Palliative Care Consultations: How Do They Impact the Care of Hospitalized Patients?

Paolo L. Manfredi, MD, R. Sean Morrison, MD, Jane Morris, RN, MS, Suzanne L. Goldhirsch, MA, John M. Carter, MD, and Diane E. Meier, MD

The Hertzberg Palliative Care Institute, The Henry L. Schwartz Department of Geriatrics and Adult Development, Mount Sinai Medical Center, New York, NY, USA

Abstract

To provide a detailed description of the recommendations of a Palliative Care Service (PCS) and to describe the impact of these recommendations on the care of terminally ill patients in an academic medical center, we describe data from all consecutive patients referred by their attending physicians to the PCS of an academic teaching hospital over a 15-month period. All patients were seen within 24 hours of consultation request. Data were collected prospectively on the day of discharge or death. Attention was focused on six recommendations and their implementation: 1) discussion about prognosis and goals of care; 2) pursuing documentation of advance directives; 3) discussion about foregoing specific treatments and/or diagnostic interventions; 4) family and patient support; 5) discharge planning; and 6) symptom management. Over a 15-month period, we collected data on 325 patients. The most frequent diagnoses were cancer, dementia, and HIV disease. The patients were followed for a mean of 7.6 days. The average number of recommendations was 4.2 per patient and 91% of the recommendations were implemented (3.8 per patient). Recommendations increased to 5.3 per patient and the implementation rate increased to 97% (5.1 per patient) for the 44 patients transferred to the Palliative Care Unit (PCU). PCS consultations result in multiple recommendations with a very high implementation rate. The number of recommendations and the high implementation rate suggest a strong need for palliative care services within acute care hospitals. J Pain Symptom Manage 2000;20:166–173 © U.S. Cancer Pain Relief Committee, 2000.

Key Words

Palliative care, inpatients, palliative care service, terminal illness, acute care hospitals

Introduction

The World Health Organization (WHO) defines palliative care as the active total care of patients at the end of their lives. Hospitals are traditionally structured for efficient treatment of acute illnesses and exacerbations of chronic illnesses. When it becomes clear that cure is no longer a realistic goal, the hospital structure often fails to provide alternatives. Even when there is no reasonable chance for meaningful recovery, treatment focused on prolongation of life may continue to the very moment of death. Life-prolonging medical care at the end of life may result in unnecessary suffering for the patient, and may also create emotional strain and financial difficulty for families. Although the acute care hospital is not the pre-
ferred site of death for many patients, at present more than 65% of adults die in hospitals. This statistic reinforces the pressing need for better approaches to the care of terminally ill hospitalized patients. 

Palliative Care Services (PCS) have recently been established in several US medical centers, and several authors have described the main features of a palliative care consultation. The field of palliative care is a new and as yet undefined field of medicine in this country. In this paper, we provide a detailed description of the array of recommendations of a clinical PCS, as well as an evaluation of the impact of these recommendations on patient care.

Methods

We describe data from all consecutive patients referred by their attending physicians to the PCS of an academic teaching hospital over a 15-month period. All patients were seen within 24 hours of the consultation request and evaluated for entry into the study. Data from patients known to the PCS from a prior hospitalization were excluded because many of the recommendations were already in place. Non-terminally ill patients referred for pain management only were also excluded, as were patients enrolled in a separate study involving mandatory PCS evaluation of all cancer patients in the Medical Intensive Care Unit (MICU). Finally, patients with incomplete data at the end of the study were excluded.

In order to describe the role of the PCS in the care of the patients, six recommendations were identified: 1) discussion about prognosis and goals of care (with patient, family, hospital staff, patient’s attending physician); 2) documentation of advance directives (resuscitation status, designation of a health care agent, completion of a living will); 3) discussion about foregoing specific treatments and/or diagnostic interventions (artificial nutrition/hydration, artificial ventilation, vasopressors, dialysis, antibiotics, venipuncture); 4) patient and/or family support (including spiritual needs); 5) discharge planning; 6) symptom management (pain, dyspnea, nausea, delirium, constipation, anxiety, depression, other). On the day of patient’s discharge or death, the PCS physician and nurse completed a questionnaire encompassing each of these recommendations; all data were entered in a computerized database. Primary diagnoses and demographics were also recorded.

