The variability of psychosocial care differs among practices, suggesting a potential for improvement.

Initial Evaluation of Quality Indicators for Psychosocial Care of Adults With Cancer


Background: The American Psychosocial Oncology Society has developed the first indicators of the quality of psychosocial care for cancer patients. This report describes the initial evaluation of these indicators.

Methods: Medical records of 388 colorectal cancer patients first seen by a medical oncologist in 2006 at seven practice sites were reviewed by trained abstractors whose accuracy was documented by periodic checks.

Results: Rates of assessment of emotional well-being within 1 month of a patient’s first visit with a medical oncologist ranged from 6% to 84% (mean = 60%; P < .001). Among the 45 patients identified as having a problem with emotional well-being, rates of evidence of action taken (or explanation for no action) ranged from 0% to 100% (mean = 51%; P = .85). A direct comparison showed that pain was assessed more often than emotional well-being in these patients (87% vs 60%, P < .001).

Conclusions: Findings show these indicators can be measured easily and reliably, demonstrate variability across practices that suggests potential for improvement, and yield information that can be used to take actions to improve quality. Additional findings suggest that, to date, efforts to promote routine symptom assessment have been more successful for pain than for emotional well-being.

Introduction

There is a growing consensus that psychosocial care is an essential component of the comprehensive care of individuals with cancer. Interest in psychosocial care can be viewed as part of a broader trend within oncology of evaluating cancer treatment with regard to its effects on quality of life as well as quantity of life. In addition to trying to extend how long people live following a cancer diagnosis, the oncology community increasingly recognizes the value of considering how well people live. Psychosocial care, with its goals of relieving emotional distress and promoting well-being, is central to efforts to improve the quality of patients’ lives.

A recent Institute of Medicine (IOM) report titled Cancer Care for the Whole Patient: Meeting Psychosocial Health Needs summarized the current status of efforts to provide psychosocial care for people with cancer. Among the report’s main conclusions was that, despite evidence of the effectiveness of psychosocial services, many patients who could benefit from this...
type of care do not receive the help they need. The reasons for this failure are many and include the tendency of oncology care providers to underestimate distress in patients and a failure to link patients to appropriate services when needs are identified. To address these problems, the report recommends that provision of appropriate psychosocial services should be adopted as a standard of quality cancer care. The report also identifies a model for the effective delivery of psychosocial services that specifies the implementation of processes for (1) facilitating effective communication between patients and care providers, (2) identifying patients’ psychosocial needs, (3) designing and implementing a plan that links patients with needed psychosocial services, coordinates their biomedical and psychosocial care, and engages and supports them, and (4) systematically following, reevaluating, and adjusting the plan.

These recommendations are similar to those embodied in the Clinical Practice Guidelines for the Management of Distress first issued by the National Comprehensive Cancer Network (NCCN) in 1999 and updated annually. The NCCN guidelines were developed based on the recognized need for better management of distress and with the intent of promoting best practices for the psychosocial care of cancer patients. Although too detailed to be fully summarized here, the NCCN guidelines are presented in the form of clinical pathways that describe recommended procedures for evaluating patients and recommended uses of psychological, psychiatric, social work, and pastoral care services to treat a wide range of problems. Similar to the IOM report, the NCCN guidelines recommend that all patients be routinely screened to identify the level and source of their distress. The specific services and resources subsequently recommended are designed to be appropriate to the nature and severity of the problems identified through screening and further evaluation.

