Commentary (Moore): Prechemotherapy Assessment of Neutropenic Risk

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Chemotherapy-induced febrile neutropenia (FN) predisposes patients to life-threatening infections and typically requires hospitalization. The goal was to investigate whether a risk assessment tool aligned with national guidelines could help identify patients at risk of FN and reduce FN-related hospitalizations. Beginning in October 2004, oncology nurses applied the new risk assessment tool to all patients initiating chemotherapy or a new regimen. Patients at risk for FN received prophylactic colony-stimulating factor. Charts for 189 patients receiving chemotherapy in fiscal year 2005 (FY05) were compared with charts of 155 patients receiving chemotherapy in FY04, before the tool was implemented. The incidence of FN-related hospitalization declined by 78%, from 9.7% in FY04 to 2.1% in FY05 (P = .003). Total hospital days decreased from 117 to 24. Routine systematic evaluation by oncology nurses improves recognition of patients at risk of FN and substantially reduces FN-related hospitalization.

Every day oncology nurses face the challenge of being symptom managers. When reading the article by Anne M. Doyle, Prechemotherapy Assessment of Neutropenic Risk, my excitement about the work of nurses in the realm of neutropenia was renewed. The quality improvement project that Ms. Doyle's team implemented reminds us that nurses do have the ability to address issues and incorporate evidence into daily practice, therefore having the potential to profoundly impact patient outcomes.

True symptom management must begin before treatment, and a standardized risk assessment launches the continuum of assessment and intervention that should occur throughout treatment for the best chance of optimal patient outcomes, as clearly described and defined in this article. Ms. Doyle describes a process that can be utilized by oncology nurses everywhere. She and her team moved through a process of literature review, defining a tool and implementing that tool with support by all levels of clinicians and providers, which is critical. This team demonstrated that a determined and systematic approach to assessing risk for neutropenia can be accomplished within a clinic and the complication of febrile neutropenia decreased. Patient education was addressed and the practice efficiencies gained are very important to all oncology practices in the current environment.

I look forward to seeing future work by this group, particularly in the area of dose reductions and delays, as well as by oncology nurses who utilize the article to further their own work in neutropenia. When this happens, the patient always wins.

You may be interested in doing similar work in your own practice, but may not know exactly where to start. This is a common challenge for all of us. The work described by Ms. Doyle in her article mentioned several key steps involving evidence, tools, teams, analyses, action, and evaluation. While typically there are several steps involved in quality improvement, it becomes manageable when you engage a team and take a step at a time:

• Build your team of key stakeholders.
• Determine the issue on which you want to focus.
• Seek evidence through literature and national oncology resources.
• Conduct an analysis of the current state of the issue in your practice. Chart review, interview, and observation can all be utilized. Evidence from literature and a true picture of what is occurring in your own practice can be very powerful. This is the foundation of information that is necessary to leverage your team and involve the entire practice in the exercise of improvement.
• Develop a precise quality improvement plan. The plan should clearly state the issue, the goal you wish to achieve, the actions to be taken, the team members involved, the date the actions will be taken, and a determined date of evaluation. If the goal appears lofty, it may take many actions over time to achieve it. Baby steps do add up.
• Always remember to celebrate the victories, no matter how small at first.
Seven evidence-based quality measures for breast and colorectal cancers have been developed by the American Society of Clinical Oncology (ASCO) in collaboration with the National Comprehensive Cancer Network (NCCN). The ASCO/NCCN Quality Measures can be applied to assess the extent to which clinicians are providing quality care to their patients with cancer. The measures and their specifications are available online at [www.asco.org/qualitymeasures](http://www.asco.org/qualitymeasures) and at [www.nccn.org](http://www.nccn.org). The ASCO/NCCN Quality Measures are appropriate for diverse measurement uses, including provider self-assessment, quality improvement programs, and external quality monitoring. If appropriately implemented, the quality measures could serve as tools for future pay-for-reporting programs.

"ASCO and NCCN are taking a leadership role in defining quality for oncology," said Joseph S. Bailes, MD, ASCO's past interim executive vice president and CEO. "The ASCO/NCCN Quality Measures are the next step in providing measures that produce valid assessments of the quality of care cancer physicians provide to their patients."

The ASCO/NCCN Measures address process of care that have been linked to patient outcomes, including survival. ASCO and NCCN experts developed and established measures that apply to large numbers of cancer patients and target areas in which variation in care has been demonstrated.

**Breast and Colorectal Cancer Measures**

ASCO/NCCN breast cancer measures address hormonal therapy for stage I (> 1 cm), stage II and stage III estrogen receptor/progesterone receptor-positive breast cancer; radiation therapy for stage I-II breast cancer patients who receive breast conserving surgery; and adjuvant chemotherapy for stage II/III estrogen receptor/progesterone receptor-negative breast cancer.

The colorectal measures address adjuvant chemotherapy for stage III colon cancer; adjuvant chemotherapy for stage II/III rectal cancer; radiation therapy for stage II/III rectal cancer; and the number of lymph nodes removed and examined for colon and rectal cancer patients who receive curative surgery.

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