Mapping Collective Sensemaking in Communication: The Interprofessional Patient Case Review in Acute Care Rounds

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Mapping Collective Sensemaking in Communication: The Interprofessional Patient Case Review in Acute Care Rounds

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Abstract

INTRODUCTION Observational studies of the actual practices of interprofessional collaborative practice (ICP) are needed to complement research on the determinants and consequences of collaboration. This naturalistic study of team communication maps a key practice: the patient case review in daily rounds. Here, ICP is conceptualized as collective sensemaking, or the joint description of the patient’s situation and associated action planning—a fundamentally communicative practice.

METHODS We observed the daily rounds of four acute care teams identified by organizational representatives for their efficient or problematic collaboration. The goal of analysis was to characterize practice differences within and across the teams. Data gathering methods included fieldnotes, structured observations, audio recorded rounds and interviews, and documentary evidence. Informed by conversation analysis, we analyzed transcribed interactions for recurrent and divergent patterns in sensemaking.

RESULTS A model of the patient case review offers a framework for exploring variations in sensemaking practice. It emphasizes the importance of framing practices in case overviews and of collective sensitivity to expressions of uncertainty. Case reviews on collaboratively efficient teams were more collectively produced, more comprehensive, richer in detail and complexity, and more routine across rotating leadership. When physicians were present, sensemaking focused more on action planning.

DISCUSSION In the time-pressured acute care context, predictable framing practices may lend stability to collective practice by ordering team thinking, while sensitivity to uncertainty and a broad focus may lead to more reliable collective performance.

CONCLUSION These findings suggest communication (as social action) as a focus for inquiry into ICP.

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**Introduction**

Interprofessional collaborative practice (ICP) is collective by nature, emerging at the intersection of different professional knowledges and scopes of practice. Many studies of ICP focus on the determinants or inputs of collaborative practice as well as on the results, outputs, or outcomes (Canadian Interprofessional Health Collaborative (CIHC), 2012; Stutsky & Laschinger, 2014). This is echoed methodologically, as the majority of ICP teamwork studies rely mainly on interview and survey data (Valentine, Nembhard, & Edmondson, 2013). However, many authors point out the need for more studies of the actual practices of collaboration (Buljac-Samardzic, Dekker-van Doorn, van Wijngaarden, & van Wijk, 2010; Lemieux-Charles & McGuire, 2006; Lewin & Reeves, 2011; Lingard, Reznick, Espin, Regehr, & DeVito, 2002). Some argue that close observations are the methods best suited methods for investigating the collective behavioural processes of interprofessional collaboration (Careau, Vincent, & Swaine, 2014; Ilgen, Hollenbeck, Johnson, & Jundt, 2005). Studies using naturalistic observation of ICP can thus enrich what is already known about practitioners’ attitudes and perceptions of working together.

This article is based on research relying primarily on observations of ICP in interprofessional team rounds in acute care. It takes seriously the term practice in ICP by adopting a practice lens from social theory (Nicolini, 2013; Schatzki, Knorr Cetina, & von Sevigny, 2001) that views language and communication as social action (e.g., Austin, 1962; Searle, 1969). Stemming from a naturalistic study of four teams in an acute care Canadian teaching hospital, this interpretive research explores and describes the collective nature and key processes of a common interprofessional practice in acute care: the interprofessional patient case review in daily team rounds. It suggests that this practice consists of collective sensemaking, specifically how different professionals on a team collaborate to determine a shared understanding of the patient’s situation and of what matters most at that point in time on the patient’s care trajectory. Central to our argument is that this practice occurs in and through communicative action.

Taking inspiration from scholarship in the field of organizational communication, our overall goal is to provide IP researchers, practitioners, and educators with a fresh perspective on communication as practice, specifically collective sensemaking practice, as it pertains to collaboration in health care and particularly in acute care. We begin by examining three concepts in the IP literature that proved key to our understanding of what teams do together in daily rounds: practice, communication, and sensemaking. This conceptual portrait is intended to guide the reader through what might be unfamiliar terrain, and it lays the groundwork for presenting this article’s main contribution to IP scholarship, namely a detailed description of sensemaking processes in the

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**Implications for Interprofessional Practice**

- The way the patient’s situation is framed during case overviews organizes and orients team sensemaking and discussion.
- “Framing training” for team facilitators should include a focus on parsing their profession-specific notes and interpreting them for other professionals involved. This is where knowledge with, from, and about other professions is brought to life.
- The rounds facilitator plays a key role in realizing IP collaborative potential by nurturing an interactional environment that welcomes questions and expressions of uncertainty because they can lead to more comprehensive and nuanced understanding of the patient’s situation.
- The model of the acute care patient case review could serve as a pedagogical aid.
interprofessional patient case review. We propose a model of the typical patient case review, based on our observations of acute care teams, both high and low performing, and explore variations in their collective communicative practices.

**Literature Review**

*Practice.*

The term *practice* tends to be blackboxed in the IP literature. Although it is frequently used in discussions of collaboration, teamwork, and teamworking, it is seldom explicitly defined (e.g., D’Amour, Ferrada-Videla, San Martín-Rodríguez, & Beaulieu, 2005; Easen, Atkins, & Dyson, 2000; Lewin & Reeves, 2011; Miller et al., 2008). One exception is Thistlethwaite et al. (2013) who take up Reeves’ (2010) call for greater problematization of IP terms and suggest that practice can be understood in three ways: (a) as the enactment of a role or profession, (b) as a moment of collective unity or performance, and (c) as a “socially institutionalized and socially acceptable form of interaction requiring cognitive understanding and reflection” (p. 54).