Relatively little is known about the extent to which recommended NCCN practices for management of distress are being followed. One of the few pieces of evidence is a 2005 survey of 15 NCCN member institutions completed by a representative from each institution. Although psychosocial services were available at all 15 institutions, only 8 (53%) were conducting routine screening for distress. Among these 8 institutions, 3 (37.5%) reported screening all patients routinely and 5 (62.5%) reported screening only certain patients routinely (eg, transplant candidates). Of the 8 institutions conducting any routine screening, 7 (87.5%) reported that patients identified as distressed were routinely referred to a mental health professional. These findings suggest that, even among NCCN member institutions, there has been limited implementation of the recommendation that all patients be routinely screened for distress. However, processes do appear to be in place, if screening is performed, to link distressed patients with needed services. It should be noted that these findings are based on responses from institutional representatives. The extent to which these responses would be confirmed by information contained in patients’ medical records is unknown. A recent survey of professionals in the United Kingdom working primarily in cancer care yielded similar results. Of 226 individuals surveyed, 23.5% reported always using some form of assessment for distress, depression, or anxiety.

Taken together, the IOM report and the survey of NCCN member institutions suggest the need to foster greater implementation of recommendations for the psychosocial care of cancer patients. One way to foster greater implementation would be to measure and provide feedback to providers on the quality of the psychosocial care their cancer patients receive. Research has shown that medical oncology practices provided with feedback demonstrating their poor performance on quality indicators (eg, recommending trastuzumab for women with HER-2/neu-positive breast cancer) demonstrated improvements over time on those same indicators.

Could psychosocial care for cancer patients likewise be improved by measuring and reporting to oncology practices their performance on indicators of the quality of psychosocial care? To evaluate this possibility first requires that measurable indicators of the quality of psychosocial care be developed. Toward this end, the American Psychosocial Oncology Society (APOS) formed a workgroup charged with developing and testing quality indicators. The goal was to produce indicators that (1) can be measured easily and reliably by review of medical records, (2) demonstrate variability in performance across sites that would suggest the potential for improvement, and (3) yield information that could be used to make decisions or take actions to improve quality. Following a review of relevant literature, including the IOM report and the NCCN guidelines, indicators were developed to measure two components considered necessary (but not sufficient) for providing quality psychosocial care: a process for identifying distressed patients and a process for linking distressed patients with services.

The current report is, to the best of our knowledge, the first to describe the performance of medical oncology practices on these two quality indicators. The indicators were evaluated using the resources of the Florida Initiative for Quality Cancer Care (FIQCC), which allowed for data to be collected based on medical record reviews at multiple oncology practices located in the state of Florida. As described elsewhere, the initial phase of the FIQCC focuses on patients with colorectal cancer, who are also the focus of this report. The specific aims of this study were to determine if the indicators (1) could be measured easily and reliably from medical records, (2) demonstrate variability in performance across practice sites that would suggest potential for improvement, and (3) provide information that could be used to make decisions or take actions to improve quality.

Methods

Study Sites

At the time the current data were collected (November 2007 to May 2008), the FIQCC consisted of medical...
the medical record that the patient’s current emotional well-being was assessed within 1 month of the patient’s first visit with a medical oncologist. The second quality indicator stipulates that, if a problem with emotional well-being was identified, there is evidence in the patient’s medical record that action was taken to address the problem or an explanation provided for why no action was taken. Measurement of these indicators was operationalized by formulating three questions that could be answered yes or no based on the content of an individual patient’s medical record (Table). In addition to these two indicators, the current report also includes information about an indicator of the quality of pain management. Specifically, medical records were evaluated (yes/no) for whether there was evidence that a patient’s pain status was assessed within 1 month of the first visit with a medical oncologist.

### Medical Record Selection

Medical chart reviews were conducted of all patients diagnosed with colon or rectal cancer who were seen for a new medical oncology consultation at the participating institutions between January 1, 2006, and December 31, 2006. Patients under the age of 18 years, diagnosed with anal or rectosigmoid carcinoma, or diagnosed with synchronous colon and rectal malignancies were excluded. Patients with nonadenocarcinoma colon or rectal malignancies (ie, sarcomas, melanomas, lymphomas, carcinoid tumors, neuroendocrine carcinoma, and gastrointestinal stromal tumors) were also excluded.

