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Palliative Care in Acute Care Hospitals

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1. Introduction

Changes in the demographics and healthcare needs of the U.S. population have forced a shift in the types of healthcare services that people want and need. Hospitals are faced with the challenge of meeting the needs of an increasingly older and frailer population. An American born in 2000 can expect to live to nearly 77 years old; a 65 years old can expect to live another 18 years (Federal interagency forum on aging-related statistics, 2002). In addition, technological advancements have allowed individuals to live longer with chronic, advanced illness. For example, the elderly often experience chronic, progressive diseases that they will live with for three to six years before death (Fried, 2000). These changes have placed pressures on the healthcare system to design practices and programs that best meet the needs of the population. Table 1.1. highlights some of the demographic and care needs that hospitals must address.

Because the last years of life are often characterized by physical and psychological distress, greater demands on family caregivers, and increased needs for external support, there is a growing need for palliative care services. Palliative care programs are often staffed by an interdisciplinary team of physicians, nurses, social workers, counselors, and clergy (the composition of which is often contingent on the program's funding source and practice setting) and is focused on the relief of the physical, psychological, and spiritual suffering of patients with life-threatening illness, and their families. The increasing number of hospital-based palliative care programs is evidence of the demand for these

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TABLE 1.1. U.S. Healthcare demographics

The median age of death is greater than 75 years and will increase
The proportion of the population older than 85 years old will double to 10 million by 2030
90% of Americans die after living for a time with one or more chronic, life-threatening illness
98% of Medicare decedents spent and spend at least some time in a hospital in the year prior
   to death
53% of all deaths occur in hospitals
15-65% of all decedents have at least one stay in an intensive care unit (ICU) in the six months
   prior to death

Source: Federal Interagency Forum on Aging-Related Statistics. www.agingstats.gov
Centers for Medicare and Medicaid Services. www.cms.hhs.gov

TABLE 1.2. The population of patients for whom palliative care is appropriate

Those with life-threatening illness where cure or reversibility is a realistic goal (e.g. stroke)
   but the illness causes significant burden
Those with chronic, life-limiting conditions (e.g. chronic heart or renal failure)
Those with a terminal condition, whether the result of a chronic or acute illness or event,
   who are unlikely to recover and for whom palliative care is the predominant goal

services—15% of hospitals and at least 26% of U.S. academic teaching hospitals have a palliative care consult service or an inpatient unit (Billings & Pantilat, 2001; White *et al.*, 2002).

Table 1.2 highlights the diverse patients who may be served by palliative care; the criteria are based on symptoms and the complexity of needs rather than on age or stage of disease (National Consensus Project, 2004a).

In this chapter we will present information that should be helpful to a prospective hospital-based palliative care program director and to the administration of health care organizations. First we will summarize the arguments about the need for and benefits provided by palliative care programs. We will then present information on the planning, implementation, and evaluation steps necessary to ensure that a palliative care program meets the needs of the hospital in which it operates, the clinicians who care for patients, and the patients and families living with illness.

2. Why Palliative Care in Acute Care Hospitals?

First, hospitals are where the most severely ill patients are found. It is estimated that 12% of acute care patients are appropriate for palliative care services (Edmonds *et al.*, 2000). Unfortunately, the care of hospitalized patients with serious, advanced illness is often characterized by the under-treatment of symptoms, conflicts about who should make decisions about the patient's care, impairments in caregivers' physical and psychological health,

and depletion of family resources (Desbiens *et al.*, 1999; Emanuel *et al.*, 2000). Palliative care aims to improve the quality of life for these patients and their families by managing pain and symptoms, maintaining communication, providing psychosocial, spiritual, and bereavement support, and coordinating a variety of medical and social services (Morrison & Meier, 2004).

Second, hospitals are where most expenditures occur. Nearly all Medicare beneficiaries spend some time in the hospital during the last year of life and roughly 25% of Medicare dollars are spent on patients in the last 60 days of life. In addition, the 63% of Medicare patients with greater than two chronic medical conditions account for 95% of Medicare costs (Lubitz & Riley, 1993). Palliative care programs can help provide quality care that is fiscally responsible by preventing unnecessary or unwanted medical interventions (Raftery *et al.*, 1996; Smith *et al.*, 2003).