This definition of practice aligns with discursive and ethnomethodological strains of social practice theory, which explain that a practice involves performative action that is socially recognizable and socially sanctioned as well as pragmatically goal-oriented and purposeful (Misak, 2013). Practice makes identity claims on the practitioner who in turn invokes this identity in performing the practice (Lazega, 1992; Silverman, 1998). Its inherently social nature (Barnes, 2001), which transcends the individual (Wenger, 1998), requires interactive engagement and shared practical understanding (Garfinkel, 1967; Schatzki et al., 2001).

We can unpack this complex definition with an example of a practice familiar to all: a diagnostic consultation between a physician and a patient. This practice is decidedly interactive and goal-driven as each party has a reason for being there and some expectations about the process and the outcome (which is not to say that it is necessarily a democratic practice). To some extent, the practice is also scripted and must be enacted: It requires that each play a particular role in a way that is recognizable, understandable, and convincing to both. Failure to do so can result in incomprehension of what it is that they are doing together or, worse, the conclusion by one or both that the other is incompetent in some way. This is because their performances must also be *knowledgeable*, where each individual displays his or her expertise in a way that enacts and confirms their role identity (e.g., the patient recounts his reasons for consulting in way that shows he knows himself and is a good “self-historian”; the physician must ask questions and listen to answers in a way that appears to be medically relevant and thus demonstrates her professional expertise). The main point is that the collective performance of this practice is accomplished through communicative actions.

While it is easy to apply this definition to professional practice, it is also useful for understanding ICP. We understand interprofessional practice as something practitioners do together—and, as we will argue below, they “do sensemaking” together. In fact, when we analyze the practice of the interprofessional patient case review, we find similarities with the example above. Individual practitioners enact their different professional identities and knowledges as they collectively sketch and negotiate an understanding of the salient aspects of a given patient’s situation and history. As they do so, they integrate their professional perspectives in a socially recognizable pattern of (interprofessional) talk based loosely on the classic medical patient case review (Cicourel, 1990).

Opie (1997, 2000) calls this discursive knowledge work, and communication can be considered the interprofessional practice itself. One of this article’s main contributions is its suggestion that the interprofessional patient case review—as communicative *practice*—should serve as a site for inquiry into ICP, as it is here that shared mental models, shared goals, and role and situation awareness are brought to life (Atwal & Caldwell, 2006; Billett, 2014; Evans & Baker, 2012; San Martín-Rodríguez, Beaulieu, D’Amour, & Ferrada-Videla, 2005; Schroder et al., 2011; Suter et al., 2009).

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1 This is slightly different from what D’Amour and Oandasan (2005) claim. Interdisciplinarity, in their view, involves integrating knowledges, whereas interprofessionality involves integrating practices. We see knowledge and practice as inextricably intertwined, especially with regard to sensemaking practices such as the patient case review, and therefore this distinction becomes less conceptually useful.
In the IP literature, communication is so ubiquitously mentioned that on the whole it is also conceptually blackboxed. This might be because there are many, often implicit, understandings of what communication is and why it matters. Most often it is conceived as a neutral conduit for information or knowledge transfer (e.g., Conn et al., 2009; Lingard et al., 2004, 2007; Mitchell et al., 2012; Reeves et al., 2007), and listed in variants of the input-process-output model (McGrath, 1964) as either a necessary prerequisite for collaboration (e.g., communication skills as individual competency, Suter et al., 2009) or as a key group process alongside trust, cohesion, shared goals, and so on (Deneckere et al., 2012; Gaboury, Bujold, Boon, & Moher, 2009). Sometimes, communication dynamics are seen to be a reflection of social realities, for instance hierarchical relations (Cott, 1997; Molyneux, 2001; Reeves & Lewin, 2004; Schryer, Gladkova, Spafford, & Lingard, 2007), and a separation is presumed between the symbolic (i.e., language) and the sociomaterial stuff of lived experience (Ashcraft, Kuhn, & Cooren, 2009).

Increasingly, however, communication is considered in the IP literature from a constructivist perspective similar to the one adopted here: as consequential social action (Sigman, 1995) through which social realities are enacted, contested, and maintained (e.g., Arber, 2008; Crepeau, 2000; Ellingson, 2002, 2003; Lingard, Reznick, DeVito, & Espin, 2002; Rowland, 2011; Vuokila-Oikkonen, Janhonen, Saarento, & Harri, 2002). As ethnomethodologists and conversation analysts have pointed out, communication involves actors reciprocally paying attention to one another as well as to contextual cues and the topic at hand (Heritage, 1984; Leiter, 1980).

Indeed, this article sees the process of communication as co-orientation (Taylor & Van Every, 2000), involving a minimum of two actors, A and B, and an object, X, “in which the term 'object' refers to the practical world of joint activities that actively engage people’s attention and care” (Taylor & Robichaud, 2004, p. 401). Intermeshional sensemaking in the patient case review means team members attend to how X (i.e., the problem being discussed) varies and changes in interactional flow, from their own professional perspective as well as having some sense of what X means to other professions, which we might represent as:

\[
\begin{align*}
A & \rightarrow X_f(A) \\
A & \rightarrow X_f(B) \\
A & \rightarrow X_f(C) \\
& \ldots
\end{align*}
\]

where A, B, and C stand for professional representatives. This is one way in which shared mental models are brought to life. So, for instance, the meaning of a patient’s blood oxygen saturation will differ depending on one’s professional perspective and one’s involvement at different stages of the care trajectory. For the acute care physiotherapist, it might indicate how best to help the patient mobilize on the ward, while for the home care coordinator in the hospital setting, it might indicate what level of support and placement facility are needed post-discharge.

