

## The NCCN Guideline for Distress Management: A Case for Making Distress the Sixth Vital Sign

Psychosocial care of patients has traditionally been seen as separate from routine medical care and has been criticized as being “soft” and lacking evidence. This traditional perspective continues in many settings, despite the fact that patients and families, when asked, state that emotional care is highly valued. The question of how to integrate psychosocial care into routine cancer care has also been an issue, partly because of the stigma associated with cancer.

In 1997, the National Comprehensive Cancer Network (NCCN) established a multidisciplinary panel to examine this problem.<sup>1</sup> Because patient and physician attitudes toward pain can pose similar barriers to care as can distress, the panel used as a model the rating system for assessing pain that resulted in successful improvement of pain management in the United States. The rating system’s success seemed partly based on routinely using a single question to assess a patient’s pain: “How is your pain on a scale of 0 to 10?” The system uses a score of 5 or higher as the indication to reassess pain medications or refer the patient for more expert management. This system is widely used, and patient self-report of subjective symptoms is now accepted as appropriate and reliable. Pain has become the fifth vital sign, after pulse, respiration, blood pressure, and temperature, ensuring that it is evaluated as part of routine care.

Drawing on this experience, the NCCN panel recommended a simple question to ask patients about psychosocial concerns. They found that *distress* was the best umbrella word to represent the range of emotional concerns patients with cancer experience and that it did not carry the stigma of other words sometimes used for emotional symptoms. Several studies have now validated the approach of asking, “How is your distress on a scale of 0 to 10?” and using a score of 4 or above as the trigger for further questions and possible referral to a psychosocial service.<sup>2,3</sup>

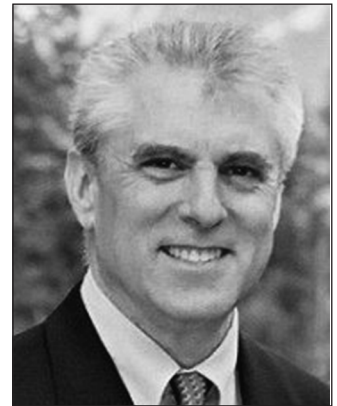
In 2004, the Canadian Federal Government’s public health agency, Health Canada–Canadian Strategy for Cancer Control, approved “Emotional Distress as the 6th Vital Sign.”<sup>4</sup> We propose that this practice should also be considered in the United States to ensure that psychosocial distress is routinely assessed as part of cancer care and managed according to the NCCN distress management guideline. This commentary outlines the potential benefits that can accrue for patients, families, and the health care system.

Over 2 years beginning in 1997, the NCCN’s multidisciplinary panel developed the first set of standards and clinical practice guidelines for psychosocial care in cancer.<sup>1</sup> Because the panel included representatives from all major disciplines involved in clinical care (oncology, nursing, psychiatry, psychology, chaplaincy, social work, and patient advocacy), it was both highly effective and practical in its approach. The panel focused on the ambulatory setting, where most cancer care is given today. Based on these NCCN guidelines, a brief handbook was published in 2006 to guide oncology clinicians in managing psychiatric and psychosocial symptoms.<sup>5</sup>



**Jimmie C. Holland, MD**

Jimmie C. Holland, MD, is the Wayne Chapman Chair in Psychiatric Oncology and Attending Psychiatrist in the Department of Psychiatry and Behavioral Sciences, Memorial Sloan-Kettering Cancer Center, New York, NY.



**Barry D. Bultz, PhD**

Barry D. Bultz, PhD, is the Director of the Department of Psychosocial Resources, Tom Baker Cancer Centre/Alberta Cancer Boards, and Chief and Adjunct Professor, Division of Psychosocial Oncology in the Department of Oncology, University of Calgary, Alberta, Canada.