Third, hospitals are the place where transitions in care often occur. Because of the many healthcare providers involved, there is potential for miscommunication. For example, patients at end of life often have long hospital stays and are typically cared for by multiple physicians, each with an opinion on what is best for the patient. Two hallmarks of palliative care, communication and coordination of care, are necessary to ensure that patients and families receive patient-centered care and have smooth transitions from the hospital to home, nursing home, or hospice (de Haes & Koedoot, 2003; Parry *et al.*, 2003).

3. What are the Benefits of Palliative Care in Acute Care Hospitals?

By meeting the needs of an increasingly aging population with multiple chronic illnesses, palliative care programs can provide several potential benefits to acute care hospitals. These include:

3.1. Lower Costs

Although the data on the cost-effectiveness of palliative care is mixed, there are several ways in which palliative care programs may lower costs (Payne *et al.*, 2002). First, by helping to transition patients appropriately to care settings with lower acuity, palliative care programs may help reduce length of stay and intensive care unit (ICU) utilization (Miller & Fins, 1996; Raftery *et al.*, 1996). Transfer of such patients out of the ICU also allows for more acute care and elective admissions, appropriate use of critical care beds, and reduced number of hours that the emergency department must be placed on "diversion." Second, palliative care can help minimize the utilization of unwanted high intensity interventions as well as

unnecessary and often painful or ineffective tests and medicines (Fins *et al.*, 1999). By helping to initiate discussions about resuscitation and treatment goals, palliative care programs can appropriately divert resources being used from patients away from expensive and intense life-prolonging therapies to less expensive comfort orientated and supportive therapies (Campbell & Guzman, 2004). Finally, by improving communication and coordination of care between clinicians, patients, and families, palliative care programs can provide high quality care while lowering ancillary costs (Hoffmann, 1998).

3.2. *Improved Pain and Symptom Management*

A cornerstone of palliative care is that patients do not suffer from uncontrolled symptoms. Successful approaches to the assessment and management of pain and other symptoms have been established in clinical trials (Higginson *et al.*, 2003). For example, 85% to 95% of terminally ill patients' pain can be relieved with oral regimens that are not dose limited by troublesome side effects (Doyle *et al.*, 2004). Not only is symptom control important for the patient, improved symptom control is associated with better well-being in the surviving family members (Valdimarsdottir *et al.*, 2002).

3.3. *Providing Support to the Primary Team*

Many clinicians have difficulty providing good end-of-life care (Christ & Sormanti, 1999; Norris *et al.*, 2004; Sivesind *et al.*, 2003; Sullivan *et al.*, 2003). Until recently, there has been little training in palliative care for health care providers. Palliative care services can support the clinicians responsible for the care of the patient by:

By providing expertise in pain and symptom management.
Helping to facilitate communication about goals of care between patients, families, and healthcare providers.
Helping to coordinate care by providing a liaison between the primary service and the other healthcare providers involved in the patient's care.
Educating clinicians about the role of hospital-based palliative care and enhancing their skills through role modeling and case-based teaching.

Despite these justifications for hospital-based palliative care programs, most hospitals do not have a program and struggle to develop new programs. In an era of high health care costs and slim profit margins, if new programs are to be developed, implemented and sustained, they need to serve the needs of hospitals in which they are based and demonstrate improved outcomes. In the next section, we will review the crucial elements to creating support and gathering the necessary information to design, market, implement, and evaluate a new hospital-based palliative care program.

4. Conducting a Needs Assessment

The first step in developing a palliative care program is to conduct a needs assessment (Table 1.3). Palliative care is not a solo practice. Strong collaborative and team-building skills are critical for success. Successful leaders will have the skills to collaborate with the multiple stakeholders–administrative, clinical, and community–whose ongoing support is necessary to the integration and sustainability of the program.

