

TEAM COMMUNICATION AND COLLABORATION
IN HOSPICE PAIN MANAGEMENT

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by
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The undersigned, appointed by the dean of the Graduate School, have examined the dissertation entitled

TEAM COMMUNICATION AND COLLABORATION
IN HOSPICE PAIN MANAGMENT

presented by Michele Day,

A candidate for the degree of Doctor of Philosophy

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ABSTRACT

This dissertation explores communication and collaboration of two hospice teams regarding pain management within the framework of The Model of Interdisciplinary Collaboration (Bronstein, 2003). Professionals (n=15) doctors, nurses, social workers and chaplains participated in the grounded theory study through interviews and observation. They communicated about pain in creative and timely exchanges of bio-psycho-social information. They collaborated about pain by using the concept of total pain, partnering with patients/families, and using a holistic approach to assess physical pain. Team members shared a common vision but different perspectives. Implications include the need for leadership and structure to support creative approaches to complex health situations. Social workers are well-situated within hospice teams to foster interdisciplinary communication and collaboration. The study lays groundwork for examining effective team pain management.

CHAPTER ONE

INTRODUCTION AND RATIONALE FOR STUDY

The professor asks, “How do we attend to the pain of our hospice patients?”

The social work student answers, “The nurse monitors pain medication prescribed by the physician.”

“But who discusses the psycho-social aspects?” the professor queries.

“Actually,” replies the student, “each member of the hospice team contributes to management of total bio-psycho-social pain.”

The professor continues, “You are on the right track, but what do you know about social work that applies to our question?”

“Social workers are often assigned to facilitate hospice interdisciplinary team meetings,” says the student.”

“Good answer” the professor states before asking the question, “Now, how could we explore the pain management processes of a hospice team?”

Introduction

Hospice programs deliver palliative care -- comfort rather than cure -- to terminally ill patients. In 2006, an estimated 1.3 million patients received hospice services (National Hospice & Palliative Care Organization, 2007). This estimate

represents a 162 percent increase in 10 years. The National Hospice and Palliative Care Organization estimates that 36 percent of patients who died in 2006 were cared for by a hospice program (2007). Relief of pain is central to the mission of hospice (Saunders, 1976). Unfortunately, between 76 percent and 90 percent of hospice patients experience pain (Herman, & Looney, 2001; Kutner, Kassel & Nowels, 2001). Palliative care is provided by interdisciplinary teams of health practitioners with expertise in communication, symptom management, coordination of care, psycho-social and spiritual care, grief and bereavement, and legal and ethical concerns (Morrison & Morrison, 2006). But there is much to learn about the processes of these teams. As Teno stated, “Research that examines the ‘black box’ of how best to deliver palliative care is urgently needed” (2002, p. 5). This dissertation explores the communication and collaboration processes of interdisciplinary hospice teams regarding pain management.

Two key concepts, *interdisciplinary* and *total pain*, are as relevant today as they were at the inception of hospice services. Hospice, referencing hospitality for travelers in Medieval Times, was founded by Dame Cicely Saunders in 1967 to promote interdisciplinary health care services for terminally ill patients (Torrens, 1985). Saunders, trained as a nurse, social worker and physician, advocated for care provided through teams that include all of these disciplines (Saunders, 2001). Today, the Interdisciplinary Team (IDT) is the definitive model of end-of-life care (HCFA, 1983).

Dame Saunders articulated the concept of total pain for end-of-life care (Clark, Small, Wright, Winslow & Hughes, 2005). Total pain reflects the multidimensional experience of pain, understanding the experience as more than biological, and including spiritual, emotional, financial, social and psychological components (Saunders, 1976).

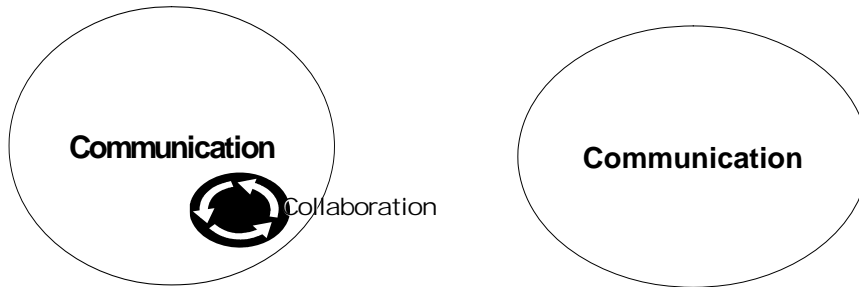
Management of this multidimensional pain is the central goal of hospice IDT services. An IDT is theorized to promote psychological and social interventions for pain as well as biological. Thus, team processes are highly relevant to research agendas targeting relief of total pain. Despite advances in team-delivered palliative care, an alarming number hospice patients experience pain (Kutner et al., 2001), are under-treated for pain (The SUPPORT Principle Investigators, 1995) and have unmet spiritual and psychological needs (Morrison & Morrison, 2006; Sherman, 1999).

Collaboration and communication are two important processes of IDT (Mukamel, Temkin-Greener, Delavan, Peterson, Gross & Kunitz et al., 2006). A recent study suggested that communication may be the most important group process for improving team effectiveness (Temkin-Greener, Gross, Kunitz, & Mukamel, 2004). Communication is considered essential for hospice IDT (Zimmermann, 1994), but perhaps is not sufficient to improve palliation (The SUPPORT Investigators, 1995). Another team process -- collaboration -- describes synergistic teamwork (McCallin, 2001).

Bronstein asserted that collaboration is a higher level of service than a coordinated, multi-dimensional communication process (2003). She built upon the idea that interdisciplinary collaboration is an interpersonal process that facilitates the actual achievement of goals that cannot be reached when individual professionals act alone (Bruner, 1991). The relationship of communication and collaboration as conceptualized in this study is illustrated in Figure 1. Communication is necessary and present for interdisciplinary collaboration to occur. However, communication may occur without leading to collaboration. The dissertation explores how team interactions are experienced

by hospice team members, whether there is communication only or communication and collaboration.

Figure 1. Collaboration can occur in teams where communication is present. However, teams can have communication and lack collaboration.



Interdisciplinary teams may require collaborative and communicative skills among all team members, especially social workers (Bronstein, 2003; Gwyther, Altilio, Blacker, Christ, Csikai, Hooyman et al., 2005; Reese & Sontag, 2001). Social workers can use their individual and group work skills to foster communication, promote cross-disciplinary understanding, integrate information from team members, and help prioritize team objectives (Gwyther et al., 2005). Care delivered by teams is believed to be an effective and efficient way to deliver many types of health services (D'Amour, Ferrada-Videla, San Martin Rodriguez & Beaulieu, 2005; Schofield & Amodeo, 1999). There is a pressing need for a systematic approach to define the scope, variety, and strength of IDT processes and document roles that social workers may fill (Bronstein, 2003; Graham & Barter, 1999; McCallin, 2001; San Martin Rodriguez et al., 2005; Teno, 2002).

This dissertation explored team processes of two hospice IDTs regarding management of total pain. Research questions concerned communication and collaboration. The design was qualitative, an approach that yields valuable and unique data about interactions of IDT because it is inductive and naturalistic (Cole, Waite & Nichols, 2003; Garland, O'Conner, Wolfner & Netting, 2006). Utilizing grounded theory methodology, team processes were defined by team members and analyzed for themes (Glaser & Strauss, 1967; Strauss & Corbin, 1998). Team meetings were observed over the course of a year and observation notes were similarly analyzed. This first chapter introduces hospice services and a conceptual framework for study of hospice IDT processes, the Model of Interdisciplinary Collaboration (Bronstein, 2003). The significance of hospice team research is discussed. Finally, the research questions, pertinent definitions, assumptions and delimitations of the dissertation are presented.

Hospice

Hospice is a specialized health care service assisting terminally ill patients and their families. In the U.S., a referral can be made when a physician establishes the prognosis that a patient will live six months or less. The goal of hospice is to provide palliative care for the highest quality of life. The service aims to utilize the complementary backgrounds of health professionals, as well as the input and resources of the patient and the patient's family. Core team members include physicians, nurses, chaplains and social workers (HCFA, 1983). Members may be home health aides, pharmacist, bereavement counselors, volunteer coordinators and others. Medicare requires regular IDT meetings to provide a major forum where these disciplines can communicate and collaborate.

In the United Kingdom, hospice is a delivery model within a social service context, indeed a charity organization (Clark et al., 2005). In contrast, in the U.S., due in large part to the hospice Medicare benefit, hospice is more aligned with the health care system. But all U.S. hospices have had some freedom to innovate in having developed outside the traditional medical model. Interdisciplinary teams combine biological, psychological and social assessments and interventions. Hospice IDTs are more holistic and more egalitarian than other health delivery systems and are believed to provide the most consistent setting for IDT observation (Connor, Egan, Kwilosz, Larson & Reese, 2002).

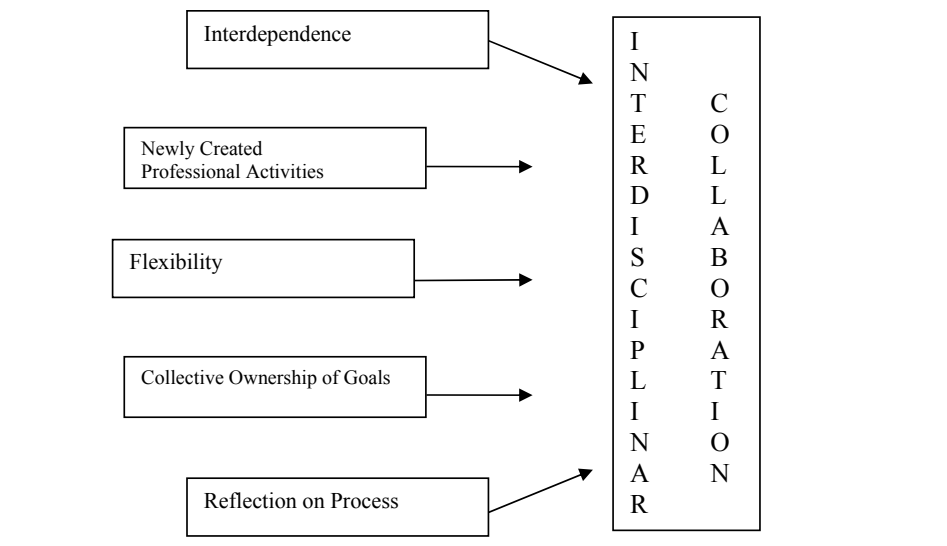
As a medical provider with an interdisciplinary approach, hospice is challenged to gain status as a medical specialty. In fact, it became a recognized medical specialty by the American Medical Association as recently as in 2006 (vonGuten, 2007) . With this formal recognition came a need for scientific evidence related to practice. There have been numerous calls for health care researchers to investigate palliative care service delivery and the outcomes for patients (Bookbinder, Rutledge, Donaldson, & Pravikoff, 2001; Kapo & Casarett, 2004; MacDonald, 1991). Specific calls have also been made for hospice research from the social work viewpoint (Burnette, Morrow-Howell & Chen, 2003; Christ & Blacker, 2005; Kramer, Christ, Bern-Klug & Francoeur, 2005).

Conceptual Framework

Bronstein developed a substantive theory termed Model of Interdisciplinary Collaboration (2003) which provides the conceptual framework of this dissertation. The model grew from analysis of multidisciplinary literature, services integration literature, role theory and ecological systems theory. Bronstein identified components of

collaboration and influences on collaboration. In the dissertation, these are used to underpin the interview guides that posed questions on IDT interactions. Components of collaboration are: *interdependence*; *flexibility*; *newly created professional activities*; *collective goals*; and *reflection on process*. Interdependence is illustrated in team interactions with reliance and dependency on upon each other to accomplish goals and tasks. The newly created professional activities occur when the team as a whole develops new activities that no member has performed or has been anticipated to perform. The flexibility found in collaboration is a purposeful and creative blurring of roles or performing in an area of overlapping disciplinary boundaries. Collective goals derive from input from varied perspectives in the joint development and achievement of a shared mission. Reflection on process is the discussion by members of team interactions with a goal of improvement.

Figure 2. Components of interdisciplinary collaboration (Bronstein, 2003).

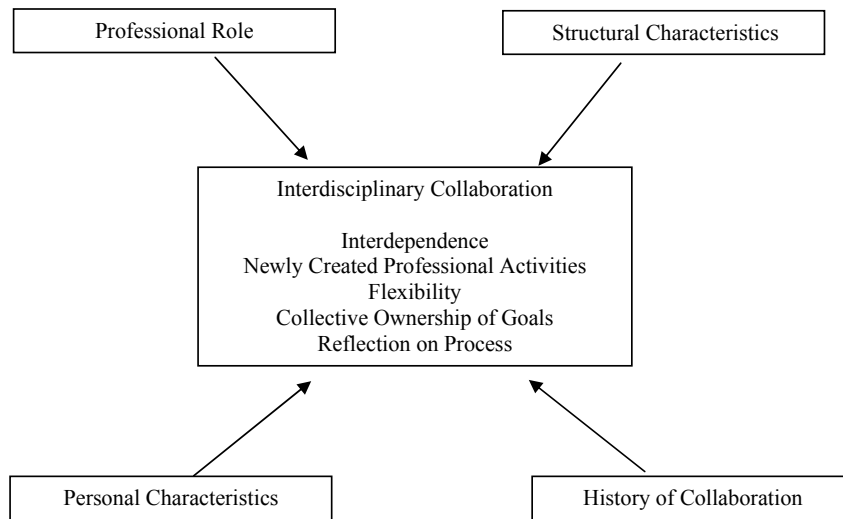


Wittenberg-Lyles & Oliver (2007) provided a summary of the group interactive components:

Collaborative acts occur as a result of interdependence between employees. Within hospice, interdependence occurs as individuals deviate from discipline specific boundaries. That is, flexibility of specific job responsibilities affords individuals the opportunity to interdependently work together. As a consequence newly created professional activities emerge that are not possible without collaboration. Such newly created professional activities expand an individual's specific job responsibilities as a result of collaboration. This is characterized by a collective ownership of goals as individual share responsibilities for all aspects of decision-making as well as work together to implement the decision. Finally, collaboration is sustained throughout the reflective process which allows the team to evaluate to outcomes of their efforts. (p. 5)

Bronstein's *influences on interdisciplinary collaboration* also guided questions for investigating the context for communication and collaboration. Bronstein described the influence of *professional role* as having simultaneous allegiance to the values of the team as well as to the values of the profession. *Structural characteristics* are tangibles such as time and space; intangibles are entities such as agency culture. *Personal characteristics* include trustworthiness, respectfulness and a good quality of communication. *History of collaboration* refers to experience that the team members have had, positive or negative, with this team and others. Figure 3 illustrates Bronstein's ideas about the influences on interdisciplinary collaboration (Bronstein, 2003).

Figure 3. Influences on interdisciplinary collaboration (Bronstein, 2003).



Significance

End-of-life care is an important issue for in an aging society. The National Hospice and Palliative Care Organization (2007) reports that in 2006, 82 percent of terminally ill patients were age 65 and older, 33 percent were age 85 or older. Older adults can be expected to have more complex health situation (Mion, Odegard, Resnick & Segal-Gidan, 2006). Hospice use was higher for diseases that impose a high burden on patients and families (NHPCO, 2007). While hospice patients receive the highest standard of treatment, improvements are still needed, specifically in pain and symptom management (Hermann & Looney, 2001; Kutner et al., 2001; Teno, Clarridge, Casey, Welch, Wetle &

Shield, 2004). Palliative care, IDT issues, and pain relief are prominent on national research agendas (Burnette et al., 2003; Ferrel, 2004, Kramer et al., 2005).

The study has significance for patients. Pain relief is a key to quality of life for hospice patients and their families (Conner, Teno, Spence, & Smith, 2005; Ferrell, Grant, Padilla, Vermuri & Rhiner, 1991). While the concept of total pain is not new, little research on the non-biological aspects of pain can be found (Altilio & Otis-Green, 2005; Lloyd-Williams, 2003). Patients and families may also benefit when teamwork processes infuse patient dignity, self-determination, and justice into care (Luptak, 2004; Skinner, 2001). Oliver (2004) suggests that it may be easier for patients to work with unfamiliar disciplines if the professional is part of a trusted IDT. The collaborative, patient-centered focus of teams may encourage patients and families to communicate and be involved in health care decisions and delivery (Egan & Abbott, 2002).

