

## A Model to Improve Value: The Interdisciplinary Palliative Care Services Agreement

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### Abstract

This article examines the definition of value in medical care for palliative care patients and describes an Interdisciplinary Palliative Care Services Agreement, which is a framework for valued, financially sustainable palliative care at a 500-bed academic medical center. Quality standards drive team interventions and also serve as metrics for financial support. The agreement defines staffing ratios necessary for sustainable team growth and represents a financial model that positions the field of palliative medicine competitively among other medical specialties.

### Introduction

**M**ORE THAN 33% of hospitals have implemented hospital-based palliative care programs; greater than 77% of hospitals with more than 250 beds have such a service.<sup>1</sup> A major strategy to engage hospitals in implementation of hospital-based palliative care teams is the demonstration of cost savings to the hospital. While this strategy is valid and critical to the growth of the field, it fails to address important issues which threaten programmatic sustainability. First, in relative value unit (RVU)-based productivity models, providers must increase patient volumes as per-unit reimbursement declines in order to maintain revenue. For services such as palliative care that are time intensive, one cannot increase patient volumes beyond a certain threshold without sacrificing quality, safety, efficiency, and timeliness in patient care. This fact puts a cap on achievable service revenue. Second, payer mix issues and the nonbillable activities necessary to sustain a quality palliative care service create a scenario in which even maximized revenue cannot cover program costs. Third, if the administration's primary incentive to support the palliative care program is cost avoidance, an element of conflict can arise for the provider, between meeting the needs of the administration related to cost and meeting the needs of the individual patient and family. The benefits of palliative care come through its ability to improve the quality of patient-centered care, with cost avoidance as a predictable, albeit secondary outcome in an aggregate of patients. Put another way, palliative care increases the value of medical care, where  $VALUE = Quality/Cost$ .<sup>2</sup> Proposals for hospital support grounded in the value equation should motivate all stakeholders, from patients and families to providers and admin-

istrators, toward shared goals of excellent patient care, high patient and family satisfaction, and improved system efficiency for those nearing end of life.

### Defining Value: Quality/Cost

A precise definition of value is of critical importance to improving value in palliative care services. Smoldt and Cortese<sup>2</sup> suggest a value equation in which the numerator of quality is broken down into measurement of outcomes of care, safety, and service, with a denominator of cost over time. The definition of quality outcome, however, must truly reflect added value for every patient. Smoldt and Cortese advocate that measurement of mortality is the "ultimate test of outcome." This definition is flawed. It fails to account for the many people who die in the hospital or after discharge under conditions in which a peaceful death is the expected and "managed" outcome. In these cases, patients and families work with care providers to make informed decisions to shift the goals of care from an interventional mode intended to prolong life to a comfort-directed mode intended to maximize quality and comfort through the natural dying process.

The number of patients affected is significant. In 2004, 1.1 million people died in U.S. hospitals, representing 40% of all U.S. deaths.<sup>3</sup> Twenty percent of all deaths in the United States occur in or shortly after an intensive care unit (ICU) stay,<sup>4</sup> and studies show that 75%–90% of those ICU deaths occur after decisions to limit or withdraw life-sustaining therapy.<sup>5,6</sup> Additionally, 930,000 people died while receiving hospice care in 2007, with a median length of stay of 20 days, meaning that at least 465,000 patients died within the first 30 days of hospice admission.<sup>7</sup> At our institution, every inpatient death

undergoes multidisciplinary mortality peer review. Over a 6-month period from February to September 2007 there were 193 inpatient deaths, representing a risk adjusted mortality index of 0.74, which represents the top 20th percentile for University Health System Consortium statistics. 91% of these deaths were classified as "natural progression of disease."<sup>8</sup> Definitions of health care quality that ignore these facts regarding in-hospital and 30-day mortality rates cannot capture the true essence of value in health care delivery for all patients in the system.

