■ *CJON* Writing Mentorship Article

The Development of a Nursing Assessment and Symptom Management Clinic

Lynn Graze, MSN, OCN®, Catherine Brady-Copertino, BSN, MS, OCN®, Ashley Varner, MSW, MBA, OSW-C, and Wendy S. Stiver, CCM, BSN, MA

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The Anne Arundel Medical Center (AAMC) DeCesaris Cancer Institute (DCI) began its participation in the ONS Foundation–supported Breast Cancer Care Quality Measures Set pilot study in 2010. The design and measures of the project were intriguing, paving a path for DCI to define quality measures and outcomes that were of value to the AAMC's oncology population and system. As the pilot program was getting underway, measurement instruments were selected for fatigue, distress, and sleep-wake disturbances. These were used as quality measures for care of patients receiving chemotherapy, to be reported to the Oncology Quality Council, AAMC DCI's Executive Quality Council, and the AAMC Board of Directors. Scores for these quality measures, as well as patient satisfaction scores for the Outpatient Infusion Center, have increased markedly since the 2010 pilot test. The increases in scores inspired nursing leadership, in conjunction with AAMC DCI's Medical Oncology Executive Committee, to develop an innovative nursing model, the advanced oncology nurse practitioner-led symptom management clinic, to systematically and efficiently treat the needs of patients with cancer.

Lynn Graze, MSN, OCN®, is the director of Ambulatory Medical Oncology, Catherine Brady-Copertino, BSN, MS, OCN®, is the executive director, and Ashley Varner, MSW, MBA, OSW-C, is an oncology social work counselor, all at Anne Arundel Medical Center's DeCesaris Cancer Institute in Annapolis, MD; and Wendy S. Stiver, CCM, BSN, MA, is a former clinical assessment nurse at Alere Health in South Pasadena, CA. The authors take full responsibility for the content of the article. The authors received editorial support from Kristen Fessele, PhD, RN, AOCN®, in preparation of this article funded by a grant to the ONS Foundation from the Breast Cancer Fund of the National Philanthropic Trust. The authors were participants in the *Clinical Journal of Oncology Nursing* (*CJON*) Writing Mentorship Program. Stiver received honorarium from the Oncology Nursing Society for her role as a mentor in the *CJON* Writing Mentorship Program. The content of this article has been reviewed by independent peer reviewers to ensure that it is balanced, objective, and free from commercial bias. No financial relationships relevant to the content of this article have been disclosed by the independent peer reviewers or editorial staff. Graze can be reached at lgraze@aahs.org, with copy to editor at CJONEditor@ons.org. (Submitted April 2014. Revision submitted May 2014. Accepted for publication May 30, 2014.)

