Little interest or pleasure in doing things</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. Feeling down, depressed, or hopeless</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. Trouble falling or staying asleep, or sleeping too much</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. Feeling tired or having little energy</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. Poor appetite or overeating</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. Feeling bad about yourself—or that you are a failure or have let yourself or your family down</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7. Trouble concentrating on things, such as reading the newspaper or watching television</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8. Moving or speaking so slowly that other people could have noticed? Or the opposite—being so fidgety or restless that you have been moving around a lot more than usual</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9. Thoughts that you would be better off dead or of hurting yourself in some way</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

- Not difficult at all
- Somewhat difficult
- Very difficult
- Extremely difficult

**FIGURE 1. Patient Health Questionnaire-9 Screening Tool**

visits. If a patient came every two weeks or more in a four-week period, they were screened once per month. The oncology technician, who draws laboratory tests, takes vital signs, and rooms the patient, gave the questionnaire to the patient, and the nurse reviewed it with the patient, totaled the score, initiated the appropriate intervention according to the score, and documented the score in the electronic medical record (see Tables 1 and 2). The depression screening process was put into effect March 1, 2012. Monthly audits are conducted to monitor staff compliance with the process and identify gaps in knowledge of the process.

**Continuing the Assessment Project**

Re-education and clarification were provided to staff as needed. Scorecards were given to the nurses each month to track their individual improvement in depression screening and assessment. Several barriers had to be overcome, such as staff reluctance, workflow organization, and patient education about the new practice. During the time of implementing the depression screening, the Commission on Cancer (COC) was at the ECC for a recertification site visit. When the team presented the depression screening process, the COC was very complimentary and posted the process on their website as an example of best practice. The ECC recently extended the depression screening process to the radiation oncology department to provide more consistent care across the collaborative teams within the cancer center. During the American College of Radiology accreditation process, the cancer center was again commended for the processes in place for depression screening.

**Conclusions**

In April 2013, the ECC met the 90% compliance goal and currently remains in the upper 80th–90th percentile for the quality performance measure of administering a depression screening tool and assessing the psychosocial status of patients. When the electronic medical record was implemented in the author’s organization, a slight decrease was seen in compliance as staff adjusted the process and transitioned the screening documentation to an electronic medical record. The ECC is currently working to establish a standard set of interventions that can be used universally within the organization. The cancer center has implemented the PHQ-9 flow sheet in the electronic medical record, with interventions built in to populate based on the patient score. The inpatient units are looking at implementing the PHQ-4 (a shorter version of the PHQ-9) into practice as well.

**Implications for Practice**

- Implement standardized, objective psychosocial assessment with the use of screening tools to provide valid measures.
- Initiate designated interventions to address various stages of anxiety and depression.
- Improve overall quality of care and patient outcomes with a patient-centered approach, including psychosocial aspects of care.

Many of the measures tested are applicable to breast cancer in addition to other types of cancer and chronic illnesses. The depression screening project has become a collaborative effort among the entire organization and continues to grow and improve. Participation in the 2012 BCC re-abstraction provided data to show that the author’s practice improved in assessing for distress. Since the pilot in 2010, quality improvements based on evidence, benchmark data, and changes in health care have been brought to the forefront to provide the highest quality of care. Although work still needs to be done to improve patient assessment and documentation of cancer care measures and survivorship care, this pilot has helped to set a basic foundation for practices to start quality-improvement initiatives that will positively affect the care provided to patients.

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References