From this perspective, the meaning of X is never a given and rarely singular. Framing practices—the way speakers present a given topic to others—are therefore paramount to the shared understanding that gets negotiated. Framing practices involve the construction of “figure-ground distinctions in order to make sense of what is going on in a given situation” (Vásquez, Brummans, & Groleau, 2012, p. 146) and to figure out the most pressing concerns requiring attention. In patient case reviews, this framing is typically accomplished through knowledge claims—descriptions of the patient’s situation—that foreground certain aspects over others. Framing is a way of reducing equivocality and ambiguity (Weick, 1995) and determining the values, priorities, and preferences that matter most at that point in time (Bergeron & Cooren, 2012). Viewed in this light, communication and language are less tools for exchanging information and more resources for creating a shared reality (Eisenberg, 2006).

Sensemaking.

Sensemaking theory has been used in the interprofessional and interorganizational collaboration literature.
to show how sensemaking about organizational change can sediment over time into organizational routines, roles, and procedures (Sylvain & Lamothe, 2012). However, its anchoring in communication has, to our knowledge, not yet been analysed in IP scholarship. In contrast, this study explores in fine detail the IP patient case review as an organizational sensemaking practice.

Sensemaking is “the process by which people enact equivocal environments and interact in ways that seek to reduce that equivocality” (Eisenberg, 2006, p. 1695). Enacting an equivocal environment is much like shining a flashlight in a dark room to see where one is and what is going on. It means, according to Weick (Weick, 1995; Weick, Sutcliffe, & Obstfeld, 2005), that people “scan” or “read” the environment for cues, thereby “activating” those cues, to understand a given situation, especially when ambiguous. These cues might be information recently written in the patient’s chart, stories recounted about the patient by other professionals, abbreviated handwritten notes in one’s daily patient list, and so on.

Daily team rounds are punctuating moments in the flow of organizational activity, where people collaborate to read the cues. As team members make sense of the patient’s current situation and define salient points for consideration, they attend to two questions: ‘What’s going on?’ and ‘Now what?’ (Blatt, Christianson, Sutcliffe, & Rosenthal, 2006; Weick et al., 2005). The first involves descriptive knowledge claims, the second prescriptive action planning. Key to this process is that the team works to reduce uncertainty in their understanding of the patient’s case through communication cycles⁴ (Kreps, 2009). In so doing, they author a current version of the patient’s story, more or less collectively and being more or less mindful (Cooren, 2004; Weick & Roberts, 1993) of who ought to get involved.

Taken together, these three concepts helped to frame our response to the broad research question we asked at the outset of the study and which was refined as our thinking evolved:

RQ1: What does interprofessional collaborative practice look like in team rounds and what is the role of communication? In other words, what are teams doing together through their talk?

RQ2: What can be gleaned about interprofessional sensemaking from variations in communication dynamics?

Methods

To provide an informed response to these questions, the first author spent six months attending the daily rounds of several teams in an acute care teaching hospital in western Canada. Subsequently, we mapped their practice and looked for key moments and players in their collective performance. The study was exploratory, relying primarily on non-participant naturalistic observations, including audio recordings of rounds meetings and structured observations of interaction dynamics. Semi-structured interviews were also conducted for triangulation, thus complementing and contextualizing the conceptions emerging from the observations. Documentary evidence was collected that defined the organization’s vision of team members’ scopes of professional practice and their designated interactional roles in daily team rounds. Combining these data collection methods allowed for thorough study of team practices over time. The unit of analysis that emerged during fieldwork was the patient case review. The ethics boards of both the first author’s university and the regional health authority granted ethical approval. All information that could potentially identify participants or patients, including team names, has been modified to protect their privacy.

Participants

Study participants were recruited through convenience sampling (Tracy, 2013). The teams of which they were members were part of an organizational efficiency-boosting pilot project already underway in the hospital that facilitated access for the research (the authors were not part of this project). Pilot project administrators identified teams for inclusion in this study: two teams they thought performed well
in rounds (explained below): Intake and Short-stay GIM (General Internal Medicine) and two that they thought had efficiency problems: Intervention, with a documented high rate of patient discharge and readmission, and GIM 2, whose average length of stay was nearly double the target set by the organization. Just before audio recordings began, the mandate, membership, and organization of GIM 2 changed, so it has been excluded from the results of this article, although its patterns of interaction dynamics were in line with what was observed on Intervention. Analysis focused on differences in patterns of practice within and across the former and the latter types of teams.

Team members included charge nurses, physiotherapists, occupational therapists, social workers, home care coordinators, pharmacists, nutritionists, geriatric specialist nurses, and speech language pathologists. Occasionally, hospitalist physicians, medical residents, and bedside nurses briefly participated in the rounds of one of the teams. A pilot project representative attended the rounds of the teams who were thought to perform less well (Intervention and GIM2), and occasionally those of Intake as it was identified as a hub of the hospital and whose activity influenced patient flow on other wards. The two teams deemed as collaborating well together (Intake and Short-Stay GIM) had an established history of holding daily team rounds prior to the pilot project, and they reported the support of their unit’s managers for holding rounds. This was not the case for the other two teams.

