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Navigating Tensions: Integrating Palliative Care Consultation Services into an Academic Medical Center Setting

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Abstract

Context—Despite rapid proliferation of hospital-based palliative care consultation services (PCCS) across the country, there is little description of the dynamic processes that the PCCS and the non-PCCS hospital cultures experience during the institutionalization of a successful PCCS.

Objectives—To describe the institutionalization of a new PCCS in a quaternary care academic medical center (AMC) and highlight two themes, cost and quality, that pervaded the dynamics involved from the inception to the successful integration of the service.

Methods—Ethnography using longitudinal field observations, in-depth interviews, and the collection of artifacts. The study was performed in a 750-bed quaternary care ACM in the northeastern region of the U.S. Participants were a purposefully selected sample (n = 79) of (a) senior-level institutional administrators, including clinical leaders in nursing, medicine, and social work, (b) clinicians who used the PCCS, either commonly or rarely, and (c) members of the PCCS core and extended teams.

Results—Key infrastructure components that contributed to the successful integration of the PCCS included: top level interprofessional administrative buy-in to the quality and cost arguments for PCCS, PCCS leadership selection, robust data collection strategies emphasizing quality outcome data, the adoption of the "physician referral only" rule, and incremental and sustainable growth. The PCCS service has grown an average of 23% per year from 2003–2009.

Conclusion—An in-depth understanding of the dynamic interaction of the infrastructures and processes of a successful institutionalization, in their unique complexity, may help other PCCSs identify and negotiate attributes of their own circumstances that will increase their chances for successful and sustainable implementation.

Keywords

Palliative care; growth; consultation service; development; infrastructure; institutionalization; ethnography

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Introduction

The purpose of this article is to describe the successful institutionalization of a new Palliative Care Consultation Service (PCCS) in a quaternary care academic medical center (AMC). By institutionalization, we mean the processes involved in integrating a PCCS into an existing medical center infrastructure, including the development of rules and/or protocols that are compatible with and reflect an understanding of the institutional culture. In this article, we emphasize the infrastructures of both the academic health center and the PCCS, and highlight tensions related to quality and cost that were influential in the institutionalization process. By infrastructure, we mean the leadership, administration, funding support, policies and formal relationships of the AMC and the growing PCCS (1).

Palliative care consult services have rapidly expanded across the U.S. During a decade, the proportion of AMCs offering palliative care services rose from 15% to more than 75% (2, 3). Approximately nine of every 10 medical centers endorsed by the National Cancer Institute now have a PCCS (4). Palliative care (PC) is now a board-certified subspecialty in both nursing and medicine, and PC consensus practice guidelines have evolved to National Quality Forum practice standards (5). Together these components demonstrate widespread institutionalization of PC into the existing national frameworks of health care delivery.

There are several descriptions of—and prescriptions for—the development of PCCSs within the hospital setting (1, 6–8). Radwany and colleagues described five strategies that contributed to the development of PCCS: planning, education, communication, accessibility and evaluation (9). Similarly, Nelson and Walsh described the importance of broad educational efforts, careful data-based program evaluation, rigorous tracking of financial outcomes and a solid business plan as key elements of PCCS success (10). The need for sound cost data in the context of the financial pressures of an AMC was highlighted by White and Cassel in a case study of how their service had to develop a business case for “justifying its continued existence” (11, p. 171). The core themes of quality and cost are consistently present in earlier reports of successfully implementing PCCSs (12). Despite these published strategies and the rapid proliferation of hospital-based PCCSs across the country, the available literature provides little additional information that incorporates multiple perspectives of administrators and clinicians about the dynamic tensions between a PCCS and the larger hospital setting as the PCCS becomes integrated into a larger institution.

Methods

This report was developed from a four-year ethnographic research study designed to better understand the interface between PC and acute care cultures within the context of an academic hospital. Data were gathered on multiple facets of the inpatient PCCS: (1) how the clinical teams integrate administratively and interpersonally, (2) perceived outcomes of the new PCCS, (3) barriers and facilitators to success, and (4) the dynamics of the PCCS, both internally and as they interface with other hospital subcultures.