Interdisciplinary team collaboration has value for professionals and for organizations. Schofield & Amodeo (1999) found the description of interdisciplinary team collaboration in the literature of health professionals gaining heightened awareness of their own disciplines, broader understanding of other disciplines, opportunity for cooperative treatment and research, and improved job satisfaction. IDTs are suggested to reduce the length of hospitalization and premature admissions, relieve the burden of treatment for staff, facilitate work with difficult patients, offer greater objectivity and enable workers to empathize with the patient and each other (McCallin, 2001) In addition to quality care and choice, palliative care teams may provide cost savings. In 2003, Medicare patients enrolled in hospice used \$3,192 less care in the last month of their life than those not enrolled (NHPCO, 2004)

The study has significance beyond hospice care. If, ultimately, the IDT were found to impact patient outcomes such as pain, there would be strong support for further focus and investment in team activities. “The hospice approach can be a catalyst to change in attitudes and practices in the wider health care community” (Clark et al., 2005, p. 37). Hospice, designed outside the traditional medical healthcare model, may truly be an exemplar of interdisciplinary teamwork. Teamwork may reintroduce the humanistic aspects to health care and improve the health and well being of patients and their families.

Research Questions

The study uses a qualitative design to explore the interdisciplinary communication and collaboration processes of a hospice team, especially as they relate to pain management. The specific research questions were:

- 1) How do hospice teams communicate regarding patient pain?
- 2) How do hospice teams collaborate to manage pain?

Definitions

Communication. As defined in *The Social Work Dictionary*, *communication* is the verbal and non-verbal exchange of information, all the ways in which knowledge is transmitted and received (Barker, 2003).

The Bio-Psycho-Social Perspective. This perspective is rooted in Systems, Ecological and Role Theories, incorporating psychological and social elements into biologically oriented health practice with an emphasis on interactions, teamwork and equal participation of health providers (Engel, 1977).

Medical Model. The Medical Model emphasizes health professionals atop a pyramid of authority in a biologically-based health care system. The level with least authority in The Medical Model is the actual care recipient. In contrast, professionals, support staff, patients and families are equal participants in the Bio-psycho-social Model (Engel, 1977).

Palliative care. Palliative care refers to care that is focused on comfort when cure is not appropriate (Raymer & Reese, 2004).

Hospice and hospice patients. Hospice refers to a Medicare and state certified hospice service to provide palliative care to terminally ill patients. Hospice patients are those formally enrolled in a hospice program and certified to have a terminal diagnosis with a life expectancy of less than six months (HFCA, 1983).

Interdisciplinary hospice team. The core members of the team include physicians, nurses, social workers and chaplains supplemented by aides, pharmacists, managers, volunteer coordinators and office staff (HCFA, 1983).

Interdisciplinary collaboration. This is an effective interpersonal process demonstrated by interdependence, newly created professional activities, flexibility, collective ownership of goals, and reflection on process (Bronstein, 2003).

Total pain. This refers to a comprehensive, multidimensional and holistic experience of pain as described by a patient (Saunders, 1976; Duggleby, 2000).

Pain management. Pain management refers to assessment and intervention for pain by an IDT.

Pain talk. This is any conversation with pain as its topic.

Assessment. This refers to any action by staff or patient/caregiver to describe pain.

Intervention. *Intervention* for pain is as any action or activity, including education, referral, counseling, family involvement.

Assumptions and Delimitations

Data from two hospices are considered together to expand representation and enhance confidentiality. It is assumed that the hospices have a uniform approach to team composition. This assumption is based on the fact that hospices are regulated by federal and state agencies that outline the membership and roles of IDT members (HCFA, 1983). It is also assumed that teams care for similar populations based on review of state statistics. Finally, also related to federal and state regulations, it is assumed that the hospice teams have similar functions such as weekly treatment planning, quality improvement, and documentation requirements (HCFA, 1983).

It was necessary to limit the scope of team membership to health care providers, although patient and family members are an important part of many health care teams. When family caregivers are included better communication is believed result; the frailty of the patient and the burden of caregiving, however, seem to be barriers to participation (Parker-Oliver, Porock, Demiris & Courtney, 2005). Inclusion is an important topic, given the current emphasis on the chronic care model and self-management, which is beyond the scope of the dissertation; patients and families are not routinely present in hospice IDT meetings at this time (Parker-Oliver, Porock et al., 2005).

The following are delimitations of the population served by the team. The team members serve almost exclusively adult patients, the majority geriatric. The team members interviewed did not specialize in certain populations such as patients with AIDS. The teams provided care to both in-home and nursing home hospice patients.

Summary

Hospice programs deliver holistic care using an IDT model. The teams bring together the perspectives of several disciplines. Collaboration and communication are two important processes of IDT that require skills among all team members, especially for social workers. This dissertation explores the interactions of hospice teams regarding management of total pain. Total pain reflects the multi-dimensional experience of pain. Its management is central to the mission of hospice.

The Model of Interdisciplinary Collaboration provides the conceptual framework for the dissertation. The components of collaboration (interdependence; newly created professional activities; flexibility; collective goals; and reflection on process) and the influences (professional role; structural characteristics; personal characteristics and history of collaboration) undergird the interview guides. The design of the study is qualitative, an approach that yields valuable and unique data about IDT interactions because it captures new ideas within their context.

End-of-life care is an important issue for an aging society, wherein 82 percent of the terminally ill is aged 65 years and older. Pain relief is a key to quality of life for hospice patient and their families. The study of palliative care, IDT and pain are prominent on national research agendas. The delivery of hospice has significance for patients and families, professionals and organizations and perhaps as a model for chronic care management. Hospice is a leader in the bio-psycho-social movement and may be an exemplar of team inclusiveness and holistic care.

CHAPTER TWO

LITERATURE REVIEW

This dissertation explored the communication and collaboration of two hospice IDTs regarding pain management. A focused literature review was conducted specifically on health care IDTs and on team interactions related to pain. The literature review has been organized into two sections. The first section outlines a history of health care teams and the regulatory requirements for hospice care related to teamwork, followed by a discussion of the value of interdisciplinary teamwork that highlights studies supporting this premise. This section includes a detailed discussion of theory framework behind the project, the Model for Interdisciplinary Collaboration (Bronstein, 2003). The second section discusses interdisciplinary teamwork and pain management. Cicely Saunders' (1976) philosophy of total pain is reviewed. The role of social workers on hospice IDTs is outlined. Particular attention is given to the role of social work in pain management. The section closes with examination of the literature on pain management and interdisciplinary communication and on pain management and interdisciplinary collaboration.

The parameters for the literature review included the databases of CINAHL, Ovid MEDLINE, PsycINFO and Social Work Abstracts. Search terms included Interdisciplinary and Collaboration and Hospice; Interdisciplinary and Team; Interdisciplinary and Hospice; Social Work and Hospice; Social Work and End-of-Life; Multidimensional Pain and Team; Total Pain and Hospice; Social Work and Pain; Hospice and Team Communication; Interdisciplinary Collaboration and Team

Communication; Interdisciplinary Communication and Pain Management; and Interdisciplinary Collaboration and Pain Management. Studies in home-based hospice and palliative care, nursing homes and acute care palliative services were accepted. Sources selected concerned adults with terminal disease, excluding AIDS patients and prison populations.

Health Care Teams

The emergence of health care teams relates to the broader understanding of patients' needs as bio-psycho-social (Corless & Nicholas, 2004; Gatchel, 2001). In the early 1900s, Richard Cabot originated IDT in health care (1929). While working for Massachusetts General Hospital, he proposed the idea of teamwork, suggesting that the nurse, social worker, doctor and educator work together on patient issues. Health professionals with different training backgrounds have since comprised multidisciplinary and IDT. In the 1970's, when the psychological and social elements of care were recognized by the broader health care community, teams were acknowledged as a service delivery mechanism for holistic care (McCallin, 2001).

Hospice, the setting for this study, delivers care through a health care team as a central philosophy (Saunders, 1976) and as outlined by federal regulation (HCFA, 1983). For a hospice program to receive Medicare reimbursement for its services, it must meet the Hospice Medicare Conditions of Participation (COP). These COPs, as well as state licensure and certification requirements, mandate that physicians, nurses, social workers, and pastors or other counselors are core members of hospice teams (HCFA, 1983). Core members are joined by several other members, which may or may not be direct

employees of the hospice, including pharmacists, volunteers, nursing assistants, bereavement professionals, dieticians, therapists, and others (HCFA, 1983) The roles and requirements for the each team member and the IDT as a whole are specifically outlined in the Medicare COPs. The IDT establishes the plan of care, provides hospice care and services, periodically reviews and updates the plan and governance of day-to-day hospice care and services (HCFA, 1983).

Value of Interdisciplinary Teams

In the 1980's, articles began to appear that suggested intrinsic value of health care teams (Schofield & Amodeo, 1999). In the 1990's, managed care emphasized the idea that health care teams are cost effective (Luptak, 2004; McCallin, 2001; Schofield & Amodeo, 1999). Rice (2000) posited that teams were important in all health settings and that the future of team care depended on research examining team elements and their relation to patient outcomes. Existing literature on teams outside of health care have limited applicability because they rarely bring together individuals with such diverse training and perspective as does hospice. As the new century dawned, researchers sought clarity about health care team processes to pave the way for studies regarding the effectiveness of teamwork.

The current health care literature clarifies the terms *IDT* and *multidisciplinary team*. Multidisciplinary teams deliver coordinated, independent care. Members of a multidisciplinary team conduct independent assessments according to their discipline, develop separate care plans, document a parallel treatment track, and cross paths only on the medical record. By contrast, IDTs physically meet together to coordinate assessments, to design and continuously develop a common plan of care, and to provide a crucible for

collaboration (Graham & Barter, 1999; Kuder, Gairola & Hamilton, 2001; McCallin, 2001; Raymer & Reese, 2004; Skinner, 2001). Recently, the concept of transdisciplinary teams have been introduced wherein disciplines are cross-trained and closely interchangeable (Mazanec, Bartel, Fessler et al., 2002).

There is widespread acceptance that collaboration on interdisciplinary health care teams has inherent value (Annis, 2002; Connor et al., 2002; Dechairo-Marino, Jordan-Marsh, Traiger & Saulo, 2001; Kharicha, Lebin, Iliffe & Davey., 2004; Lesser, 2000; Mellor, 1998; Miller, Teno & Mor, 2004; Oliver, 2004; Reese & Sontag, 2001; Schofield & Amodeo, 1999, Werth, 2002). Various disciplines bring unique perspective and training, helping address complex problems with collaborative multidimensional services. Interdisciplinary teams provide care that is both comprehensive and parsimonious (Graham & Barter, 1999). Health care educators value IDTs as a model of different professions achieving a common goal (Skinner, 2001). Others have questioned whether a belief in the value of teams has any real foundation and whether teams will be useful in a health environment with its many constraints (Cole et al., 2003; Kharicha et al., 2004)

Interdisciplinary teams may have value for patients. Reported benefits include improved access to care and improved efficacy in patient self-care (Schofield & Amodeo, 1999). Sherman (1999) proposed that IDTs should have value for addressing the undertreated pain found in a major study of hospice patients (SUPPORT). Recent studies explored the possibility that teams may improve pain and symptoms in cancer patients (Jack, Hillier, Williams & Oldham, 2003; Rabow, Dibble, Pantilat & McPhee, 2004). Patients may benefit when teamwork infuses patient dignity, self-determination, and justice into care (Luptak, 2004; Skinner, 2001). Parker Oliver (2004) suggests that it may

be easier for patients to work with unfamiliar disciplines when the professionals belong to a trusted IDT. The collaborative patient-centered focus of teams may encourage patients and families to be involved in health care decisions and to be active in health care delivery that increases the efficacy of care (Egan & Abbott, 2002).

Interdisciplinary teams have value for professionals and for organizations as well. Schofield & Amodeo (1999) described health professionals gaining heightened awareness of their own discipline, a broader understanding of other disciplines, opportunity for cooperative treatment and research, and improved job satisfaction when belonging to IDTs. Benefits for health system resource management have been discussed (McCallin, 2001). Interdisciplinary teams were reported to reduce length of hospitalization and premature admissions, relieve the burden of treatment for staff, facilitate work with difficult patients, offer greater objectivity and enable workers to empathize with the patient and with each other (McCallin, 2001).

A Model of Interdisciplinary Collaboration

Communication and collaboration have increasingly been examined as important health care team processes for interdisciplinary work (Dechairo-Marino et al., 2001). In *The Social Work Dictionary* it is stated that communication can usefully be understood as the verbal and non-verbal exchange of information -- all the ways in which knowledge is transmitted and received (Barker, 2003). A social work scientist can use this broad definition to include all behaviors when observing team communication. Interdisciplinary collaboration builds on communication. Bronstein (2003) described the interpersonal interactions in the Model of Interdisciplinary Collaboration as distinct from other team

communication, asserting that interdisciplinary collaboration is a higher level of service than a coordinated, multi-dimensional communication process.

The term collaboration captures the dynamic, synergistic nature of interdisciplinary teamwork noted in a comprehensive review of the literature on teams and team settings (Bronstein, 2003). Bronstein and others recognized collaboration as a developmental advance from team cooperation, communication, coordination or partnership (Bronstein, 2002; Bruner, 1991; Graham & Barter, 1999). Describing interdisciplinary collaboration and the influences upon it set the stage for measuring collaboration and exploring relationships to patient outcomes (Bronstein, 2002).

To understand Bronstein's model it is useful to review the bio-psycho-social perspective, a humanistic framework for team health care that incorporates psychological and social factors into the traditional medical view of illness as biological (Engel, 1977). Perhaps the perspective was present in the early 1900's when physician Richard Cabot (1929) originated IDTs in health care. He proposed teamwork, suggesting that the nurse, social worker, doctor and educator work jointly on patient issues. Today, medical social work practice utilizes this interdisciplinary approach as does palliative care (Kharicha et al., 2004; Luptak, 2004; Rabow et al. 2004; Saunders, 2001). Some consider the hospice movement, in fact, to have been a reaction against the traditional medical model, its reliance on technology and its subsequent impact upon sacred human experiences such as dying (Raymer & Reese, 2004).

The bio-psycho-social perspective provides a broad foundation for the study of IDT. Team meetings are understood to be forum for exchanging the various perspectives brought by professionals with discipline-specific training. The interaction among team

members is an important area for research, particularly for hospice and palliative care settings (Annis, 2002; Dechairo-Marino et al., 2001; Lesser, 2000; MacDonald, 1991; Mellor, 1998; Miller et al., 2004). This perspective is generating a body of literature on IDT interaction (Bronstein, 2003; Clark, 1996; Cole et al., 2003; Munoz & Jeris, 2005; Saltz, 1996). This dissertation builds on a line of hospice team research that utilizes the Model of Interdisciplinary Collaboration developed by Bronstein (2003).

Bronstein began with four theoretical perspectives: a theory of collaboration from a multidisciplinary perspective; services integration; role theory and systems theory, and developed a model of interdisciplinary collaboration (2003). She described components of collaboration (interdependence; flexibility; newly created professional activities; collective ownership of goals; and reflection on process and influences on collaboration, which includes professional role, structural characteristics, personal characteristics, history of collaboration (Bronstein, 2003). The components will be detailed in the following paragraphs.

“Interdependence refers to the occurrence of and reliance on interactions among professionals whereby each is dependent upon the other to accomplish his or her goals and tasks (Bronstein, 2003, p. 299).” Bronstein bases this component upon formal and informal communication that occurs between professionals from different training backgrounds. Each profession must be certain of colleagues’ respective roles, as well as their own, and must believe that complicated situations require multiple perspectives. More and more communication spans boundaries or interpretations between each profession’s languages regarding what needs to occur in order to achieve a goal. From the

premise that each profession embodies a unique expertise, trust begins to build into reliance and, finally, into interdependence.

“Newly created professional activities refer to collaborative acts, programs and structures that can achieve more than could be achieved by the same professionals acting independently (Bronstein, 2003, p. 300).” At the most basic level, this component suggests through teamwork, professionals may begin to perform untried tasks routinely performed by other disciplines. In addition, however, the team as a whole develops new activities that no member has performed or has been anticipated to perform. This component is said to be evident in new service delivery mechanisms, new policies and new structures (Bronstein, 2003). Bronstein’s example is a hospital where a new program is created for medical and social work interns to work side-by-side (2003).

“Flexibility extends beyond interdependence and refers to the deliberate occurrence of role-blurring (Bronstein, 2003, p. 300).” Role blurring occurs when there is overlap between traditional tasks performed by different professions. For example, hospice nurses can engage in some types of psychosocial interactions with patients that social workers or chaplains routinely offer. As above, while this may have been sparked competition in the past, newer definitions of collaboration encourage role blur (Graham & Barter, 1999). The flexibility found in collaboration is purposeful. Creative role blurring addresses the needs of a complex situation.