Study context

The hospital where the fieldwork took place was a large, acute care trauma centre for the regional health authority in the greater Vancouver area, and the need to get patients efficiently through the hospital was a major organizational concern. Consequently, the push for rapid patient flow could be felt on most wards. The pilot project was based on the concept of “streamlining the patient journey” by reducing unnecessary delays, and it tracked statistical markers of each team’s organizational efficiency. It also addressed “the complexity of interdisciplinary care” by “increasing communication” (Fraser Health, 2008) among health care providers caring for the same patient, namely by structuring talk during daily team rounds around goal-focused questions that were designed to encourage teams to integrate discharge planning into care planning.

Participating teams were mandated to discuss the case of every patient on the ward at daily team rounds, identifying the patient’s medical and functional status and the related goals, as well as any concerns or barriers for discharge. Consequently, in addition to the statistical tracking component (to which the authors did not have access), the pilot project judged the teams’ performance by their holistic description of the patient’s situation in case reviews and their preoccupation with figuring out barriers to moving care forward on the care trajectory. A team was labeled as collaborating well when its members collectively performed this practice without the need for prompting from a pilot project representative.

Data collection

The research for this article came from a larger study on interactions in interprofessional team rounds. As mentioned above, ethnographic data collection relied primarily on non-participant naturalistic observations (Lincoln & Guba, 1985; Tracy, 2013; Van Maanen, 2011; Watson, 2011) of daily team rounds (97 rounds meetings), representing nearly 3,400 patient case reviews and around 75 hours of observation. Following informed consent, data collection proceeded in three overlapping phases. Initially, the first author spent 3 months attending the rounds of the four teams to build a better understanding of the purpose of the meetings and what got accomplished therein (RQ1). To keep track of the researcher’s own sensemaking, field notes, memos (Emerson, Fretz, & Shaw, 1995), and an extensive list of organizational and medical lexicon were compiled. Informal interviews were also conducted with several members of these teams and the pilot project about their work and their experience on the teams. Reflection during this period focused on perceived team culture and observed interaction dynamics, including the differences within and across teams. During this phase, documentary evidence was gathered from pilot project representatives (aims and strategies of the project, description of professional roles, definition of goal-oriented questions that focused talk in rounds). During this period, the patient case review emerged as the unit of analysis.
Second, in the final 3 months, a tool was designed to allow for structured observations of patient case reviews in rounds (44 rounds meetings). (At this point, GIM2 had changed its mandate, organization, and membership and was thus excluded from further data collection.) This tool allowed the first researcher to track interaction dynamics by hand, including who spoke when, about what, who interrupted, who opened and closed case reviews, who asked and who answered questions, and so forth. This data gave a quick visual overview of the interaction patterns within and across the teams that would be later analyzed.

Third, shortly after structured observations began, ethical permission was granted to conduct audio recordings of the meetings (n=32; no audio data was collected from GIM). During this time, semi-structured, audio-recorded interviews were also conducted with a convenience sample of participants with at least one representative from each profession and several each from Intake, Intervention, and Short-stay GIM (n=15; interviews ranged between 30 to 56 minutes). Interviews focused on team members’ perceptions and attitudes about collaboration, team roles, and communication with other team members. This data enriched and corroborated emerging understanding about the teams’ practice, cultures, and organizational mandates.

Data analysis

Because our observational approach is somewhat idiosyncratic (Saldana, 2003, p. 166), we have included here a detailed description of our data analysis journey. Inductive data analysis (Creswell, 2007) was concurrent with data collection and it continued after fieldwork concluded, in several phases. The goal of the data analysis was to characterize in fine detail the collective practice accomplished by the different teams—what they were “doing together” through their communication—and to explore observed variations within and across the teams. Recorded materials were transcribed and, when possible, included relevant nonverbal and contextual cues to enable a detailed analysis of communicative practices.

The first phase focused on building a deeper understanding of the similarities and differences within and across the teams and how they collaborated. Field notes and memos (300+ single-spaced pages) were open coded and subsequently clustered into themes (Emerson, 1995) regarding: the interaction dynamics in meetings (e.g., conflict, hierarchy, humour); the issues to which team members paid most attention (e.g., classifications and barriers to the care plan); the teams’ different histories of working together; the working “culture” of each (e.g., how hierarchical versus egalitarian); and their preoccupations with organizational (versus ward level) concerns. This was compared with the interview data to test the fit of the emerging responses to RQ1 and the ways the teams worked together.

Next, the structured observations were used to help generate a working typology of case reviews to identify variations based on length, number of turns of talk, topical complexity, number and professional identity of speakers, and directionality of talk. This allowed us to roughly code for the complexity of each case and to compare cases across teams and across time. This also helped inform a preliminary model of a prototypical patient case review that could describe variations, which was refined as analysis proceeded.