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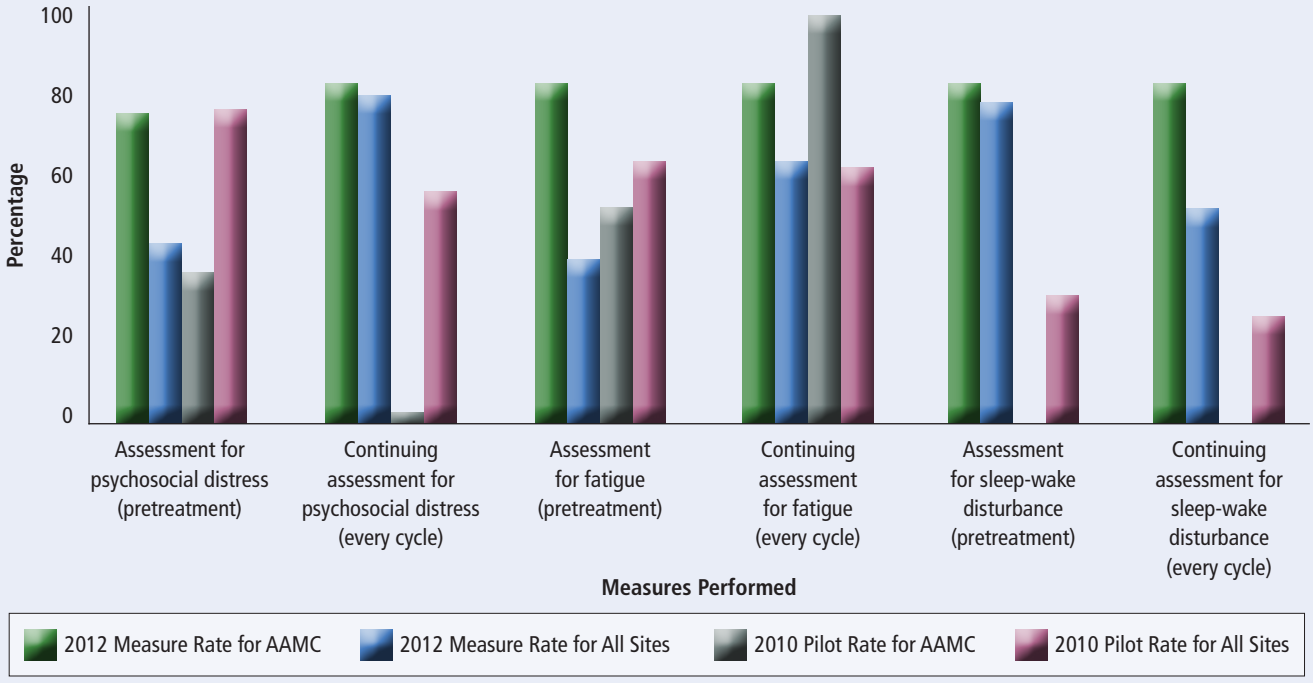
Two top priorities in U.S. health care today are high-quality care and reducing waste (Berwick & Hackbarth, 2012; Prybil, Bardach, & Fardo, 2014). Research has consistently demonstrated that systematic nursing symptom assessments and interventions for patients with cancer result in better patient outcomes and increased quality of life (Eaton & Tipton, 2009; Matsuda, Yamaoka, Tango, Matsuda, & Nishimoto, 2014). Unrelieved symptoms lead to a decline in physical state, a decline in performance status, and increased suffering (Mori, Elsayem, Reddy, Bruera, & Fadul, 2012). The treatment of symptoms can improve a patient's ability to tolerate therapy and increase his or her performance status, which correlates with survival length (Vandyk, Harrison, McCarthey, Ross-White, & Stacey, 2012).

Research also has shown that systematic nursing assessment and targeted interventions reduce patient trips to the emergency department (ED) for symptom management (Mayer, Villaire, & Connell, 2005). Developing effective and efficient systems to address problematic symptoms increases quality of care and appropriate use of healthcare resources. If a patient has to go to the ED for symptom management, the patient has a greater than 50% likelihood of being admitted for hospitalization (Vandyk et al., 2012). Research also has demonstrated that better symptom management benefits patients and caregivers through fewer dose modifications, increased supportive care, increased education, increased clinical trials experience, and increased medication adherence (Coolbrant, 2011).

Barriers to Systematic Nursing Assessment

Despite ongoing research, barriers exist that prevent patients with cancer from receiving optimal assessment and symptom



AAMC—Anne Arundel Medical Center

FIGURE 1. Breast Cancer Care Quality Measures

management. Guidelines, such as the American College of Surgeon's (2012) cancer program standards and the American Society of Clinical Oncology's (ASCO) Quality Oncology Practice Initiative (2014) standards, are not consistently followed by providers for several reasons. Providers may lack the knowledge and/or confidence to use the evidence-based recommendations (ASCO, 2014); the current guidelines may conflict with the training the provider previously received (Tipton, 2011); there may be gaps in evidence and/or conflicting data in the evidence (Tipton, 2011); and staffing, reimbursement for services, and lack of equipment also may contribute to suboptimal care (Tipton, 2011). In addition, studies have demonstrated that patients delay calling providers for fear of bothering their physicians and that they do not report symptoms because the patient assumes the physician knows when symptoms may occur (Berry, 2011; Eaton & Tipton, 2009). Another barrier that contributes to suboptimal care is the lack of reliable and standardized assessment tools (Tipton, 2011).