“Collective ownership of goals refers to shared responsibility in the entire process of reaching goals including joint design, definition, development and achievement of goals (Bronstein, 2003, p. 302).” In the broadest sense, the team must first share a vision or stated mission that guides all interactions. But that does not suggest that team members

agree initially on goals for a patient. In fact, this component includes important possibilities for dynamic team communication and collaboration through disagreement. Truly collective goals derive from input obtained from varied perspectives. It would seem that team members must be confident in their role and their unique contribution in order to argue a position but must also have the capacity to retreat when others have better ideas. Differences are shelved as the team forms collective goals, plans and interventions. This component closely matches the HCFA (1983) requirements for Hospice IDT.

“Reflection on process refers to collaborators’ attention to their process of working together (Bronstein, 2003, p. 302).” A team can be formed by regulation and administration yet exist without awareness about its own team process. In collaboration a team has goals not only for patients but also for themselves as a work group. There is protected time to examine team process and explore conflicts, particularly any ethical dilemmas. Members encourage feedback from one another and work to implement suggestions on improving team process.

Bronstein suggests four influences on interdisciplinary collaboration: professional role, structural characteristics, personal characteristics; and history of collaboration (2003). Bronstein proposed that studying influences might reveal specific actions to promote or impede collaboration (Bronstein, 2002). In other words, after a model is in place to describe collaboration it is possible to test the model. Does the model represent experience? Are the outcomes on interactions important? Can the factors that positively or negatively influence actions be manipulated for testing?

As the dissertation explores experience, the influences may be important to understand what team members report about communication and collaboration. Bronstein

described the influence of professional role as having simultaneous allegiance to the values of the team and to the profession. Structural characteristics are tangibles, such as time and space, and intangibles, such as agency culture. Personal characteristics include trustworthiness, respectfulness and a good quality of communication. History of Collaboration refers to experience that the team members have had, positive or negative, with this team and others.

Next Steps

It has been argued that much of the growing literature on teamwork has ignored the fundamental question about whether interdisciplinary collaboration improves patient outcomes (Bronstein, 2002; Kharicha et al., 2004; Schofield & Amodeo, 1999). The first step toward an answer was to identify a model, the Model of Interdisciplinary Collaboration. As empirical work began to be published regarding a model, Bronstein believed that the second step was to develop an instrument for measuring perception of collaboration (2002). She utilized the Model of Interdisciplinary Collaboration to develop a scale, The Index of Interdisciplinary Collaboration, to measure social workers' perceptions. Testing the index has demonstrated the validity and reliability of the instrument (Bronstein, 2002; Parker-Oliver, Bronstein, 2005). The index was modified to explore the perspective of the various disciplines participating on hospice IDT as the Modified Index of Interdisciplinary Collaboration (MIIC) (Parker-Oliver, Wittenberg-Lyles & Day, 2007). Thus the foundation was laid for examining IDT members' perspectives.

Wittenberg-Lyles and Parker-Oliver (2007) explored collaborative communication, or communication relating to interdependence and job flexibility, newly

created professional activities, collective ownership of goals and reflective process. They conducted a mixed methods study to assess the validity of Bronstein' model and the modified index built upon the scale, the MIIC (Wittenberg-Lyles & Parker-Oliver, 2007). A key finding was the need for collaborative communication outside the hospice agency such that a change to the MIIC may be warranted (it refers to the agency only). The study provided empirical evidence for collaborative communication in hospice of the type described by Bronstein's model and validated use of the MIIC.

The third step according to Bronstein (2003) and others (Parker-Oliver , Wittenberg-Lyles & Day, 2006; Teno, 2002) is to fully explore the processes of hospice teams, particularly with qualitative methodologies. Of particular interest are communication and collaboration as they are critical interactions on hospice teams. Better understanding of IDT communication and collaboration is required before systematic study can be made of outcomes for team members, organizations and most importantly, for patients and families.

Summary

The emergence of IDT, the service delivery mechanism for hospice, relates to understanding patient's needs as bio-psycho-social. Teams are believed to have value for patients/families, team members and organizations. A focus for health care research is the processes of teams to pave the way for evaluating effectiveness. Bronstein's Model of Interdisciplinary Collaboration depicted components of collaboration: interdependence; newly created professional activities; flexibility; collective ownership of goals; and reflection on process. She identified four influences on IDT collaboration: structural

characteristics, personal characteristics, history of collaboration and professional role.

The model is used in a productive line of research regarding hospice teams.

Interdisciplinary Teams and Pain Management

Dame Cicely Saunders coined the term hospice, referencing hospitality for travelers in medieval times, to describe how IDTs provide health care for terminally ill patients. Saunders, trained as a nurse, social worker and physician, advocated for interdisciplinary collaboration. Saunders also articulated the concept of total pain and integrated it into end-of-life care (Clark et al., 2005). *Total* reflects the multiple dimensions of pain, capturing how the experience extends beyond the biological, and includes spiritual, emotional, financial and psychological components (Saunders, 1976).

The bio-psycho-social perspective provided the foundation for the concept of total pain and for IDTs (Melzack & Wall, 1965; Nelson & Weir, 2001; Saunders, 2001). Pain is attributed to biological injury, such as an arthritic knee, and also to a wide variety of psychological and social sources (Ferrel, 2003; McMillan, 1996, Nelson & Weir, 2001; Saunders, 2001). Dame Saunders called upon the IDT team to provide relief from pain in all of its dimensions (Clark, 1996). Relieving total pain remains the central goal of palliative care and hospice (Morrison & Morrison, 2006)

Ahles, Blanchard and Ruckdeschel (1983) published a seminal study finding that the psychological dimension of pain includes factors such as anxiety, depression, and the cognitive interpretation of disease and pain. They found that activity level decreased in a group of cancer patients experiencing pain compared to a matched control group. Ahles et al. (suggested that situational or environmental factors and emotional health influence

the pain experience. Pain is related to patient's condition in a circular pattern a patient who is depressed may feel increased pain intensity and conversely a patient experiencing pain may be more prone to depression.

Social isolation of a patient may exacerbate pain even as pain intensity may affect social withdrawal (Lloyd-Williams, 2003; Otis-Green, Sherman, Perez & Baird, 2002). Financial aspects of pain can include the inability to purchase medications or distress over medical bills left for family members' attention. The unique contribution of spiritual care, as found in hospice, can help patients face denial of impending death and find solace in life's meaning. Thus healing the spiritual pain that effects biological pain (Welk, 1998). Biological, psychological, social and spiritual elements seem reflexively involved in the human pain experience.

The concept of total pain is now integral to the functioning of hospices, palliative care units and for other health care programs (Dobratz, Wade, Herbst & Ryndes, 1991; Guo, Fine, Mendoza & Cleland, 2001; Hearn & Higginson, 1998; Mor, 1986; Sherwood, Adams-McNeil, Starck, Nieto & Thompson, 2000; Tang, Aaronson & Forbes, 2004). Proposing a relationship between IDT and multidimensional pain management is intuitive. Team members are specifically trained to bring different perspectives: physicians and nurses would bring biological, social workers would bring psycho-social, and chaplains would bring spiritual perspectives. Some authors consider pain to be a multidimensional phenomenon that is the professional responsibility of all IDT members (Carr, Brockbank & Barrett, 2003; Manzanec, Buras, Judson & Montana, 2002). Even so, evaluations of existing programs to ameliorate total pain at end-of life have indicated poor progress (Morrison & Morrison, 2006; Sherman, 1999)

There have been also been disappointments in the effort to reduce patient symptoms. Pain was one of the outcomes evaluated in a two year prospective observational study in five teaching hospitals with 4,301 patients followed by a two year controlled clinical trial with 4,804 patients (The SUPPORT Principle Investigators, 1995). The SUPPORT study (The Study to Understand Prognoses and Preferences for Outcomes and Risks of Treatment) documented that half of the phase one patients experienced shortcomings in communication with their physician. During the study physicians received daily updates about their patients' condition. A nurse trained to enhance communication had multiple contacts with the participants (patients, families, physicians, and staff) although they did not meet as a team. Two of the aims were to achieve pain control and to improve patient-physician communication. However there was no decrease in pain as measured by numeric pain scale and no improvement in communication (The SUPPORT Principle Investigators, 1995).

Kutner et al. reported a cross-sectional study among 16 hospices for which staff estimated symptom presence, frequency, and severity in 348 patients using the Memorial Symptom Assessment Scale. Staff identified a high frequency (51%-83%) of symptom occurrence, which were rated to be almost constant 75% of the time (2001). A recent comprehensive review of empirical studies suggests that palliative care teams may improve care (Hearn & Higginson, 1998). With the mixed results of available literature, the need to improve understanding of the teams and their processes is critical to discovering how some teams are effective in this domain.

Social work, IDT, and Pain Management

There was discussion in the 1990's about the need to clarify social work roles on hospice teams. Existing paradigms viewed the overlap of social work, physician, nursing, and chaplaincy as problematic or even contentious (Abramson & Mizrahi, 1996; MacDonald, 1991; Reese & Sontag, 2001). Current literature suggests a unique role for social workers on hospice teams even in a paradigm of shared responsibilities (Brandsen, 2005; Luptak, 2004; Rabow et al., 2004; Saunders, 2001; Taylor-Brown & Sormanti, 2004). That role is crystallizing. For example, social workers can foster the environment wherein team members from different disciplines achieve more collectively than they do individually (Bronstein, 2003; Gwyther et al., 2005; Reese & Sontag, 2001). Social workers could advocate for role blurring as a positive step toward interdisciplinary care.

Social work literature discusses the following roles for social workers in pain management: providing psycho-social assessment and treatment, advocating for an integrated model of pain, and facilitating a team-based intervention. Regulation mandates a psycho-social assessment of patients and families by social workers on hospice teams (HCFA, 1983). Family relationships and interpersonal forgiveness have been long accepted as areas for psycho-social intervention provided by social workers (Baker, 2005). More recently, direct psycho-social attention to pain has gained acceptance and specific pain management techniques have been advanced, such as cognitive behavioral therapy, guided imagery and motivational counseling (Colon, 2006; Holland, 2003; MacDonald, 2000; Mendenhall, 2003; Novy, 2004).

Current literature suggests that because all members of the team offer pain interventions, an integrated model of total pain may be most productive, in which all

disciplines assess and treat (Ferrel, 2004; Manzanec et al., 2002; Otis-Green, et al., 2002). Social workers are called to advocate for such models because the models better meet the needs of underserved populations and are congruent with social work values (Altilio & Otis-Green, 2005; Brandsen, 2005). The models provide a foundation for empirical studies of health care team outcomes through measuring communication (Zimmermann, 1994) collaboration (Bronstein, 2002) and total pain (Manzanec et al., 2002; Otis-Green, 2006). In addition to quantitative studies, pain management scholars are adamant that research on service delivery models should also include qualitative study of the team processes that deliver end-of-life care (Bostrom, Sandh, Lundberg & Fridlund, 2004; Ferrell et al., 1991; Tang et al., 2004; Teno, 2002)

Social work is challenged to specify ways to facilitate the whole team in treating unrelieved pain (Glajchen, Blum & Calder, 1995; MacDonald, 1991; Mendenhall, 2003; Sherman, 1999). In a recent article competencies were put forward for social workers in end-of-life and palliative care (Gwyther et al., 2005), devoting one section to social work roles on the IDT. Gwyther et al. list the following as social work competencies: fostering effective communication, promoting collaborative cross-disciplinary education, integrating information from observations so that the team can prioritize, negotiating situations involving patient confidentiality, addressing issues of informing patients/families, advocating for the patient on bio-psycho-social needs and values, and promoting discussion of ethical and legal issues and supporting team members. Glajchen et al. (1995) write that social workers must recognize that communication is the cornerstone of pain control. Social workers have an important role in teamwork (especially communication and collaboration) that occurs around pain management.

IDT Communication for Hospice Pain Management

According to Bronstein's model of collaboration, professional role, structural characteristics, personal characteristics and history of collaboration influence teams as they work together (2003). Despite educational programs, interdisciplinary communication continues to be problematic in end-of-life care (Higginson & Constantini, 2002; Maison, 2006; Morrison & Morrison, 2006; Street & Blackford, 2001; Tulsy, 2005). Communication between health care team members is essential for efficient and effective service delivery, for hospice service in particular, and for pain management by teams (Maison, 2006; Parker-Oliver & Peck, 2006; Temkin-Greener et al., 2004) (Carline, Curtis, Wenrich, Shannon, Ambrozy & Ramsey, 2002; Carr et al., 2003). There are a few published articles on hospice team communication for pain management. The relevant literature examines perceptions of communication in hospice, basic communication constructs for hospice team members, and the actual interaction among hospice team members.

Structural characteristics. There exists some literature on empirical study of perceptions of team communication in hospice and palliative care. Street and Blackford (2001) conducted semi-structured interviews with recruited palliative care nurses (n=11) and focus groups with self-selected nurses (n=29). They used qualitative content analysis with the transcribed data. Issues raised included communication breakdown that affected service provision. This was due to poor networking between the teams and the primary care physicians, a need to educate the physicians outside the team about pain medicine, no consensus on who conducted case management, multiple service providers and lack of standardized documentation (Street & Blackford, 2001). These can be understood as

structural characteristics. Other studies of hospice teams have found structural characteristics such as leadership and established protocols impact communication (Wittenberg-Lyles, 2005; Wright, 2001).

Professional role. Role influences team interactions when there are needed talents and tasks from a person and communication breaks down. Street and Blackford (2001) provided information on the roles of hospice team members. Positive interaction between physician and hospice team members depended upon the physician role including: respect for the expertise and role responsibilities of nurses, social workers and others; consistent communication; families educated about team providers, patient and team guided together in a timely manner; and ensured team coverage when the physician is unavailable (Street & Blackford, 2001). Professional role had a positive impact when physicians put aside allegiance to traditional authoritative positions and interacted on an equal footing with other team members, patients, and families.

History of collaboration. Bellamy, Fiddian and Nixon (2006) utilized a formal evaluation process to explore how hospice case review sessions -- a form of team meeting -- can be used to improve communication. They surveyed 54 participants, receiving 30 for a response rate of 56 percent. Hospice staff perceived communication to be enhanced by the case reviews through new understanding of how events affected other team members of different disciplines and/or status in the agency and the opportunity to talk together about how cases were handled. But, the authors report that half of the respondents did not see the case review experience as translating into changes in their practice. And team members did not recognize that examining their team process was a practice element. Therefore, positive history of collaboration, such as in case review,

might not influence communication in regular team meetings unless a team member underscores the connection.

Personal characteristics. Zimmerman (1994) studied social cognition, as a basic communication construct, and hospice team communication in six hospice teams using quantitative and qualitative methods. She looked at links between a team member's cognitive constructs and their 1) evaluation of team communication effectiveness and 2) satisfaction with the team. She posited that outcomes, including pain management, rely upon services coordinated through communication. Furthermore, team members in hospice programs might be more flexible and collaboration-minded as they approach communication.

Zimmerman (1994) reported that, in fact, personal constructs were too complex to be considered for study at the team level. It was also discovered that role mattered. Those team members who focused on traditional tasks for their discipline held more negative views about team discussion. Traditional health care training stressed services to the patient, leaving team members unprepared for the necessary team communication (Zimmermann, 1994). These findings suggest that the personal characteristics of the team members may influence team communication.

Other Recent Studies

Outside of the social work literature, other studies have underscored the importance of team interaction in communication for pain management. Higginson & Constantini (2002) included questions about communicating with other professionals in an end-of-life care research project. The study was a prospective cohort design; 1,326 patients participated. At least 10 percent – 20 percent of patients experienced

communication problems between professionals (Higginson & Constantini, 2002). Spearman Correlations between aspects of communication and the patients' other problems were also interesting. The following patient issues were associated with poor communication between professionals: a need for the patient to advise the professionals on health information assumed to be already gathered by other professionals ; family having better insight into the problems and explaining them to staff; spiritual aspects of care were not recognized; and the level of patient anxiety increased when communication failed. The study suggests that communication problems are relevant to care improvement efforts, and that communication relates to multiple dimensions of the patient's pain experience.