## The NCCN Approach

The NCCN panel chose the word *distress* to describe the psychological, social, and spiritual (nonphysical) aspects of care because it does not carry stigmatizing connotations and because patients are comfortable with its use. Although people with cancer normally experience some level of distress, it can reach intolerable levels. Thus, *distress* can be considered to range from normal fears, worry, and sadness to disabling problems such as clinical depression, generalized anxiety, panic, isolation, or a spiritual or existential crisis.

The NCCN panel recognized that emotional distress should be part of routine care. The guideline provides an algorithm (see “Screening Tools for Measuring Distress” on page 72) to quickly identify patients with significant distress. Similar to the 0 to 10 scale for assessing pain, a visual analogue screening approach can be used to help patients rate their distress, becoming the sixth vital sign.<sup>6-8</sup> The 0 to 10 scale can be visually displayed as the Distress Thermometer (see page 72), and patients can rate their distress in the waiting room. The patients can also be asked, “How is your distress on a scale of 0 to 10?” A score of 4 or higher (a first-level inquiry) is a trigger for the oncologist or nurses to ask additional questions (a second-level inquiry) to determine the cause of distress and refer the patient to the proper psychosocial or supportive care service. Physicians and nurses can learn to use this rapid screening method routinely, ensuring that patients are asked about distress at each visit. The American Psychosocial Oncology Society, which endorses these guidelines, offers 4 free online lectures for nurses on using the distress thermometer ([www.apos-society.org](http://www.apos-society.org)). The Distress Thermometer is accompanied by a Problem List (see page 72), in which patients are asked to note the nature and source of their distress (physical, social, psychological, or spiritual). In this way, the appropriate referral discipline (e.g., mental health, social work, pastoral counseling) can be identified easily.

Several studies were done to establish the reliability and validity of the Distress Thermometer as a screening instrument for distress (Table 1).<sup>2,3,9-12</sup> It is most often validated against the Hospital Anxiety and Depression Scale. The specificity and sensitivity found in the largest multicenter validation study suggest that a score of 4 or higher indicates the need for further evaluation,<sup>2</sup> although early data suggested a cut-off score of 5 or higher. Patients are comfortable using the Distress

**Table 1 Distress Thermometer Validation Studies**

Author	No. of Patients	Comparison Measure	Cut-off Score
Roth et al. <sup>9</sup> (1998)	N = 121 prostate carcinoma with advanced disease	HADS	≥5
Jacobsen et al. <sup>2</sup> multicenter (2005)	N = 380 outpatient	HADS, BSI-18	≥4
Hoffman et al. <sup>12</sup> (2004)	N = 68 outpatient	BSI & BSI-18	≥4-6
Ransom et al. <sup>3</sup> (2006)	N = 491 pretransplant	CES-D, STAI-5	≥4

Thermometer and Problem List, and physicians see them as useful checklists to prompt and guide questions about physical and psychological symptoms.<sup>11</sup>

In 2003, the NCCN Distress Management Panel published more fully developed standards for psychosocial care and distress management, which established for the first time a minimal set of quality measures for managing distress:<sup>13</sup>

- Distress should be recognized, monitored, documented, and treated promptly at all stages of disease.
- All patients should be screened for distress during the initial visit, at appropriate intervals, and as clinically indicated, especially with changes in disease status such as remission, recurrence, disease progression.
- Screening should identify the level and nature of the distress.
- Distress should be assessed and managed according to clinical practice guidelines.

## How Common is Distress in Patients with Cancer?

Distress clearly occurs at a significant level in at least one third of cancer patients,<sup>14-16</sup> with frequency and severity increasing with advanced stages of illness.<sup>17,18</sup> A large study using the Brief Symptom Inventory to screen for distress in almost 5000 cancer patients at Johns Hopkins found that 35% had significant levels of distress.<sup>15</sup> The rate for patients with lung cancer was greater, at 45%. Similarly, in almost 3000 patients at the Tom Baker Cancer Centre in Alberta, Canada, high levels

of fatigue were found in 49% of all patients, pain in 26%, anxiety in 24%, and depression in 24%, along with significant financial hardship.<sup>16</sup> In a Jordanian sample of hospitalized cancer patients, the prevalence of distress was 70%.<sup>17</sup> Similar overall rates are reported in other parts of the Middle East,<sup>20–22</sup> several European countries,<sup>11, 23, 24</sup> South America,<sup>25</sup> and Asia.<sup>26–29</sup>