The composition of the PCS closely resembles the structure of PCSs described by other U.S. medical centers. A team consisting of a physician, a nurse, and rotating residents, fellows, and medical students delivers consultative services to referring attendings who remain in the role of primary caregiver. The hospital house staff, nurses, social workers, and clergy may be involved in the implementation of the PCS recommendations.

Approximately six months into the study, a four-bed Palliative Care Unit (PCU) opened on one of the medical floors to care for patients with more intense needs for symptom management and emotional support. The PCU is supervised by the PCS team and staffed by medicine house staff and hospital nurses who have special expertise derived from in-services on palliative care issues by the PCS, constant feedback during patient care, and past experience in the care of patients with HIV disease. Among the 44 patients admitted or transferred to the PCU, 20 were transferred to the primary care of the Palliative Care Service while 24 remained under the care of the referring service.

Results

A total of 408 patients were seen by the PCS during the study period. We excluded the following patients from the report: 24 were

<table>
<thead>
<tr>
<th>Table 1: Demographic Data (325 Patients)</th>
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<tbody>
<tr>
<td>Age: Range 20–101</td>
</tr>
<tr>
<td>Median 71.2</td>
</tr>
<tr>
<td>Gender: Male 174 (53.5%)</td>
</tr>
<tr>
<td>Female 151 (46.5%)</td>
</tr>
<tr>
<td>Ethnicity: Caucasian 151 (46.5%)</td>
</tr>
<tr>
<td>African-American 84 (25.8%)</td>
</tr>
<tr>
<td>Hispanic 66 (20.5%)</td>
</tr>
<tr>
<td>Asian 5 (1.5%)</td>
</tr>
<tr>
<td>Other 19 (5.9%)</td>
</tr>
<tr>
<td>Religion: Catholic 106 (32.6%)</td>
</tr>
<tr>
<td>Jewish 61 (18.8%)</td>
</tr>
<tr>
<td>Protestant 36 (11.1%)</td>
</tr>
<tr>
<td>Jehovah’s Witness 7 (2.2%)</td>
</tr>
<tr>
<td>Other 13 (3.9%)</td>
</tr>
<tr>
<td>None 102 (31.4%)</td>
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</tbody>
</table>
known to the PCS from previous admissions; 27 were non-terminally ill patients referred for pain management only; 24 were enrolled in the MICU palliative care study; and 8 patients had incomplete data. Data from the remaining 325 patients were analyzed. Table 1 summarizes the demographic data and Table 2 illustrates the diagnoses for our patients. The request for the consultation originated from the primary attending in 48.6% of cases; house staff 32.9%; nursing staff 10.8%; family 2.2%; social work 1.2%; patient representative 0.3%; and unknown 4%. All consultation requests were approved by the primary attending physician. The Medicine service was the leading source of referrals (53.8%) followed by the Geriatric service (9.5%). Patients were followed by the PCS for an average of 7.6 days (range 1–127 days, median 5 days).

The average number of recommendations per patient was 4.2 and 91% of these recommendations were implemented (3.8 per patient). For the 44 patients (13.5% of the study population) who were transferred to the Palliative Care Unit, the number of recommendations increased to 5.3 per patient and the implementation rate increased to 97% (5.1 per patient). Figure 1 illustrates the percentage of patients with each of the six recommendations and the implementation rate of the single recommendations.

In 306 cases (94.2%), the PCS conducted discussions on the issues of prognosis and goals of care. Based on these discussions there was a modification of the understanding of the prognosis and goals of care in 88.6% of cases. The participants in these discussions included: the patient (39.9%), family members (74.8%), house staff and nursing staff (67.3%), and the patient’s attending physician (52.3%).