Wittenberg-Lyles used ethnographic method to explore communication of psycho-social information in hospice team meetings (2005). It is accepted that psychological and social/spiritual issues contribute to pain. Therefore, it would be expected, for both philosophical and practical reasons, to find multi-dimensional pain talk. Wittenberg-Lyles found that hospice team communication followed the medical model of biomedical reporting (2005). While hospice embraced the bio-psycho-social perspective in its philosophy, there was no evidence of these domains' inclusion in hospice team meetings. She argued that there is tension in team interactions between the tradition medical and holistic approaches to hospice communication, and suggested that future study is needed particularly about team leadership and tension.

IDT Collaboration for Hospice Pain Management

Bronstein's model is a useful framework for reporting existing studies on IDT collaboration and hospice pain management (2003). Interdependence, a component of the model, is the reliance on interactions among professionals whereby each is confident in their role and dependent upon the other to accomplish mutual goals (Bronstein, 2003). Glajchen et al. (1995) challenged social workers to be more certain of their role on the team regarding pain relief. Reese and Sontag (2001) wrote that lack of clarity of the social work role contributed negatively to hospice team interaction. Establishing a role is not the same as defending turf (Larson, 2003). In fact, an important skill for social workers on IDTs is to assist disciplines with boundary-spanning activities such as understanding the role of others (Gwyther et al., 2005). Another collaborative skill on the IDT is to interpret the patients' needs to enhance other disciplines' understanding of the individuals' pain (Glajchen et al., 1995; Street & Blackford, 2001). This interpreting is what blends the skills of independent team members and builds trust, reliance and interdependence (Bronstein, 2003).

IDTs are a preferred service delivery for care when patient needs are complicated and require coordination of services (Larson, 2003; Schofield & Amodeo, 1999; Temkin-Greener et al., 2004). Collaborative flexibility extends beyond coordination, or even interdependence, into purposeful role-blurring toward meeting the needs of a complex situation (Bronstein, 2003). True collaborative flexibility is illustrated by Polatin (1996) in a chapter on pharmacotherapy and psychological treatment of pain. Pain was claimed to be best treated by an IDT when physicians, nurses and pharmacists learn to use psychosocial approaches. Flexibility occurs in the opposite direction, too. Social workers

and chaplains were advised to learn about medications so that they can discuss and recognize pharmacological issues (Polatin, 1996).

Newly created professional activities are a component of IDT collaboration in Bronstein's model (Bronstein, 2003). Parker-Oliver et al., (2006) studied variances in perceptions of interdisciplinary collaboration by hospice staff by use of the MIIC instrument with five U.S. hospice programs. Hospice team members varied on perceptions of all components of collaboration except newly created professional activities. No one reported new activities as a result of teamwork.

Achieving collective ownership of goals can put a strain on team harmony when values clash (Bronstein, 2003; Mendenhall, 2003). Interdisciplinary collaboration can be undermined if team members fail to understand and respect the position of others (Larson, 2003). Conflict can be positive, however, if the team is facilitated to appreciate differences, reach a consensus and develop creative response to pain management. Thunberg and Hallberg used grounded theory with constant comparison to analyze interviews of 24 health care professionals selected for work in a pain clinic, doctor, psychologist and physical therapists (2002). They found that a common core of knowledge about pain, and clarity about having a mission toward pain relief, stood as key requirements of the interdisciplinary work as described by these pain management specialists (Thunberg & Hallberg, 2002).

Reflection is awareness by the team that working together is an interactive process (Bronstein, 2003). Carr et al. report on a pilot project to improve pain management through interprofessional education (2003). They provided seminars on pain to hospital staff (n=35) and measured patient pain score self-reports before and after the

educational series. In addition to case presentation, the staff was encouraged to reflect upon their work together. The researchers were cautious about the outcome measure of pain scores as an “unrefined measure,” but supported their choice as a commitment to clinical relevance, and perhaps groundbreaking work on pain management. They audited pain scores (on a 0-10 scale) before and after the program from charts on a medical and on a surgical floor served by the attendees. Patient pain scores averaged 2.9 (n=30) prior and 2.0 (n=29) afterward; the number of scores above 4 decreased from 14 to 8. Staff appeared to have a greater interest in pain management and referrals to the pain team increased.

Such empirical studies on IDT collaboration and pain management are few. Rabow et al. conducted a year long controlled trial of 50 intervention and 40 control patients (2004). The intervention was consultation provided to staff by a comprehensive care team. They did not find any significant change in pain relief but noted that most of their recommendations were not adopted. Jack et al. found that a hospital-based palliative care team may have improved symptoms among cancer patients, including pain relief. It was a nonequivalent control group study of two groups, but the groups had had no significant differences on pain before treatment (2003).

Other empirical studies of hospice IDT have relevance. For example, Parker-Oliver et al. were concerned with measurement of team member perception of collaboration (2007). One tool to address this was the MIIC. Hospice programs might use the MIIC scale and subscales, which are the components of collaboration, to target areas where perceived collaboration could be enhanced. This is particularly important if collaboration is eventually linked to patient outcomes such as pain management.

Summary

Total pain reflects the multiple dimensions of pain: biological, psychological and spiritual. Use of total pain as a concept is standard for hospice and palliative care patients. A linkage between IDT and pain management is intuitive but unproven. Current literature suggests that all IDT members can offer pain interventions. Social workers may have a unique role by providing intensive psycho-social assessment, psycho-social treatment, advocacy for an integrated model of pain, and facilitation of team-based intervention. The literature on pain management by teams is in a fledgling state. IDT communication and collaboration, as key interactions, are important areas for continued research.

Chapter Summary

With the bio-psycho-social movement, there has been an increased appreciation for the human perspective of pain and a recognition that many patients continue to suffer despite advances in biological treatment (Ferrell et al., 1991). Thus, holistic health care through IDT has been of keen interest as a service delivery mechanism and for relief of total pain (Jack, et al., 2003; Kharicha et al., 2004; Rabow et al., 2004). There is a heritage of interdisciplinary teamwork in health care, but little empirical study. This dissertation builds on a line of hospice research that utilizes a model of IDT collaboration developed by Bronstein (2003). Pain management in palliative care continues to be an important research area. Hospice claims delivering care through a team as its central philosophy, and as a corollary, focuses on total pain management for quality of life. Hospice teams may therefore serve as an exemplar for other health care teams. Communication and collaboration have increasingly been examined as important health

care team processes. This dissertation explores the communication and collaboration of two hospice IDTs regarding pain management.

Hospice programs are a service delivery mechanism for utilizing IDT for palliative care. The teams bring together the perspectives of several disciplines. Collaboration and communication are two important processes of IDT that require skills of all team members, and especially social workers. This dissertation explores the interactions of hospice teams regarding management of total pain. Total pain reflects the multi-dimensional experience of pain. Its management is the central to the mission of hospice.

The model of interdisciplinary collaboration provides the conceptual framework for the dissertation. The components of collaboration (interdependence; newly created professional activities; flexibility; collective goals; and reflection on process) and the influences (professional role; structural characteristics; personal characteristics; and history of collaboration) undergird the interview guides. The design of the study is qualitative, an approach that yields valuable and unique data about IDT interactions because it captures new ideas within their context.

End-of-life care is an important issue for an aging society wherein 82 percent of the terminally ill are aged 65 and older. Pain relief is a key to quality of life for hospice patient and their families. Study of palliative care, IDT and pain are prominent on national research agendas. The delivery of hospice has significance for patients and families, professionals and organizations and perhaps as a model for chronic care management. Hospice was a leader in the bio-psycho-social movement and may be an exemplar of team inclusiveness and holistic care.

CHAPTER THREE METHODS

Chapter Three describes strategy of inquiry, rationale of design, and specific procedures conducted in the data collection and analysis for this dissertation. The study uses a qualitative strategy of inquiry with Grounded Theory (GT) method. Grounded theory method is the systemic inductive analysis of data by constantly comparing concepts drawn directly from a developing data set toward creation of a substantive theory (Glaser & Strauss, 1967). Data were obtained by interview and observation of hospice professionals.

Early social work researchers followed established qualitative methods drawn from sociology and anthropology (Padgett, 1998). When procedures for quantitative analysis became more practical, social work researchers added quantitative methods to their repertoire. Padgett points out that there are similarities: Both groups of methods are empirical and systematic (1998), and differences extend beyond the type of data utilized. Qualitative studies are inductive and naturalistic, whereas quantitative are deductive and de-contextualized. In qualitative research the scientist serves as the instrument for data collection; analysis moves from data into categories that can be labeled. In quantitative research development of categories precede data, which then are collected by standardized instruments in a particular, closed set of circumstances (Padgett, 1998). Today, social workers utilize both qualitative and quantitative methods, singularly and in combination, to find the best strategic fit for inquiry of a research question.

Strategy of Inquiry

The strategy of inquiry for this dissertation is qualitative with GT design. Strauss and Corbin define a grounded theory as tied explicitly to a data set gathered using

scientific process (1998). They define grounded theory design as a study where theory derives from an experience under study by the discovery, developing and provisionally verifying an idea through systematic data collection and analysis (Strauss & Corbin, 1990). GT method features: a) theoretical or purposive sampling; b) constant comparison as a means to collect and analyze empirical data and test that data continuously to reveal themes that represent the experiences; and c) systematic auditing by the researcher, such as writing memos and consulting with participants who reported the experience that it is captured correctly (Heppner & Heppner, 2004; Padgett, 1998).

Purposive sampling. Purposive sampling involves the gathering of data from a given sample that the researcher theorizes will yield the most information. Then, collected data is analyzed and used to decide what data to collect next and where to seek the next purposive sample in order to develop an emerging theory (Glaser, 1992). For example, the first professionals interviewed in the study were core members mandated by Medicare to attend hospice team meetings (HCFA, 183). The sample included members with heterogeneous health care training to provide a variety of viewpoints. During collection, the data indicated that team members had daily contacts with the aide and the office nurse that facilitated coordination of services for patients. Thus, the home health aide and the office nurse were added as participants although they were not core members and did not regularly attend team meetings.

Constant comparison. Data are systematically collected and analyzed in GT using constant comparison as a key technique (Glaser, 1992). Strauss and Corbin describe the technique as continuously asking questions about the data, finding similarities and differences and making comparisons between incidents and events (1990). The raw data

is systematically collected through interview guides that capture ideas. Data collection is directed by comparing incoming data with existing data.

Constant comparison in analysis provides the means to move from concepts in the data directly to abstractions and themes. First, gathered data are coded line-by-line for units of meaning in a process called “open coding” (Glaser & Strauss, 1967). These concepts are constantly compared with one another while being labeled with a code that expresses what is happening in that meaning unit. The researcher begins to notice whether the open codes pertaining to the same phenomenon can be grouped (Strauss & Corbin, 1990).

Categories of codes begin to develop. Strauss and Corbin (1990) noted that as coded units are collapsed into emerging categories, a level of abstraction is achieved:

The phenomenon represented by a category is given a conceptual name; however this name should be more abstract than that given to the concepts grouped under it. Categories have conceptual power because they are able to pull together around them other groups of concepts or subcategories (Strauss & Corbin, 1990, p. 64)

Codes are also compared with categories and categories undergo constant comparison among themselves. If new codes and categories emerge, previous data must be reexamined. Categories are developed and described with detail so that their properties are clear.

Theoretical sensitivity, or the researcher’s experience and knowledge of the topic, enhances recognition of patterns throughout the analytical process (Glaser & Strauss, 1967). Data are collected, coded, and used to direct the continued collection of data until all new data fits within established categories (Charmaz, 2006; Glaser, 1992). Constantly

comparing categories leads to a refined list of categories and then to the final product - themes that reflect the essence of the collected data (Padgett, 1998).

Systematic auditing. Auditing is required to document development of categories and themes directly from the data (Padgett, 1998). Memoing is a primary technique wherein the researcher maintains detailed records about how codes are developed and about how abstractions emerge. Memos are helpful to the analysis and to the rigor of the research. GT requires returning to members of the sample periodically to check whether collected data and analysis continue to represent the perspective of participants. This “member checking” is achieved by focus groups and individual interviews (Padgett, 1998). Memoing and member checking help the researcher recognize the introduction of bias. Computer assisted qualitative research analysis programs are available to assist with the systematic auditing of memos and the preparation of timely member checking (Bringer, Johnson & Brackenridge, 2004).

Rationale of Design

Padgett lists the following reasons to undertake qualitative research: (a) there is little known about the topic; (b) the topic is sensitive and/or require exploration of the emotions involved; (c) the goal is to capture the experience of the participants; (d) there are programs or interventions that have “black box” elements that need to be elucidated; (e) quantitative methods do not explain the findings of a study; and (f) the goal is to merge activism with research (1998). As demonstrated in the literature review, there is little empirical research on hospice IDT.

The emotionally charged atmosphere of hospice and interviewing individuals who work in such a setting requires remarkable sensitivity on the part of the researcher.

Whereas other studies are beginning to capture quantitative data about teams, this qualitative inquiry adds another dimension. In particular, it helps to describe how team members interact. In addition, it allows an inquiry about whether Bronstein's model represents the experience of hospice teams. While the dissertation is not tied to activism, it is conceivable that interacting with the hospice team members might have some unintended effects that would promote inadvertently better teamwork.

Grounded theory is used to investigate interaction, people, and processes (Strauss & Corbin, 1998). The dissertation research questions are about interaction, people, and processes. The grounded theory method, with its constant comparison technique, was chosen because its use promotes a rich set of unstructured data about processes that can be used to directly abstract categories, and themes. The author adheres to a positivist research perspective and the method is consistent with that view. Padgett talks about the balance of creativity and structure that is possible in GT methodology (1998). The particular relevance of context for study of IDTs in the hospice setting also calls for GT.

Specific Procedures

Institutional Review Board procedures were satisfied at the hospice organizations and at the University of Missouri. Team member participation in the study was voluntary and confidential, consents are on file for all the team members interviewed and, names and other identifying information have been deleted. Data is kept in a locked office and purged from computers.

Participant selection. The dissertation was part of a larger, established research project -a National Institutes of Health – National Cancer Institute funded study on teams, hospice caregivers and telemedicine (Parker-Oliver, Demiris, Rantz & Wittenberg-Lyles,

2006-08). The NCI study included family care givers in hospice team member meetings by videophone. One IDT from each of two hospices in the NCI study was chosen as a convenience sample. Information about the study and the directors' support was announced to each team at a regular meeting. Then individuals were approached for scheduling of their interviews. All members of each team were interviewed during regular work hours in a private area of the office or while traveling with the team member in their car (to a home visit).

Setting. The setting for Team I is a rural area of one Midwestern state. A large not-for-profit health system based hospice administered Team I. The 2005 statistics for the hospice reported a total of 512 patients served, 299 cancer patients and 213 non cancer patients. Exactly one-half of the patients were female. Unfortunately, no statistics on race were available. Hospice I had an average of 90 persons per day in 2005. With approximately half of them were assigned to each of two teams; Team I served an average of 45 total persons per day (Missouri Hospice & Palliative Care Association, 2006). The author had worked for one year previously with this hospice on another study and had a positive relationship with staff members.

The setting for Team II is also rural but the agency is private and located approximately three hours from Hospice I. The 2005 statistics for Hospice II include 370 patients served, 88 cancer and 282 non cancer patients (MHPCA, 2006). More female patients were in the census than male (, n = 233 vs. n = 137, respectively). Information on race was unavailable. In both hospices the staff reported anecdotally the occasional admission of a minority client. It was not apparent whether there were no minority patients in 2005 or whether statistical reporting had not recorded their admission.

Hospice II served 102 patients per day. The Hospice I team and the Hospice II team each served 51 patients per day (MHPCA, 2006). The author introduced herself by videophone on two occasions to Team II prior to making appointments for interviews.

Data collection. Demographic information was collected systematically (Appendix A). An initial interview guide was developed (Appendix B) underpinned by Bronstein's Model of Interdisciplinary Collaboration (2003). Specifically, it was designed from a tool developed from the model, the Modified Index of Interdisciplinary Collaboration, or MIIC, (Parker Oliver et al., 2005) found in Appendix C. The MIIC was demonstrated to be relevant for surveying all hospice disciplines' perceptions of collaboration (Parker Oliver et al., 2005). The guide posed open-ended questions about communication and collaboration toward pain management. Although based in Bronstein's model, the model's concepts and phrases were obscured in the interview questions. The interview guide was reviewed by experts in communication, hospice teams, and interview construction. As initial data were gathered they were analyzed and then used to guide the subsequent interview(s); a few alterations were made in the guide during the study and for the member check (Appendix D).