### Table. — Quality Indicators of Psychosocial Care and Related Rating Criteria

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes/No</th>
<th>Rating Criteria</th>
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<tbody>
<tr>
<td>1. Is there evidence that current emotional well-being was assessed within 1 month of the first visit with a medical oncologist?</td>
<td>If Yes, mark Yes and answer question 2 If No, mark No</td>
<td>Documentation of current emotional well-being is sufficient if the medical chart includes: • copy of distress, depression, or anxiety screening measure or • copy of form including patient self-report of distress, depression, or anxiety or • any note with statement referring to current “coping,” “adjustment,” “distress,” “emotional,” “depression,” or “anxiety” status of patient Reference to past history is not sufficient. There must be evidence that current emotional well-being was assessed.</td>
</tr>
<tr>
<td>2. Is there evidence that a problem with emotional well-being was identified within 1 month of the first visit with a medical oncologist?</td>
<td>If Yes, mark Yes and answer question 3 If No, mark No</td>
<td>Documentation of a problem is sufficient if the chart includes a statement indicating that the patient is “distressed,” “depressed,” “anxious,” or having problems with “coping,” “adjustment,” or “emotional well-being.” All patients for whom action was taken to address a problem with emotional well-being (question 3) are considered to have had a problem with emotional well-being. This item is not considered a quality indicator. It is used to determine if question 3 should be answered.</td>
</tr>
<tr>
<td>3. Is there evidence that action was taken to address the problem or an explanation provided of why no action was taken within 1 month of the first visit with a medical oncologist?</td>
<td>If Yes, mark Yes If No, mark No</td>
<td>Evidence that action was taken or explanation of lack of action is sufficient if the medical chart includes one of the following: • chart note describing care provided by primary oncology team for problem with “coping,” “adjustment,” “depression,” “anxiety,” or “distress” or • chart note describing referral to another professional for care of problem with “coping,” “adjustment,” “depression,” “anxiety,” or “distress” or • chart note describing referral to mental health professional (ie, psychiatrist, psychologist, social worker, pastoral care professional, mental health counselor, or psychotherapist) or • chart note describing care provided by another professional for problem with “coping,” “adjustment,” “depression,” “anxiety,” or “distress” or • chart note describing why no action was taken to address problem with “coping,” “adjustment,” “depression,” “anxiety,” or “distress”</td>
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Medical Record Review

A training and reference manual for data identification, abstraction, and entry was developed in consultation with participating clinicians and data abstractors to ensure consistency across study sites. An experienced medical record abstractor from the Moffitt Cancer Center was designated as the chief abstractor and had responsibility for training and monitoring all the other data abstractors. Training and monitoring was conducted in three phases.

The initial phase consisted of intensive on-site training. The medical records of approximately 16 to 20 cases of colon and rectal cancer first seen by a medical oncologist in 2005 were retrieved at each site for training purposes. The chief abstractor first demonstrated the rating of each quality indicator with approximately four to five records, answering any questions the site abstractor might have. The site abstractor and the chief abstractor then independently rated four to five charts, compared their ratings, and discussed any discrepancies. This process continued until the site abstractor and the chief abstractor agreed on an average of 70% or greater of the total number of their ratings of quality indicators. The average was based on ratings from the last five consecutive charts abstracted independently by both individuals. During the initial phase, site abstractors were also trained in data entry using a secured Web-based application designed for the collection and transmission of data to the Moffitt Cancer Center. This application had the capability to skip questions that did not apply, thus minimizing possible data entry errors.

The second phase occurred after each site had completed abstraction of approximately one-third of their 2006 cases. The chief abstractor independently rated approximately five of the cases that had been rated and submitted by each site abstractor. Discrepancies between the chief abstractor and the site abstractor were discussed and resolved, and relevant portions of the training and reference manual were reviewed when necessary.

The third phase involved application of the same procedures when approximately two-thirds of the 2006 cases had been abstracted at a site. Throughout the course of data collection, site abstractors were strongly encouraged to contact the chief abstractor if they had any questions about how to complete a quality rating.