Documentation of advance directives was

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**Table 2**

Primary Diagnosis (325 Patients)

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Count (Percentage)</th>
</tr>
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<tbody>
<tr>
<td>Cancer</td>
<td>184 (56.6%)</td>
</tr>
<tr>
<td>Dementia</td>
<td>35 (10.8%)</td>
</tr>
<tr>
<td>HIV disease</td>
<td>27 (8.3%)</td>
</tr>
<tr>
<td>Stroke/coma</td>
<td>21 (6.5%)</td>
</tr>
<tr>
<td>Lung disease</td>
<td>14 (4.3%)</td>
</tr>
<tr>
<td>Liver disease</td>
<td>13 (4%)</td>
</tr>
<tr>
<td>Cardiac disease</td>
<td>12 (3.7%)</td>
</tr>
<tr>
<td>Renal disease</td>
<td>6 (1.8%)</td>
</tr>
<tr>
<td>Other</td>
<td>13 (4%)</td>
</tr>
</tbody>
</table>

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Fig. 1. Percentage of patients with recommendations and the implementation rate for each recommendation.
recommended by the PCS in 132 cases (or 40.6% of all patients) as follows: discussions about a Do Not Resuscitate (DNR) order (85.6%) and designation of a health care agent (29.5%). The implementation rates for these recommendations were: DNR status (84.1%) and designation of a health care proxy (79.5%).

Decisions to forego specific treatments and/or diagnostic interventions were addressed in 189 cases (58.1%). Patients/families opted to forego treatments and/or diagnostic interventions in 159 or 84.1% of cases. Figure 2 illustrates the frequency of the different treatments/diagnostic interventions discussed and the choice of foregoing each treatment/diagnostic interventions.

Supportive counseling for the patient and/or family members was provided by the PCS in 239 cases (73.5%). Spiritual needs were specifically addressed in 75 patients (31.4%).

Discharge plans were established for 266 patients (81.8% of all patients). For 111 patients of these patients the plan was to provide care in the hospital until death. One hundred and five of these patients died in the hospital as expected. The plan to remain in the hospital until death was not implemented in the remaining six cases because the referring service chose an alternative plan. Discharge plans were not implemented in 26 cases (10%) for the following reasons: fifteen patients died while discharge planning was in progress; the referring service chose alternative plans for eleven patients. Table 3 shows the discharge sites for the 325 patients.

Symptoms were specifically addressed in 243 (74.8%) of the study participants. Figure 3 illustrates the percentage of patients with recommendations for medical management of symptoms and the implementation rate for each recommendation.

<table>
<thead>
<tr>
<th>Table 3</th>
<th>Discharge Sites (325 Patients)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care in hospital until death</td>
<td>128 (39.4%)</td>
</tr>
<tr>
<td>Inpatient hospice</td>
<td>75 (22.9%)</td>
</tr>
<tr>
<td>Home hospice</td>
<td>51 (15.7%)</td>
</tr>
<tr>
<td>Nursing home</td>
<td>22 (6.8%)</td>
</tr>
<tr>
<td>Home with health aide</td>
<td>21 (6.5%)</td>
</tr>
<tr>
<td>Outpatient PCS</td>
<td>13 (4%)</td>
</tr>
<tr>
<td>Other</td>
<td>15 (4.6%)</td>
</tr>
</tbody>
</table>
Karnofsky Performance Status scores were collected on the last 172 patients. The mean score was 25, with 25.6% of patients scoring 15 or less. (We arbitrarily used KPS scores with 5-point increments rather than the conventional 10-point increments to account for patients falling in between the 10-point categories.)

A total of 161 patients (49.5% of all patients) died during the index hospital stay. The statistic cited for deaths in the hospital includes 19 patients who died in the PCU.

Discussion

Palliative Medicine is a relatively new discipline in the United States. Although Palliative Care is a more established discipline in other countries (e.g., Great Britain, Canada, and Australia), the US health care system is sufficiently different from the health care systems of other countries to warrant a detailed description of the interventions pursued by a PCS within a United States academic medical center.

Even recently published comprehensive textbooks of palliative medicine do not specifically describe the role of a PCS consultation team in academic medical centers in the United States. Other authors have described the structure of PCSs, their recommendations and the patient population they serve. We describe in detail the interventions pursued, their relative frequency and the actual implementation rate.

The demographic data for our patients show a wide age range and a diverse ethnic and religious background. The general medicine service was the leading source of patients and more than one-third of consultations originated from the house staff rather than the attending physicians. These data closely resemble those reported by von Gunten et al.