Porter and Teisberg, in their book *Redefining Health Care*,<sup>9</sup> advocate that the key to fixing the health care system is physician-led reform to improve value in health care across patient care cycles and across the continuum of care. While it is easy to agree with this premise, the "cycle of care" that they outline is incomplete. To quote their *JAMA* article, ". . . the cycle of care begins with screening and prevention and extends all the way through preparation, treatment, recovery, ongoing monitoring, and active disease management in the case of chronic conditions."<sup>10</sup>

This position on health care reform has failed to acknowledge that health care's duty to the patient can only logically end when the patient dies. Definitions of health care quality that exclude the quality of the dying process cannot capture the true essence of value in health care delivery across the complete cycle of a patient's care. Such definitions ignore the imperative for quality care to those patients who are dying in the hospital or who are receiving hospice services at the natural end of their lives. Such definitions are punitive toward systems that recognize the importance of incorporating quality end of life care into their service lines.<sup>11</sup>

### **Defining Value: Determinants of Quality in Palliative Care**

The Institute of Medicine, National Quality Forum, and others have identified palliative medicine as a national priority area for quality improvement. In 2004, The National Consensus Project (NCP) for Quality Palliative Care outlined core elements of quality in its "Clinical Practice Guidelines for Quality Palliative Care."<sup>12</sup> The National Quality Forum (NQF) used these guidelines as the cornerstone for the Forum's *National Framework and Preferred Practices for Palliative and Hospice Care Quality*.<sup>13</sup> Much work is currently underway to define the standards for structure, process, and outcome that encompass "quality" for palliative care. These standards must address quality from every stakeholders' perspective. The Interdisciplinary Palliative Care Services agreement that follows is one application of this idea.

### **The Interdisciplinary Palliative Care Services Agreement: Structure**

The Interdisciplinary Palliative Care Services Agreement is a contract between physicians intent on providing high-quality, patient-centered care and the hospital in which that care is provided. Physicians agree to provide a set of designated duties and to meet a set of Standards of Performance that are reported quarterly. The Standards of Performance derive from the NCP Clinical Practice Guidelines and from the available evidence regarding potential performance measures for palliative care.<sup>14-18</sup> They represent the starting point in an evolutionary process. However, these measures

are not currently validated and will require ongoing study. As the "state of the science" for quality measurement in palliative care evolves to link validated performance measurements with the desired outcomes of patients, families, and health care providers, the measures will evolve.<sup>17,19</sup> Table 1 outlines Standards of Performance for FY09.

In return for services provided and Standards of Performance achieved, the hospital compensates the physician group at an hourly rate equivalent to fair market value for the services provided. There are multiple benchmark surveys for fair market value, including Medical Group Management Association Compensation Survey, Sullivan-Cotter Compensation Survey, The Hay Group, and others. The agreement can be structured such that the physician is compensated for the number of hours of onsite coverage at the appropriate median benchmark rate. The amount of coverage per day will vary by size and acuity of the institution. Table 2 outlines an example of the calculation for physician compensation. The agreement can be designed to adjust the compensation amount for a few subsequent years based on the Consumer Price Index for Physician Services which adjusts for inflation in physician services. However, fair market value should be reestablished at least every 3 years. Table 3 outlines how compensation is determined to ensure that the agreement meets the fair market value requirements for contracts between hospitals and physicians. Beyond computing compensation, establishment of fair market value is essential to transparency and compliance with Stark laws.

For the Interdisciplinary Palliative Care Services Agreement, fair market value for palliative care services was set using the benchmark for the internal medicine, inpatient-based specialty. This benchmark was chosen for a number of reasons. First, palliative care currently lacks its own national benchmarks in the surveys available, so a surrogate benchmark was necessary. Second, while available data regarding palliative care physician compensation nationally is scarce, a small survey published in the *AAHPM Bulletin* in 2005 revealed the mean yearly income of a group of primarily inpatient Palliative Care practitioners to be \$181,225,<sup>20</sup> a similar number to that reported in the national inpatient internal medicine benchmarks for that year. Third, palliative care provider coverage is occasionally linked to hospitalists in academic sections, and is so at our institution. Equivalence in pay rate allows the provider to move between roles without risk of a compensation gap which could deter growth in either area of service.

