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A Qualitative Analysis of Information Sharing in Hospice Interdisciplinary Group Meetings

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Abstract

Background: In the United States, hospice agencies are required to convene interdisciplinary group (IDG) meetings no less frequently than every 15 days to review patients' care plans. Challenges associated with information sharing during these meetings can impede efficiency and frustrate attendees.

Objectives: We sought to examine information sharing in the context of hospice IDG meetings as a first step toward developing an informatics tool to support interdisciplinary collaboration in this setting. Specifically, we wanted to better understand the purpose of information sharing in IDG meetings and determine the type(s) of information required to fulfill that purpose.

Methods, Setting, and Participants: In this qualitative descriptive study, we analyzed video recordings of care plan discussions (n = 57) in hospice IDG meetings and individual interviews of hospice providers (n = 24).

Results: Data indicated that sharing physical, psychosocial, and spiritual information is intended to optimize hospice teams' ability to deliver whole-person care that is aligned with patient and family goals and that satisfies regulatory requirements.

Conclusion: Information sharing is a key function of hospice teams in IDG meetings. Informatics tools may optimize IDG meeting efficiency by succinctly presenting well-organized

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and required information that is relevant to all team members. Such tools should highlight patient and family goals and ensure that teams are able to satisfy regulatory requirements.

Keywords

hospice; interdisciplinary communication; interdisciplinary health team; information display; interdisciplinary collaboration; team meeting

Introduction

US hospice agencies are required to convene interdisciplinary group (IDG) meetings at least every 15 days to review and update patients' plans of care.¹ Interdisciplinary group meetings can vary widely in terms of attendance, overall length, and proportion of time given to specific topics.² Even within the same agency, providers may lack a shared understanding of the purpose of IDG meetings and express dissatisfaction with their content and length.³ Further, because funders reimburse most hospice care at a per diem rate that must cover direct services and indirect costs (eg, staff attendance at meetings), the financial impact of IDG meetings is substantial. Thus, IDG meeting efficiency (ie, cost vs benefit) is a serious concern for hospice agencies.²

Several challenges associated with information sharing pose serious barriers to hospice IDG meeting efficiency. Particularly in agencies without electronic health records, meeting attendees are often unable to access information from patients' charts when needed. This problem is exacerbated by the absence of staff members who could otherwise provide key clinical information.⁴ Within and across IDG meetings, attendees sometimes repeat themselves, providing information with which others are already familiar,⁴ and IDG members' conflicting goals may make it difficult for them to determine which information is most important to share in meetings.³ Researchers have suggested that informatics tools could address many of these challenges⁴; however, little research on the basic mechanisms of IDG meetings exists to guide the development and utilization of such tools.

The objective of this qualitative descriptive study⁵ was to examine information sharing in the context of hospice IDG meetings as a first step toward developing informatics tools to support interdisciplinary collaboration in this setting. Our research questions were (1) What is the purpose of information sharing in hospice IDG meetings? and (2) What information do attendees need to access in IDG meetings?

Methods

Data Sources

A common challenge in the study of teamwork is that individual team members may be unaware of existing behaviors, interactions, and patterns that influence the overall team functioning. Further, they may be disinclined to share information that presents them, their colleagues, or their organization in a negative light.⁶ To address these challenges, we obtained data from 2 sources—individual interviews of hospice professionals, which allowed us to learn from team members' individual thoughts and insights, and video

recordings of hospice IDG meetings, which provided us with the ability to observe actual team interactions.

Individual interviews.—After receiving approval from the University of Missouri Health Sciences Institutional Review Board, we recruited a convenience sample of interviewees from hospice agencies in the Midwestern United States, inviting potential participants during agency meetings and via e-mail announcements. This led to the recruitment of 24 individuals including nurses (n = 9), chaplains (n = 5), physicians (n = 3), social workers (n = 3), bereavement counselors (n = 2), and volunteer coordinators (n = 2). We determined that we had achieved data saturation⁷ after interviewing our 20th participant. At that point, we ended active recruitment, completed previously scheduled interviews, and then closed the study to enrollment. All interviews were conducted between March and April 2015 and lasted between 10 and 36 minutes ($\bar{x} \approx 19$ minutes). Each interviewee received US\$20 compensation.