All participant contacts were assigned a code number for confidentiality. All of interviews were audio-recorded and transcribed verbatim. The author transcribed the first six interviews. The last nine interviews and all further audio material were transcribed by a professional transcriptionist. Transcripts for Team I and Team II were considered as a whole in the final analysis.

The participant interviews were augmented by observations of the team members during regular team meetings over the course of one year. Systematic note taking

occurred during the meetings with a guide that prompted for recording of communication and collaboration interactions and specific discussion of pain (Appendix E). Team I was observed by the author as a graduate research assistant attending every team meeting. Another graduate research student observed Team II and provided observation notes. The author observed Team II twice.

Validation of Data Collection

Data is systematically collected and analyzed in GT using constant comparison. The initial interview guide was used throughout the Team I interviews without adjustment because codes continued to be relevant to the research questions. Developing codes were compared to existing codes and a data set began to emerge that would address team communication and Bronstein's components of collaboration. After the initial themes were devised, Team I was approached at a team meeting about the findings. A poster was displayed with preliminary themes. Reactions and comments from the team were recorded. It was apparent that abstracting potential themes had led to use of esoteric terms that did not make sense to the participants. And so the labels for potential themes were simplified for the individual member checks.

The codes that had been generated in the first interviews did not reflect the influences on collaboration suggested by Bronstein. Consultations with advisors led to additional questions to the guide to probe into collaboration. More relevant language and additional questions amended the interview guide for member checks and for Team II interviews. Individual member checks with Team I yielded a few new open codes. Members of Team II expressed understanding and agreement with proposed themes. When all of the open codes from Team II were analyzed, they fit into categories that had

been established. The final set of open codes was used to analyze the extensive team meeting observation notes and notes from a team improvement session. No new codes emerged.

Data Analysis

I used NVIVO7, or Non-numerical Unstructured Data, Indexing, Searching, and Theorizing version 7 (Qualitative Research Software International, 2000), a computer – assisted qualitative data analysis program. Using NVIVO7, detailed records were kept of how and when textual data was entered directly from interview transcripts, field observation notes and member checks. Memos about methods were loaded as were detailed records of decisions on analysis. The software provided opportunity for audits at each step. All of the collection and analysis was monitored by advisors with ease and the sources of ideas were clearly identified.

The first interview was uploaded and analyzed line-by-line for concepts about pain management expressed by the participant. An example of coding from an interview follows: “You have to get at what is going on psychologically with that person; what does this mean, ‘now that you are taking this medicine, how do you feel about taking this’?” This reference yielded two codes which were 1) Patients’ Needs and 2) Discipline. The code “Discipline”, for instance, labeled any mention of training or perspective on pain management. Observations notes were also coded; the following is an example: “Nurses are knowledgeable about titration of meds.” This unit of meaning was labeled “Intervention”. Further examples of coding and the processes involved in coding can be found in Appendix F.

All of the units of meaning were identified with an open code. NVIVO gathers all interview quotation initially coded into a “node.” The 16 nodes that resulted from the first interview were saved by NVIVO and recorded by their date of creation. As each interview underwent coding, a constant comparison was made to earlier interviews and codes. Open coding of Team I was completed when all interviews had been coded and the original reference linked to an accompanying node(s).

Utilizing NVIVO, every statement in every interview could be explored easily. This resulted in eliminating a few codes, collapsing others, and created new codes that superseded others. As new codes were added or codes were modified, the author returned to earlier interviews to explore and code for these changes and additions. All Team I interviews were re-read. Each final free node with its interview quotation was printed. A memo was written for each node in addition to the audit trail describing the creation of each node.

The next step in GT is to explore relationships between established codes. It was at this point that the nodes were sorted into those relating primarily to team communication about pain and to those relating primarily to team collaboration in addressing pain. The group of nodes relating to collaboration was analyzed first. Following grounded theory method, the nodes were evaluated for their fit within categories. Each node had been described by a memo as well as a definition. The author returned to those memos to solidify the attributes of each code. The attributes made it possible to see connections between codes.

The level of abstraction that emerged from the established codes was the study’s axial codes or categories. Categories represent a cluster of codes; each category received

a label to reflect a clustering of codes. The same analysis was conducted with nodes for the communication group of codes. Then the final set of open nodes was applied to analyze the observation notes and notes taken on other meetings of the teams. Working with the categories, themes emerged that represented the data.

The themes were presented individually to Team I members as well as in a group format. After revisions were made to the interview guide, Team II participants were interviewed. In GT an analysis has reached a point of finality when no new categories can be developed and subsequent interviews do not yield new information (Glaser & Strauss, 1967). This point, or *saturation*, (Glaser & Strauss, 1967) was reached with interviews among the final team members of Team II transcript analysis.

Validation

Trustworthiness and credibility of data collection was assured by systematic auditing, memos and member checks. Validation of data analysis was achieved with the following strategies: prolonged engagement, triangulation, and peer debriefing. By spending time with participants in extended individual interviews, and spending time in the agencies over many weeks, trust was developed resulting in more accurate and intimate information. Triangulation was achieved through gathering of data from more several sources, for example, by adding observation and other notes to intensive interviewing. Regular peer debriefing was conducted with classmates and experts provided overviews of the qualitative analysis.

Summary

Chapter Three describes strategy of inquiry, rationale of design, and specific procedures conducted in data collection and analysis. The dissertation uses a qualitative strategy of inquiry with a GT method. Grounded Theory is used to investigate interaction, people, and processes (Strauss & Corbin, 1998). It features purposive sampling, constant comparison as a means to collect and analyze empirical data, and systematic auditing. Team members from two rural Midwestern hospices were interviewed. Team members included physicians, nurses, social workers, chaplains and home health aides. Utilizing NVIVO, which is qualitative data analysis software, all quotes from each interview could be explored easily. The first interview yielded open codes. Codes developed in analysis of the second interview were compared to those of the first. As I continued the process, I coded units of meaning and comparing the codes until categories and then themes emerged. Trustworthiness and credibility of data collection was assured by systematic auditing, memos and member checks. The following strategies were used for validating the analysis: prolonged engagement; triangulation; and peer debriefing.

CHAPTER FOUR FINDINGS

This dissertation explored the communication and collaboration about total pain management among team members for two hospice IDTs. Chapter One described the justification for the study. The literature review in Chapter Two provided a history of health care teams and their value, a discussion of social work on hospice IDTs, and a detailed treatment of the theoretical basis of the dissertation. The review also examined team communication and team collaboration for pain management. Methodology and specific procedures were discussed in Chapter Three. The present chapter summarizes the themes that emerged from the data collected with examples of the evidence supporting them. Following textual description of the findings are figures which summarize the process of analysis from open coding to themes.

Participants

Team processes were discussed with 15 team members during interviews (averaging 45 minutes) that generated 325 pages of transcribed data. Team meetings were observed during the course of a year, yielding 188 pages of detailed notes. Team I comprised eight participants and Team II comprised seven participants. The physician, office nurse, case manager nurses, social worker, chaplain and home health aide were interviewed for each team. Participants were White (n=14) and African-American (n=1). They were predominately women. Their average age was 57 years. Participants had an average of 21.5 years experience as a health care professional, nine year average for working in hospice. There were two high school graduates, eight individuals with some college and eight who had earned college degrees.

When asked about team leadership, several members of Team I reported that the social worker was the meeting leader others, however, believed that it rotated. Team II unanimously reported nurse case managers as the leader, although during my observations of the team meeting the physician led. Descriptive team statistics included an item asking members to estimate how much content of the meeting was devoted to each discipline, or how much of the meeting time did each discipline command. Participants answered as follows: Nursing - 62 percent; Medicine - 14 percent, Social Work - 13 percent and Chaplain Services - 13 percent.

Analysis of Data

Coding through constant comparison provided the means to move from units of meaning in the data to abstractions and themes. First, as units of meaning were identified they were given open codes (the labels for that level) (Glaser & Strauss, 1967; Strauss & Corbin, 1990). Open codes were constantly compared to one another. After the first interview, 16 open codes were identified. Examples of these codes are: *Communication property*, *complicated case*; and *treating pain*. *Communication property* labeled units where pain communication was influenced by how the team spoke among themselves, such as using professionalism or cutting someone off. *Complicated case* labeled units where pain management was described as complex or as having many dimensions. *Treating pain* captured any mention of treating pain.

Open coding was used throughout the project. As new open codes were identified they were added or merged with existing codes. It became apparent that the open codes could be sorted into two broad groupings: *Communication* and *collaboration*. After the open codes were sorted, there were 16 open codes in *communication* and 21 open codes in

collaboration. This in itself is a very important finding: one of the corollaries of how teams interact is the extent to which they use both communication and collaboration.

Constantly comparing codes with one another led to collapsing them into a refined lists called categories (Padgett, 1998; Strauss & Corbin, 1990). Categories were compared to codes, and to one another, until themes about communication and collaboration for pain management were extracted from the data. Eight final themes were identified; four related to communication (*routine or creative; timeliness outside team meeting; information exchange; bio-psycho-social pain language*) and four to collaboration (*total pain; human agency; assessment physical pain; medicine & nursing*). Table 1 and Table 2 show the final open codes, categories, and themes from the communication group of codes and the collaboration group of codes. These themes represent answers to the original research questions and will be presented in that form.

RQ1) How do Hospice Teams Communicate Regarding Patient Pain?

Routine or creative. Definition of this theme is that most of the time, team meeting followed a checklist type of communication pattern; occasionally, however, creative conversations happen. When a patient's pain was not in control to the patient's satisfaction, the team would brainstorm during the team meeting, which increased team members' openness to psycho-social issues. These situations were described as complicated or problematic. Team members reported the synergistic interaction to be a positive aspect of team process with complex cases.

Those team members who had history of collaboration with highly functioning teams were more aware of the challenges of communication about pain during team

meeting. These members noted the influence of structural characteristics. While personal characteristics such as personality and training were reported to be important, they were perceived to be less of an influence when the team agenda and leadership were effective. All members participated in communication about pain when brainstorming was supported; a higher quality of care resulted. The routine or creative theme underscores a connection of creative, non-biologically focused communication for the successful resolution of complex health problems.

Quotation from members of both teams indicated how patient pain was discussed during team meeting with statements such as: “Well, we meet as a team to discuss patients, recerts, deaths, current issues, always pain.” and “mostly it’s just routine.” The communication about pain that occurred was described in many references as an update to the doctor and an item for the documentation. A physician said “Some of it is just rudimentary, regulated, required.” Most of the pain talk was nurse to doctor or nurse to nurse. One nurse commented, “Different nurses have different ideas of how to handle what’s going on and two heads are better than one. With the doctor present, if you need an order, we get it right then, or he can put his influence on it.”

There was some caution expressed about allowing pain talk to become routine. A physician noted “Just going through the basics is adequate, but, [nurses] are not applying their skills.” His meaning seemed to be that allowing or even forcing the meeting to be managed with a routine, such as a list of items for documentation, would suppress creativity. A nurse said the pain talk that occurred was almost always about physical pain. “It’s the nurses that lead the team and they talk the most about pain and, consequently, it’s physical pain.” A chaplain said “Physical pain is always discussed. Social, spiritual,

psychological (pain); definitely not sure they are always discussed. The patient talks about it.” A social worker did note that other types of pain were occasionally discussed,

Probably three or four patients in the last few years and we have talked about this that ‘this person is so hard to get into good pain control.’....They have changed medications and there just doesn’t seem to be much change with the person so then we start looking at the psychological and spiritual side.

Participants reported that brainstorming occurred when the presenting pain issue was complicated. A nurse said “We all have something to offer and we can all brainstorm and try [to] come up with a better plan for this patient and family.” Likewise it was said that complicated situations can lead to “crisis and conflict” within families and within the team. Another nurse said, “You know, I really think we work well together. Do we get on each other’s nerves? Yes. Do we get mad at each other? Yes. Because they don’t see things the way we quite do. But when it’s all said and done, we’re a team.”

The charisma of a leader was reported to be helpful for communication inside the team meeting. A social worker recalled the social worker who led a team at another facility “She never had to be nasty, nobody ever talked out of turn, nobody ever had side conversations.” A physician said, “Well it works best if someone drives it.” The personality of the other team members was reported to also have an influence on pain communication. “The way the meeting is conducted depends on, a lot on, the personality of the people in the group,” stated a nurse manager. To the team members, routine meetings contained little creativity. Creativity was demanded in situation where the presenting pain problem had several dimensions. Otherwise it took a strong leader to

create a culture where creativity was encouraged. Engaging all team members in brainstorming was reported to be connected to quality care.

Finally, the structure of the meetings and the opportunity for all to participate influenced the communication about pain. A team member who was not a nurse stated, “Things that are important, from our perspective, don’t get the value. They [other team members] don’t see it as medical, so they don’t listen.” A nurse aide added “there are times, I believe, that I have not been listened to.” Interview questions about roles and rules for team meeting were largely met with puzzled faces. In one observation note coded for team process it had been noted that the meeting that day was chaotic. Participants indirectly said that their current team would function better with more structure. But they were grasping to express specifically what would improve team meeting. Communication coding is summarized in Table 1.

Timeliness outside team meeting. Timeliness outside team meeting titles the recurring theme that important pain communication frequently occurs outside of team meeting. Office nurses triaged pain emergencies and coordinated medication orders for biological pain. In addition to being a steward of resources, overall case management by office nurses was needed to assure the safety of patients and staff. Teams, however, named field nurses, as the case managers; they naturally had the most pain communication outside of regularly scheduled team meetings.

Under the theme timeliness outside team meeting was a category, *case management*. There were two subcategories under *case management*: a) *the team talked to each other outside of the team meeting*, and b) *team members spoke to people who were not hospice team members*, for example, the primary care physician. Outside of the

team meeting, there was some opportunity for team members to see each other during the morning before they left the agency to make visits. These encounters offered a timely and productive opportunity to talk about pain management problems. In the role of case manager, the field nurses found it necessary to communicate outside of team meeting to educate patients, family members, nursing homes and primary care physicians about pain medicine.

Team members talked about the urgency and the constructiveness of such communication. One aide stated, “Believe it or not, there’s twice the communication that goes on (outside the meeting) between the nurse and the aides and the chaplains and the social workers.” More pain communication occurred outside the meeting because of the immediacy of patients’ needs. The timeliness of recognizing, reporting and treating pain dominated the descriptions of *pain talk*. In one interview a nurse was referring to pain talk when she said, “It [*pain talk*] doesn’t happen in the meeting.” An office nurse remarked: “So many times, it has to be addressed outside the meeting because it has to be addressed immediately. We want to know sooner than the next day. We do have patients who get into a pain crisis.”

Pain communication outside the meeting was viewed as purposeful and effective or, as one aide said, “I think what we do outside the meeting is much more constructive than what we do inside the meeting.” During office hours, the office nurses are the hub for pain communication. The hub was described by an office nurse as “The coordination of care in getting the orders, getting them sent to the pharmacy, getting delivery and really just that whole coordination piece.” Effective, timely management of physical pain seemed to be a source of pride for team members. One social worker retorted, “Obviously,

you would never wait to coordinate or communicate about pain.” In contrast to communicating inside the team meeting, pain communication outside could be a daily occurrence.

Interviews on both teams indicated that there is need of timely communication about pain management with people outside the hospice team. There were numerous descriptions about speaking with personnel at nursing homes to obtain information and educate them about pain management with hospice patients. Likewise, team members had found that pain management concerns were not always understood by primary care physicians and required communication outside meetings, especially by the hospice medical director. “The doctor (hospice medical director) gets engaged if the primary care doctor is hesitant,” said one nurse. Critical communication is reported to happen with patients and family members outside the meeting. One nurse noted, “On-call people do a lot of work with the families.” Another nurse stated, “It’s not just the patient, it’s the family. Because we are a team in here, but they are a team out there.”

Information exchange. This theme is characterized by basic pain information being provided in the team meeting but without clear focus or leadership. Team member narratives and the observation notes described the meetings as resembling a medical report, a familiar format for health professionals whereby doctors are briefed on a patient’s condition and write orders. Otherwise, there was disagreement about what information should be shared at team meeting.

By discipline, nurses and nurse aides suggested the appropriate topic for team was mostly care for physical pain. Physician, social workers and chaplains strongly expressed that discussion about psychological and social aspects of pain were important aspects of

the meeting. They said it was the intent of hospice to be holistic; therefore, it was essential that all aspects of pain were presented to provide the best care for a patient. The office nurses had each initiated activities that fell somewhere in between a quick meeting about physical pain and a lengthy multi-disciplinary exchange of information. Each hospice introduced a meeting format to involve every discipline, but they restricted the discussion content.