The following section describes the different components of the needs assessment and discusses the process by which the information is gathered and used in program planning and implementation.

4.1. Systems Assessment

A commitment from stakeholders throughout the hospital will be necessary to influence the culture of acute care hospitals to accept a palliative care program. Many program developers assume that educating hospital staff about the benefits of palliative care is sufficient to generate support. The planning team, however, needs to refocus the traditional ideas of "selling" palliative care and use the assessment of the stakeholders to help them shape and design the program. Find out what the stakeholders want from a program and then tailor the program to meet these needs. The assessment will also help determine what outcomes will be important to the stakeholders. For example, it is important to meet with the hospital's administrators and its financial planning and billing managers to determine how they think palliative care services can benefit the hospital–is it in reducing costs, meeting Joint Commission on Accreditation of Healthcare Organizations (JCAHO) compliance standards regarding symptom control, generating good public relations, etc?

TABLE 1.3. Purposes of a needs assessment

To reconcile the priorities of palliative care proponents with those of the hospital administration, clinicians, patients, and families, and with the existence of similar or overlapping services in the community

To ensure that the palliative care program meets the needs of its consumers and is accepted as an integral part of the hospital continuum of patient care

To establish baseline information that will be necessary when attempting to evaluate outcomes

To provide insight into the design of the program, staffing needs, and clinical focus e.g. ICU patients vs. outpatients, symptom management vs. care planning, etc.

To allow program developers to address the common misperceptions that clinicians have about palliative care, *before* launching the program

These include the view that:

Palliative care teams "take over" the care of the patient at the expense of the primary team

Palliative care teams encourage patients and families to "give up" rather than to continue with aggressive care

Palliative care is a form of healthcare rationing.

4.2. Clinical Assessment

Proponents of palliative care can easily identify clinical units or populations that they believe need their services; they tend to view palliative care in terms of the benefits that it can provide to patients. While these benefits are important, a key to generating support for a new program is to view clinicians as the primary consumers of the program. According to the Center to Advance Palliative Care, marketing the benefits of palliative care to potential consumers (physicians, nurses, social workers, care managers, clergy etc.) is not nearly as effective in gathering support as is stressing how palliative care can help them (Meier & Sieger, 2004). Clinicians will only utilize the services of the palliative program to the extent that they perceive the services to be of use to them. The clinical assessment will allow the program to focus on providing services that clinicians want, whether it is help with pain and symptom management, time-intensive communication with patients and families, or care plan coordination. Without the support of clinicians, who will be the major source of patient referrals, a palliative care program will fail, regardless of the expected benefits it may bring. Of course, individuals interested in developing a palliative care program must be mindful to promise only what is deliverable and sustainable within the constraints of existing and likely resources.

Physicians, nurses, social workers, and other care providers are likely to have different needs. It is important to discern what issues they struggle with in caring for seriously ill patients before attempting to convince them that a palliative care program can help. For example, physicians may be primarily interested in help with difficult to manage symptoms or having an experienced team available to talk with patients and families about goals of care. Nurses may be most interested in a service that helps to facilitate communication between the multiple members of the healthcare team. Social workers may want help with coordination of care issues, especially as related to discharge from hospital to home, nursing home, or hospice. Surveys, in-depth interviews with key leaders, or focus groups can be used to obtain this information.

4.3. Population and Community Assessment

Another step in designing a program is to use the information obtained from the system and clinical assessment to describe the types of patients who will benefit from the services. Gathering data on projected needs and volumes will enable the palliative care planning team to determine the program model that best fits the hospital's needs and resources and to establish baseline data that will be necessary for assessing program effectiveness. Consider some of the following questions:

How large is the *target population* that you intend to serve? How many patients died in a given year? Where did people die? How many people were referred to hospice?

What *hospital departments* could most benefit from palliative care services—critical care, oncology, geriatrics, cardiology, surgery etc? The populations served by these departments are different. For example, patients and families in an intensive care unit may be most in need of improved communication about goals of care whereas oncology outpatients may benefit most from better pain control. In addition, the associated healthcare providers may have different opinions on the role palliative care should play in the care of their patients. Will they use palliative care services primarily to manage symptoms, discuss end-of-life issues, coordinate care and disposition, etc?