The physicians are paid at an hourly rate for clinical services, and the professional revenue collected becomes hospital collections. The difference between physician revenue generated and the hospital cost for the program constitutes the cost of a "Palliative Care Quality Product" that the palliative care team delivers through achievement of the Standards of Performance. As a byproduct of the work to achieve the desired quality outcomes, the palliative care program is able to demonstrate a predictable decrease in hospital costs when mean cost preconsult is compared to mean cost post-consult, consistent with a growing body of evidence nationwide showing similar savings.<sup>21,22</sup> Table 4 shows 2007 data for how total hospital costs for the Palliative Care program, net physician revenue, and the cost savings generated by the "Palliative Care Quality Product" relate.

TABLE 1. PALLIATIVE CARE PERFORMANCE STANDARDS—FY09

No.	Performance indicator	Metric
1.	Timely completion of consultation	For 100% of palliative care patients a full consultation with treatment recommendations/plan will be completed within 24 hours on a routine basis and as soon as possible on an emergent basis.
2.	Documentation of patient status	90% documentation of patient status within 48 hours of consultation; this includes the following subsets: prognosis, functional status, psychosocial issues, and spiritual issues, with plan for psychosocial/spiritual intervention as appropriate.
3.	Goals of care	At least 90% of palliative care patients will have delineation of goals of care for patient, family, and medical providers within 72 hours following palliative care consultation.
4.	Overall level of physical comfort	Goal in at least 75% of patients for symptom reduction to a level consistent with their goal for overall comfort within 72 hours of consultation.
5.	Facilitation of system throughput	For at least 90% of palliative care patients, options for Discharge or ICU transfer disposition will be documented within 48 of consultation.
6.	Patient and family satisfaction (pt = live discharges, family = of deceased patients)	New for FY09, Metrics in development.

ICU, intensive care unit.

Appropriate interdisciplinary team staffing is of critical importance to meeting the standards of performance. To address this need, the Services Agreement calls for a Palliative Care Planning Task Force made up of palliative care providers and hospital administration to implement staffing adjustments based on a “Palliative Care Core Unit” model. A “Core Unit” is 1.5 FTE physician, 1.0 FTE nurse, and 1.0 FTE social worker per a maximum of 15 patients on the daily census for the service, with a goal of staffing growth in increments of core units rather than individual or partial FTEs. This staffing ratio is consistent with that of other established palliative care programs across the nation.<sup>22,23</sup> Also, it is consistent with academic hospitalist data showing a median number of shift encounters per hospitalist of 12 patients,<sup>24</sup> and an optimal academic hospitalist census of 12–15 patients.<sup>25,26</sup>

**The Interdisciplinary Palliative Care Services Agreement: Function**

The Palliative Care Service Agreement serves a number of functions: it provides financial support of the team for sustainability, it is a framework for continuous quality improvement to promote standardized, evidence-based clinical practice, and it creates a foundation for healthy team growth and sustainability through recognition of the interdisciplinary nature of the work. The palliative care service functions as an interdisciplinary team of physicians, nurses, and social workers. The Standards of Performance are owned by the

team as a unit and outcomes reflect the work of the group rather than any one individual. This can be true whether the entire team is employed through the physician practice group, or whether certain components are provided through the hospital, such as advance practice nursing or social work. The ultimate test of success is whether or not the agreement functions to align the goals and meet the needs of all stakeholders affected: the patients and families first and foremost, the hospital partners, and the health care providers.