Video recordings of IDG meetings.—We also included in our data set video recordings of 57 patients' care plan discussions that took place during hospice IDG meetings held between January and June 2011. These discussions, which were originally recorded as part of a separate research project (described in detail elsewhere⁸), totaled 2 hours 54 minutes. All discussions took place as part of regularly scheduled meetings in 1 of 2 Midwestern hospice agencies that participated in the research project. Our full data set, including both audio-recorded interviews and video-recorded IDG discussions, contained approximately 10.5 hours of data.

Data Analysis

We used a template approach⁹ to qualitative data analysis, a method wherein data are coded using an a priori framework or “template,” which is typically derived from previous studies, an existing theory or model, or impressions developed during data collection and initial data review. In preparation for developing our initial coding template, 2 members of our research team reviewed all video-recorded IDG discussions in our data set, focusing on patterns of information sharing and types of information exchanged. We then developed a coding template based on our initial impressions, anticipating that it would be expanded upon and otherwise refined during subsequent data analysis. Next, 1 researcher used NVivo¹⁰ version 10 to analyze the video recordings, applying codes to pertinent segments of data (typically 10–30 seconds of video-recorded content). A second researcher then reviewed the initial analysis, meeting with the first researcher to discuss areas of disagreement (which occurred for fewer than 20% of the coded data segments) and to obtain clarification about specific analytic choices before solidifying final coding decisions.

Interview data were transcribed verbatim and were subsequently analyzed by 2 researchers, who built upon earlier coding of video-recorded IDG meetings to further refine the coding template. For example, while the fairly broad code *changes over time* had been identified during analysis of the videorecorded IDG meetings, the more specific code *showing decline* emerged during analysis of the individual interviews, as interviewees explained the importance of demonstrating decline as a type of change over time for purposes of

recertifying patients for continuing hospice care. Researchers worked jointly to analyze interview data, relying on in-depth discussion to arrive at consensus on coding decisions; thus, intercoder agreement was not applicable to this phase of the project.¹¹ After all data were coded, we grouped similarly coded data into broader themes that addressed our research questions. As is typically the case in qualitative research,¹² we identified themes according to their relevance to our research questions rather than the frequency with which they occurred in our data set.

Results

Our findings suggest that information sharing in hospice IDG meetings is intended to optimize the group's ability to provide care that is holistic in nature, is consistent with patients' and families' goals, and satisfies regulatory requirements. Information about patients' and families' physical, psychosocial, and spiritual goals and progress toward those goals is needed to fulfill this purpose. These findings are summarized below and in Table 1. For the sake of clarity, henceforth, we use the term "interviewee" to denote individuals who participated in interviews and the term "attendee" when referencing individuals who were included in video-recorded IDG meetings. More general terms (eg, "hospice staff members" and "participants") are used when both groups are discussed.

Information That Supports Whole-Person Care

Hospice staff members expressed a desire for information in IDG meetings regarding patients' and families' physical, psychosocial, and spiritual needs, frequently referencing their commitment to providing holistic or "whole-person" care. Interviewee #5, a social worker, described IDG meetings as an opportunity to "talk about what's been going on with [patients] medically, socially, spiritually and0...[brainstorm] as a team if there's an issue that one of us is trying to work on but can't quite get...resolved." Other interviewees appreciated information that helped them understand patients and families as people. For example, interviewee #18, a bereavement counselor, liked receiving "a little summary about the patient...if someone's a vet[eran], if someone has a dog or a cat, if someone likes music...Everyone...needs to know that stuff." Two interviewees (#11, a chaplain; #18, a bereavement counselor) suggested that it would be advantageous to have pictures of patients in IDG meetings as a reminder of them "[as] people" (interviewee #18).

Information to support physical care.—To support physical care, hospice staff members wanted or discussed information about diagnosis, physical symptoms and related interventions, functional status, and changes that impacted care. The patient's diagnosis was commonly cited as a key piece of physical information in both the interviews and video-recorded IDG discussions. Interviewee #2, a physician, stated, "You've gotta have the diagnosis so you're framing the discussion from the getgo." Interviewee #7, a social worker, emphasized the importance of knowing not just the patient's primary diagnosis, but also any other "comorbidities they have that [are] affecting their main terminal diagnosis." In the video recordings, IDG attendees routinely described each patient's diagnoses.