Responses did indicate that patient's needs received first priority status and were the focal point so that information could be exchange to ensure quality care despite the perception of different agendas or personal conflicts among staff. It was interesting to note that the same nurse who suggested that team meeting was a place to support one another seemed aggravated by the meetings' length. No participant mentioned specific communication skills that were used consistently to promote interdisciplinary communication.

Some pain information is exchanged during team meeting. One nurse said "It's like the medical report to allow the doctor to know everything that's been going on." Another nurse said, "We seldom see each other; some may not know the patient, and I feel the team meeting [relates] to quality care." "Make sure all the disciplines are on the same page," said a third. Quality of care and fulfilling the hospice mission were reported to be related to the exchange of information. There was disagreement about other possible purposes of the meeting. The following ideas were expressed by: a physician - "I did some teaching;" a nurse - "It is good to support each other;" an office nurse - "This is not the time and place for support or education;" and a social worker "Supposed to work on the care plan."

One social worker said “I feel like most people absolutely dread going to team meetings.” There was frustration that the meetings were too long but also frustration that they did not cover enough. One chaplain provided this example, “To lots of people it’s just that little few lines in there, saying to ‘recertify’ or ‘pain in control.’” A social worker said, “I found that very frustrating. We need to have respect for each other and allow each person the time to say what they have been doing with the person or what their ideas are.” A physician made the comment that he was thwarted in trying to institute a new format for team because the team had its own culture and would return to the same pattern.

The following quote from a physician suggests reasons that interdisciplinary pain communication might be limited: “The nurses have so much more frequent contact and intense contact that they really feel the responsibility, and sometimes they even forget to include the other disciplines.” A chaplain said of team meeting, “When we run out of time we just keep going with same agenda of nursing first no matter what[ever] the needs.”

There was a sense of justice about representing the patient’s needs in the team meeting as described by a physician: “Properly functioning, this team directs a higher level of care or a more holistic complete level of care for people who cannot otherwise access these resources.” But one social worker said presumably about injustice, “I’ve felt, in the past, that I was limited on what I could say because things that are important [to me], well that’s just chit chat according to others.” A physician said that excluding team members “Runs a risk of family and the team and the office perceiving that the other members aren’t important. Team meeting is one place that they or the different disciplines are really acknowledged.”

One thing agreed upon was that the team meeting offered an opportunity to exchange information. Apparently the meeting could be a forum for different functions such as care planning, supporting one another and learning from seasoned hospice professionals. Participants intimated that most team meetings lacked focus for effective information exchange and did not encourage full participation. This was possibly due to time constraints or lack of structure. There was no sense of interdisciplinary teamwork in the exchange of information and absolutely no mention of skills used to promote interdisciplinary communication. The essence of the theme information exchange is that pain communication during team meeting is multidisciplinary rather than interdisciplinary.

Bio-psycho-social pain language. There seemed to be clearly defined and respected areas of pain communication from biological, psychological and social viewpoints. The areas were often represented by comments from specific disciplines: the physician, nurses and aides provided biological information, the social worker offered psychological and social concerns, and the chaplains contributed a spiritual perspective. A mind-body connection, spiritual and emotional pain and financial hardship are but a few terms used by participants. Nurses had the most latitude in venturing comments from all viewpoints, but all disciplines used bio-psycho-social language to communicate about pain. Members were interested in using a shared language to communicate effectively about pain, equating the effort with professionalism.

The different viewpoints did not translate into appreciation for different roles. Services described in the narratives were delivered in a nursing case management model where nurses coordinate daily activities. Other disciplines obtained information and assessments, subsequently feeding such communications back to the nurses in a shared

language. All team members had the capacity to engage in bio-psycho-social communication.

The following quote from a physician indicates the expectation that team communication should have discipline specific elements. “OK, Interdisciplinary Team Meeting is a timed conference that brings together different disciplines, mainly physician, nurse, ideally a pharmacist, chaplain, social worker, volunteer, bereavement counselor.” He continued regarding having various disciplines’ views “Shifts the whole emphasis from medical care to holistic care.” Team members spoke about discipline-specific communication or information that they elicited and shared because of their training. From a social worker, “They look [to] me as the person [who] has the knowledge to deal with the psychological part of what is going on with the patient.” A nurse believed she offered “Information on family dynamics.” A chaplain stated, “What I struggle with is, the issue isn’t physical pain, it’s more spiritual pain and emotional pain.”

The ability of team members to use bio-psycho-social language from their perspective was connected to what would be shared by patients. As one physician noted:

They [patients] don’t want to reveal their pain; they don’t want to admit to pain or that the pain is increasing because that means they are getting worse and they are dying, so there is a patient resistance. They will tell different members different things.

A nurse gave an example of how the aides may be involved in pain communication. “Well, I think our nurse’s aides play a big role in this question, because they are there doing things with [the patients] that we don’t do when we’re there.” A physician said, “And the social worker also gets very good information sometimes because they are just there listening, letting people talk.”

Lack of appreciation for discipline-specific role was reported by some to be a personality issue rather than training. A nurse explained:

Some individuals don't look outside of their role. It's more up to personality than the role itself or the discipline itself. Some individuals won't look outside of their own "box," particularly if they believe that that's the most important perspective.

Others reported that it was the training. Overall, the message was that all disciplines have something to say about pain, but not everyone listened or understood the role of others. A nurse stated, "The disciplines bring [to team] all the information they have gathered;" whereas a chaplain emphasized, "Pain is spiritual or a mental pain that I think both chaplains and social workers can help with."

<i>Table 1.</i> Communication codes: Open to category to theme		
Open	Category	Theme
<i>Complicated</i>	Complexity leads to teamwork	Routine or Creative
<i>Problems</i>	Complexity leads to teamwork	
<i>“Anti-hierarchical”</i>	Real communication is limited	
<i>Other teams by contrast</i>	Real communication is limited	
<i>Team process</i>	Real communication is limited	
<i>Team leader</i>	Influences	
<i>Personality</i>	Influences	
<i>Temporal</i>	Timeliness	Timeliness Outside Meeting
<i>Coordinating communication</i>	Timeliness	
<i>Triage</i>	Timeliness	
<i>Safety</i>	Case management	
<i>Steward of resources</i>	Case management	
<i>Team talks outside</i>	<u>Subcategory</u> Team pain communication occurs outside meeting	
<i>Team talks to outsiders</i>	<u>Subcategory</u> pain communication occurs with others outside meeting	
<i>Reason for meeting</i>	Formal exchange	Information Exchange
<i>Justice</i>	Formal exchange	
<i>Quality</i>	Formal exchange	
<i>Personal need</i>	Informal exchange	

Table 1 (continued). Communication codes: Open to category to theme

Open	Category	Theme
<i>Discipline</i>	Perspective rather than discipline	Bio-Psycho-Social Pain Language
<i>Roles</i>	Perspective rather than discipline	
<i>Narrow definition of role</i>	Perspective rather than discipline	
<i>Professionals</i>	Professionalism = responsibility	
<i>Property of meeting</i>	Professionalism = responsibility	
<i>Communication Property</i>	Professionalism = responsibility	

Research Question 2: How do Hospice Teams Collaborate Regarding Patient Pain?

Total pain. This theme is defined by the use of bio-psycho-social and spiritual examples of how the team might collaborate. Care was taken in the initial guide not to lead participants into describing pain using bio-psycho-social or spiritual wording. But these concepts were clearly in the transcripts and were confirmed with member checks. Team members reported that because pain is multidimensional, collaboration on a hospice team requires assessment and intervention in all areas of pain. In answer to the research question, these hospice team members collaborated by using different techniques to assess pain and by using different ways of bringing that information to team meeting. Note, however, that all of these are assessments, not interventions, for total pain

At least at the conceptual level, the team members could describe total pain. An aide described pain as “It has to do with everything, your mind and your body.” A nurse described a basic function of hospice is to help the patient “To be pain free both in body and soul”. This from a chaplain’s viewpoint: “I struggle with a lot of spiritual and emotional pain.” A physician expressed why the physical dimension of pain may be most recognized. “Pain (physical) is the manifestation we can deal with. Although there are spiritual, social issues, the thing that’s immediately expressed by the patient is pain and that’s where the team starts.” Nurses, as well as social workers, recognized that there could be financial concerns such as medication costs or missed work.

Description of pain as bio-psycho-social was elemental for collaborating about pain management. A physician said, “We have high goals of managing pain, but it’s very complex and very individualized.” A nurse said, “Half the time, that patient’s not complying [with] the medication [orders], and it’s not necessarily another pill they’re

wanting, it's just to say, okay, you know, this has no cure." Observation notes indicated that patients were missing activities that they enjoyed because of pain. The following is how a social worker approached pain with patients:

One of the things that I tell them is an explanation of why we have a chaplain and why we have a social worker -- it is not because we want to bug you or we just want to come out and chat with you. We want to find out about you. You may be suffering in ways beside the physical pain you are going through and those things can cause physical pain.

Understanding the complete bio-psycho-social and spiritual condition was necessary for the team to work collaboratively. Each member performing a limited role in isolation would not produce the desired understanding. As one social worker said, There is probably a reason they are skipping their medications. We need to get to the bottom of it and figure out, WHY. They may have had a family member that had a bad experience with medication or they feel this is the next step to dying. As a chaplain indicated, Everyone needs to hear about all parts of pain. The team is all aware of inner pain." Observation notes document nurse involvement with spiritual pain issues. These examples illustrate how the social work, nurse and chaplain roles overlap in this setting. team members had a need to learn from other disciplines by engaging in conversation.

Participants seemed to have a working definition of total pain that required intense exploration of every aspect of pain, most effectively by a discipline trained for that assessment. Then, the team as a whole needed to understand all parts of the pain picture. A chaplain said, "I think just very simply to help to work toward how we can help our patients and families....A goal to help them to walk to the other side pain free in mind, body and soul."

Human agency. This theme is labeled from the definition of human agency as the power to engage in action to achieve specific goals. All disciplines talked about working to understand the meaning that patients and families give to pain and the necessity of partnering with patients and families for effective pain management. Just as personal needs were put aside to communicate about pain, staff members sometimes put aside traditional medical relationships to collaborate about pain. This sublimation extended to family members as well. However, it will be noted that the disciplines approached agency differently. The nurses had a pragmatic view, such as how to control pain quickly. Others had a larger view of how total pain might be involved in choices made by patients.

A nurse said, “You have to work with the patient and the family view.” Another nurse said “In the very beginning, ask the family what are their expectations. ‘What do they want to happen?’ And ‘who’s the decision maker?’” A social worker spoke about a typical patient concern, “You have to get at what is going on psychologically with that person; what does this mean you know ‘now that you are taking this medicine, how do you feel about taking this?’” A physician said, “And all of that has to be weighted [*sic*] with what can you get the patient to do or the family to do.” An aide said, “You have to work with them. I don’t think you could do it without working with them.”

The main issues that the team members talked about concerning collaborating with patients/families were fear and control. A physician summarized this as, “because there are so many human biases and so much misinformation, misunderstanding of pharmacology.” Social workers talked about the fear that families have about overdosing, fear of pain medication “because it’s a narcotic, means something to them.” Also, fear of the sedation, and loss of control, which might occur that would make it hard for patients

to interact with family members. In an observation note coded for fear of pain medicine, a patient was reported to refuse narcotics because of constipation.

From another perspective, collaborating gave the patients and families shared control over pain management. Following is a good example from a social workers transcript:

You know, what changes do you feel you have experienced since you have started taking this medication? Physically and psychologically and you know, you know do you think this is the best thing for you? What are the pros and cons? I'll often get into the pros and cons of especially if they are reluctant to take the next step with the narcotic protocol or pain control? I'll say 'What are the pros and cons? Are you happy with having moderate pain and being more alert?' or [I] use different scenarios.

Nurses wanted the patients and families to know that the pain would be controlled as quickly and completely as possible. A nurse made the point that one patient had even tried to commit suicide prior to coming on to hospice service because the pain was so bad. The patient received an intravenous pain pump and then as the nurse related, "She's in control. She knows if the pain's hurting, push that button." A social worker exclaimed, "Heavens, if we see somebody in pain, we're immediately trying to think of anything and everything." Total relief of pain was not always the goal. A nurse related an approach to giving patients agency that demonstrates commitment to partnering:

Ask them in admit, 'what pain level can you live with?' Some of them will say a one or a two (number on a pain scale). You know, and if that's their, goal, because some of them want to have a little pain. They do. It's odd, but they do. Because it's like, you know, 'I still have this thing'.

The hospice teams studied constantly referred to the patients and families in their comments. It was affirming that team members practiced from the hospice philosophy

when so many examples were given of partnering between staff and family. Study participants were very aware of issues that might interfere with a collaborative relationship with patients and acted to reduce them. Because of the complexity of the situations and the likelihood for patients to confide in different members, it was necessary for the team to collaborate in assessment to get the full picture. In fact, the professional staff and the patient/family are described as achieving more interdependence than that which occurs between disciplines. It could be inferred that when the professionals accepted the need to collaborate with patients, collaborating with team members was accepted or reaffirmed.

Assessment physical pain. Unanimously, team members talked about relieving physical pain as the primary goal of the team meeting and the primary goal of hospice. This theme emerged from two categories, How is pain assessed? and, Who assesses pain? Team member could be expected to evaluate pain through use of Likert type pain scales and observing visual signs, which are new activities and skills for social workers and chaplains. This theme in particular involved activities which spanned the borders of traditional disciplinary roles, or role blur. All participants consistently described a collaborative role for themselves and for every other team member in assessing pain.

A nurse manager described unanimous pain assessment as:

Everyone who goes out for a visit whether they just as the homemaker for the day, social workers, volunteers, all of them, if they perceive that a patient is in pain even if it is not voiced they call me and say 'this is what I am seeing' and it sounds like they (the patient) took their pain medicine or tell me more about the current status and that way I can get on the phone with the family member or the patient and ask some more questions and have another opportunity to intervene.

Some team members stated that pain assessment was mostly done by nursing but then gave examples of how they themselves detected pain. As one nurse aide described it,

There's three ways of assessing pain in my opinion. That's the patient verbally expressing the pain, the caregiver verbally expressing the pain, but also there's a time that you can look at the patient and see the furrows in the brow and see the twitching and jumping about and that's the third way and all team members are responsible for watching for pain.

“You know, by using the numbers (pain scale),” said one social worker. Another social worker described watching faces for signs of pain. Both social workers spoke about using creative approaches to elicit pain information. In an observation note coded for assessment, a chaplain was reporting to the team what a patient had said when asked about physical pain. Unanimous involvement in pain assessment was supported by team member's stories of immediately calling nurses to report pain or to approach the nurse about what they had seen.

Medicine & nursing. This theme emerged to label that cluster of categories regarding treatment of pain following a model where physicians and nurses jointly provided the preponderance of care. In contrast to the traditional medical model, nurses at the hospices operated independently from the physician in many regards. But the culture of the institutions did not support wider egalitarian collaboration for treatment of pain. Both physicians and nurses reported a high level of interdependence with their two roles. Nurses were very independent and physicians served as consultants. If there were collaborative intervention processes beyond of the physician/nurse relationship, then they went unrecognized or unmentioned by team members. The social workers and chaplains were keenly aware of their professional scope of service issues and expressed that treating pain might not be expected in their role.

A category developed during analysis (and collapsed into Medicine & Nursing) was *nurse extender*, analogous to the physician extenders who perform many tasks formerly undertaken by doctors. I was told that non-nursing staff assisted nursing pain intervention services, for example, as another “set of eyes” in a patient’s home to see if pain persisted. All reported activities of pain intervention were implemented by nursing. If non-nursing staff were involved in care it was to extend the reach of nurses. This is another example of the pervasive medicine and nursing culture of the teams. There were many occasions observed where the chaplain’s and social worker’s contribution to the meeting was a yes or no answer to “Are you guys involved?”

When asked about treating pain, non- nursing participants made clear and careful statements about their personal involvement: “It’s the physician. Number one, the patient, [two] - the physician and then the nurse.” “Well there is really nothing I can do but report that pain.” “If they say there is pain I call and talk to the nurse manager.” “Yes, I think it [pain management] is very nurse-centered still.” There was a sense of caution regarding scope of practice. Only nurses and physicians reported actually treating pain.

It was physicians and nurses who spoke about indirect ways that others could help with pain management. For example, to assign a volunteer to a home, to ease stress and perhaps diminish pain. One of the physicians spoke of everyone on the team having a potential to play a role in pain treatments. But the overwhelming response to questions about treating pain was that pain management is the purview of doctors and nurses. While assessment was a collective goal, pain treatment followed the traditional medical chain of command.

