

Identifying Patients in Need of a Palliative Care Assessment in the Hospital Setting

A Consensus Report from the Center to Advance Palliative Care

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Abstract

Workforce shortages, late referrals, and palliative care program resource constraints present significant barriers to meeting the needs of hospitalized patients facing serious illnesses. The Center to Advance Palliative Care convened a consensus panel to select criteria by which patients at high risk for unmet palliative care needs can be identified in advance for a palliative care screening assessment. The consensus panel developed primary and secondary criteria for two checklists—one to use for screening at the time of admission and one for daily patient rounds. The consensus panel believes that by implementing a checklist approach to screening patients for unmet palliative care needs, combined with educational initiatives and other system-change work, hospital staff engaged in day-to-day patient care can identify a majority of such needs, reserving specialty palliative care services for more complex problems.

Introduction

THE NEED TO IMPROVE CARE for patients with serious, complex, and potentially life-threatening or life-limiting medical conditions is unquestioned. The new physician, nursing, and social worker specialties and certification processes of hospice and palliative medicine have emerged to help meet these needs. Although there has been enormous expansion of hospital palliative care programs, not all hospitals have palliative care teams, and workforce shortages combined with tenuous funding may limit the spread and sustainability of existing programs.^{1–2}

The most prevalent model of palliative care service delivery in acute care hospitals is the consultation service, designed to provide specialty (aka, secondary or tertiary) level care for difficult-to-manage symptoms, complex family dynamics, and challenging care decisions regarding the use of life-sustaining treatments (Table 1, sidebar).^{3–8} Ideally, day-to-day care for seriously ill patients would be managed through basic (aka, primary) palliative care services, provided by attending physicians, nursing staff, social workers, chaplains, and other professionals involved with routine patient care. It is neither sustainable nor desirable that palliative care specialists manage all the palliative care needs of all seriously ill patients. Thus, there is an urgent need to improve basic palliative care assessment and treatment skills among clinicians caring for seriously ill patients, with a goal

of reserving specialty-level palliative care services for problems beyond their capabilities.

Although the need for better basic palliative care skills is recognized, education alone is unlikely to substantially change practice patterns.^{9–10} Ideally, education would be one component of a more comprehensive systems-change approach.¹¹ Systems-change approaches work to address complex problems by combining evidence-based assessment and treatment algorithms, checklists of key tasks, quality improvement initiatives, provider and patient education, and other systematic processes geared to reducing variation in care. The use of checklists in hospitals is gaining acceptance; data indicate that the rigorous use of checklists can lead to quality outcomes, such as reductions in infections and improved clinical team communication.^{12–15} Palliative care programs are experimenting with checklists as a means of identifying patients most in need of a specialty-level consultation (16). In this approach, a consideration for consultation is initiated based on disease (metastatic cancer), patient (severe pain), or family (difficulty coping) variables, rather than using variable thresholds for initiating a consultation among attending physicians.

The staff and consultants of the Center to Advance Palliative Care (CAPC) have recognized the gap between what palliative care teams can provide and the needs of the larger pool of hospitalized patients with palliative care needs. As a first step to identify patients in this gap, and with the goal of working

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Accepted August 20, 2010.

TABLE 1. DEFINITIONS

<i>Primary palliative care</i>	The basic skills and competencies required of all physicians and other health care professionals. ³
<i>Secondary palliative care</i>	Specialist clinicians that provide consultation and specialty care. ³
<i>Tertiary palliative care</i>	Care provided at tertiary medical centers where specialist knowledge for the most complex cases is researched, taught, and practiced. ³
<i>Systems-based approach</i>	An organized, deliberate approach to the identification, assessment, and management of a complex clinical problem; may include checklists, treatment algorithms, provider education, quality improvement initiatives, and changes in delivery and payment models.
<i>Potentially life-limiting or life-threatening condition</i>	Any disease/disorder/condition that is known to be life-limiting (e.g., dementia, COPD, chronic renal failure, metastatic cancer, cirrhosis, muscular dystrophy, cystic fibrosis) or that has a high chance of leading to death (e.g., sepsis, multiorgan failure, major trauma, complex congenital heart disease). Medical conditions that are serious, but for which recovery to baseline function is routine (e.g., community-acquired pneumonia in an otherwise healthy patient) are not included in this definition.
<i>Goals of care</i>	Physical, social, spiritual, or other patient-centered goals that arise following an informed discussion of the current disease(s), prognosis, and treatment options. ^{6,22}

toward systems-based change, CAPC convened a consensus panel in 2010 to address the following question: *What criteria should be used for hospitals to conduct prospective case-finding, via a checklist, for patients with unmet palliative care needs?*