## Funding for Psychosocial Services

Funding for psychosocial services remains limited. Budget cuts in the United States usually involve social work and mental health first, because these are viewed as the most expendable. In Canada, where health care is publicly funded and delivered, a 1999 survey of provincial cancer agencies found that less than 3% of the operating dollars of cancer centers were appropriated for psychosocial care, compared with 5% for cleaning services.<sup>30</sup>

In the United States, most cancer care has moved from the hospital to outpatient offices and clinics, but hospital psychosocial services did not move. Furthermore, new psychosocial counseling positions have not been added to meet the high volume of patients treated in the outpatient setting. This situation is largely related to poor reimbursement from government and private insurers for outpatient mental health and social services. Office practices often cannot generate the funds to support psychosocial care without grants or philanthropy. In a resource-rich country like the United States, this is an unacceptable policy. Reimbursing 80% of a patient's medical visit by Medicare and only 50% for a psychiatric or mental health visit is a major discrepancy that must be addressed.

Two events suggest progress. In June 2004, the U.S. President's Cancer Panel said "The Federal government should implement comprehensive health care reform, whose provisions should include coverage for psychosocial services, both during and after treatment, and reimbursement for a range of follow-up care, including that provided by nonphysicians."<sup>31</sup> Furthermore, in the 2005 Appropriations Bill, \$1 million was allocated to undertake a major study by the Institute of Medicine (IOM), National Academy of Sciences, to examine the barriers to psychosocial services of patients with cancer and chronic illnesses.<sup>32</sup> The IOM committee began deliberating in July 2006 and should have forceful recommendations for policy

changes by 2007, which should include a study of reimbursement issues.

Many insurance companies in the United States and health care administrators in Canada say the system cannot afford to pay for this "soft side" of cancer care. We suggest that this is not the case. The United States cannot afford to ignore the problem because the financial and human burdens become greater when these aspects of care are neglected. Patients who are significantly distressed require more time, contact, and emergency attention, and are often the most frustrating to the oncology team. Early diagnosis and treatment of emotional distress can reduce both patient symptoms and the strain on the oncology team.

## Economics of Psychosocial Care

Although clinical studies have shown that patients benefit from psychosocial care, fewer than 5% of distressed patients in busy clinics are diagnosed with this condition and receive any psychosocial treatment.<sup>33,34</sup> Studies have also shown that timely psychosocial care can be delivered without increasing overall cost.<sup>35,36</sup> A randomized trial in Canada<sup>37</sup> showed a 22% decrease in billings to the medical system as a result of psychosocial intervention in women with breast cancer, and a meta-analysis of 90 studies<sup>38</sup> showed that medical costs were offset when psychosocial care in medically ill patients improved. Because the World Health Organization estimates that the incidence of cancer in developed countries will double in the next 15 years and as the focus on chronic diseases, particularly cancer, increases and care becomes more patient-centered, the economics become more critical<sup>39</sup> and including distress management in routine care will become even more important.

Dr. David Beatty, Executive Director of the National Cancer Institute of Canada in 1993, stated that the most significant advance in cancer treatment in the past decade has occurred in psychosocial care.<sup>40</sup> However, emotional care of the cancer patient still has received only minor recognition within the formal cancer care system. Clearly, this policy must change.

## Summary

Recognizing that the "people part" of cancer care is a vital component of a compassionate high-quality cancer system makes ethical, emotional, and economic sense. A simple way to screen for distress is to use the

single-item question recommended by the NCCN; experience with pain management proves that this is a major step in the right direction. We propose that emotional distress should be declared the sixth vital sign in the United States, as in Canada, to ensure that distress management, like pain management, becomes a routine part of cancer care.