Conversation analytic methods were then used to identify, characterize, and analyze the collective actions the teams accomplished through their talk, both to flesh out the model and to begin mapping variations in case reviews. Conversation analysis (CA) focuses on the actions accomplished in interaction (Drew, 2005; Pomerantz & Fehr, 1997; Pomerantz, 1990), and the “mechanisms” by which these actions are accomplished (Mortensen & Wagner, 2013), thus offering a window, for instance, on how hierarchy is enacted in interaction (Heritage, 2005). A portion of the audio recorded rounds (15 meetings; n=413 case reviews; 283 pages of single-spaced transcriptions) were transcribed according to conversation analytic conventions established by Jefferson (1984) without attending to pronunciation, with one third each from Intake, Intervention, and Short-stay GIM. The first author then conducted an immersive reading (and re-readings) of the hundreds of transcribed cases, and used CA to analyze several typical and atypical case reviews. This analysis was applied to the model to help refine recurrent features and to account for “deviant” cases (Bernard, 2006), interpreting the actions that were being collectively accomplished through each recurrent feature.  

We do not present this research as primarily focused on the goals of conversation analysis, but rather have employed CA as a methodological tool (Hammersley, 2003).
Typical samples of this data were analyzed by a group of interaction analysts at the Groupe LOG (Language, Organization, and Governance) at the Université de Montréal in order to test and confirm the first author’s emerging interpretations. Here it was determined that one recurrent feature that structured case reviews was the expression of uncertainty (doubt, questions, corrections or conversational repair, etc.); these tended to mark the topical sequences within case reviews (see Pomerantz & Fehr, 1997), that is, the variations of X to which team members oriented. Following these group analysis sessions, the theory of organizational sense-making (Weick et al., 2005; Weick, 1995) was selected as offering a good explanatory fit between the observed interactional phenomena and the research questions.

Finally, to explore and characterize observed variations across the “high” and “low” collaborating teams, representative portions of transcribed rounds recordings were further analyzed comparing the conversational actions accomplished (by whom) and the topical content discussed (and how). Analysis focused on when, how, and how often case reviews typically went from being overviews to more extended discussions. This was compared with the topical richness and multi-vocality across teams, that is, how many sequences and sub-sequences and how many speakers per case review, and was compared with our understandings of the teams’ cultures and ways of operating generated from field note analysis.

We also looked for markers and possible explanations of stable practice, including how routine and comprehensive the overviews tended to be for each team. This also included looking at the continuity of storytelling, especially the interactional effects of frequent rotation in leadership nurses on two of the teams, Intake and Intervention, by analyzing in-depth a sample of 15 diachronic cases from each for how the framing in patient stories evolved over time, and who or what carried portions of the story from one day to the next (which we dub story-porting). This was especially relevant for complex cases, where a given issue may have been hashed out in one meeting and a consensus reached, only to be dropped in the next meeting because the leadership had rotated. Finally, we took advantage of a small portion of our audio recordings in which physicians and medical residents were present on one of the teams (Short-stay GIM) in order to examine how collective practice tended to change when they walked into the room (36 case reviews out of sample of 171 total). This will be elaborated in a future article, but the broad strokes are presented below, along with our other findings.

Findings: Collective Sensemaking in Communicative Practice

The findings report on the three teams for which audio recordings were collected (Intake, Intervention, and Short-stay GIM), and it proceeds in two steps. First, we describe the pattern of practice of doing the patient case review observed across the teams, emphasizing (a) framing practices in case overviews and their influence on team sensemaking, and (b) collective sensitivity to expressions of uncertainty. This is presented in Figure 1 (following page), which depicts a model of a typical IP patient case review. Second and based on this framework, we explore the differences observed across the teams identified as efficient collaborators and those with problematic collaboration.

Overall portrait

The average patient load discussed at each meeting was 33 patients, and the average length of time spent discussing each varied by team (approximately 0:58 minutes on Intake and Intervention, and 1:28 minutes on Short-Stay GIM). However, on Intervention the length also varied greatly by the charge nurse on duty, which might indicate a less stable collective practice on this team, which we explore below.

While rounds were always facilitated by charge nurses, or a pilot project representative if attending, documentary supports were integral to collective performance.
Talk was organized around the ascending bed numbers on each professional’s patient list. These documents served as co-orientation aids for team members who followed along in their own notes as the charge nurse gave the overview by relying on his or her nursing notes, which were compiled in consultation with the charge nurse from the previous shift. In this way, listening team members could immediately remark on any discrepancies, and the various threads of the patient’s story could be woven into a multi-stranded whole, although the teams seemed to tolerate many narrative loose ends.

Case reviews usually followed a routine structure (see Figure 1), especially on the teams thought to be more efficient (Intake and Short-stay GIM). The charge nurse served as a conversational gatekeeper by opening and closing (Schegloff, 1968) case reviews, accomplished by calling out patient identifiers such as the patient’s first and last name, age, and bed number. This was a first step in collective sensemaking, as it allowed listening team members to co-orient and follow along their own lists.

As observed in other care contexts, case discussions can involve the collective accomplishment of two actions, often in sequential temporal phases (Careau et al., 2014): First, the building of a common vision of the situation, which is considered here as collaborative description of the patient’s situation and, second, the development of a cohesive action plan, referred to here as collaborative action planning. These correspond to the two questions that organizational sensemaking typically addresses: What’s going on here? And, now what? (Blatt et al., 2006; Weick et al., 2005). In our

**Figure 1. Mapping IP sensemaking in the acute care patient case review**

![Diagram showing the process of case reviews and the components of collaborative description and action planning](image-url)
study, these were not always both present in all case reviews, as explained below.