The consensus panel included representation from a range of professional disciplines and from academic, Veterans Health Administration, and community hospital settings; single hospitals and large health systems; adult and pediatric programs; and palliative care programs coordinated by both hospice agencies and hospitals (Appendix). Previous work by this panel has included consensus recommendations for operational, clinical, and customer metrics for palliative care inpatient units and consultation services, as well as operational standards for hospital palliative care programs.^{17–20}

Consensus Process

The panel began by reviewing existing palliative care consultation triggers from the literature and current practices

of the consensus panel members, and then agreed upon several key concepts to guide further deliberation:

- Using specialty-level palliative care professionals, currently a scarce resource, should be reserved for complex palliative care problems. Routine palliative care problems should be managed by health professionals involved in day-to-day care of patients in the same manner that routine cardiac problems are handled by primary care physicians, rather than cardiologists.
- Every hospital (acute care, long-term acute care, specialty) should develop a systematic approach to ensure that patients at high risk for unmet palliative care needs are identified and served in a timely manner.
- Hospitals should develop a systematic approach to ensure that, upon admission and daily throughout the hospitalization, identified patients undergo a screening palliative care assessment by health professionals providing day-to-day care (Table 2).
- Hospitals should ensure that specialty-level palliative care services are available for needs that are unmet

TABLE 2. PRIMARY PALLIATIVE CARE ASSESSMENT COMPONENTS

Pain/Symptom Assessment	• <i>Are there distressing physical or psychological symptoms?</i>
Social/Spiritual Assessment	• <i>Are there significant social or spiritual concerns affecting daily life?</i>
Understanding of illness/prognosis and treatment options	• <i>Does the patient/family/surrogate understand the current illness, prognostic trajectory, and treatment options?</i>
Identification of patient-centered goals of care	• <i>What are the goals for care, as identified by the patient/family/surrogate?</i> • <i>Are treatment options matched to informed patient-centered goals?</i> • <i>Has the patient participated in an advance care planning process?</i> • <i>Has the patient completed an advance care planning document?</i>
Transition of care post-discharge	• <i>What are the key considerations for a safe and sustainable transition from one setting to another?</i>

TABLE 3. CRITERIA FOR A PALLIATIVE CARE ASSESSMENT AT THE TIME OF ADMISSION

A potentially life-limiting or life-threatening condition *and* . . .

Primary Criteria^a

- The “surprise question”: *You would not be surprised if the patient died within 12 months or before adulthood*^{23–25}
- Frequent admissions (e.g., more than one admission for same condition within several months)^{26–30}
- Admission prompted by difficult-to-control physical or psychological symptoms (e.g., moderate-to-severe symptom intensity for more than 24–48 hours)^{6, 31}
- Complex care requirements (e.g., functional dependency; complex home support for ventilator/antibiotics/feedings)⁶
- Decline in function, feeding intolerance, or unintended decline in weight (e.g., failure to thrive)^{6, 31}

Secondary Criteria^b

- Admission from long-term care facility or medical foster home^c
- Elderly patient, cognitively impaired, with acute hip fracture^{32–35}
- Metastatic or locally advanced incurable cancer³⁶
- Chronic home oxygen use^c
- Out-of-hospital cardiac arrest^{37–38}
- Current or past hospice program enrollee^c
- Limited social support (e.g., family stress, chronic mental illness)^c
- No history of completing an advance care planning discussion/document^{6, 31}

^aPrimary Criteria are global indicators that represent the minimum that hospitals should use to screen patients at risk for unmet palliative care needs.

^bSecondary Criteria are more-specific indicators of a high likelihood of unmet palliative care needs and should be incorporated into a systems-based approach to patient identification if possible.

^cThese indicators are included based on a consensus panel opinion.

despite the best attempts of the health professionals involved in day-to-day patient care.

The consensus panel determined that identifying patients with unmet palliative care needs is important both at the time of admission and during the trajectory of the hospital

course; thus, two checklists were developed. The first is designed for screening at the time of admission, to identify patients whose conditions clearly warrant a basic palliative care assessment (e.g., chronic disease, failure-to-thrive) (Table 3). The second is designed as a tool for daily rounds (physician rounds, discharge planning rounds, or any other

TABLE 4. CRITERIA FOR PALLIATIVE CARE ASSESSMENT DURING EACH HOSPITAL DAY

A potentially life-limiting or life-threatening condition *and* . . .