Statistical Analysis

Descriptive statistics were used to summarize demographic and clinical characteristics of patients whose records were reviewed. Overall and site-specific performance rates were calculated for each indicator. Variation in site-specific performance for the two emotional well-being indicators and the pain indicator were evaluated by conducting chi-square or Fisher’s exact tests as appropriate. A comparison of overall performance across sites on the pain and emotional well-being assessment indicators (ie, matched pairs) was conducted by computing the exact P value for McNemar’s test. All analyses were performed with a P < .05 significance level (two-tailed). An a priori statistical power evaluation was not conducted due to the exploratory nature of the project. With the obtained sample size (N = 388), power is estimated at .85 to detect a small to medium size effect (w = .20)\(^2\) for variability across sites on a quality indicator.

Results

Medical records of 388 patients were abstracted. The number of cases per practice site ranged from 34 to 97 (mean = 62, SD = 22). Fifty-three percent of patients (n = 207) were male and 47% (n = 181) were female. Their mean age was 66 years (SD = 12; range = 27 to 92). Seventy-five percent of patients (n = 290) had been diagnosed with colon cancer and 25% (n = 98) with rectal cancer. Of the 356 patients for whom staging information was available, 68% had nonmetastatic disease (n = 242) and 32% had metastatic disease (n = 114). Information about overall and site-specific performance on the emotional well-being and pain quality indicators appears in Figs 1–4. The rates for each site (lettered A–G) are presented in masked form to preserve anonymity per prior agreement with participating institutions.

The percentage of patients for whom assessment of emotional well-being was documented within 1 month of their initial consultation with a medical oncologist ranged from 6% to 84% (mean = 60, SD = 23; Fig 1). The extent of variability evident across sites on this indicator was statistically significant (P < .001).

A problem in emotional well-being was documented in the medical records of 45 patients. This figure represents 12% of the 388 records reviewed and 19% of the 234 records in which there was evidence that emotional well-being was assessed. Among these 45 patients, the percentage for whom there was evidence that action was taken to address a problem with emotional well-being (or an explanation provided for why no action was taken) ranged from 0% to 100% (mean = 51, SD = 27; Fig 2). However, the extent of variability evident across sites on this indicator was not statistically significant (P = .85).

Performance on the two emotional well-being indicators was combined for each site to calculate a “defect-free” performance rate. This rate represents the percentage of patients per site for whom assessment of emotional well-being was documented and, for patients identified as distressed, there was evidence that action was taken. Performance across sites ranged from 3% to 78% (mean = 54, SD = 21; Fig 3). The extent of variability evident across sites on this composite indicator was statistically significant (P < .001).

The percentage of patients for whom assessment of pain was documented within 1 month of their initial consultation with a medical oncologist ranged from 72% to 98% (mean = 87, SD = 9; Fig 4). The extent of variability evident across sites on this indicator was statistically significant (P < .001).

Across all study sites, the percentage of records which showed that pain was assessed (87%) was higher than the percentage of records which showed that emo-
tional well-being was assessed (60%). This difference in percentages was statistically significant \((P < .001)\).

Discussion
This project utilized the resources of the FIQCC to conduct the first evaluation of two indicators of the quality of psychosocial care provided to patients with cancer. Successful testing of the indicators was expected to yield evidence that they could be measured easily and reliably from medical records, demonstrate variability in performance that would suggest potential for improvement, and provide information that could be used to make decisions or take actions to improve quality. Results from this initial evaluation suggest that all three goals were met.