The leading diagnosis was cancer (56.6%), a finding which has been observed in other studies. The second most frequent diagnosis was dementia, a finding which is unique to our study and which identifies a group of patients with important palliative care needs not previously emphasized by others. A possible explanation is that the PCS at our institution originated as a program within the Department of Geriatrics.

In an attempt to capture and convey the essence of the challenging and time consuming interventions undertaken by the PCS, we subdi-
vided the complex processes of communication and supportive counseling in four discrete interventions: 1) discussions about prognosis and goals of care, 2) pursuing documentation of advance directives, 3) discussions about foregoing specific treatments/diagnostic interventions, and 4) providing family and patient support.

Discussions about prognosis and goals of care took place in 92.3% of cases. Each case was discussed with an average of 2.7 different parties. Because the patient’s condition frequently changed significantly over time, many of these discussions were repeated over the course of the hospitalization. Discussions usually took the form of meetings where an attempt was made to include the patient, family members, the house staff, the social worker, and one or more attendings. Meetings were often repeated for the benefit of absent parties and the dialogue with patients and/or families continued until discharge or death of the patient and, in some cases, beyond.

Formal documentation of advance directives was discussed in 40.6% of all consults, with an 85.1% implementation rate among the 95 patients that had a DNR form completed by the PCS; 46 died during the index hospital stay. For these patients an informative dialogue appropriately avoided cardiopulmonary resuscitation. For 59.4% of all patients, the DNR status was not addressed by the PCS because the primary service was conducting those discussions or the discussions were not appropriate to that time. Creation of a living will was prompted in only 2 patients, suggesting that hospitalized patients with terminal illnesses might be too compromised for a task that requires emotional stability and intact cognitive abilities. The low advance-directive recommendation rate for designation of a health care agent reflects the high prevalence of loss of decisional capacity among the seriously ill patients described here.

Discussions about the risk and burden to benefit ratio of specific treatments and/or diagnostic interventions were conducted in 58.1% of all cases. Decisions to forego specific treatments/diagnostic interventions were taken in 159 cases (84.1%). These decisions were complex and multiple meetings were often required to arrive at a conclusion. Particularly difficult decisions for patients and families were those about continuing or foregoing artificial ventilation (24.3%), nutrition (44.4%), hydration (66.5%), and dialysis (4.9%). Any decision to forego antibiotics (53.4%) also included foregoing diagnostic studies directed toward identification of the cause of infection. On average, the risk and burden to benefit ratio of 3.2 different treatments/diagnostic intervention was discussed in each case and separate discussions were often required for each decision. These discussions were time consuming, frequently requiring repeated meetings with more than one family member at different times and on different days. The general consensus of the PCS was that the most difficult sessions were those involving patients without a diagnosis of cancer who often had a less definable prognosis.15

Supportive counseling was provided by the PCS in 68.9% of all cases. This counseling consisted primarily of one to one sessions for patients and/or family members who demonstrated a more intense need for emotional support. More than 70% of our patients professed a religious background, suggesting that access to spiritual support might have been helpful. This support was provided by the PCS in only 17.5% of cases, perhaps reflecting the medically oriented nature of our consultations.

Discharge planning is routinely pursued by social workers and primary clinical teams. Prognostication of how the disease will progress, knowledge of patient/family needs, preferences, insurance and financial status, and knowledge of the available options and community support systems are all essential pieces of information for optimal discharge planning. In 81.8% of our patients, the coordination and integration of these complex variables was directed primarily by the PCS. The resulting plan was implemented in 90% of cases. The most frequent cause for non-implementation was the death of the patient while awaiting discharge.

Symptoms were addressed in a high percentage of cases (74.8%). As noted in other studies,7,8 pain was the symptom most frequently addressed (73.3%). Dyspnea was managed in 42.8% of patients with symptoms. The incidence of dyspnea is considerably higher than the 30% rate reported by von Gunten et al7 and Weissman and Griffin, who list dyspnea as a reason for PCS consultations in less than 3% of cases.8 Among the patients in whom symp-
toms were addressed, there were 103 (42.4%) with more than one symptom. This under-
scores the high symptom burden faced by hos-
pitalized patients with advanced disease.