Primary Criteria^a

- The “surprise question”: *You would not be surprised if the patient died within 12 months or did not live to adulthood*^{1–3}
- Difficult-to-control physical or psychological symptoms (e.g., more than one admission for same condition within several months)^{6, 31}
- Intensive Care Unit length of stay ≥ 7 days^{39–44, c}
- Lack of Goals of Care clarity and documentation^{6, 31}
- Disagreements or uncertainty among the patient, staff, and/or family concerning . . .
 - major medical treatment decisions^{6, 31}
 - resuscitation preferences^{6, 31}
 - use of nonoral feeding or hydration^{6, 31}

Secondary Criteria^b

- Awaiting, or deemed ineligible for, solid-organ transplantation^{45–46}
- Patient/family/surrogate emotional, spiritual, or relational distress^{6, 31, 44}
- Patient/family/surrogate request for palliative care/hospice services^c
- Patient is considered a potential candidate, or medical team is considering seeking consultation, for:
 - feeding tube placement^{47–51}
 - tracheostomy⁵²
 - initiation of renal replacement therapy⁵³
 - ethics concerns^{54–57}
 - LVAD^d or AICD^e placement⁵⁸
 - LTAC^f hospital or medical foster home disposition⁵⁹
 - bone marrow transplantation (high-risk patients)^{60–61}

^aPrimary Criteria are global indicators that represent the minimum that hospitals should use to screen patients at risk for unmet palliative care needs.

^bSecondary Criteria are more-specific indicators of a high likelihood of unmet palliative care needs and should be incorporated into a systems-based approach to patient identification if possible.

^cThese matters are included based on a consensus panel opinion.

^dLVAD = Left ventricular assist device.

^eAICD = Automated implantable cardioverter-defibrillator.

^fLTAC = Long-term acute care hospital.

daily review of patient status), where evolving patient issues (e.g., worsening physical symptoms or disagreements regarding treatment options) should trigger the need for a basic palliative care assessment (Table 4). Since not all hospitals have pediatricians or pediatric palliative care specialists available, adult clinicians may be called upon to provide palliative care for children and their families.²¹ Thus, while recognizing that many clinical care issues are different between adult and pediatric patients, the panel decided to develop a single master list of indicators suitable for both populations.

The starting point for all criteria chosen was the identification of patients with a *potentially life-limiting or life-threatening condition* (Table 1). The panel recognized that this term represents a broad construct that is open to variable interpretation. However, the panel believed that, to capture the spectrum of palliative care unmet needs, the defining term should be as inclusive as possible.

Each checklist is divided into *primary and secondary* criteria to facilitate ease of implementation. Primary criteria are limited to the five most-important indicators identified by the consensus panel. They are global in nature (e.g., weight loss) and are to be used as the minimum expected standard of care. Secondary criteria are more specific (e.g., waiting for LVAD placement) and are designed to be used as supplementary criteria for hospitals that have the ability to implement more-comprehensive systems of patient identification using a longer list of criteria.

Selection of indicators was based on national standards (e.g., National Quality Forum), research findings (e.g., hip fracture, dementia), and expert opinion from the consensus panel. Supporting references are provided for criteria, based on national standards or research findings, in which the citation directly recommends palliative care assessment or where a strong inference can be made from research data that a palliative care assessment is warranted. Of note is that criteria were identified to trigger a basic palliative care assessment by the primary treatment team, not as a trigger for additional specialty-level palliative care consultations, although they could be applied for that purpose. Many of the identified criteria also apply to and are easily adapted for use in long-term care, office, or home-care settings.

Discussion

The panel recognizes that not all clinicians are competent to complete a basic palliative care assessment, or to respond effectively to palliative care needs once such needs are identified. Application of a systems-based approach to patient identification proposed here, combined with complementary educational initiatives tied to credentialing processes, will help improve clinicians' knowledge and skills in basic palliative care. Provider and staff education and checklist implementation are inseparable; both are required to increase access to palliative care services.

As with all quality improvement efforts, attitudinal and logistical barriers to implementation will be significant. In particular, we expect that some clinicians will question the perceived value of palliative care assessments and resist the burden of adopting a new clinical checklist. Health care professionals are urged to review the methods by which others have successfully implemented checklists into routine care.¹²⁻¹⁵

The development and spread of specialty-level palliative care programs in hospitals over the past 10 years has been

heartening, outstripping the capacity of many teams to meet the demand for their services. Palliative care clinical competencies are basic skills for all clinical staff, hence the need to better equip health professionals to provide standardized and evidence-based primary palliative care services, reserving specialists for truly difficult problems. A first step in this process is to develop standards for identifying patients at risk for unmet palliative care needs.