Study Setting

The setting was a 750-bed quaternary care AMC in the northeastern region of the U.S. Data collection began in 2005 and was completed in 2009, years four through eight of a new and growing AMC-based PCCS.

Sample

Data included field notes from 3½ years of participant observation, in-depth interviews of patients, family members, clinicians, administrators, and others, and the collection of "cultural artifacts" (e.g., policies, meeting minutes, forms, letters, and brochures). Data collection also included a retrospective examination, through interviews and artifacts, of the first three years of the PCCS development. This ethnographic study used a team-based approach. All authors, with the exception of T.E.Q., collected data and participated in data analysis and writing. T.E.Q. participated in data analysis and writing but did not have access to raw data.

For this report, we rely on a subsample of data from interviews with clinicians and administrators, field notes, and cultural artifacts. This subsample included transcripts of interviews with study participants (n=79) who were purposefully selected because they could give a broad view of the early implementation of PCCS from a variety of perspectives and historical vantage points. Participants were: (a) senior-level institutional administrators (n = 21), including clinical leaders in nursing, medicine, and social work, (b) clinicians who used the PCCS (n= 33), either commonly or rarely, and (c) members of the PCCS core and extended teams (n = 25). The range of participants' collective lengths of service extended across the eight-year history of the PCCS at the institution, from the period prior to and near the time the service was introduced to its organizational status at the end of data collection. These data provide insights regarding the contemporaneous thinking about the role and scope of palliative care over time.

The study was approved by the University of Rochester's Research Subjects Review Board. All interviewed participants gave informed consent and an additional level of protection was obtained through a National Institute of Health Certificate of Confidentiality.

Results

The PCCS Team

The PCCS team we studied consisted of a small core team of PC board-certified physicians and nurse practitioners (NPs) providing direct care to patients and families working in collaboration with the referring team (the patient's attending physician, residents, and NPs) and the unit-based nurses, social workers and chaplains. This core team was part of an extended clinical team that included a social worker, chaplain, psychologist, ethicist, massage therapist, bereavement coordinator, and a harpist. The core and extended clinical teams were integrated through weekly team meetings. The teams (core and extended) were led by a director (T.E.Q.), a prominent PC physician scholar, and supported by an administrative staff managing the clinical, educational, research and performance improvement, and billing components of the team. The first author is a co-director of the research and performance improvement program. At the beginning of our study period, the PCCS core team consisted of a single NP-attending physician dyad. During our study, the core team grew to two teams, with each team including an attending physician (AP) and NP. In addition to the two AP-NP dyads, medical residents on required PC rotations and occasional medical and nursing students on PC electives were assigned to one or the other of the teams. The full-time NPs were a team constant who provided much of the continuity of the service, while other team members (e.g., APs, residents, and students) rotated on/off service on two- or four-week schedules. In 2006, PC fellows were added to the team.

Impetus for the PCCS

Quality and cost concerns were central to the initial rationale for developing a PC service, and continued to be important in its ongoing administrative support. The initial development arose from an interprofessional task force assembled in 2000, comprised of hospital administrators and leaders in medicine, ethics, nursing, and social work, who were charged with improving end-of-life (EOL) care. Study participants able to speak from this historical perspective and task force meeting minutes described two interrelated concerns: 1) inadequate symptom management, and 2) inconsistent communication for persons nearing the EOL. Both concerns were perceived to result in the continuation of burdensome, costly, and ineffective treatments. As one administrator said, “A large number of resources are used for EOL management, when, if everyone knew all the facts, and there was a group of people helping people think through the EOL, those resources wouldn’t have to be used in that way.”