Physical symptoms and related interventions were also commonly discussed as information priorities. When asked to identify the most important pieces of information that are shared in

IDG meetings, interviewee #23, a nurse, responded, “Probably the first one would be patient symptoms simply because...those are just always things that we’re trying to keep on top of.” Several interviewees stressed the importance of flagging uncontrolled symptoms so the care team could provide additional interventions. By a wide margin, the most commonly discussed symptom in our sample of IDG meeting videos was physical pain. Discussions of interventions to ameliorate physical symptoms were generally limited to medications. Many interviewees cited information about patients’ currently prescribed medications and recent medication changes as priorities.

Needing assistance with transfers, falling, spending increasing amounts of time in bed, and becoming less able to complete activities of daily living were all discussed with regard to patients’ overall functional status, which was regarded as a key concern for the hospice IDG. Several interviewees cited patients’ Palliative Performance Scale¹³ (PPS; a tool used to identify potential care needs across the disease trajectory) scores as important. Functional information was also described as important in “show[ing] decline” (interviewee #8, a nurse) or a lack thereof, thereby determining if the patient continued to be appropriate for hospice.

“Showing decline” was just one of several changes over time that were of interest to hospice staff members. In addition to changes in functional status, interviewees emphasized the importance of changes in physical symptoms and medications. The importance of this information was supported by video data; changes were commonly discussed in the IDG discussions we reviewed. Interviewee #16, a volunteer coordinator, made the following comments about accessing information in IDG meetings: “[I would like to have information on] any changes in care [or] medication[s]...It’s nice to have that dated so you can see a progression and see when patients fluctuated.”

Information to support psychosocial care.—Interviewees described psychosocial information as critical to the provision of good end-of-life care. In particular, family information was cited as important. Interviewee #15, a nurse, wondered, “How involved or not involved is the family? What kind of caregiver issues are there?” Interviewee #20, a social worker, told a story about a family caregiver who had a complicated history with the patient for whom she was providing care:

The [patient]...had a pretty significant psychosocial history with many instances of abuse, both as a victim and perpetrator, so [there were] very complicated family dynamics...I knew that the other team members really weren’t aware of that. I [had] made some comments ...to the daughter [about the patient being] a really great person – he [was] really great to us – but that had kind of bothered her.

In addition to information about families, interviewees discussed the importance of information about patients’ emotional well-being. Interviewee #13, a chaplain, valued information on how patients were coping with their illness and prognosis. In the video-recorded IDG meetings, attendees discussed patients’ anxiety, depression, fear, and loneliness. Some interviewees commented on the ways in which information about patients’ emotional well-being affected the care provided by all team members. Interviewee #6, a nurse, provided the following example: “If the social worker’s talking about someone, I get

to hear a certain aspect of them...Maybe the social worker says they were depressed, [then] I would alter my assessment to make sure to include that.”

Information to support spiritual care.—Several interviewees commented on the importance of information about patients’ and families’ spiritual care. Interviewee #10, a chaplain, stated, “[Important information] for me ...[is] spiritual background...I believe that dictates a great deal of how we die.” Although statements regarding the importance of spiritual information were more commonly made by chaplains than other members of the team, it was not always the case. Interviewee #12, a nurse, stated the following:

There totally is truth in spiritual pain. There are people out there who can’t get comfortable...we’ve had our chaplain go out there, and...it was just so enlightening to see how, after that chaplain worked through those issues with the patient and family, how their comfort level was much better.

Despite the emphasis placed on spiritual information in the interviews, spiritual concerns were infrequently discussed in an explicit way in the video-recorded IDG meetings. One exchange, described in Table 1, related to a patient’s upcoming baptism. Another IDG attendee described talking with a patient “about how sad she is with the choices she made earlier in her life and the effect they had on her family,” a topic that might be conceptualized as spiritual and/or psychosocial in nature. Other similar topics discussed in IDG meetings included patients feeling abandoned (eg, “She felt like her family dumped her there in the nursing home”) or struggling to accept their illness.