The criteria identified in this report should be viewed as a starting point for discussion within hospitals: *Are these the right criteria for our patient population? What workflow and medical record systems can efficiently support optimal and routine patient identification? How will we support all clinicians in providing basic palliative care services? How will palliative care be made part of the hospital culture across settings of care? How do we decide, in a timely way, which patients need specialty-level palliative care services, and then ensure that they receive those services?* The Center to Advance Palliative Care is committed to helping health professionals and organizations address these questions, and to supporting their efforts to improve palliative care for all patients.

Acknowledgment

The authors wish to thank Jeffery Alderman, M.D.; Lauren Michalakes, M.D.; and Nancy Henley, M.D. for their insightful comments during manuscript preparation.

References

1. Goldsmith B, Dietrich J, Du Q, Morrison RS: Variability in access to hospital palliative care in the United States. *J Palliat Med* 2008;11:1094-1102.
2. Morrison RS, Maroney-Galin C, Kralovec PD, Meier DE: The growth of palliative care programs in United States hospitals. *J Palliat Med* 2005;8:1127-1134.
3. von Gunten CF: Secondary and tertiary palliative care in US hospitals. *JAMA* 2002 20;287:875-881.
4. Weissman, DE: Consultation in Palliative Medicine. *Arch Int Med* 1997;157:733-737.
5. Meier DE, Morrison RS, Cassel CK: Improving palliative care. *Ann Intern Med* 1997;127:225-230.
6. Klick JC, Hauer J. Pediatric palliative care: *J Curr Probl Pediatr Adolesc Health Care*. 2010;40:120-151.
7. Campbell ML: Palliative care consultation in the intensive care unit. *Crit Care Med* 2006;34:S355-358.
8. Abrahm JL, Callahan J, Rossetti K, Pierre L: The impact of a hospice consultation team on the care of veterans with advanced cancer. *J Pain Symptom Manage* 1996;12:23-31.
9. Weissman, DE: End-of-Life Physician Education: Is change possible? *J Palliative Medicine* 1998;1:401-407.
10. Greco PJ, Eisenberg JM: Changing physicians' practices. *N Engl J Med* 1993;329:1271-1274.
11. Batalden P, Mohr J: Building a knowledge of health care as a system. *Qual Manag Health Care* 1997; 5:1-12.
12. Lingard L, Regehr G, Orser B, Reznick R, Baker GR, Doran D, Espin S, Bohnen J, Whyte S: Evaluation of a preoperative checklist and team briefing among surgeons, nurses, and anesthesiologists to reduce failures in communication. *Arch Surg* 2008;143:12-18.
13. Haynes AB, Weiser TG, Berry WR, Lipsitz SR: A surgical safety checklist to reduce morbidity and mortality in a global population. *Safe Surgery Saves Lives Study Group*. *N Engl J Med* 2009;360:491-499.