**Framing practices in case overviews.**

The charge nurse also served as a “gatekeeper” for team sensemaking through his or her framing practices, which implied parsing or interpreting his or her nursing notes for details currently relevant to the case and to the team members around the table. Because of time pressures, discussions in acute care rounds must be targeted, and framing practices do just this. Overviews act as a lens for team sensemaking and are thus consequential to the parts of the patient's story that get discussed. The overviews given on the different teams were more or less comprehensive and focused on the goal-focused questions mandated by the pilot project (patient's medical status and goal, functional status and goal, and discharge concerns). They established the patient's situation and circumscribed collective focus on what was problematic in that situation so team members could mentally plot the patient's current status on the care trajectory.

About half of all case reviews on all of the teams stopped at the overview, and they involved univocal (only one speaker) and unidirectional (from charge nurse to others) talk produced by the charge nurse. We considered them as briefings.

**Sensitivity to expressions of uncertainty.**

The other half of case reviews went beyond briefings. They tended to be lengthier discussions, more complex, and more multivocal; it was in these that collective sensemaking was most directly observable (although a team listening to a briefing can also be considered collective sensemaking). In these, some expression of uncertainty triggered further discussion to establish the patient's situation. This could take many forms, such as a direct request for information or for confirmation, or, more subtly, the marking of epistemic doubt, such as the charge nurse saying ”I’m not sure if…” or the noticing of a discrepancy (e.g., “the description in the notes doesn't match what I heard at shift change”). It could also come in the form of a conversational repair of a previous utterance (i.e., correcting what someone has just said), which simultaneously served to point out and reduce doubt.\(^7\) Interactionally, the expression of uncertainty could also introduce something new for consideration, especially in complex cases, and by so doing, could constitute an authoring move in the team's collective account of the patient's situation. Most importantly, however, expressed uncertainty seems to have been taken up by listening team members as a solicitation for help in figuring out the situation and how to reduce the uncertainty: an opening up of the conversational floor.

Typically and especially on the teams thought to be more efficient, discussion to reduce expressed uncertainty would proceed until team members agreed on a shared vision or action plan (i.e., consensus)—what Weick calls communication cycles—or until they explicitly or implicitly agreed to move on, for instance when someone raised a new topic of concern or the charge nurse called out the name of the next patient and they began a new case review.

In most of these case reviews, discussion was descriptive only (labeled collaborative description). A small portion, though, also involved prescriptive action planning (labeled collaborative description + action planning), and it seemed to depend in part on the team members' capacity to act; teams tended to do action planning when the actions were ones they were authorized to carry out. Finally, the charge nurse typically closed case reviews by calling out the name of the next patient on the list, again serving as a conversational gatekeeper.

Having described the main features of the typical patient case review, we can now consider how elements of this practice varied.

**Observed variations within and across teams**

**Shared authorship.**

One of the practice variations between what the pilot project deemed as the highly efficient teams (Intake and Short-stay GIM) and the less efficient team (Intervention) was how collaboratively each case review was...
authored, including the overview. Although overviews tended to be the domain of the charge nurse, on Intake and Short-stay GIM, authorship of overviews was easily shared with other involved team members who may have had more up-to-date information or direct experience with the patient. On these teams, talk was less unidirectional and univocal in general, and there was more co-authoring of the patient’s situation in their talk. This included greater conversational alignment and affiliation (Steensig, 2013) as well as co-construction of utterances (e.g., finishing each other’s thoughts). In other words, these interactional markers indicated a more collaborative performance at the communicative level. In this way, authorship of case reviews was shared among the members of the team, even if the charge nurse leading rounds (along with his or her daily patient notes) remained the primary author.

### Routineness and comprehensiveness of overviews.

On Intake and Short-stay GIM, the overall practice and especially overviews tended to be more stable across rotating charge nurses, and this was especially notable on Intake, whose duo of charge nurses rotated daily such that a given charge nurse did not report on the same patients two days in a row. On these teams, overviews almost always included routine, comprehensive and thus predictable components that framed the patient’s situation and tended to comprehensively address the same foci: the patient’s medical status and goal, functional status and functional goal, and psychosocial concerns for discharge.

In contrast, on Intervention, which had been red-flagged for poor discharge planning and a high rate of discharge and readmittance, overviews varied greatly by charge nurse, especially with regard to how charge nurses relied on and parsed their nursing notes. For instance, one charge nurse relied very little on the nursing notes and recounted moral tales about the patients or involved practitioners (Crepeau, 2000), but provided few consistent circumscribing details in the overviews. A second charge nurse tended to read directly from the nursing notes in nursing jargon and provided little psychosocial contextualizing information, speaking from an impersonal “tubes in and tubes out” focus (i.e., catheters, drains, epidurals, body fluids, vital signs) that was not necessarily meaningful to all the professionals present. Neither of these charge nurses tended to interpret or parse the notes for the listening team members. Their use of the nursing notes contrasted with that of the charge nurses on Intake and Short-stay GIM who observably switched back and forth between reading and interpreting registers. A third Intervention charge nurse, however, provided comparatively extensive overviews, relying on the nursing notes and the patient charts, and frequently expressing doubt about what was in the notes, asking for confirmation from listening team members. They in turn (and this is perhaps ironic) sometimes expressed frustration to the first author at the comprehensiveness of these overviews because rounds tended to run twice as long as usual when this charge nurse was on duty.