Information That Ensures Care Is Consistent With Patients’ and Families’ Goals

Nearly every interviewee described information about patients’ and families’ goals as essential. In describing a tool to support hospice IDG meetings, interviewee #21, a chaplain, suggested that such a tool should prioritize information on goals: “[I would like it] if there was a place where...goals for each of the interdisciplinary areas could be...stated, where we could see those in front of us.” Several interviewees explained that sharing information about patient and family goals during IDG meetings led the hospice team to develop creative strategies to support those goals. Interviewee #12, a nurse, shared the following story:

We always ask...“What is important to you?” We’ve had patients tell us, “Oh, just to be able to go hunting one more time,” and we’ve actually gotten them out of the house, into the truck, and they shot their guns through the [truck] window.

In one of the IDG discussions, attendees discussed a patient whose primary goal was to remain in his home, despite his advancing illness. Interdisciplinary group attendees developed a plan to stagger the timing of their visits and provide additional phone calls to ensure that he was able to live at home as long as it was safely possible.

Information Needed to Satisfy Regulatory Requirements

Many interviewees indicated that, minimally, information shared in IDG meetings should satisfy regulatory requirements. Interviewee #2, a physician, explained:

There's the [IDG meeting] that [is just] bringing everybody together and having an interprofessional thing to meet the requirements of the rules and, at its most basic, it's doing the regulatory work that has to be done...the "legalese" and the "must-dos."

Like several others, interviewee #1 discussed the importance of recertifying patients to ensure that they were able to continue receiving hospice services. When asked about information that is important to share in IDG meetings, she responded, "[As a physician] what I like to hear is a very organized report that details any changes in the patient's status that will be relevant to be[ing] qualified for hospice." When asked about specific pieces of information that would be important to share in IDG meetings, some interviewees focused on information necessary to recertify patients including weight or arm circumference changes, PPS scores, changes in eating, and other evidence of decline. Specifying information needs was sometimes difficult, though. Interviewee #8, a nurse, explained that different pieces of information could be more or less relevant for different patients: "What's their diagnosis and what are we looking at for them to qualify [for hospice] and show decline? A heart patient would be totally different than someone who has cancer." The emphasis on regulatory requirements was also observed in video-recorded IDG meetings. Attendees frequently passed around and signed patient charts, presumably to document compliance with regulations, and often asked questions related to hospice eligibility criteria.

Discussion

Our analysis indicated that sharing physical, psychosocial, and spiritual information in hospice IDG meetings is intended to optimize the team's ability to deliver whole-person care that is aligned with patient and family goals and that satisfies regulatory requirements. This is consistent with published research indicating that communication in IDG meetings should enable teams to provide quality end-of-life care that "fulfills the hospice mission."³ In addition, as has been previously identified, we found that hospice professionals from different disciplines sometimes prioritized different types of information based upon their interests, areas of expertise, and work tasks.³

Our study adds to the field's understanding of information sharing in hospice IDG meetings in numerous ways. First, it more fully explores provider attitudes toward the inclusion of nonmedical information in IDG meetings. Based on the previously reported lack of psychosocial and spiritual content in IDG meetings,^{3,14,15} we were surprised to learn that such information was generally valued by providers of all disciplines. The prioritization of biomedical information over psychosocial and spiritual information in IDG meetings, it appears, is not explained by a lack of interest or value on the part of team members. Other explanations, such as a focus on meeting efficiency and cost,² may be stronger explanations. It is conceivable that, if it were possible to communicate psychosocial and spiritual content in a focused, efficient manner, prevailing attitudes toward sharing such information in IDG meetings would shift in a positive direction. This possibility should be examined in future research. In addition, our study examined information sharing in the context of IDG meetings as a first step toward developing informatics tools to support team functioning in these settings. To that end, we specifically asked about information priorities, seeking to