14. Byrnes MC, Schuerer DJ, Schallom ME, Sona CS, Mazuski JE, Taylor BE, McKenzie W, Thomas JM, Emerson JS, Nemeth JL, Bailey RA, Boyle WA, Buchman TG, Coopersmith CM: Implementation of a mandatory checklist of protocols and objectives improves compliance with a wide range of evidence-based intensive care unit practices. *Crit Care Med* 2009;37:2775–2781.
15. Schultz MJ, Gajic O: Mandatory checklists at discharge may have the potential to prevent readmissions. *Crit Care Med* 2010;38:1226–1227.
16. Clinical Tools for Palliative Care Programs: Center to Advance Palliative Care. 2010. www.capc.org/tools-for-palliative-care-programs/clinical-tools (Last accessed November 7, 2010).
17. Weissman DE, Meier DE: Operational features for hospital palliative care programs: consensus recommendations. *J Palliat Med* 2008;11:1189–1194.
18. Weissman DE, Meier DE, Spragens LH: Center to Advance Palliative Care: palliative care consultation service metrics: consensus recommendations. *J Palliat Med* 2008;11:1294–1298.
19. Weissman DE, Meier DE: Center to Advance Palliative Care: palliative care inpatient unit operational metrics: consensus recommendations. *J Palliat Med* 2009;12:21–25.
20. Weissman DE, Morrison S, Meier DE: Clinical and Customer Metrics: Consensus Panel Report. *J Palliat Med* 2010;13:179–184.
21. Davies B, Sehring SA, Partridge JC, Cooper BA, Hughes A, Philp JC, Amidi-Nouri A, Kramer RF: Barriers to palliative care for children: perceptions of pediatric health care providers. *Pediatrics* 2008;121;2:282–288.
22. Kaldjian LC, Curtis AE, Shinkunas LA, Kannon KT: Review Article: Goals of Care Toward the End of Life: A Structured Literature Review. *Am J Hosp Palliat Care* 2009; 6: 501–511.
23. Lynn J: Living Long in Fragile Health: The New Demographics Shape End of Life Care. In: Jennings B, Kaebnick GE, and Murray TH (eds): *Improving End of Life Care: Why has it been so difficult*. Hastings Center Report, 2005, November/December.
24. Moss A, Ganjoo J, Sharma S, Gansor J, Senft S, Weaner B, Dalton C, MacKay K, Pellegrino B, Anantharaman P, Schmidt R: Utility of the “Surprise” Question to Identify Dialysis Patients with High Mortality. *Clin J Am Soc Nephrol* 2008;3:1379–1384.
25. Moss AH, Lunney JR, Culp S, Auber M, Kurian S, Rogers J, Dower J, Abraham J: Prognostic significance of the “surprise” question in cancer patients. *J Palliat Med* 2010;13:837–840.
26. Antonio C.P. Barretto ACP, Carlos H. Del Carlo CH, et al. Re-Hospitalizations and Mortality Still at Alarming Rates in Advanced Heart Failure. *J Cardiac Failure* 2007; 13:S153.
27. Cao Z, Ong KC, Eng P, Tan WC, Ng TP: Frequent hospital readmissions for acute exacerbation of COPD and their associated factors. *Respirology*. 2006;11:188–195.
28. Utzolino S, Kaffarnik M, Keck T, Berlett M et al: Unplanned discharges from a surgical intensive care unit: Readmissions and mortality. *J Critical Care* 2010 (in press).
29. Udris EM, Fihn SD, McDonnell MB, Curtis JR: Differences in health care utilization at the end of life among patients with chronic obstructive pulmonary disease and patients with lung cancer. *Arch Intern Med*. 2006;166:326–331.
30. Goodlin SJ, Hauptman PJ, Arnold R, Grady K, et al: Consensus statement: Palliative and supportive care in advanced heart failure. *J Card Failure* 2004;10:200–209.
31. National Quality Forum: A National Framework and Preferred Practices for Palliative and Hospice Care Quality: A Consensus Report (Washington, DC: National Quality Forum, 2006), www.qualityforum.org (Last accessed November 7, 2010).
32. Wolinsky FD, Fitzgerald JF, Stump TE: The effect of hip fracture on mortality, hospitalization, and functional status: A prospective study. *Am J Public Health* 1997;87:398–403.
33. Bentler SE, Liu L, Obrizan M, Cook EA, et al.: The aftermath of hip fracture: discharge placement, functional status change, and mortality. *Am J Epi* 2009;170:1290–1299.
34. Marcantonio ER, Flacker JM, Michaels M, Resnick NM: Delirium is independently associated with poor functional recovery after hip fracture. *J Am Geriatr Soc*. 2000;48:18–24.
35. Harris IA, Yong S, McEvoy L, Thorn L: A prospective study of the effect of nursing home residency on mortality following hip fracture. *ANZ J Surg*. 2010;80:447–450.
36. Levy, MH, Back A, Benedetti C, Billings JA, et al.: NCCN Clinical Practice Guidelines in Oncology: Palliative Care. V.1. 2010. www.nccn.org (Last accessed November 7, 2010).
37. Hollenberg, J, Herlitz J, Lindqvist, J, Riva, J: Improved Survival after Out-of-Hospital Cardiac Arrest is Associated with an Increase in Proportion of Emergency Crew-Witnessed Cases and Bystander Cardiopulmonary Resuscitation. *Circulation* 2008;118:389–396.
38. Ramenofsky DH, Weissman DE: CPR Survival in the Hospital Setting. Fast Facts and Concepts #179. 2007. www.eperc.mcw.edu/fastfact/ff_179.htm (Last accessed November 7, 2010).
39. Unroe, M, Kahn JK, Carson SS, Govert JA: One-Year Trajectories of Care and Resource Utilization for Recipients of Prolonged Mechanical Ventilation. *Ann Intern Med* 2010;153:167–175.
40. Campbell ML, Guzman JA: Impact of a proactive approach to improve EOL care in a medical ICU. *Chest* 2003;123:255–271.
41. Campbell ML, Guzman JA: A proactive approach to improve end-of-life care in a medical intensive care unit for patients with terminal dementia. *Crit Care Med* 2004;32:1839–1843.
42. Norton SA, Hogan LA, Holloway RG, Temkin-Greener H, et al.: Proactive PC in the MICU: Effects on LOS for selected high-risk patients. *Crit Care Med* 2007;35:1530–1535.
43. Ahrens T, Yancey V, Kollef M: Improving family communications at the end of life: implications for length of stay in the intensive care unit and resource use. *Am J Crit Care* 2003;12:317–323.
44. McAdam JL, Dracup KA, White DB, Fontaine DK, Putillo KA: Symptom experiences of family members of intensive care unit patients at high risk for dying. *Critical Care Med* 2010;38:1078–1085.
45. Adam SJ: Palliative care for patients with a failed liver transplant. *Intensive Crit Care Nurs* 2000;16:396–402.
46. Song MK, Dabbs AD, Studer SM, Arnold RM: Palliative Care Referrals after Lung Transplantation in Major Transplant Centers in the United States. *Crit Care Med* 2009;37:1288–1292.
47. Janes SE, Price CS, Khan S: Percutaneous endoscopic gastrostomy: mortality trends and risk factors. *J Postgrad Med* 2005;51:23–29.
48. Finucane T, Christmas C, Travis K: Tube feeding in patients with advanced dementia: a review of the evidence. *JAMA* 1999;282:1365–1370.
49. Shah PM, Sen S, Perlmutter LC, Feller A: Survival after percutaneous endoscopic gastrostomy: the role of dementia. *J Nutr Health Aging* 2005;9:255–259.