The mean Karnofsky Performance Status
Scale score was 25, with over 25% of patients
scoring 15 or less, a score that corresponds to
the moribund descriptor of the scale. These
data are comparable to von Gunten et al.’s find-
ing that the life expectancy of 26% of PCS pa-
tients could be estimated in terms of hours or
days.7

Hospitalized patients with incurable illnesses
have complex needs, which go beyond pain
management. These needs must be addressed
if patients are to receive optimal medical care.
When PCSs are consulted in the care of hospi-
talized terminally ill patients, multiple inter-
ventions are undertaken.6–9 The relative fre-
quency of these interventions and their
implementation rate has not been previously
described.

The patients we studied had on average 4.23
recommendations each and 91% of these rec-
ommendations were implemented. The number
of documented interventions, in keeping with
the “total care” WHO-definition of palliative
care, was high. The unexpectedly high imple-
mentation rate (91%) for the PCS recommen-
dations can be interpreted as acknowledgement
by the involved health care professionals
that terminally ill patients do in fact have
needs not addressed by “usual hospital care.”
In comparison, when adherence to recommenda-
tions was analyzed by a geriatric consultation
service, which has a broad intervention scope
similar to the PCS, the rate of implementation
was significantly lower (55.5%).18 It should be
noted that the PCS at our hospital made a con-
certed effort to increase the implementation
rate by means of two critical strategies: 1) for
every patient referred to the PCS, an attempt
was made to establish personal contact with the
involved parties (family members, nurse, pri-
mary physician, house staff) rather than merely
relying upon communication by notes in the
medical chart; 2) permission was also fre-
quently sought and obtained by the PCS to di-
rectly implement certain critical interventions
promptly in order to avoid unnecessary delay
and suffering.

The recommendations of a PCS require an
approach respectful of the central role of the
attending and house staff primarily responsible
for the patient’s care. Tensions may evolve
from the fact that many of the PCS recommenda-
tions significantly overlap with the medical
care that every physician should be able to pro-
vide for a patient. Physicians with special inter-
est and training in palliative care, however,
possess attitudes, knowledge, and skills not yet
shared by most physicians4,8 and they are also
prepared to address the very time consuming
interventions required by hospitalized termi-
nally ill patients.

The high number of interventions and the
high implementation rate underscore the in-
tensity and length of PCS consultations and fol-
low-up visits. Our patients often required mul-
tiple visits over the course of the day, sometimes
for symptom management but more frequently
because of ongoing discussions about goals
and plan of care. We concur with von Gunten
et al that eliciting and giving information and
providing counseling occupies the vast major-
ity of time.7 Although financial reimbursement
is available for some portions of palliative care
services, it is not sufficient to compensate for
the extraordinary expenditure of time re-
quired by PCS consultations. In our program,
over the initial 15 months, revenues for consul-
tative services covered only 34.9% of the sala-
ries of the PCS physician and nurse. In order
to survive, therefore, PCSs must rely heavily
upon financial support from alternative
sources (grants, hospital support, and philan-
thropic donations).

The presence of a PCS within a tertiary care
hospital has been found to result in a more ap-
propriate allocation of resources.11–14 In our
study, patients’/families’ decisions to forego
burdensome, unwanted, unnecessary, and al-
ways costly treatments were made in 159 or
58.1% of all cases, not including the 46 cases
where the decision was to forego resuscitation
in patients who expired during the hospital stay.

Once goals of care are clarified, discharge
planning is not only more adherent to the pa-
tient’s/family’s wishes but it is also more expe-
dient, thereby decreasing the length of hospital
stay. The active role of the PCS in the discharge
planning of 81.8% of patients and the high im-
plementation rate of these plans (90%) are also
likely to result in savings for the hospital.

We hope that hospital administrators will
eventually acknowledge that PCSs, in addition
to providing relief of physical and emotional suffering for hospitalized patients with advanced progressive illness, promote considerable savings by modifying the allocation of resources and intervening in the discharge planning process. Ongoing financial assistance in addition to clinical revenues is required to ensure viability of PCSs in hospitals and academic medical centers.

Acknowledgments

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References