A next step is to identify and evaluate the community resources that provide palliative care services or that deliver care for patients with chronic disease. These may include hospices, nursing homes, pain clinics, or home health services. Information that should be gathered would include:

1. The number and type of services that are available,
2. Their reputation among patients and clinicians,
3. Their ability to satisfy the community's need for palliative care.

This step is essential for identifying gaps in currently provided services and for determining how a proposed palliative care program might help fill these gaps. In addition, this step can help form partnerships with community providers who can enhance the quality of the hospital-based program by providing continuity of care to patients discharged from the hospital and potentially providing another funding stream.

4.4. Financial Assessment

In an environment of limited health care dollars, a palliative care program needs to demonstrate that it can improve clinical outcomes, at a cost at least comparable to conventional care (Bruera & Suarez-Almazor, 1998). Medicare, a fixed rate (capitated) system, is the primary payment mechanism for hospitalized patients. Payment is based on the Diagnostic Related Group (DRG) (Davis *et al.*, 2002). The DRG, however, was developed for acute illness and is a poor method for stratifying illness severity and resource utilization in palliative care. For example, it does not take into account special circumstances like progressive disease, co-morbidity, or psychosocial issues, all of which prolong hospitalization (Rutledge & Osler, 1998). Because of the limitations of the DRG, case-mix indexing (CMI) is usually necessary to ensure that cost and resource use comparisons are equitable for palliative care programs versus other hospital services (Davis *et al.*, 2001). The CMI is a DRG with a relative weight scale based on resource, labor, and supply utilization. CMI indirectly reflects illness severity and better predicts cost of care as compared to a DRG.

Understanding your patient population, payer mix, and utilization rates for certain services is important for assessing the potential financial impact of a new palliative care program. For example, if administrators reveal that the readmission rates for Medicare beneficiaries admitted under DRG 127 (heart

failure and shock) is the most costly or preventable expense to the institution, the palliative care program may want to focus on that high-risk group. To the extent possible, it will also be helpful to demonstrate costs to the hospital (in length of stay and ancillary expenses) for failing to identify and institute appropriate services and discharge options for this population. Many hospitals already have a methodology for tracking the impact of quality added services (e.g. the value of social work or care management) to the bottom line. In addition, state Department of Health data can provide useful information on length of stay for patients in local peer institutions with and without palliative care programs. This data will allow for benchmarking within the institution and local region. Finally, it is important to quantify and document the value-added revenues that will result from the program. These may include:

Increased patient and family satisfaction
Improvements in pain and symptom management
Reduction in length of stay
Reduction in unnecessary and costly interventions and procedures
Appropriate referrals to affiliate or hospital owned hospices, home care or
    nursing home services

5. Developing a Business Plan

In a cost conscious environment, new projects must be carefully planned and evaluated to ensure clinical as well as economic success. As the needs assessment is being conducted, there is a need to create a business plan that combines information from the needs assessment with prospective program outcomes. The business plan (Cohn & Schwartz, 2002):

Reassures the hospital administration that a palliative care service is needed
    and that program development is being approached in a fiscally responsi-
    ble manner
Is a demonstration of the planning that went into program development
Defines the range of services to be offered in light of the stated program goals
Serves as a tool for performance appraisal

A business plan should include the following components (Meier & Sieger, 2004):

5.1. Justification

The justification summarizes the rational for a palliative care program, presents the medical and social context for the proposed program, and includes data from the needs assessment. National, regional, and local data about other palliative care programs and about the demographics of the hospital service area can be included.

The justification is where the following questions are answered:

How will a palliative care program help the hospital meet its goals?
How will a palliative care program meet the needs of physicians, nurses, social workers, clergy, etc.?
What services will the program provide?
What model will the program adopt and why?
How will the program be fiscally viable?