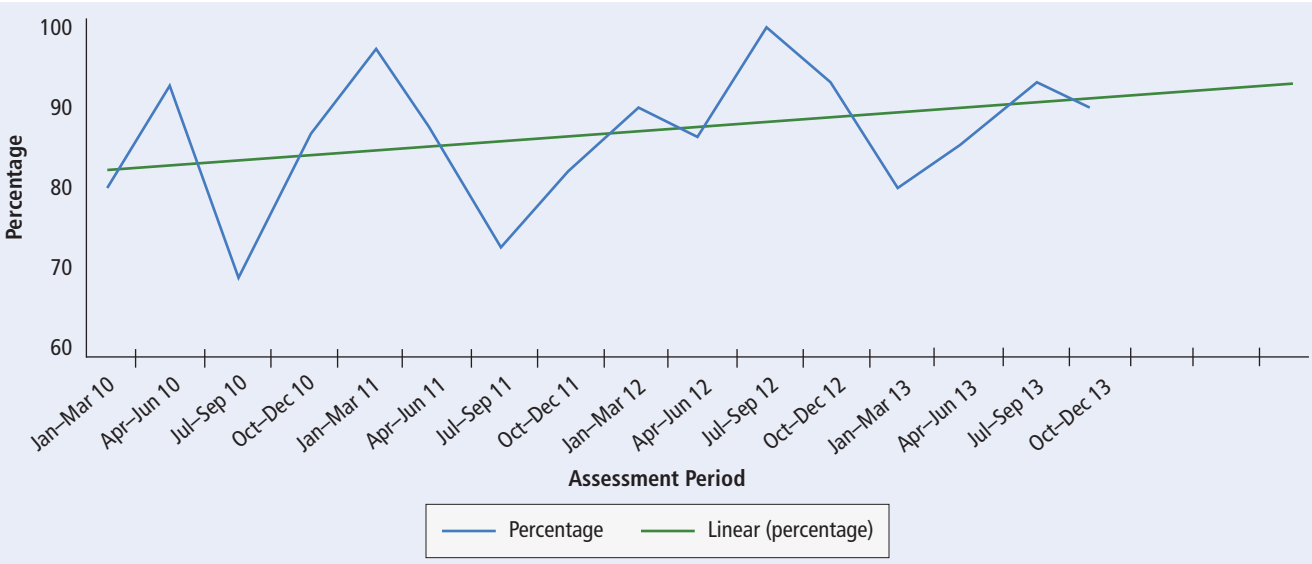


FIGURE 2. Outpatient Infusion Patient Satisfaction

Implications for Practice

- Use evidence-based research to deliver cost-effective care to patients with cancer.
- Provide timely, effective, and efficient needs assessments and symptom management for patients with cancer.
- Report outcomes to showcase what matters most to patients. This can serve to inspire the development of innovative nursing care delivery models.

Addressing the Gaps in Care

In response to these gaps in care, the ONS Foundation–supported Breast Cancer Care (BCC) Quality Measures Set pilot study began in 2010. The Anne Arundel Medical Center (AAMC) DeCesaris Cancer Institute (DCI) participated in the first pilot group establishing quality measures. The goal of the initiative was to develop the process and expertise necessary to fully test tools (quality measures) that could translate into high-quality, evidence-based patient care. The 2010 pilot data from 39 different sites, measuring 14 separate variables, demonstrated poor symptom assessment of patients with cancer. ONS then created an Oncology Quality Collaborative (OQC), inviting the 39 pilot sites to come together and use this evidence to change and improve assessments (Fessele, Yendro, & Mallory, 2014). In 2012, a subgroup of the OQC chose to collect several of the BCC Measures again, and achieved improved quality outcomes for most measures (see Figure 1).

Creating a System for Consistent, Prospective Nursing Assessment

The leadership and nursing staff at DCI were intrigued by the design of the pilot study, coupled with the opportunity to define which outcomes were of greatest value for DCI's specific oncology population. The pilot study clearly indicated that prospective oncology nursing interventions (i.e., regular oncology nursing assessments and screening) had the potential to positively affect patient outcomes. The question became which outcomes were most important to improve patient satisfaction, quality of care, efficiency, and use of healthcare services at AAMC.

After a thorough literature review, qualitative interviews with leadership and the infusion nursing staff, and evaluation of data from DCI's cancer survivorship program, three of the pilot study's BCC Measures were selected. The rate of nursing assessments for fatigue, psychosocial distress, and sleep-wake disturbances were measured with every patient prior to the initiation of chemotherapy and again at each cycle of chemotherapy. The results were reported to the OQC, the AAMC DCI's Executive Quality Council, and to the AAMC Board of Directors. This consistent measurement and reporting provided transparency and created buy-in from organizational leadership and the medical community, which has driven system change.