### Complexity of discussions.

Discussions tended to be more topically complex and more nuanced on Intake and Short-stay GIM, with consideration of finer grained details of the patient’s situation. There was more frequent expression of uncertainty and more communication cycles to address and reduce uncertainty (Kreps, 2009) and to collaboratively plan actions than on Intervention. This corresponds with more time spent on average in the middle section of the model presented above, and with greater multivoicality (more speakers on average per patient case review) and sharing of the conversational floor.

This difference was poignantly evident in the only recorded patient case discussed by all three teams—a complex case that resulted in a new colostomy for a blind patient—where the complicating factors (the patient’s blindness and his ability for eventual self-care with support) were collectively noticed and discussed by Intake where he began his stay, but were not mentioned at all by the Intervention team until late in his 10-day stay on that ward and even then were practically glossed over. Fortunately for this patient, Intervention did not do his discharge planning; the complicating factors were extensively discussed by Short-stay GIM before he left the hospital.

### Stabilizers of practice: Story-porters.

The greater topical complexity of discussions on the “high-efficiency” teams was mirrored by the stability of their collective storytelling practice across rotating charge nurses, especially on Intake. We tracked...
instances of story porting—that is, the carrying forward of a discussed element of the patient’s story from one meeting to the next—from a sample of 15 patients with diachronic cases from both Intake and Intervention, teams whose charge nurses rotated almost daily. Story porting was observed in every possible case on Intake (n=24 case reviews), with an average of 1.6 instances per case review. Intervention had a similarly high incidence of story porting, occurring in 85% of possible cases (n=34 case reviews), but only 0.8 instances per case review on average. In other words, fewer elements of the story were revisited in subsequent case reviews. However, where they differed even more was in who and how story porting occurred. While charge nurses were undeniably key players in both teams’ story porting given their framing roles in case overviews, on Intake the story was carried by other team members in 68% of observed instances, in particular by social work and physiotherapy. In contrast, story porting by team members other than the charge nurse (excluding the pilot project representative) was observed in only 29% of instances. While this sample size is admittedly too small for drawing conclusions (and we present the data as descriptive only), the overall picture of practice differences across the teams is confirmed by the story-porting analysis: Intake had richer, more detailed and more multi-vocal discussions in their case reviews, and more continuity in their storytelling across rotating leadership.

Physician presence.

Finally, physicians (hospitalists and medical residents) came to the rounds of only one team, Short-stay GIM, and only occasionally at that (n=36 case reviews out of a transcribed 171 over 5 rounds). Nonetheless, important and persistent differences in collective practice were observed when they did drop in. Invariably, co-orientation details (such as the patient’s first name, age, and bed number) were omitted as the charge nurse ceded the floor to the physician, who typically called out only the last name of the patient in his or her care. In other words, the doctor’s presence trumped documentary supports as the organizer of talk. This effectively forced the other listening team members to flip quickly through their own patient lists to locate the patient in question, and represented an interruption in the flow of discussion (Alvarez & Coiera, 2006; Palese, Sartor, Costaperaria, & Bresadola, 2009) and an increased challenge for co-orientation. While no one complained overtly about this, one team member (a seasoned, older nurse in community care) sometimes stopped discussion to clarify which patient they were reviewing, and other listening team members would whisper their thanks.

When physicians were present, overviews tended to be less comprehensive or even non-existent. Similarly, contributors to talk (i.e., those authoring the current version of the patient’s story) were typically restricted to the physician, the charge nurse, and a bedside nurse when present; allied and community health team members remained relatively silent. In fact, ceding authorship and conversational gatekeeping to the doctor effectively enacted hierarchy in the interaction (Heritage, 2005), and positioned the other team members as the overhearing audience rather than as the intended audience for sensemaking (Heritage, 1985); a subtle but important shift with regard to a flatter hierarchy and democratic clinical practice (Long, Forsyth, Iedema, & Carroll, 2006; Quinlan & Robertson, 2010). Related to truncated overviews (and thus less attention to circumscribing “What’s going on?”), when a physician was present, case reviews tended to focus much more often on action planning (“Now what?”) than solely on collaborative description: 65% for hospitalists (n=20 case reviews) and 69% for medical residents (n=16), compared to 28% of the case reviews with no physician presence (n=135).

With this overall portrait in place of the three teams’ practice of doing the patient case review, we turn now to a more developed interpretation of their collaboration as collective sensemaking practice and what we gain by such an interpretation.

Discussion

The World Health Organization (WHO) (2010) explains that collaborative practice “occurs when multiple health workers from different professional backgrounds provide comprehensive services by working with patients, their families, carers, and communities to deliver the highest quality of care across settings” (p.
However, the WHO does not specify what this working together looks like or what the collective practices might be.

This article contributes to knowledge about ICP by reporting on observed interactional processes in collaborative work (Careau et al., 2014; Valentine et al., 2013) and by presenting a model that maps the typical case review and allows for consideration of different variations. The article’s overall goal has been to describe in detail a common communicative practice in interprofessional collaboration in acute care, the patient case review, and to frame it as collective sensemaking (Weick et al., 2005; Weick, 1979b, 1995). This makes explicit the link—or even the equivalence—between communicative action and interprofessional collaboration (Morgan, Pullon, & McKinlay, 2015), thus adding to ongoing conversations about the determinants of successful collaboration (San Martín-Rodríguez et al., 2005). Rather than an input to collaboration, we argue here that communicative practice constitutes the collaboration itself, at least insofar as collaborative practice implies a shared definition of the (patient’s) situation and the collective determination of shared goals (Billett, 2014; Careau et al., 2012; Quinlan & Robertson, 2010) if not shared decision-making.