5.2. *Program Goals*

Program goals will be dictated by the information gathered during the needs assessment. Program success will be measured in part by the ability of the program to meet feasible and specific goals agreed upon by the palliative care team, hospital administrators, physicians, nurses, social workers, and other hospital consumers. Depending on the needs assessment, potential goals may include the following short term (e.g. 12 months) and longer-term (e.g. 3-5 years) goals:

Clinical outcomes: e.g. symptom burden, quality of life, clinician satisfaction, patient and family satisfaction, etc.

Demographic and utilization statistics: e.g. Number of consultations and percentage of patients with particular DRGs who receive services from the palliative care program, percent of palliative care patients who died in the hospital, length of stay for patients before and after palliative care intervention, hospice referral rates, etc.

Fiscal statistics: e.g. Number of ICU days saved as a result of palliative care, number of procedures (e.g. surgery, hemodialysis, etc.) avoided as a result of palliative care, emergency department utilization and readmission rate after the index palliative care consult, revenue generated from inpatient hospice patients, emergency department utilization, and readmission rate post index consult.

5.3. *Delivery Model*

There is no "right" program model. Rather, the model must fit the needs, resources (hospital size, bed availability, availability of trained palliative care staff, etc.) and culture of each institution. For example, if your hospital is an academic hospital familiar with the involvement of physician consultants, a physician-centered palliative care consult service may be the best fit. On the contrary, if your hospital is a community hospital with a voluntary medical staff that follows patients in various settings (e.g. the hospital, outpatient clinics, long term care facilities), a nurse or social worker-led model with strong involvement from a community hospice may work best. The advantages and disadvantages of the various delivery models are:

Consultation service: A consultation service is typically staffed by physicians, advance practice nurses, or social workers, who see patients throughout the hospital.

Advantage: This is a good mechanism for introducing palliative care to clinicians as it reaches the largest number of geographically separated healthcare providers. This model also requires very little overhead costs. Although paid work time can be much higher for a physician, the salary of an advance practice nurse with the requisite skill set often approximates that of a physician. In addition, in our experience, advance practice nurses need significant training/experience prior to being able to function independently. Moreover, physicians are often more comfortable caring for patients with complex medical problems. However unlike with physician consultants, a nurse or social worker palliative care consultant does not require a formal consultation order to see patients. Therefore, nonphysician and family requests for palliative care can easily be accommodated.

Disadvantage: Hospital staff may not be comfortable with palliative care, may be unaware of when to ask for palliative care consultation, and may be uneasy with certain recommendations e.g. using opioids for dyspnea. As a result, the willingness to implement recommendations or accept a consultation may vary by discipline of the consultant. Also, the palliative care team may not have their recommendations followed as they serve only as consultants to the primary physicians. Additionally, a formal order for a palliative care consult must be written in the clinical chart in order for physicians, nurse practitioners, or physician assistants to bill the patient's insurance for their services. If the program is dependent on clinical revenue, it may take several months for the program to generate the revenue necessary to support the palliative care clinicians' time.

Inpatient Unit: Palliative care patients are clustered together in a section of the hospital or in designated beds.

Advantage: The hospital staff on that unit quickly becomes skilled in palliative care. The concentration of staff allows for the palliative care staff to educate the other healthcare providers. Additionally, the culture and philosophy of care in a specific unit or designated beds within a unit may be more conducive to the philosophy of palliative care. Patients and families would have easier access to a different array of disciplines (music therapy, massage therapy, etc.) and feel more supported in their decision to choose a palliative plan of care.

Disadvantage: Geographic concentration deprives staff and patients from other parts of the hospital of the benefits of palliative care. The number of patients cared for by the palliative care program is limited to the number of beds in the unit. The physical separation of palliative care patients from other hospital patients may deepen the belief of some physicians, nurses, patients, and families that palliative is an "all or nothing" choice. Financially, inpatient units have higher overhead costs than consultation models. Although, financial drain is less of a factor if length of stay is carefully managed and if the institution has a high capacity with frequent admissions.

Combined consultation and inpatient unit:

Advantage: Allows concentration of staff expertise and can enhance continuity of care in the hospital.