The first quality concern of the task force was the communication surrounding decision making for patients with “non-reversible end-stage illness.” Participants sensed that patients were remaining in the hospital because physicians were unwilling or unable to have conversations with patients, families, and/or each other about the likelihood that patients were dying. Participants reported and archival records documented that clinician-patient-family conversations focused on EOL care often did not happen until death was imminent (within hours to days) if at all. These findings are similar to earlier reports regarding reluctance of clinicians to engage in EOL conversations (13–15). The associated delays were believed to result in default decisions to continue aggressive, disease-driven, expensive and ultimately non-beneficial treatments. Inadequate communication about EOL issues with patients and families was commonly attributed to physician discomfort and/or a lack of continuity in patient care. Participants observed that the common practice in AMCs of rotating attending physicians made it easy to avoid difficult conversations regarding poor prognoses. Conversations would be delayed until a new, more willing physician rotated onto the service or until every possible technologic option to prolong life had been tried and had failed. The delay in these conversations had significant cost and quality implications. As an administrator described: “[W]e had a length of stay problem that we thought was somewhat associated with the inability to handle EOL appropriately.” As a result, many long-stay patients continued to receive disease-driven, expensive, invasive and burdensome treatment, despite no clearly achievable goals or benefits.

The second quality concern identified by the interprofessional task force was a lack of a systematic institutional approach to symptom management. Idiosyncratic differences in approaches between individual physicians, nurses, and clinical care units meant that patients frequently did not receive symptom management of the highest quality. Task force members recommended an action plan to address two main quality concerns: 1) lack of communication about poor prognosis, and 2) lack of systematic excellence in symptom management.

The dual motivators of quality and cost were summed up by one administrator who described the rationale for investing in a PC consultation service: “We felt there would be a quality return on investment. We felt there would be a quality of life for the patient. We thought we would have a good service for patients and families. And we thought there would be a length of stay return.” Administrators in our study reported that although improving the quality of care was a driving motivator, it would be difficult to implement system-wide improvement unless the service was financially viable.

Funding the PCCS

The idea that a PCCS could improve patient care and simultaneously decrease net overall hospital costs was generally agreed upon by PC clinicians and hospital administrators. Several PC clinicians suggested that the notion of a PCCS helping to control overall cost by avoiding ineffective treatment was especially important to hospital administrators. As one clinician said, “People buy the business model for palliative care, especially hospital-based palliative care.” Similarly, another clinician noted the success palliative care has had nationally, arguing for its business model and cost savings. He noted that administrators “definitely believe it [the business model] for palliative care.” He then went on to compare PC and geriatric services: “[I]t’s harder to be as optimistic about the future of geriatrics, although I think it will survive and it will thrive. But I think the future’s probably brighter for palliative care to a larger degree because palliative care has been much more successful about making arguments about the business model.”

Since direct income from palliative care consultation is insufficient to fully fund a program (16), the potential for additional cost savings through shortening lengths of stay was also emphasized at national conferences. One clinician who attended national PC conferences said: “[O]n the business side…they [presenters] would emphasize ‘short length of stay, short length of stay, short length of stay.’” Studies (17–19) and arguments put forth by national PC organizations such as the Center to Advance Palliative Care (20) support the potential for hospital cost-savings associated with a PCCS. All administrators we spoke with were aware of the cost avoidance arguments related to palliative care. Several administrators who supported the PCCS development acknowledged that cost arguments were important in garnering support for the program, but then added that was not their sole rationale for supporting the program. Instead, they emphasized their own personal stories related to the quality arguments for PC as their rationale for valuing and supporting the PCCS. One administrator described working with PCCS leadership to develop a business model for the new service as: “How do we do this [PC consultation] in a way that I can subsidize it and that we can create the business case for continuing to subsidize it because, probably because of my clinical background…I believe it [PC consultation] has value.” Another administrator noted the difficulty in creating any new program in today’s hospital milieu and described PC as a win-win scenario, noting: “Not only was there a value to the patient and the family as it relates to their care… There also was a financial advantage for the hospital.” Administrators repeatedly described both the cost and quality benefits of PC for the institution. As one said: “Institutions have to know what they are paying for. [The PCCS] saves the institution not only anguish for their patients but are saving them money – because these places don’t run on good will.”