A number of procedures were put in place in the current project to ensure that the two quality indicators of psychosocial care could be easily and reliably measured from patients' medical records. First, a manual was developed that included a detailed description of each indicator and identified the order in which the indicators were to be measured. Second, every site abstractor underwent extensive training with an experienced chief abstractor who demonstrated the correct procedures for completing the ratings, provided feedback on the initial ratings performed by each site abstractor, and was available to answer any questions that might arise. Third, the accuracy of each site abstractor was monitored on a periodic basis throughout the course of data collection. Anecdotal information provided by the chief abstractor who conducted both the training and monitoring suggests that site abstractors experienced few problems locating the information necessary to measure the two quality indicators. In addition, few problems with accuracy were identified during either the initial training or the ongoing monitoring. In the future, it will be important to assess accuracy more directly by having two abstractors review the same set of cases independently and then calculate their rates of agreement. Also, future work needs to determine whether the extensive training and monitoring used in this project are necessary to yield reliable information or whether these procedures can be streamlined.

Results showed wide variability in performance on the two indicators of the quality of psychosocial care. Performance rates ranged from 6% to 84% for assessing emotional well-being \((P < .001)\) and from 0% to 100% \((P < .85)\) for taking action to address an identified problem. The lack of statistical significance for the latter finding is likely attributable to the small number of cases \((n = 45)\) eligible for this analysis. Performance on a quality indicator below 85% has been used previously...
as a threshold for identifying opportunities to improve the quality of cancer care. All seven sites were below 85% for assessing emotional well-being, and six of seven sites were below 85% for taking action to address an identified problem in emotional well-being. Among those sites performing below 85% on an indicator, rates varied widely. With regard to assessing emotional well-being, they ranged from 6% to 84%. Close inspection of these findings suggest that three sites (those with performance rates of 70% or greater) had some procedures in place, although less than optimal, to systematically assess problems in emotional well-being. In the four remaining sites, where performance rates ranged from 6% to 52%, the data suggest the absence of procedures to systematically address problems in emotional well-being. With regard to addressing identified emotional problems, performance rates below 85% ranged from 0% to 62%. Close inspection of these findings suggests the one site with a 0% performance rate had no procedures in place to address problems in emotional well-being. Among the five remaining sites, where performance rates ranged from 35% to 63%, results suggest that procedures were in place for addressing emotional problems but were not being routinely implemented.

These findings contrast sharply with those for performance on the pain indicator. Although the degree of variability across sites was statistically significant for this indicator, the range of scores (72% to 98%) was narrower than it was for the assessment of emotional well-being indicator (6% to 84%). Close inspection of the findings shows that three of the seven sites fell below the 85% threshold on the pain indicator, with rates ranging from 72% to 81%. In addition to the range of scores being narrower for assessment of pain, the average performance rate for assessment of pain (87%) was significantly higher than the corresponding rate for assessment of emotional well-being (60%). These findings suggest that, to date, efforts to promote routine symptom assessment have been more successful for pain than for emotional well-being. Consistency within the sites for assessment of pain and emotional well-being was variable; at some sites (eg, sites A, D, and G), performance rates on the pain and emotional well-being indicators were within 15 percentage points of each other. Among the remaining sites, however, the difference between performance on the pain and emotional well-being indicators ranged from 28 to 85 percentage points.

Findings from this project provide considerable information that could be used to make decisions about the need to improve the quality of psychosocial care. Most importantly, the findings identified specific practices where the processes currently in place for assessing and addressing problems in emotional well-being were less than optimal. To convey this information, a report was provided to each participating oncology practice that summarized performance on these and other quality indicators using the same format shown in Figs 1–4. At the time the report was made available, each practice was told which letter corresponded to its practice. Thus, each practice was readily able to determine how its performance compared to every other practice individually and to the average of all seven practices. In addition, a meeting or conference call was conducted with a designated representative from each practice in which the leadership of the FIQCC reviewed the findings in detail and pointed out specific areas in which performance on an indicator suggested a need for improvement.