Disadvantage: Availability of trained staff for both unit and the consult service.

Outpatient palliative care clinic:

Advantage: Provides the greatest continuity of care for patients discharged from the hospital. Also provides a valuable resource to physicians caring for patients with multiple physical and psychosocial symptoms but who are not so ill that they need to be admitted to the hospital.

Disadvantage: Not available to hospitalized patients. In addition, seriously ill patients may not want to or may have difficulty following up with both the palliative care service and their primary physician. Debilitated patients who rely on family caregivers to travel to and from clinic may have particular difficulty. Another disadvantage is that outpatient palliative care visits can be time intensive. Physician payment for outpatient services is often insufficient to sustain a clinic on clinical revenue alone.

Given these advantages and disadvantages, an important factor to keep in mind when developing a program is that different models of care delivery will be needed to meet the needs of different types of palliative care patients. Integrated programs that focus on how best to meet the needs of diverse palliative care patients are often the most successful and sustainable.

5.4. Marketing

Marketing is often perceived as a one-time effort that takes place early in the life of a program. In fact, it begins during the needs assessment and should be a continuous, seamless part of program development, implementation, and sustainability. Hillestad and Berkowitz wrote that "marketing is the process of molding the organization to the market, rather than convincing the market that the organization provides what they need" (Hillestad & Berkowitz, 1984). Marketing efforts, therefore, must be continually reviewed and revised as needed based on the needs of the hospital administration, partnering organizations, clinicians, patients, and families. Otherwise, the program may find its support base decreasing.

5.5. Operations Plans

The operations plan is a list of resources required to put the new program into operation and a description of how the program will function:

Administrative and clinical staff: This is the most important component of the operations plan (Vetter *et al.*, 2001). Ideally, the team members should be named and their experience and expertise described. If a position is vacant,

the operations plan should describe the education and experience necessary to fill the position and when, how, and where the program will recruit the necessary staff.

Data and financial systems: The plan should outline the type of data that will be collected on a regular basis and how it will be collected and analyzed. Additionally, the plans should include how professional fees will be coded, entered, and submitted to the payer. This often happens at the physician practice level, but the hospital-based palliative care team should be aware of the process and know whom to work with to ensure that the clinician's time is being covered.

Administrative and clinical space: The dimensions, the timetable for readying the space, and any constraints on the use of the space should be described.

Equipment and supplies:

Medicine formulary: Program developers need to ensure that medicines that are commonly used in palliative care (e.g. methadone, hycosamine) are available and stocked in the necessary pharmacies.

Clinical pathways: These may include symptom assessment and control protocols, sedation policies, and transfer policies. A good source for information on symptom, communication, and coordination protocols is the National Consensus Project (National Consensus Project, 2004b).

Quality assurance: This section should address quality and safety measures. Methods for measuring and improving outcomes should be outlined.

5.6. Financial Plan

This part of the business plan must establish an accurate range of financial parameters that support the proposed program's viability. For hospital administrators, the financial plan may be the most important component of the business plan. The financial plan should include a short term (12 month) and long-term (3-5 year) budget of revenues, cost savings, and expenses based on volume and program growth assumptions.

Development of a financial plan begins with a list of sources of revenue from payers including Medicare, Medicaid, and commercial insurers, as well as fund-raising activities and philanthropy. In addition, revenue generated by the hospital for inpatient hospice patients can also be included if the palliative care program plans to utilize inpatient hospice care.

While the revenue streams may be limited for hospital palliative care programs under the current financing structure, the financial plan should include estimations of cost savings as a result of palliative care interventions. For example, if data obtained from the needs assessment reveals that long lengths of stay in the ICU are causing a financial drain, estimates about palliative care penetration in the ICU and about the cost per day of ICU care can be used to calculate savings resulting from decreased lengths of stay.