In contrast, clinicians who seldom referred patients to the PCCS were less likely to identify that PC consultation added quality to the care of their own patient populations and were more likely to question the motivation of the PCCS. Several of the clinicians who seldom referred patients to the PCCS described the motivation of administration and the PC service as driven by cost rather than quality concerns. Clinicians who seldom referred patients to the PCCS were less likely to identify that PC consultation added quality to the care of their patient population. One clinician described what she perceived as the dual motivations for starting a PCCS: “I don’t know whether [the administrator] thought that [the hospital] should do palliative care because palliative care is the right thing to do or as a very good manager [the administrator] was looking to shorten hospital length of stay.” In another instance, a clinician reported: “I’ve heard people say things like, they [the PCCS] are very fueled by shortening length of stay in the hospital so… And I hear those comments and I’m, like: ‘Okay, what is the real agenda here?’” The presence of a perceived cost-reducing agenda left the PCCS and its supporters open to occasional innuendos suggesting that their motivations were primarily financial. Although it is the institutional norm for all programs to have quality assurance goals and metrics, the subtle and sometimes derisive comments that the PCCS motivations were primarily financial seemed to mandate that the PCCS have strong evidence of its quality outcomes in order to develop broader acceptance.

Data-Driven Justification for Continued Funding

Administrative leaders needed data to support and sometimes defend the legitimacy of the PC service within the organization. The need for data was especially important because the PCCS relied on deficit funding. Most administrators in our study reported that they needed objective evidence of the “value added” by the PCCS in the hospital as requisite to continued support, especially early in the life of the service. One PCCS participant noted that the PCCS was “able to collect data from the get-go, both about who we were seeing, how many consults, and all the symptom management [data] that show that people with high pain levels, [had their pain levels go] down after we saw them, and shortness of breath also, and that – it’s powerful data and it helps, you know, trying to justify your existence.” The push for PCCS quality and cost outcome data was omnipresent in this AMC because services – especially those not mandatory – with poor or no outcome data run the very real risk of being cut (21).

From its inception in 2001, the director of the PCCS was intent on creating and maintaining a database to systematically track key patient, service, and system outcomes. A “PC Consult Form” was developed that reflected relevant variables at the institutional (location, referring attending, length of stay), patient (demographic, goals of care, social circumstances), clinical (diagnoses, prognoses, lab results) and PC-focused levels (reason for consultation, Edmonton Symptom Assessment Scale scores, capacity assessment, PC performance status, advance directives, and resuscitation status). Integrating important PC outcomes into the assessment made sense clinically, and making the PC Consult Form a different color made it stand out in the medical record. The form and its companion, “PC Follow-Up Form,” which incorporated the same symptom assessment measures, allowed the team to collect and report overall trends in numbers, locations, and patterns of consultations as well as primary diagnoses of PC patients. The use of the matched follow-up form also allowed the service to demonstrate quality improvements over time in total number of patients’ symptoms, symptom severity and responses to treatment, as well as to monitor the patient’s performance status and goals of care, and to provide narrative responses to questions designed to prioritize what patients felt was “most important” and “most bothersome” to them (22, 23).

The early establishment and maintenance of a database (which consisted of over 4,000 entries in 2009) allowed the PCCS to regularly provide both narrative and quantifiable outcome data to hospital administrators and clinicians; since its inception. The availability and synthesis of consult outcome data were ongoing administrative and clinical requirements, not a one-time event. These aggregate data were available for quality analysis, research, and appeals to potential donors.

Much of the data in support of the continuing need for the PCCS came from the database, but additional important data also came from: (a) general physician satisfaction surveys, (b) internal medicine resident physician satisfaction evaluations of their required rotations, (c) reports of medical student satisfaction with their understanding of pain and symptom management and palliative care, and (d) narrative data in the form of stories or letters from patients and family members. Responses from non-PCCS clinicians identified several key areas of satisfaction including that the team was visible, responsive, trustworthy, added value, and provided continuity of care for many patients with complex medical and family dynamics.