**Function: Meeting the Needs of Patients and Families**

Studies repeatedly show what patients and families want from their care providers and care systems in the face of severe illness: confidence and trust in health care delivery, adequate pain and symptom management, avoidance of prolonged dying, and regular, honest communication with providers to engage in shared decision making.<sup>27–31</sup> Studies also show that patients and families want support for healthy spiritual and psychosocial life closure.<sup>27,28,30</sup>

The Interdisciplinary Palliative Care Services Agreement serves as a tool to align these patient and family needs with care providers’ efforts in a structured and measurable way. The Standards of Performance were drawn from the above evidence base via the NCP guidelines, aligning the care provider and the hospital administration with the common goal

TABLE 2. CALCULATION OF HOURLY PHYSICIAN RATE BASED ON FAIR MARKET VALUE BENCHMARK

National salary benchmark, internal medicine, inpatient-based	\$182,500
Increase by benefits and administrative factor (assume 30%)	\$237,250
Transition to hourly rate (divide by 2000 [50 weeks at 40 hours per week])	\$118.63

TABLE 3. FAIR MARKET VALUE REQUIREMENTS FOR CONTRACTS BETWEEN HOSPITALS AND PHYSICIANS

Agreement Provisions to Assure Fair Market Value Compensation
1. Compensation is set in advance
2. Compensation is reviewed annually
3. Compensation is consistent with other care providers in that specialty in that market in arm’s length transactions
4. Compensation rate is not determined in any manner related to volume or value of referrals

TABLE 4. RELATIONSHIP BETWEEN TOTAL HOSPITAL COSTS FOR THE PALLIATIVE CARE PROGRAM, PHYSICIAN REVENUE, AND COST SAVINGS GENERATED BY THE "PALLIATIVE CARE QUALITY PRODUCT"

<i>Total hospital costs<sup>a</sup></i>	–	<i>Physician net revenue</i>	=	<i>Cost of "quality product"</i>
\$573,748.00		\$138,901.10		\$434,847.00
Cost savings generated <sup>b</sup>	–	Cost of "quality product"	=	Net cost savings to hospital
\$1,876,851.00		\$434,847.00		\$1,442,004.00

<sup>a</sup>Total Hospital costs = 1.5 FTE physician at MGMA Southern hospitalist rate, 2.0 FTE APRN nursing support, 1.0 FTE LCSW support, 0.05 FTE Organizational improvement data support.

<sup>b</sup>Cost Savings calculation; (Mean cost preconsult-Mean cost post consult)×median LOS post consult×no. of consults.

of optimized care and added value for the patient and the health system. Because there is transparency in the Standards of Performance, the medical provider can trust that there is no third party influence on the measures to achieve anything other than incentive aligned outcomes.<sup>32</sup> Table 5 shows quality performance data for the first three quarters of 2008. Metric data are gathered prospectively and entered into a Web tool that is downloaded into an Organizational Improvement database for analysis.

Internal performance data reflect improvements in symptoms for the majority of patients. These results are externally validated by the patients, in terms of satisfaction with pain control as a marker on the Press-Ganey patient satisfaction survey. This survey also shows striking improvements in other markers of patient satisfaction. The data also highlight opportunities for improvement, whether it is with documentation processes or actual provision of patient care.

#### Function: Meeting the Needs of the Hospital

Hospital systems are focused on providing the highest quality (safe, efficient, timely, effective, equitable, patient-centered) care at the lowest acceptable cost in order to maximize revenue, to maintain accreditation standards, to compete in national quality rankings, and to satisfy health care consumers who elevate the system's reputation to further drive growth and development.

In a health care market competing to maximize the value of services to patients and families, Palliative Care service lines make a weighty contribution. Studies show that patient and family satisfaction scores are high when palliative care services have been involved, even when the outcome is death.<sup>21,33,34</sup> Our data are consistent with these findings. Numerous studies show that palliative care services decrease costs by optimizing resource utilization through alignment of goals and care plan.<sup>21,22,35–37</sup> These numbers are critical to the bottom line and also work to address serious hospital capacity issues with throughput.