That is not to say that only medication served as the sole intervention. A nurse described an alternative,

And you know, I think that the human touch, even if it's just holding the hand, I don't care how much they're hurting sometimes. And especially, the ones with the cancer, the ones with the bad things that's oozing here, or scabbing there, just touching them, you know, I believe that the energy that comes from me to them can help them.

The interesting point is that nurses filled other roles without hesitation, such as providing the psycho-social intervention reported above. As a nurse manager said,

So if we don't have a social worker on hand we are doing that. I know a lot of times we provide a spiritual presence." I know a lot of our nurses pray with their patients and, know this is talking about me, but I do that job too when I am out in the field or on call. So, I think, I think we all have a little sampling of some of the other disciplines as part of the care we provide.

A physician cautioned that "oftentimes the nurse kind of bleeds out and starts to fill the other roles and it's helpful for the team to remind the nurses that they can help with all these other things that start coming."

Table 2. Collaboration codes: Open to category to theme

Open	Category	Theme
<i>Bio-Psycho-Social comments</i>	Bio-Psycho-Social collaboration for pain	Total Pain
<i>Spiritual</i>	Bio-Psycho-Social collaboration for pain	
<i>Asking for patient perception</i>	Patients want/have control	Human Agency
<i>Fear of pain medicine</i>	Patients want/have control	
<i>Patient's needs</i>	Coll. with patients/family	
<i>Family as patient</i>	Coll. with patients/family	
<i>Assessing pain</i>	How is pain assessed?	Assessment Physical Pain
<i>Pain scale</i>	How is pain assessed?	
<i>Pain</i>	How is pain assessed?	
<i>Unanimous</i>	Who assess pain?	
<i>Role blur</i>	Who assess pain?	
<i>Assess</i>	Who assess pain?	
<i>Goal</i>	Treating pain	Medicine & Nursing
<i>Intervention</i>	Treating pain	
<i>Other than medication</i>	Nurse extender	
<i>Collaboration</i>	Nurse extender	

Summary

Chapter Four includes some overall findings and the specific themes that emerged from the data collected. Examples of the evidence supporting them are provided for each. Quotations are from physicians, office nurses, case manager nurses, social workers, chaplains and home health aides. Coding through constant comparison provided the means to move from units of meaning in the data to abstractions and themes. Themes representing answers to the original research questions were presented. Eight final themes were identified, four of which are related to communication and four of which are related to collaboration. Data shows that the first question (How do hospice teams communicate regarding patient pain?) was answered with the four themes: routine or creative; timeliness outside meeting; information exchange, and bio-psycho-social communication. The second (How do Hospice Teams Collaborate Regarding Patient Pain?) was answered with these four themes: total pain, human agency, assessment physical pain, and medicine & nursing.

CHAPTER FIVE DISCUSSION

This research study explored the communication and collaboration of two hospice IDTs regarding pain management. Chapter Five presents discussion of study findings, their relationship to Bronstein's model (2003), their implication and finally their applications. First, an introduction places the discussion in context. Second, each communication theme is discussed and compared to Bronstein's model of IDT collaboration. Third, collaboration themes are discussed and compared. The fourth section presents theory development and contributions of the study. The final section suggests applications for policy, practice and future research.

Introduction

The effective delivery of hospice has significance for patients and families, professionals and organizations and perhaps as a model for chronic care management. Unfortunately pain continues to be a problem for terminally ill patients; consequently, there have been calls for studies concerning IDT delivery of palliative care (Bookbinder et al., 2001; Kapo & Casarett, 2004; MacDonald, 1991). Communication and collaboration are processes that can be explored within a framework of Bronstein's model of interdisciplinary collaboration (2003). Components of collaboration are interdependence, newly created professional activities, flexibility, collective ownership of goals, and reflection on process. Influences on collaboration are structural characteristics, personal characteristics, history of collaboration and professional role. Bronstein asserted that interdisciplinary collaboration is a higher level of service than is coordinated, multi-dimensional communication (2003). A large scale attempt to improve communication

and pain control indicated that mere coordination of services by an individual may not improve communication or outcomes (The SUPPORT Investigators, 1995).

Two research questions were posed in the dissertation: RQ1) How do hospice teams communicate regarding patient pain? And RQ2) How do hospice teams collaborate to manage pain? An important finding was that the IDT used both communication and collaboration. As separate processes it would seem that communication alone does not ensure collaboration. The findings showed that the teams communicated about pain by creative, timely exchange of bio-psycho-social information. They collaborated about pain by using the concept of total pain, partnering with patients/families, and using a holistic approach to assess physical pain. Tables 3 and 4 illustrate the relationship of the data themes, model components and influences, and the consequent implications. Chapter Five discussions include commentary on the scope, variety, and strength of IDT processes.

Communication Themes

Routine or creative. This theme is consistent with some components and influences of Bronstein's Model of Interdisciplinary Collaboration (2003). Interdependence and flexibility of disciplines were apparent in creative discussions about patients who experienced complex and stressful pain circumstances. The physicians and nurses were open to psycho-social perspectives; they asked for help from the other disciplines. Venturing into a discussion of physical pain required flexibility among social workers and chaplains. A history of collaboration had sensitized some team members so that they were frustrated with the lack of structure in team meetings and the poor support for interdisciplinary communication. Lack of having a history with IDT among the other

half of the members may have impacted their expectations for creativity. These influences affected pain management by producing regimented discussions of pain that focused solely on physical pain.

The brevity of pain communication may be viewed as positive or negative. If psycho-social aspects of a patient's pain experience go unrecognized, then the team is missing opportunities to provide interdisciplinary care. Concern about poor pain management would be heightened if all disciplines did not have an opportunity to participate. (Some team members in the study had that perception). If, however, a patient is experiencing good pain control then perhaps the team has addressed all aspects of pain and a brief check during the meeting is all that is required. Regardless, questioning the perceived brevity of routine pain communication and the rarity of creative pain talk is warranted given the fact that so many hospice patients experience pain (Jack et al., 2003).

Timeliness outside meeting. Communication about pain, when it occurred outside the structure of the team meeting, can be interpreted as at least a partial interdependence among team members. It was team members who sought interactions beyond the formal meeting. There was interdependence and flexibility when non-nursing team members discovered pain issues in the field and called to discuss them with the office nurses. Decision making about physical pain, however, did not exhibit interdependence, since only physicians and nurses were involved. As for professional role, beyond the team meeting the nurses' first allegiance appeared to be with the nursing role than with the team. The theme of "timeliness outside meeting" encompasses the suggestion that to understand the pain communication of these teams, it is important to look at interactions beyond as well as during team meeting.

Information exchange. Medical report is neither interdependent nor flexible.

Neither does it create new professional activities nor truly collective goals. Exchange of pain information was defined by the team members according to the history that each had with collaboration and by their professional training. By discipline, nurses and nurse aides suggested the most appropriate topic for team discussion was the care for physical pain. Physician, social workers and chaplains, however, strongly expressed the importance to discuss the psychological and social aspects of pain during team meeting. In general, team members were cognizant of time constraints and need for structure.

There is an important implication here: Teams appear to lack the skills for integration, thus their pain communication was multidisciplinary rather than interdisciplinary. For example, during observed team meetings there were instances where a chaplain, aide or social worker would raise a psycho-social issues and the team would continue with planning for medication as if no one had offered another viewpoint. With all due respect to the professionals involved, this was very troubling. As noted in both interview and observation, members did not expect that the formal evaluations of team process instituted by the agencies would improve a weekly exchange of pain information during meetings. This implies that there was no support for a leadership role that would initiate and maintain collaborative communication.

Bio-psycho-social communication. Pain communication was enhanced by the team's comfort with interdependent pain language during team meeting. This likely reflects indoctrination of the hospice philosophy. Use of bio-psycho-social terms, however, did not evoke new activities. A question then developed, "how holistic does a

team have to be?” Perhaps shared bio-psycho-social perspective and language are adequate for communication about pain in a bio-medical case management model. But it inclusion of psycho-social planning and intervention (Altilio & Otis-Green, 2005; Connor et al., 2002; Temkin-Greener et al., 2004). The implication is that the team members do not fully understand the roles of one another. These teams used bio-psycho-social language to consider their purpose as a team, but the discipline-specific perspectives seemed to stifle reflection about team performance.

Table 3. Relationships of communication themes to Model of Interdisciplinary Collaboration (Bronstein, 2003) and to study implications.

Theme	Model	Implication
Routine or Creative	Interdependence	Creative and comprehensive pain communication is required for quality care of complex health issues
	Flexibility	Leadership and structure of team meeting influence pain communication
	History of Collaboration	
	Structural Characteristics	Question brief pain communication
Timeliness Outside of Meeting	Interdependence	Pain communication should be studied inside and outside team meeting
	Flexibility	
	No Professional Role	
Information Exchange	History of Collaboration	Pain communication during team meeting is multidisciplinary rather than interdisciplinary
	Structural Characteristics	Lack of support for a leadership role
Bio-Psycho-Social Pain Language	Interdependence	As hospice professionals, team members used Bio-Psycho-Social Perspective and language but do not understand different roles
	Reflection on Process	

Collaboration Themes

Total pain. Team members described their collaboration for approaching total pain as congruent with many aspects of in Bronstein's model (2003). Team members easily and consistently gave examples of how each discipline's background and training was important with regard to role flexibility in managing pain. Team members indicated that their own work would not be as effective without the input from other disciplines this constitutes evidence of interdependence. Team members described obtaining a comprehensive and mutual understanding of pain as a collective goal.

Professional role influenced collaborative pain management, or at least the allegiance to the team as well as to one's own discipline. An example given by a nurse was the team decision to support a patient's greatest desire to return home although the home environment barely met safety standards. The patient's pain was not controlled during a nursing home respite stay, and the team was frustrated. The discussion that finally supported a return home included nurses who were protective but also a nurse who had been influenced, in her words, by a social worker's position on "self-determination." This is an example where one professional borrowed from another's professional role. The professionals, as well as the informal caregivers, collectively worked to transfer the patient home. The patient died at home with her pain managed.

In the previous case, the team valued its collective wisdom over the values espoused by individual members. Furthermore, there was collaboration to develop a team value that was embraced above a more typical discipline specific perspective. Because all team members were involved in assessment, planning, implementation and evaluation, the

case exemplifies a collective goal. As one social worker reported, though, these occasions may occur as infrequently as three or four times in the last few years. Physicians and nurses and aides almost always promoted medical and nursing perspectives while chaplains and social workers occasionally raised psycho-social and spiritual concerns. The net result was very seldom did professional role support treatment of total pain. The implication of this theme is that the team members have a common vision of pain but different perspectives on how to approach team action.

Human agency. The hospice philosophy aligns professionals with the expectation that patients will be in charge of their own care; such a perspective requires interdependence and flexibility of staff roles. Rather than a medical authority, the professional role of hospice staff is to treat patients as equals. These hospice teams affirmed that they embrace this hospice values. Staff and patients must arrive at collective goals before pain management can be effective. In hospice, family members provide services that overlap with professional boundaries, families try new activities, and professionals are permitted a presence during the very personal experience of dying. The team regularly checks, or reflects, on the working relationship with the patient and family. All of these support the model of interdisciplinary collaboration.

There is an implication that the theme human agency, as well as the theme total pain, reflects professionals' endorsement of the hospice philosophy. While the hospice philosophy is central, discipline specific viewpoints still influence one's professional role. It is interesting that the nurse aides seem to join the chaplains and social workers in partnering with patients as equals. Physicians and nurses give patients and families more directions, possibly making decisions for them. Whereas everyone espoused the

philosophy of partnering with patients, each discipline had its individual approach to fulfilling such a partnership. Perhaps that explains why commitment and experience in partnering with families did not appear to influence the development of egalitarian relationships on the teams.

In conjunction with these findings, it should be noted that all of the team members were involved in a research project that empowered families to attend team meetings through videophone technology. Although the study had been delimited to professionals, it was observed and documented in transcripts that patients and family members were in some way part of the hospice interaction. One implication might be that the professionals considered patients and caregivers as part of the team, in keeping with hospice philosophy. But there is a real possibility that the professionals' sensitivity and report of partnering with patients and families may have been affected by team member participation in the larger study.

Assessment physical pain. Interdependence was seen in the recognition that all assessments needed to have a comprehensive pain treatment plan. Flexibility and newly created professional activities were also easy to see. For example, social workers and chaplains used a numeric pain scale to assess physical pain with patients, which they described as absent from their original training. Team identity superseded individual perspective in assessing physical pain, which is evidence of professional role. Personal characteristics or history of collaboration had less to do with collaboration than the culture of the present team (a structural characteristic).

A collective goal requires the full participation of team members during in all phases of patient care. Speaking strictly of assessment, all team members discovered

pain, participated in collaborative assessment of pain and took part in a combined team evaluation of the effectiveness of pain control. Missing is team intervention for pain such that assessment of physical pain remains assessment only, and does not really reach the full definition of collective goal. An implication of this theme is that, in the assessment of physical pain, the hospice teams are close to true collaborative action. There is evidence that the team members can participate in boundary spanning activities. Another implication is that movement toward collaborative action can be subverted when collaborative assessment is followed by traditional planning and treatment. There does indeed appear to be pressure to return to a bio-medical structure.

Medicine & nursing. Nurses were very independently and physicians acted in a consulting capacity, but both reported a high level of interdependence with their two roles. Nursing had a different sort of relationship with the other disciplines which might be described as a nurse extender model. The case management and direction of care was a nursing function. The other disciplines fed in information and occasionally carried out requests by nursing. The preferential valuing of medicine and nursing is also played out in the agenda of team meeting.

There has to be some structure to care provision and nursing case management may be the best available. It is also possible that pain activities are identified and addressed by disciplines other than medicine and nursing but the influence of the service delivery structure prevents recognition of these contributions. The sincere respect for scope of practice seemed to limit the creation of new professional activities. In fact, new activities were almost absent in this study. The culture of the teams did not support collaboration in treatment of pain. Interdependence seems to be the only model

component represented by this theme. The implication is that although holistic care is espoused by the professionals the daily interactions of the hospice teams remain heavily in a more traditional structure valuing their roles above others.

Table 4. Relationships of collaboration themes to Model of Interdisciplinary Collaboration (Bronstein, 2003) and to study implications

Theme	Model	Implication
Total Pain	Interdependence	Disciplines view total pain from different perspectives which creates barriers
	Flexibility	
	Collective Goal Some Professional Role	
Human Agency	Flexibility	Affirmed use of hospice philosophy
	Interdependence	
	Collective Goal	Necessity of partnering with patients/families
	Reflection on Process	
Assessment Physical Pain	New Activities	Hospice assessment is boundary-spanning and could be an example of successful collaboration
	Some Professional Role	
	Interdependence	
	Flexibility	
Medicine & Nursing	New Activities	Planning and treatment revert from total pain to physical pain
	Reflection on Goals	
	Professional Roles	
	Structural Characteristics	
Medicine & Nursing	Interdependence	Other staff were nurse extenders not interveners
	Structural Characteristics	Tension for bio-medical structure

Theory Development and Contributions of the Study

The research questions in this dissertation were selected to explore hospice IDT interactions within a frame of The Model of Interdisciplinary Collaboration (Bronstein, 2003). Implications of the study contribute to what is known about healthcare teamwork for pain management and what can be concluded about the usefulness of Bronstein's model. A broad definition of communication was used to be inclusive of all interactions described by the team. And, indeed, open codes fell into two broad groups, one that described attempts to collaborate about pain management and one that described communication about pain that was not collaborative. Thus, a major contribution of the dissertation is support for previous studies that found communication, in and of itself, does not constitute collaboration (Dechairo-Marino et al., 2001; The SUPPORT Investigators, 1995)

The premise in the literature that health professionals view a connection of creative, non-biologically focused communication to the successful resolution of complex health problems is supported by the findings of this study. Creativity toward pain management occurred both inside and outside the formal team meeting. But the team members did not describe strong communication skills for discussing pain. There was not a clear definition of a team leader or specific duties ascribed to the role of team leader. Team members could provide examples of timely but very occasional discussions of total pain. The perceived brevity of pain discussions in team meeting is interesting, especially given the significance of the subject matter to hospice's mission.