Several administrators indicated that the multiple sources of data about the PCCS and its measurable outcomes reported at least annually were vital factors in their ongoing judgments about whether to continue or expand the service. The PCCS director emphasized that key indicators of quality performance were influential in assuring continued program support from the service's many stakeholders (patients, families, clinicians, potential donors, and administrators).

Interprofessional Buy-In and Physician Hierarchy

The interprofessional membership of the task force in 2000 resulted in the formation of supportive administrative "buy-in" from hospital sectors governing nurses, social workers, and physicians. In particular, buy-in from physicians was described by administrators as key for the nascent program and the most important element to negotiate. The successful buy-in from physicians stood in contrast to an example of one clinician's account of an experience with a PC service in another hospital. In describing that PCCS, she noted: "There was not a real buy-in by medicine… nursing administration bought into it but it didn't translate to medical administration buying into it. So I think that was a barrier." She went on to say that the service never flourished and closed after losing its institutional funding.

Several hospital administrators described their good fortune in getting a "doctor's doctor" or "champion" to be the director of the PCCS. In addition to typical leadership characteristics, administrators were in agreement that being a physician with established clinical credibility was important. As one administrator described: "I think it would have to be a physician that's seen as a physician who's actually working in the trenches." The benefit of hiring such a leader was that he came into the organization with the trust and respect of clinical leaders in the system's hierarchy. As one administrator described, he could "talk to other physicians on a level where they have a common dialogue." Early on, when the PC service was not yet established, he provided the clinical credibility necessary for the "pushback" to other services or individual physicians who questioned the need for or legitimacy of a PCCS.

"Referral by Attending Physician Only" Consultation Rule

Although the mission of the PCCS was quickly embraced by most nurses, social workers and chaplains, its acceptance by physicians was more gradual. Some physician participants described an initial reluctance to call for a consult. The task force convened in 2000 discussed the importance of having attending physician permission prior to initiating a consultation, and this idea was adopted by the PCCS as a consultation rule. As one PC physician noted, "The nurses often want to get consults [for patients] and they don't [always] get them but in the long run it was a better strategy [for growth] because you don't want to alienate the docs in this environment. It is a doc-oriented environment." The rationale for the rule was that it recognized and respected established institutional hierarchies, boundaries, and processes. With the exception of practices surrounding ethics consultations, this rule was consistent with seeking other consultations in the medical center and was required to bill for services that, in turn, helped support the financial viability of the PCCS program. Respect for and reinforcement of this rule by core PC team members was a critical element in the PCCS' continual growth.

The steady increase in consultations experienced by the PCCS reflected higher numbers of physicians calling for consults, often at the behest of bedside nurses or residents who have rotated through the mandatory PCCS rotation. It also reflected an increased number of consultations approved by individual attending physicians whose first PC consultation experience was perceived to add value to patient care. Because the PCCS operated on a physician referral basis, the attending physicians must ultimately see the value-added attributes of the service.

The PCCS is seen as an effective means to facilitate patients making an often difficult transition from disease-directed treatments that have become burdensome and ineffective to treatment that is more exclusively focused on symptom management. This was welcomed by most referring physicians who, as part of their initial reason for consultation, might request that the PCCS engage in a “goals of care” discussion with patients and their family members. However, sometimes these shifts in goals of care were a source of negotiation and tension between and among providers when the PCCS supported informed patient/family choices that ran counter to what the referring physician thought was most clinically appropriate, and sometimes also counter to the PCCS clinician’s own opinions. The delicacy of this negotiation within a structure where the referring physician was in charge and a consulting team present only at the behest of the referring physician should not be underestimated. A successful negotiation that did not violate professional boundaries meant that the PCCS would likely be consulted again by the requesting physician. Overstepping those same boundaries would have the opposite effect.

However, to be seen strictly as an EOL or hospice service was perceived by PC clinicians to limit the scope of PC services and hamper consultation growth. In order to grow, the PCCS had to be seen as able to provide services to patients who were continuing disease-directed treatments, as well as those who were forgoing such treatments. In the former category, the PCCS was most often consulted for pain and symptom management. The ability to see and refer patients who were actively involved in disease-directed treatment increased the range and number of patients for whom a PC consult was a viable option.