It is important to note that there are no specific standards of performance for cost avoidance or reduction in length of stay. As previously described, the program tracks and consistently shows total cost savings of \$1100–\$1300 per patient per day. However, the services agreement is not linked to achievement of these numbers. With increasing quality as the primary driver in the value equation, providers are incented to strive for the appropriate quality outcomes. Cost reduction is allowed to remain a predictable byproduct of doing that work.

#### Function: Meeting the Needs of the Palliative Care Providers

It is the mission of palliative care providers to maximize patient- and family-centered care, attending to physical, emotional, spiritual, and practical needs of patients and families as they deal with illness, eventual death, and grief. It is recognized that this care is best delivered by an interdisciplinary team,<sup>38</sup> capitalizing on the unique proficiencies of physicians, nurses, and social workers working closely together to provide the spectrum of necessary support. For sustainability, the team needs to ensure safe and timely growth to meet service demands, avoid burnout of the providers, and ensure consistency in the quality of team care delivered.<sup>23</sup> As a profession, there need to be financial models that validate the importance of this work to the system. A healthy financial foundation increases the credibility of palliative medicine as a mainstream, viable career path for physicians in training.<sup>39</sup>

The Interdisciplinary Palliative Care Services Agreement addresses these needs in a number of ways. The physician payment structure ensures that the designated physicians are paid at a competitive rate for their clinical work, regardless of payer mix and variations in clinical productivity that come with service maturation, as well as the time-intensive nature of the work, which is not always conducive to high RVU production. The Core Unit model of interdisciplinary staffing addresses the need for safe and timely team growth to meet service demands and to maintain quality. At our institution, the services agreement has been in place for 2 years, with census trending toward the threshold for implementation of a second Core Unit. This trend highlights the importance of strategic planning for growth to maintain both the quality of patient care and the quality of life for those dedicated to providing it.<sup>23</sup>

#### Conclusion

The Interdisciplinary Palliative Care Services Agreement represents an example of physician leaders and hospital administration partnering to improve the value of medical care for patients and families. However, there are potential implementation barriers to consider. For example, the model described only addresses the clinical portion of the physicians' work and does not address the educational and research missions of the academic model. Also, this model may not generalize to smaller hospital systems. Additionally, at a certain level of volume and team efficiency, an RVU model of reimbursement may become preferable to a time-based rate. This consideration is important to track with service

TABLE 5. PALLIATIVE CARE TEAM QUALITY PERFORMANCE METRICS AND DATA

Overall comfort	Documentation of pt status	Goals of care	Timely consult completion	Facilitation of throughput	Patient satisfaction—Press ganey (Family tool in development)	Hospital %ile
Goal in at least 75% of patients for symptom reduction to a level consistent with their goal for overall comfort within 72 hours of consultation (metric changed for FY2009)	90% documentation of patient status within 48 hours of consultation; this includes the following subsets: prognosis, functional status, psychosocial issues, and spiritual issues, with plan for psychosocial/spiritual intervention as appropriate	At least 90% of palliative care patients will have delineation of goals of care for patient, family, and medical providers within 72 hours following palliative care consultation	For 100% of palliative care patients a full consultation with treatment recommendations/plan will be completed within 24 hours on a routine basis and as soon as possible on an emergent basis per medical staff by-laws	For at least 90% of palliative care patients, options for discharge or ICU transfer disposition will be documented within 48 of consultation	Section Pain control 98 Spiritual/emotional 99 Physician 96 Personal Issues 98 Overall 90	88 64 95 87 88
% better or same for specific symptoms in the 2008 dataset:					Response Rate: 36% (46 of 129 live home discharges)	
	Prognosis-304 of 417 73%	376 of 417 90%	409 of 417 98%	336 of 417 81%		
	Spiritual-323 of 417 77%					
	Psych/Soc-383 of 417 92%					
	Functional-404 of 417 97%					

ICU, intensive care unit.

development to derive the most benefit from the agreement over time. Finally, the program's infrastructure and maturation must be well enough established to clearly demonstrate the desired outcomes so that administration can readily identify return on investment.

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