Scores for the three BCC Measures have increased markedly from the 2010 pilot test. In parallel, patient satisfaction has increased in the outpatient infusion center where the assessments and interventions were administered (see Figure 2).

- Fever greater than 100.4°F
- Chills with or without fever after receiving recent chemotherapy
- New shortness of breath or dyspnea on exertion
- New bleeding (nose, tarry stools, urine)
- Mouth sores, making it difficult to eat or drink
- Uncontrolled nausea and vomiting (not responding to home medications)
- Diarrhea not controlled by home medications (unresponsive to loperamide)
- New abdominal pain with or without constipation
- New swelling in arms or legs
- Redness or tenderness of port site
- Swelling, pain, redness at peripheral IV site
- New rash
- Need for increased pain management or new site of pain
- Dysuria or urinary frequency
- Excessive fatigue
- Excessive thirst
- Dizziness or vertigo
- Weakness of arms or legs
- Neuro-double vision, headache

FIGURE 3. Symptom Management Clinic Symptoms

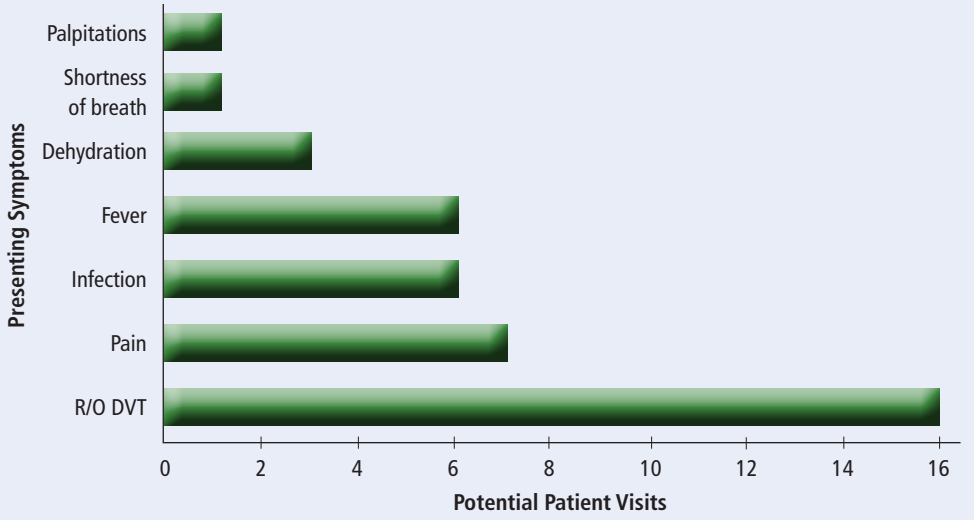
Symptom Management Clinic

The increase in prospective nursing assessments in the infusion area, the resulting recognition of the frequency of uncontrolled symptoms, and the appreciation of the power of early intervention led hospital leadership and nursing staff to ask how intervention could happen earlier. Based on their prospective nursing assessments, outpatient infusion therapy nurses expressed a concern that their outpatients often were unable to access medical care adequately enough to manage acute symptoms related to their disease and/or associated chemotherapy/biotherapy treatment. Although a telephone triage system staffed by a core group of five oncology nurses was in place to address calls about patients' clinical issues and concerns, the volume of triage calls had increased by 28 calls per day from June to December 2011 (from 65 to 93, respectively). Nurses answering the triage calls noted that same-day appointments with the patients' oncologists often could not be accommodated because no appointments were available. Care coordination was managed via the phone as much as possible, or patients were referred to the ED for care.

DCI nursing leadership came together to discuss concerns about symptom management and access to timely care. Based on direct feedback from infusion and triage nurses, it was decided that a symptom management clinic (SMC) would be planned and implemented to increase patient access and reduce ED visits.

Process

In February 2012, best practices for urgent care symptom management for patients with cancer were researched. A summary document was developed, describing current growth and challenges in managing patients needing to be seen urgently for symptom management. Recommendations for the structure and process for the proposed clinic were outlined. In April 2012, the members of the Medical Oncology Executive Committee



R/O DVT—rule out deep vein thrombosis; SMC—symptom management clinic

FIGURE 4. Emergency Department Visits Potentially Prevented by SMC

(MOEC)—which includes physicians representing the medical oncology physician practice, DCI medical and executive leadership, and physician organization executives—reviewed, discussed, and approved the plan for the development of an SMC.