Concerns About the PCCS

Initial and some ongoing negative responses to the PCCS (primarily from physicians), included: 1) PC is not what an AMC is about, 2) we already provide this service ourselves, 3) our patients are not at EOL, and 4) the PCCS has an “agenda” with which we do not agree. Some NPs and MDs expressed concern that a PCCS had the potential to deskill physicians, i.e., some physicians would not learn important communication and symptom management skills themselves, knowing that they could always call for a PC consult. As one clinician noted, “I think that there’s been a lack of accountability [among some non-PC attendings and fellows] for adequately treating peoples’ symptoms and they turf them to the palliative care team…You know, you don’t have to refer them to the palliative care team…for basic level things.”

Positive Perceptions of the PCCS

More positive physician, nurse, and social worker reactions focused on: 1) the value-added of PC for patient care, 2) assistance available in working with complex families, 3) help with difficult symptom management problems, 4) assistance with complex decision making 5) continuity as patients approach the EOL, 6) written clarity and focus of assessments and recommendations, and 7) assistance with complex home discharge planning for dying patients. Organizational value-added PCCS-associated clinical practice activities included developing and implementing: 1) systematic pain management pocket cards, 2) Medical Orders for Life Sustaining Treatment (the MOLST, based on Oregon’s Physician Orders for Life Sustaining Treatment), and 3) institutional policy guidelines for the withdrawal of ventilators and for palliative sedation.

Almost all physicians who used the PCCS described PC as a time-saver for their own workloads, with some recognizing the particular expertise and availability that PC clinicians have to address complex psychosocial and clinical issues. One physician noted: They [PC clinicians] do have more skill in having these kinds of conversations and so in some ways they are able to have these conversations better than the regular team. But I think a main component of it is just the time that they spend with the patient.” Another physician described the PC team as an interdisciplinary group where “I don’t see it [the PCCS] nearly

> as controversial as ethics [consultation] sometimes is. I think it has become more acceptable, more valued, greater utilization. Because people are beginning to see that it can actually help."

Sustainable Growth

The steady growth of consultations (by an average of 23% per year from 2003–2009, see Table 1) provided the data necessary to justify the increased number of personnel needed for the service. Table 1 depicts team size, composition, average inpatient daily census, consultation rates, and key milestones in the PCCS.

As the consultation numbers grew for the PCCS, the team expanded. The initial dyadic team expanded into two teams, each team having a full-time NP and part-time PC attending MD, along with rotating residents. The aggregate percentage time of the NPs increased from 1.0 FTE to 2.0 FTE and the MDs on each team increased from one physician 0.5 FTE to two physicians with 1.4 FTE to account for the increasing workload and weekend coverage. The administrative support components of the PCCS have grown proportionally, beginning with 1 FTE for a program administrator to 5.3 FTE for administrators who manage routine administration duties, maintenance of an extensive database, bereavement follow-up care services, and a cadre of volunteers. A formal outpatient clinic was opened in 2004 and a dedicated PC inpatient unit was opened in 2009.

For many members of the PC team, this pattern of growth was perceived as one of a normal workload, followed by months of an increasingly busy workload (more "very busy" days), which then led to an extraordinarily heavy workload (almost every day extremely busy). In the latter mode, some team members were worried that they were not doing as good a job as they could. Concerted efforts to stay responsive to patients, family members, and referring teams often resulted in missed lunches and late evenings. This extraordinarily heavy workload was followed by an expansion of FTE time allocated to the core team. Staff who had been on the PCCS for a longer period of time recognized and acknowledged these transition times while still finding them difficult, but newer members sometimes expressed frustration at the high workload. One experienced participant summarized the growth patterns, "I think [the] approach is that you wait until you have the data to support growth, even though there are growing pains, and then present that [data] to administration" to demonstrate the need for more staff. The administration's responses to such requests were ongoing negotiations, in part based on the quality of the evidence that the PCCS was able to gather and produce.