Typical expenses for a palliative care program include salaries and benefits, rent, taxes, equipment, etc. (Tarantion, 2001). Because financial operations involve tax and accounting considerations, cash management strategies, and financial reporting, this section should be prepared with the aid of financial specialists within the hospital. After identification of the marketing and operations-related costs and estimating the anticipated program revenues, it becomes possible to judge whether the revenue stream is adequate to support a new program. Finally, the financial plan should include contingency plans if the assumptions about program revenue, cost savings, and expenses do not hold. A long-term plan for financial sustainability is particularly necessary if the major funding sources for the program include unreliable sources such as hospital and medial school funding or philanthropy.

5.7. *Implementation Plan*

The implementation plan ties together the entire business plan and assures the hospital administration that the palliative care program will be delivered as promised. The plan describes potential problems and how they will be addressed. A timetable provides a visual landmark for the proposed activities and identifies important milestones e.g. recruiting and hiring of key faculty, the addition of services.

The business plan is not a static document. Rather it is a fluid process that will undergo a number of revisions as the program matures and the palliative care leadership meets with administrators, key clinicians, and potential donors. Regular meetings with the different members of the palliative care team will also ensure that the business plan is continually updated to reflect the current environment.

6. Sustaining a Palliative Care Program

6.1. *Measuring Outcomes*

How will the success of the program be measured? The success of a new program depends on the ability to demonstrate results. Baseline measurements, clinical and financial, should be established prior to launching the program and systems must be in place to track the effects of the program on those measurements over time. Tracking and reporting outcomes demonstrates accountability, keeps hospital administration and clinicians abreast of the positive effects of the palliative care program, and allows the palliative care team to make adjustments to the program as needed.

Monitoring outcomes will depend on data collected from patients and families, clinicians, medical records, and hospital databases. Important outcome measures include:

Patient data: Patient characteristics (e.g. date of consult, gender, ethnicity, religion), DRG/ICD9 code, functional status, number of patients seen, lengths of stay prior to and after being seen by the palliative care program, percent of patients discharged alive, discharge location, the percentage of inpatient deaths for patients with DRGs that are often seen in palliative care, and referrals to hospice are examples of data that may be important to track based on the program's goals.

Clinical data: Advance care planning, pain and symptom assessment at defined intervals, and patient and family satisfaction are important clinical data to collect.

Financial data: Costs per day before and after palliative care consultation, length of stay in the hospital and ICU before and after palliative care consultation, and unwanted or unnecessary procedures, medicines and treatments avoided as a result of the palliative care intervention are examples of possible financial data that could be tracked and analyzed. If possible, much of this data should be collected in patients seen by the palliative care service and in control groups with equivalent length of stay, CMIs, or DRGs.

6.2. Managing Growth

As the program matures and the hospital administration, clinicians, patients, and families become more knowledgeable about palliative care and the benefits that it can bring, the program will grow. Plans should be in place to adjust the delivery model and the composition and number of staff, depending on program growth because clinicians will stop referring patients if the program does not have the capacity to meet their needs. Issues to consider include the:

Hospital environment: Have there been changes in hospital services that may compete or complement palliative care services (e.g. a new pain program, an ethics consultation service, a multi-disciplinary geriatrics program)? Are there new administrative champions or opponents of palliative care?

Financial environment: What has been the financial impact of the program? Does the value added justify the addition of new resources (e.g. more clinical staff and space)?

Clinical environment: Is the number of referrals increasing, decreasing, or remaining stable? Is the CMI/patient acuity changing? Is the program seeing patients earlier in their hospital stay or disease process? How do clinicians hear about the program? Who is referring to the program? How could the program reach those clinicians or departments that do not make use of the palliative care services?

   Program directors should also periodically assess the palliative care staff. How is their morale? Are their signs of burnout? As the program grows, new

policies that help prevent staff burnout may need to be instituted for things such as weekend coverage or vacation time. Directors should also ensure that the staff has opportunities for professional development and advancement. These issues have implications for staff turnover (Baumrucker, 2002).

Community environment: Are there new referral sources outside the hospital? Are there competing services in the community (e.g. a new hospice program)?

In revisiting the business plan, the palliative care team may need to make changes to the delivery model, number and composition of the clinical staff, budget, or marketing plan.

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