50. Vitale CA, Monteleoni C, Burke L, Frazier-Rios D, Volicer L: Strategies for improving care for patients with advanced dementia and eating problems. *Ann Long-Term Care* 2009; 17:32–33.
51. Siden H, Tucker T, Derman S, Cox K, Soon GS, Hartnett C, Straatman L: Pediatric enteral feeding intolerance: a new prognosticator for children with life-limiting illness? *J Palliat Care* 2009;25;3:213–217.
52. Chan T, Devaiah AK: Tracheostomy in Palliative Care: *Otolaryngologic Clinics of North America* 2009; 42:133–141.
53. Renal Physicians Association: *Shared Decision-Making in the Appropriate Initiation of and Withdrawal from Dialysis, 2nd ed.* Rockville, MD: Renal Physicians Association, 2010.
54. Aulisio MP, Chaitin E, Arnold RM: Ethics and palliative care consultation in the intensive care unit. *Crit Care Clin* 2004; 20:505–523.
55. Dowdy MD, Robertson C, Bander JA: A study of proactive ethics consultation for critically and terminally ill patients with extended lengths of stay. *Crit Care Med* 1998;26:252–259.
56. Schneiderman L, Gilmer T, Teetzel H, Dugan DO, Blustein J, Cranford R, Briggs KB, Komatsu GI, Goodman-Crews P, Cohn F, Young EW: Effect of ethics consultations on nonbeneficial life-sustaining treatments in the intensive care setting: a randomized controlled trial. *JAMA* 2003;290:1166–1172.
57. Schneiderman LJ: Effect of ethics consultations in the intensive care unit. *Crit Care Med* 2006;34:S359–S363.
58. Ferris H, Hunt S: Destination Ventricular Assist Devices for Heart Failure. *Fast Facts and Concepts #205*. August 2008. www.eperc.mcw.edu/fastfact/ff_205.htm (Last accessed November 7, 2010).
59. Kahn JM, Benson NM, Appleby D: Long-term Acute Care Hospital Utilization after Critical Illness *JAMA* 2010;303: 2253–2259.
60. Chung HM, Lyckholm LJ, Smith TJ: Palliative care in BMT. *Bone Marrow Transplant* 2009;43:265–273.
61. Meyers FJ, Linder J, Beckett L, Christensen S, Blais J, Gandara DR: Simultaneous care: a model approach to the perceived conflict between investigational therapy and palliative care. *J Pain Symptom Manage* 2004; 28:548–556.

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