As far as scope, variety and strength of processes, activities of these teams were similar to teams observed by others (Parker-Oliver & Peck, 2006; Wittenberg-Lyles,

2005; Wittenberg-Lyles& Parker-Oliver, 2007). Activities did affirm a positive perception and a valuing of IDT interaction among team members. Team members appear sincerely committed to the hospice philosophy, particularly the concepts of relieving total pain and partnering with patients and families. There was, however, only one instance of a newly created professional activity. Working together as a multi-disciplinary hospice team did not translate into increased variety or scope of interactions for pain management.

The strength of the teams' interactions appears quite limited. Team members even seemed puzzled by questions about the processes of the team, as if they had not previously considered their actual interactions. Only in assessment of physical pain did team members find a way to span some disciplinary boundaries. With few communication skills and little guidance about interdisciplinary interaction, the team meetings succumbed to discipline specific perspectives and that familiar health care institution, the medical report. This concurs with Wittenberg-Lyles' observation that there is tension during hospice team meetings to return to bio-medical reporting (2005).

The dissertation supports use of Bronstein's model for study of hospice IDTs (2003). Relieving pain is a critical outcome for all palliative services, yet the service delivery mechanisms of IDT are still obscure, hidden in a black box, if you will. The components and influences of the model provided a framework that guided interviews; the interviews yielded useful information on team interactions both inside and outside of team meetings. The model helped identify the implications of study findings. In an optimally functioning IDT, one would expect to see a full representation of all of Bronstein's (2003) components and influences of interdisciplinary collaboration. Instead,

the absence of components and the placement of existing components focused discussion on areas for improvement. Combining demographic information with influence on collaboration highlighted the importance of structure, training and leadership. Use of the model also made it possible to compare this team to others, for example Wittenberg-Lyles & Parker-Oliver found similar components in study of a hospice team (2007).

Applications

Practice. First, hospice teams should be congratulated on the finding of hospice core philosophy in describing their interactions; in particular, I refer to the philosophy of patient-centered care and a holistic perspective. Regarding the brevity of routine pain communication, if pain is a major focus of hospice service, then a comprehensive interdisciplinary pain assessment is warranted. Once a comprehensive assessment is accomplished, education is needed to move the team toward interdisciplinary planning, intervention, and evaluation. One suggestion from a team member is to place psychosocial-spiritual issues first on meeting agendas. Leadership and structure of the team can be improved. The very large role that social work could play on these teams seems underutilized and unsupported.

Team members are open to improvements, even seeking them, but without a lens for viewing their interactions. The shared platform of the bio-psycho-social perspective and related language positively influenced pain communication. This study supports previously suggested ideas for improvement through transdisciplinary training with existing teams, but especially to target the early training of professionals (Fulmer et al. 2005; Otis-Green et al., 2002). Social workers need more tools and education in this area. New resources for social work assessment of pain and psychosocial treatment of pain may

assist them in their role on hospice teams (Altilio, 2006; Association of Oncology Social Workers, 2008; Otis-Green, 2006). There is an opportunity for social workers not only to foster collaborative communication, but to take a strong lead in putting collaborative intervention into action. The teams' success at collaborative pain assessment may serve as a good example for developing collaborative pain treatment. Finally, education about communication and collaboration would encourage more team reflection on its interactive processes.

Policy. There needs to be recognized that the team meeting may not foster for collaborative communication. Team member narratives and my observation notes described the IDT meetings as equivalent to "medical report." Beyond team culture, a strong role for agency policy would be to stipulate a structure for the meeting that would include all aspects of care, and all interdisciplinary professionals. The role of team meeting leader needs to be developed. Documentation of collaboration outside the team meeting should be in place to capture this important activity.

State licensing authorities would benefit from closer review of collaborative practices and acts within hospice, rather than simply on the written documentation. Observation of formal and informal collaboration between team members regarding pain management would provide a better evaluation of communication and collaboration than does the review of paper records. Support for continued evaluation of IDT is suggested given the complex health needs of an aging population that will best be addressed with creative, comprehensive interdisciplinary care (Mion et al., 2006).

Research. To understand pain related activities of these teams, it would be important to look at interactions outside as well as inside team meeting. The MIIC instrument is broad enough to capture collaboration both inside and outside team meeting. The dissertation data support its use to compare teams. Another focus could be comparison of perception with observations of collaborative activities. The data suggest that study of collaboration with patients and families should be continued. Video and audio recordings of team meetings could be compared with reports from members of the activities.

Research on social work roles in hospice is in its infancy; the dissertation study underscores the need for new ways to foster collaborative communication and intervention on hospice teams. Although hospice is considered the gold standard of end-of-life care, and an exemplar for IDT collaboration, further research is necessary and can identify opportunities for improvement. Hospice is still a hybrid of multi-disciplinary and interdisciplinary approaches. As Palliative Medicine mature as a science, the translation of research needs to result in changes in practice and support from policy.

Appendix A

Demographic Survey

Date _____

Team member characteristics

Your age _____

Your job title _____

Your education _____

How long working in healthcare? _____

How long working in hospice/palliative care? _____

What led you to get involved with hospice? _____

Team information

How long working on your present team? _____

Who takes the lead in your team meetings? _____

Of the meeting content (100 percent) how much is physician oriented, nurse oriented,
chaplain oriented, social worker oriented, other?

How many hours of teamwork training were in your education? _____

Hours of continuing education about teams you have attended? _____

Have you worked on teams in other settings?

Other comments so far?

Appendix B
Initial Interview Guide

Date _____

Tell me about team meeting and about its purpose.

Tell me about your most recent team meeting experience.

Can you give an example of when the team really worked well together?

Describe what is most challenging working on the hospice IDG.

Can you describe a team meeting experience where there were differences to be resolved?

What do your colleagues in other disciplines see as your contributions to team meetings?

What team communication occurs outside of the IDG meeting?

What might be an example of a goal which is targeted by all team members?

Do all team members assess pain issues? How do they do this?

Can you tell of a time when another discipline's assessment was helpful to you in pain intervention?

Can you give me an example of how working with colleagues from other disciplines leads to pain management outcomes that team members could not achieve alone?

What do your colleagues see as your contribution to pain management?

Does your job description cover all the things you do?

Does your role ever blur with other disciplines- how?

How would you know if the team was not working well together?

Can you give an example of a “bad experience” that might occur at a team meeting?

What could be done if improvements in team meeting were needed?

What advice would you give to a new team member?

Appendix C

Modified Index of Interdisciplinary Collaboration

DIRECTIONS: With regard to your current primary work setting/organization, please indicate the extent to which you agree or disagree with each of the following statements by circling the appropriate number beside each statement. Please answer all questions to the best of your ability.

1= Strongly Agree 2= Agree 3= Neutral 4= Disagree 5= Strongly disagree

- | | | | | | |
|---|---|---|---|---|---|
| 1. I utilize other professionals in different disciplines for their particular expertise. | 1 | 2 | 3 | 4 | 5 |
| 2. I consistently give feedback to professionals in different disciplines in my setting. | 1 | 2 | 3 | 4 | 5 |
| 3. Professionals in different disciplines in my setting utilize me for a range of tasks. | 1 | 2 | 3 | 4 | 5 |
| 4. Teamwork with professionals from other disciplines is not important in my ability to help clients. | 1 | 2 | 3 | 4 | 5 |
| 5. My colleagues from other professional disciplines and I rarely communicate. | 1 | 2 | 3 | 4 | 5 |
| 6. The colleagues from other disciplines with whom I work have a good understanding of the distinction between my role and their role(s). | 1 | 2 | 3 | 4 | 5 |
| *7. I communicate in writing with my colleagues from other disciplines to verify information shared verbally. | 1 | 2 | 3 | 4 | 5 |
| 8. My colleagues from other disciplines make inappropriate referrals to me. | 1 | 2 | 3 | 4 | 5 |
| 9. I can define those areas that are distinct in my professional role from that of professionals from other disciplines with whom I work. | 1 | 2 | 3 | 4 | 5 |
| 10. I view part of my professional role as supporting the role of others with whom I work. | 1 | 2 | 3 | 4 | 5 |
| 11. My colleagues from other disciplines refer to me often. | 1 | 2 | 3 | 4 | 5 |
| 12. Cooperative work with colleagues from other disciplines is not a part of my job description. | 1 | 2 | 3 | 4 | 5 |

*13. I utilize informal methods of communication (i.e. social networks, lunchtime, etc.) to communicate with my colleagues from other disciplines.	1	2	3	4	5
14. My colleagues from other professional disciplines do not treat me as an equal.	1	2	3	4	5
15. My colleagues from other disciplines believe that they could not do their jobs as well without my professional discipline.	1	2	3	4	5
*16. Incorporating views of treatment held by my colleagues from other disciplines improves my ability to meet clients' needs.	1	2	3	4	5
17. Distinct new programs emerge from the collective work of colleagues from different disciplines.	1	2	3	4	5
18. Organizational protocols reflect the existence of cooperation between professionals from different disciplines.	1	2	3	4	5
19. Formal procedures/mechanisms exist for facilitating dialogue between professionals from different disciplines (i.e., at staffings, inservice, rounds, etc.)	1	2	3	4	5
20. I am not aware of situations in my agency in which a coalition, task force or committee has developed out of interdisciplinary efforts.	1	2	3	4	5
*21. Some meetings, committees etc. in my agency/ organization are consistently run jointly by different disciplines.	1	2	3	4	5
22. Working with colleagues from other disciplines leads to outcomes that we could not achieve alone.	1	2	3	4	5
23. Creative outcomes emerge from my work with colleagues from other professions that I could not have predicted.	1	2	3	4	5
24. I am willing to take on tasks outside of my job description when that seems important.	1	2	3	4	5
25. I am not willing to sacrifice a degree of autonomy to support cooperative problem solving.	1	2	3	4	5
26. I utilize formal and informal procedures for problem-solving with my colleagues from other disciplines.	1	2	3	4	5
27. The professional colleagues from other disciplines with whom I work stick rigidly to their job descriptions.	1	2	3	4	5
28. Colleagues from other disciplines and I work together in many different ways.	1	2	3	4	5

*29. Relationships with my colleagues sustain themselves despite external changes in the organization or outside environment.	1	2	3	4	5
*30. Decisions about approaches to treatment are made unilaterally by professionals from other disciplines.	1	2	3	4	5
31. Professional from other disciplines with whom I work encourage family members' participation in the treatment process.	1	2	3	4	5
32. My colleagues from other disciplines are not committed to working together.	1	2	3	4	5
33. My colleagues from other disciplines work through conflicts with me in efforts to resolve them.	1	2	3	4	5
34. When colleagues from different disciplines make decisions together they go through a process of examining alternatives.	1	2	3	4	5
35. My interactions with colleagues from other disciplines occurs in a climate where there is freedom to be different and to disagree.	1	2	3	4	5
36. Clients/patients/students participate in interdisciplinary planning that concerns them.	1	2	3	4	5
37. Colleagues from all professional disciplines take responsibility for developing treatment plans.	1	2	3	4	5
38. Colleagues from all professional disciplines do not participate in implementing treatment plans.	1	2	3	4	5
39. Professionals from different disciplines are straightforward when sharing information with clients/ patients/students.	1	2	3	4	5
40. My colleagues from other disciplines and I often discuss different strategies to improve our working relationships.	1	2	3	4	5
41. My colleagues from other professions and I talk about ways to involve other professionals in our work together.	1	2	3	4	5
*42. I work to create a positive climate in our organization.	1	2	3	4	5
43. Colleagues from different disciplines do not attempt to create a positive climate in our organization.	1	2	3	4	5
44. I am optimistic about the ability of my colleagues from other disciplines to work with me to resolve problems.	1	2	3	4	5

45. I help my colleagues from other disciplines to address conflict with other professionals directly.	1	2	3	4	5
46. Colleagues from other disciplines are as likely as I am to address obstacles to our successful collaboration.	1	2	3	4	5
47. My colleagues from other disciplines and I talk together about our professional similarities and differences including role, competencies and stereotypes.	1	2	3	4	5
48. My colleagues from other professions and I do not evaluate our work together.	1	2	3	4	5
49. I discuss with professionals from other disciplines the degree to which each of us should be involved in a particular case.	1	2	3	4	5

Appendix D

Last interview and member check

Date_____

Discipline_____

Collaboration Themes

- 1) Any reflections on an observation that more collaboration may go on outside of team meeting than outside?
- 2) Pain is described by the team as having bio-psycho-social/spiritual elements do you agree?
- 3) To collaborate in achieving pain management you have to work with patient and family view?
- 4) Everyone on the team assesses pain?
- 5) Treating pain follows a traditional medical model?

New question Are the role and/or personality of team members factors in collaboration?

New question how might the team meeting be better structured to facilitate collaboration- or are you satisfied it does now?

Communication Themes

- 1) Communication inside the meeting about pain is either routine (mostly) but occasionally brainstorming occurs?

- 2) Communication outside the meeting often involves explaining pain management to people outside the hospice team?
- 3) The pain management goal of the meeting involves first: quality care, then a wide range of objectives (for example support each other or education) so that there is some confusion about what is expected to happen at team meeting?
--What do you believe are the expectations and goals of the team meeting?
- 4) Good communication about pain requires timeliness and coordination?
- 5) Professionalism and Discipline specific knowledge are important to pain communication?

New question: What about the team structure (the leadership, agenda, “rules”), is it important for communication?

Appendix E

Field Contact Summary Sheet

Time In:

Check field contact type:	_____	Out:
Interview	<input type="checkbox"/>	Site:
Observation	<input type="checkbox"/>	Date:
Phone call	<input type="checkbox"/>	Researcher:

Census
Admits
Recerts

Videophone:

Taping: (remember to correct for order)

- 1. Who was involved in the field contact? What was the situation or event?**
- 2. Summarize the information on the research aim/questions below:**

Question

Information

Communication:

Pain management:

Quality of Life

Satisfaction

Measurement

3. What were the main issues that struck you in this contact?

4. How does this contribute to the research project?

5. What new questions do you have in considering the next contact?

Appendix F
Examples of Code Definitions

Discipline: Any mention of training or perspective on pain management
Created 8/27/07 that is reported to be related to discipline

Role: Stated Role that a team member takes in pain management
Created 8/10/07

Excerpts from Memo on Discipline 10/08/07:

The doctor, the nurse can suggest some better medication for the patient each from their perspective.

Doctor assists with challenges, medical advice and doctor power

Different disciplines have gathered their info and share i.e. family dynamics Things that nurses bring to the meeting are assessment, experience

Nurse's aides have value for team meeting

Nurses feel they can offer a bit of each Discipline to the patients

Hospice is nurse centered

LINK? with narrow definition of role

LINK ?with biopsychosocial

Excerpt of Memo on the Category: Perspective Rather than Discipline:

Discipline attributes included the chaplain and social worker talking about emotional pain or social pain. However, nurses and sometimes physicians did this also.

Role attributes included bringing a certain perspective to the team, however this was not tied to a discipline. For example nurses brought examples of how family situations were affecting physical pain.

I think rather than being tied to a training background the concepts of BSP pain are being talked about by everyone. Likewise, it is expected to be the role of each discipline to always bring an expected area of information on pain, but team members are not limited.

Example of Memo to self on process:

Memo on analysis 10-4-07 (From Observation Notes)

I don't see much coming out of team in way of planning for psychosocial intervention. On the one hand you would say that is duh because so little psychosocial info is discussed

But the converse is interesting, if no interventions are available or routine, why go over them in team? Medical treatments are the plan; I do not see incorporation of the other disciplines into the planning on pain management.

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VITA

Michele Day was born in Springfield, Missouri. Her interest in Gerontology began while a junior at Southwest Missouri State University. Dr. Jack Edwards was leading the region in appreciating the aging baby boom and encouraging study of Gerontology. Dr. Day received a Bachelor of Science degree from Southwest Missouri State University with majors in Psychology and Gerontology. Washington University in St. Louis, Missouri offered an M.S.W. degree with emphasis on aging through a grant from The United States Administration on Aging. Dr. Day completed the M.S.W. degree at Washington University with the AOA program as a Geriatric Case Practitioner with an additional Family Therapy Specialization.

Dr. Day had a 20 year professional career before returning to school as a Ph.D. student at Missouri University. Workplaces included: inpatient geriatric mental health facility, senior health promotion program of a hospital, nursing home mental health, and outpatient mental health counseling center. In addition to geriatric populations, she worked with college students as clinical supervisor for a child welfare education grant and as a college instructor.

Critical to success as a Ph.D. student were grants from the John A. Hartford Foundation and the American Cancer Society which allowed Dr. Day to attend school full time. She now works at Missouri State

University as an assistant professor in the School of Social Work where she will conduct research in aging and oncology, instruct and advise graduate and undergraduate students and hopefully inspire a new generation of gerontologists.