Discussion

Although not all successful PCCSs look alike, one common marker of early success is solid and consistent growth in the number of consultations. Using this criterion, the PCCS that we studied represents a successful program.

Much of the infrastructure perceived by our participants as necessary for the success of the PCCS is similar to elements previously identified by others, including a robust data collection process (1, 9). Others key elements include the presence of top administrative advocacy, broad-based multidisciplinary support, and a credible physician leader. Our findings extend the existing knowledge base by: 1) describing infrastructure development and processes longitudinally and in context, 2) highlighting tensions surrounding cost and quality themes and 3) providing a broad spectrum of perspectives from clinicians and administrators about the elements that supported institutionalization of PC services, as well as perceived concerns.

Contextualizing general factors through specific institutional cases, such as this report, conveys how the success of a PCCS depends on interactive institutional and PCCS leadership to manage the complexity of fitting general factors to a particular institution's history, infrastructure, values, and priorities. The AMC studied has strong historical ties to the biopsychosocial model of medicine, possibly making the introduction and institutionalization of a multidisciplinary, multidimensional PCCS more acceptable (24). Early interprofessional support along with careful attention to existing medical hierarchies improved the PCCS's opportunity for long-term success. In addition, having a national leader (T.E.Q.) to champion and shepherd the service was likely beneficial to overcoming early skepticism about the clinical importance of a PCCS.

There was a strong perception within the institution that a PCCS could substantially improve the quality of care delivered to patients with complex illness while at the same time contribute to cost containment (16). The latter is most likely to occur via clarifying treatment goals and aiding informed decision making. For some patients such decision making may lead to avoiding burdensome and costly treatments of unlikely benefit. The interaction between improving quality of care for patients and containing costs for hospitals allowed for an indirect funding stream for the PCCS, but also created ongoing tensions with some clinicians—those who did not see a value-added by PC for their patients—related to the perceptions of "ulterior motives" for palliative care services. Similar tensions were described by Edmonds and colleagues in their editorial responding to media critiques of an EOL pathway in an acute care hospital in the United Kingdom (25).

Because many of the patients seen by PCCS die during their hospitalization and perhaps because of the historic links with hospice programs, there is also risk of PCCSs being perceived as end-of-life programs akin to hospice. It was important for continued growth in this academic health care environment that the PCCS was seen as available to work with patients (and their clinicians) receiving disease-directed treatment as well as those nearing the EOL. This PCCS worked hard to overcome the initial perception that palliative care is exclusively for EOL or hospice care by giving educational presentations as well as obtaining permission from referring physicians before having goals of treatment discussions.

In summary, we described aspects of infrastructure and key processes that contributed to the success of a new PCCS in an AMC. Important institutional infrastructure elements included: 1) initial broad-based top level administrative support; 2) PCCS leadership selection; 3) the collection of robust quality and outcome data demonstrating improved quality of care; and 4) recognition of the medical hierarchy through physician referral only rule. These factors created a context from which to build and sustain a successful PCCS over time. Examining the unique complexity of one's own institutional structures and processes may help newer PC services identify attributes of their own context that will increase their chances for the successful initiation and institutionalization of PCCS in the acute care medical center environment.

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Table 1

Palliative Care Team and Consultation Growth

Year	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**
Key milestones (service begins October 2001)	Resident rotations begin		Formal outpatient services begin		Palliative care fellowship begins	Outpatient services expanded		Dedicated inpatient unit opens
Days from admission to PC consult, mean(median)	17.5 (7)	15.4 (7)	15.6 (7)	12.4 (6)	12.4 (6)	10.6 (5)	10.2 (4)	9.1 (3)
Core NP-MD team (FTE)	1.5	1.5	2.5	3.0	3	3.4	3.4	3.4
Administrative support (FTE)	1.5	2.75	3.5	4.0	4.5	5.5	5.3	5.3
New inpatient consultations	276	282	447	584	688	775	857	904
Avg. inpatient daily census	~7[a]	~7 [a]	10.8	12.4	17.2	20.8	21.4	24.1

[a] Estimate.