## References

1. NCCN practice guidelines for the management of psychosocial distress. National Comprehensive Cancer Network. *Oncology (Williston Park)* 1999;13:113–147.
2. Jacobsen PB, Donovan KA, Trask PC, et al. Screening for psychologic distress in ambulatory cancer patients: a multicenter evaluation of the Distress Thermometer. *Cancer* 2005;103:1494–1502.
3. Ransom S, Jacobsen PB, Booth-Jones M. Validation of the Distress Thermometer with bone marrow transplant patients. *Psychooncology* 2006;15:604–612.
4. Rebalance Focus Action Group. A position paper: screening key indicators in cancer patients: pain as a fifth vital sign and emotional distress as a sixth vital sign. *Canadian Strategy for Cancer Control Bulletin* 2005;7(Suppl):4.
5. Holland JC, Greenberg DB, Hughes MK, eds. *Quick Reference for Oncology Clinicians: the Psychiatric and Psychological Dimensions of Cancer Symptom Management*. Charlottesville, VA: IPOS Press, 2006.
6. Bultz BD, Carlson LE. Emotional distress: the sixth vital sign in cancer care. *J Clin Oncol* 2005;23:6440–6441.
7. Bultz BD, Carlson LE. Emotional distress: the sixth vital sign—future directions in cancer care. *Psychooncology* 2006;15:93–95.
8. Bultz BD, Holland JC. Emotional distress in patients with cancer: the sixth vital sign. *Commun Oncol* 2006;3:311–314.
9. Roth AJ, Kornblith AB, Batel-Copel L, et al. Rapid screening for psychologic distress in men with prostate carcinoma: a pilot study. *Cancer* 1998;82:1904–1908.
10. Roth AJ, Rosenfeld B, Kornblith AB, et al. The Memorial Anxiety Scale for Prostate Cancer: validation of a new scale to measure anxiety in men with prostate cancer. *Cancer* 2003;97:2910–2918.
11. Dolbeault S, Mignot V, Gauvain-Piquard A, et al. Evaluation of psychological distress and quality of life in French cancer patients: validation of the French version of the memorial distress thermometer. *Psychooncology* 2003;12(suppl 4):S225.
12. Hoffman BM, Zevon MA, D'Arrigo MC, Cecchini TB. Screening for distress in cancer patients: the NCCN rapid-screening measure. *Psychooncology* 2004;13:792–799. Erratum in *Psychooncology* 2004;13:831.
13. Holland JC, Andersen B, Booth-Jones M, et al. Distress Management Clinical Practice Guidelines in Oncology. *J Natl Compr Canc Netw* 2003;1:344–374.
14. Powe BD, Finnie R. Cancer fatalism: the state of the science. *Cancer Nurs* 2003;26:454–465.
15. Zabora J, BrintzenhofeSzoc K, Curbow B, et al. The prevalence of psychological distress by cancer site. *Psychooncology* 2001;10:19–28.
16. Carlson LE, Angen M, Cullum J, et al. High levels of untreated distress and fatigue in cancer patients. *Br J Cancer* 2004;90:2297–2304.
17. Carlson LE, Bultz BD. Cancer distress screening. Needs, models, and methods. *J Psychosom Res* 2003;55:403–409.
18. Potash M, Breitbart W. Affective disorders in advanced cancer. *Hematol Oncol Clin North Am* 2002;16:671–700.
19. Khatib J, Salhi R, Awad G. Distress in cancer in-patients in King Hussein Cancer Center (KHCC): a study using the Arabic-modified version of the Distress Thermometer [abstract]. *Psychooncology* 2004;12(suppl 1):S42. Abstract.
20. Isikhan V, Guner P, Komurcu S, et al. The relationship between disease features and quality of life in patients with cancer—I. *Cancer Nurs* 2001;24:490–495.
21. Sadeh-Tassa D, Yagil Y, Stadler J. A comparison between first occurrence and recurrent breast cancer: anxiety, depression, PTSD. *Psychooncology* 2004;13(suppl 4):S66.
22. Montazeri A, Sajadian A, Fateh A, et al. Factors predicting psychological distress in cancer patients. *Psychooncology* 2004;13(suppl):S62.
23. Gil F, Travado L, Tomamichel M, et al. Visual analogue scales (VAS) and hospital anxiety depression (HAD) scale as tools for evaluating distress in cancer patients: a multi-centre southern European study. *Psychooncology* 2003;12(suppl 4):S257.
24. Mehnert A. Prevalence of post-traumatic stress-disorder, anxiety and depression in a representative sample of breast cancer patients. *Psychooncology* 2004;13(suppl 1):S62.
25. Santos FRM. Symptoms of post-traumatic stress disorder in patients with malignant hematologic disease. *Psychooncology* 2004;13(suppl 1):S67.
26. Fielding R, Lam WWT, Ho E. Factors predicting psychological morbidity in Chinese women following breast cancer surgery. *Psychooncology* 2004;13(suppl 1):S53.
27. Shimizu K, Akechi T, Okamura M, et al. Feasibility and usefulness of the distress and impact thermometer as a brief screening tool to detect psychological distress in clinical oncology practice. *Psychooncology* 2004;13(suppl 1):S68–S69.
28. Akizuki N, Akechi T, Nakanishi T, et al. Development of a brief screening interview for adjustment disorders and major depression in patients with cancer. *Cancer* 2003;97:2605–2613.
29. Akizuki N, Yamawaki S, Akechi T, et al. Development of an Impact Thermometer for use in combination with the Distress Thermometer as a brief screening tool for adjustment disorders and/or major depression in cancer patients. *J Pain Symptom Manage* 2005;29:91–99.
30. Bultz BD. Changing the face of cancer care for patients, community and the health care system. Commission on the Future of Health Care in Canada. Report, 2001.
31. U.S. President's Panel. Living beyond cancer: Finding a new balance: President's Cancer Panel 2003–2004 Annual Report.