Detailed program planning began immediately after MOEC approval. An advanced practice oncology nurse practitioner developed a list of symptoms appropriate for referral to the SMC (see Figure 3). Nursing leadership met with infusion and triage nurses to discuss the clinic plan in detail, including criteria, triage protocols, hours, the process for scheduling patients, and the projected start date. The objectives for the clinic were reviewed, with the primary objective being to provide better clinical service and immediate same-day access. Finally, a symptom management log was created to track every patient's call.

The SMC is an advanced oncology nurse practitioner–led clinic. The clinic is embedded within the medical oncology practice at AAMC, providing rapid access and coordination of care with the oncologist and the infusion team. The existing oncology nurse triage call system was integrated with the SMC to enhance coordination, communication, and patient education. Evidence has demonstrated that nurses are better prepared to manage symptoms because nurses are more engaged in day-to-day symptom control and have more time to devote to supportive care. Physicians are more focused on disease trajectory, imaging, test results, and treatment decisions (Tipton, 2011).

Outcome

The SMC was fully implemented in June 2012. This was a direct result of staff nurses identifying and communicating the need to improve access to care for patients exhibiting symptoms related to their disease and associated chemotherapy/biotherapy treatment. Improved access to urgent care in the SMC has resulted in fewer ED visits and admissions to the oncology unit for symptom management. At least 40 ED visits were potentially prevented from June 2012 to January 2013 (see Figure 4).

In the seven months before the opening of the SMC (November 2011 to May 2012), oncology unit admissions related to symptoms of pain and weakness averaged 26 per month. For the seven months after the opening of the clinic (June 2012 to January 2013), admissions for symptoms of pain and weakness were reduced to an average of 17 per month (see Figure 5).

Conclusion

Outcome measures can provide vital information that can prompt change and transform health care. Building on the BCC Measures pilot, AAMC DCI nursing leadership was able to not only establish prospective nursing assessment for all patients receiving chemotherapy, but also to expand the triage call center into an advanced practice oncology nurse practitioner–led SMC. As a result, appropriate resources were used; at least 40 ED

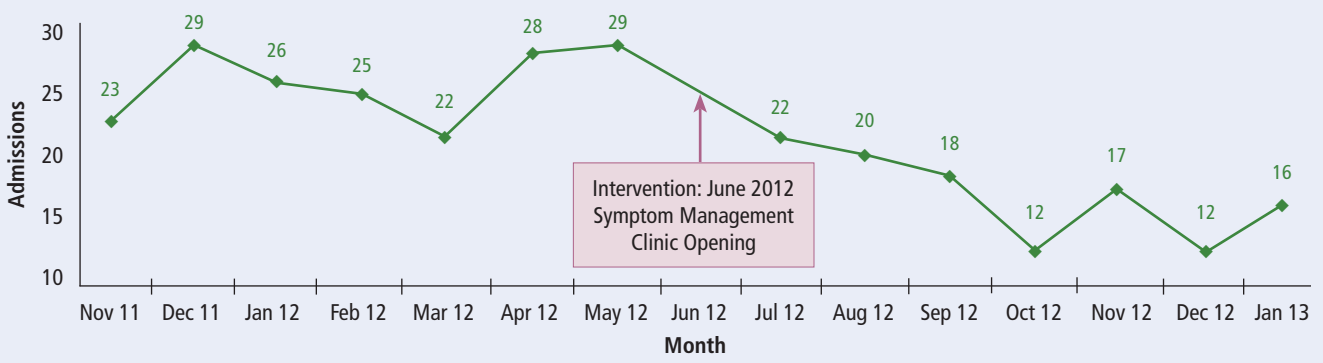


FIGURE 5. Oncology Unit Admissions Related to Symptoms of Pain and Weakness

visits were potentially prevented, and inpatient oncology admissions for pain and/or weakness decreased by 35%. Throughout the development process for the nursing assessment and SMC, it was demonstrated to hospital leadership that oncology nurses make a difference in improving outcomes.

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