The feedback provided to the practices has the potential to yield improvements in the quality of psychosocial care they provide to their patients. Evidence in support of this statement includes findings from the Quality Oncology Practice Initiative (QOPI), a voluntary medical oncology practice-based project sponsored by the American Society of Clinical Oncology. Among 71 practices that participated in two rounds of chart abstraction in March and September 2006, mean overall performance on measures of the quality of cancer care was found to improve significantly over time. As might be expected, improvement was most marked among practices originally performing in the bottom quartile. These improvements occurred in the absence of any systematic intervention other than providing the practices with feedback about their performance.

Although provision of feedback alone may yield improvements in the quality of psychosocial care, a more active approach seems more likely to achieve the desired results. One coordinated approach would be for each practice to examine its processes for assessing emotional well-being and compare and contrast them with its processes for assessing pain, given the generally higher rates of performance for the latter. For example, site B achieved a 91% performance rate on the pain indicator but a 6% performance rate on the emotional well-being indicator. An in-depth review might reveal processes in place at this site for assessing pain that could potentially be adapted or extended to ensure that emotional well-being was also assessed. Beyond this, it may be possible to encourage collaboration among the practices in which information could be shared on processes used to assess and address problems in emotional well-being. For example, sites A and G (with performance rates of 83% and 84% for assessing emotional well-being) could share information about processes they have in place that would be helpful to other sites seeking to improve their performance on this indicator.

The approach outlined in the previous paragraph focuses on promoting the dissemination and implementation of the best processes identified among the few oncology practices that were surveyed. It is important to note, however, that the extent to which these existing processes can be considered “best” from an evidence-based standpoint is unknown. For example, the methods used to assess distress may have ranged from informal questioning conducted as part of a clinical examination to administration of a standardized screening measure validated in oncology settings, such as the DistressThermometer. The specific method used is important.
because research conducted in oncology settings has shown that informal methods typically result in under-recognition of psychological distress when compared with use of standardized screening measures.¹

These considerations suggest that efforts to improve psychosocial care should be informed by both experience and evidence. One way to ensure that evidence informs these efforts is by comparing the processes in use to recommended clinical practice guidelines. In the case of psychosocial care, comparisons can be made with the Clinical Practice Guidelines for Distress Management developed by the NCCN.⁷ These guidelines represent the consensus of experts in psychosocial oncology informed by a review of available research evidence. The guidelines are presented primarily in the form of clinical pathways that describe recommended procedures for screening and evaluating patients and recommended uses of psychological, psychiatric, social work, and pastoral care services to treat a wide range of problems. In those practices where current processes are consistent with these guidelines, no quality improvement actions may be necessary. In other practices, an in-depth review will show the need to institute new processes or modify existing processes to be more consistent with the guidelines. These practices may then wish to examine their experience (if applicable) in successfully implementing other improvements in supportive care (eg, pain assessment) or the experience of other practices that are providing psychosocial care in a manner more consistent with the guidelines. The information obtained could then be used to plan and implement a quality improvement project targeting psychosocial care. Stimulated by results reported in this article, institutions participating in the FIQCC are currently discussing a coordinated quality improvement project developed along these lines.

Several limitations of the current study should be noted. First, no external “gold standard” measure of emotional well-being was routinely administered to patients whose medical records were reviewed. Therefore, the accuracy of the assessment methods used at the practice sites to identify patients as having problems with emotional well-being is unknown. Second, medical records were not examined to evaluate the outcomes of actions taken to address problems with emotional well-being. Consequently, the adequacy of these actions in resolving problems is unknown. Third, the quality indicators focus on only the 1-month period after a patient’s initial visit with a medical oncologist. As a result, they do not address the recommendation that patients’ emotional well-being be assessed at appropriate intervals throughout the course of treatment.⁷

Conclusions

Despite the limitations noted above, evidence that the indicators can be measured easily and reliably, can demonstrate variability across practice sites, and can guide quality improvement efforts supports their continued evaluation. Clinicians and researchers are encouraged to use these indicators and to report additional information about their utility in measuring the quality of psychosocial care and guiding quality improvement efforts.

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References