## Commentary

- Washington, DC: U.S. Department of Health and Human Services; 2004.
32. US House of Representatives Conference Report. 2004. Available at: [www.house.gov/rules/h4818crfulltext.htm](http://www.house.gov/rules/h4818crfulltext.htm). Accessed January 24, 2006.
  33. Ashbury FD, Findlay H, Reynolds B, McKerracher K. A Canadian survey of cancer patients' experiences: are their needs being met? *J Pain Symptom Manage* 1998;16:298–306.
  34. Newell SA, Sanson-Fisher RW, Savolainen NJ. Systematic review of psychological therapies for cancer patients: overview and recommendations for future research. *J Natl Cancer Inst* 2002;94:558–584.
  35. Koocher GP, Curtiss EK, Pollin IS, Patton KE. Medical crisis counseling in a health maintenance organization: prevention intervention. *Prof Psychol Res Pr* 2001;32:52–58.
  36. Carlson LE, Bultz BD. Efficacy and medical cost offset of psychosocial interventions in cancer care: making the case for economic analyses. *Psychooncology* 2004;13:837–849.
  37. Simpson JS, Carlson LE, Trew ME. Effect of group therapy for breast cancer on healthcare utilization. *Cancer Pract* 2001;9:19–26.
  38. Chiles JA, Lambert MJ, Hatch AL. The impact of psychological interventions on medical cost offset: a meta-analytic review. *Clin Psychol: Sci Practice* 1999;6:204–220.
  39. World Health Organization. Executive Summary National Cancer Control Programmes: Policies and Managerial Guidelines, 2nd ed. Geneva: World Health Organization, 2002:XII.
  40. Bultz BD. Editorial: can we meet the challenge of change? *Oncology Exchange* 2004;2:3.