learn what types of information IDG members think it is important to discuss. Importantly, this may or not align with what is actually discussed in meetings, which has been the focus of many other studies of hospice IDG meetings. Thus, rather than focusing solely on challenges in IDG meetings, our study findings can be used to improve team functioning in these meetings. Considered alongside existing research, our findings suggest that IDG meetings would benefit from informatics tools that effectively summarize biopsychosocial and spiritual information and allow teams to convert available data to actionable knowledge. Such tools may promote efficiency by allowing hospice professionals to quickly access and understand varied types of information about patients and families. Study participants' emphasis on the importance of changes over time suggests that information presented longitudinally, possibly through visualizations, could support decision making and enable the hospice team to provide more responsive care. In addition, many interviewees stressed that they needed to be able to quickly identify symptoms that were uncontrolled or problems that urgently needed attention. Tools that flag these high-priority pieces of information may be especially well received and utilized by hospice teams.

Study Strengths and Limitations

Several study strengths and limitations warrant consideration. First, our study was strengthened by our use of both interview and video data. Supplementing individual reports with observational data is a well-supported approach to the study of teams, as it allows researchers to discover behaviors and patterns of which study participants may be unaware or choose not to report.⁶ In addition, our interview sample included representation of many different hospice disciplines, ensuring that these diverse perspectives would be reflected in our findings. The short duration of our interviews, while respectful of the busy schedules of hospice professionals, necessitated a very focused interview guide; thus, a limitation of our study is that our data show less breadth than might be expected for a typical qualitative study. In addition, the fact that all our data were collected from hospice professionals in the Midwestern United States presents a limitation, as IDGs in other parts of the country may function somewhat differently. It should also be noted that interview data were collected in 2015, whereas data from IDG meeting recordings were originally obtained in 2011. Changes in hospice care delivery might have occurred between those 2 time points, limiting the compatibility of data from the 2 sources from which they were drawn.

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Table 1.

Summary of Findings.

What Is the Purpose of Information Sharing in Hospice IDG Meetings?	What Information Do IDG Meeting Attendees Need to Achieve This Purpose?	Illustrative Quotations
Information supports whole-person care ^a	Information about patients' and families' physical, psychosocial, and spiritual goals and progress toward those goals is needed	"The team is more than just the medical side. It also deals with the psychological and emotional. So [in IDG meetings] we have all of those people at the table represented on the team... We try to put the emphasis on the whole family versus just [focusing on]...medications." (interviewee #8, nurse)
Information supports physical care	Important information includes patients' diagnoses, physical symptoms and related interventions, and functional status. Changes over time are key	"I'm amazed at the IDGs that don't review the med[ication] list on each patient each time they're talking about them." (interviewee #2, physician)
Information supports psychosocial care	Information about family members' (especially family caregivers') needs is emphasized. Updated information on patients' and family members' emotional well-being is valued	"[Does the patient] have [a caregiver] who's strong enough to 'walk the mile,' you know? Do they have the support they're going to need?" (interviewee #15, nurse)
Information supports spiritual care	Spiritual and religious background and current concerns are viewed as potentially important influences on dying and coping with illness-related challenges	"Since he came on [hospice service] there's been a request for him to be baptized. And [another chaplain] has been following up on that and trying to get the right people, the right time, and provide the right education to do that. It's now going to happen tomorrow ... [It's going to take place in] the kitchen there at the [nursing home] facility." (discussion in IDG meeting, chaplain)
Information ensures care is consistent with patients' and families' goals	Patient and family goals serve as the basis of the plan of care. Hospice providers adopt a broad view of goals, including both symptom-related goals (eg, goals for pain control) and quality-of-life goals (eg, to marry a long-term romantic partner)	"The patient's goals should be ... number one ... Our real purpose is to provide that added layer of support for that patient to accomplish what goals they have in the time that they have left. Number two are family goals ... I was tempted to put those together, but the reality is they're not always the same." (interviewee #14, physician)
Information satisfies regulatory requirements	IDG meetings are required by federal regulations. So-called must-do items include discussing and documenting decisions regarding recertification	"A lot of times [IDG meetings] can be focused pretty heavily on two areas, and that's the medical aspect and the Medicare/Medicaid reimbursement aspect, making sure that ... all the documentation is in place." (interviewee #11, chaplain)

Abbreviation: IDG, interdisciplinary group.

^aMajor themes are listed in this column in nonitalicized font. Subthemes are denoted in italics.