Indeed, according to Careau and colleagues (2012), IP collaboration occurs on a continuum from uni-professional to interprofessional, and it ought to vary on a case-by-case basis according to the complexity and the needs of the patient’s situation. The task facing collaborative teams is thus to identify the level of complexity of each case, the current location of the patient’s case on the care trajectory, and which professionals ought to get involved. This is precisely the task in which the teams in this study engaged, and it involved collective sensemaking that occurs in and through communicative practice. From this, we propose that the collective practice of the patient case review can serve as a fruitful site of inquiry into and potentially even evaluation of ICP in acute care and elsewhere.

Our study was limited, due to its lack of access to the pilot project’s statistical measures of ward and organizational performance and by its consequent reliance on pilot project representatives’ anecdotal reports of these measures to characterize the teams as efficient or not. However, pilot project descriptions of the teams did resonate with the practice differences that clearly emerged in the analysis. A future study could aim to incorporate in its design pertinent outcome indicators with process observations (Conn, Kenaschuk, Dainty, Zwarenstein, & Reeves, 2014).

Another limitation is that this is a single site study. However, there are few studies of communication in acute care IP team meetings, as most research on IP team meetings and case discussions has focused on other care contexts, such as long-term geriatric care (Bokhour, 2006), palliative and hospice care (Arber, 2008; Wittenberg-Lyles, Parker Oliver, Demiris, & Regehr, 2010), or psychiatry (Vuokila-Oikkonen et al., 2002), where teams meet less frequently but for longer periods of time and discuss fewer patients (see also Lanceley, Savage, Menon, & Jacobs, 2007; Opie, 2000). The specificity of this acute care context, with its time pressure and biomedical dominance, likely impacts greatly on the format and routinized nature of discussions.

Even so, the interactional patterns discerned here echo the findings of studies from other contexts, such as rehabilitation (Abreu, Zhang, Seale, Primeau, & Jones, 2002) and long-term care (Bokhour, 2006) where collaborative discussion was most often triggered by a team member questioning or commenting on a report given by another team member. This suggests that a sensemaking framework could be useful more generally in studies of ICP.

Our findings also echo those of an observational study in the acute care hospital context, Lewin and Reeves (2011), which found that planned IP meetings were ritualistic in nature, containing little functional collaborative activity, which they implicitly define as decision making or action planning. Indeed, in our study, action-planning in case reviews tended to occur most often when physicians were present. (This is not surprising given the ordering privileges held by physicians, but their infrequent presence at rounds does raise the question of the purpose and design of rounds with regard to organizational efficiency, as well as the differential professional accountability for participation therein.) However, we resist discrediting the collaborative value of case reviews where action planning did not occur (i.e., the briefings and collaborative description in our typology), and we interpret their value differently than did Lewin and Reeves (2011). On Intake and Short-stay
GIM, the stable practice of collaboratively and comprehensively describing the patient's situation may have been precisely what allowed practitioners to better articulate their efforts in care outside of the rounds context (Strauss, 1988, 1993), lending to the overall efficiency of these wards, according to the pilot project’s estimation.

Furthermore, the ritualistic aspect of the performance—the predictable framing practices as well as the prescribed areas for team consideration (the pilot project's script of goal-focused questions)—may have served as an implicit checklist (Kitto, 2010; Lingard et al., 2005) or sensemaking frame for the teams, thus foregrounding omissions and anomalies, and contributing to a more holistic description of the patient's situation and more knowledgeable discussions. This itself may have lent stability to the collective practice by ordering and organizing the teams' thinking, even if it did not always lead to explicit action planning. In fact, the habitual practice of predictable and comprehensive overviews, greater multivocality, and a welcome atmosphere for expressions of uncertainty might have helped stabilize practice when team member presence was irregular, thereby lending continuity to the patient's story and possibly to his or her care.

As Gordon et al. explain (2012, location 1130):

Health care professionals often claim that predictable communication is impossible because of their constant confrontation with uncertainty. What is not well understood or accepted yet in health care is that predictable communication patterns may be the best and most effective way to mitigate the stress that is itself a by-product of the constant ambiguity in their work.

This is corroborated in the literature on high reliability organizations (HROs), which has pointed out that reliable collective performance is facilitated by stability in sensemaking routines and variability in action routines (Weick, Sutcliffe, & Obstfeld, 1999). In other words, stable communication practices and variability in care interventions. The HRO literature recommends taking a wide view when scanning the environment and making sense of the situation (Cooren & Robichaud, 2010; Kreps, 2009; Weick et al., 1999), and this was also built into the practice of Intake and Short-stay GIM through the goal-focused questions that broadly emplotted patients on their care trajectory, anticipating future developments and making sense of past history. These teams looked farther upstream and downstream in their deliberations than did Intervention's relatively myopic, ward-level focus on biomedical concerns. Intake and Short-stay GIM were thus able to more reliably incorporate (a) considerations that could impact on discharge planning, such as the patient's family dynamics and living situation, and (b) the patient's perspective (the patient's preferences were most often mobilised in discussion about discharge options). In contrast, Intervention focused less often upstream and downstream on the patient care trajectory in their collective sensemaking, which could help explain their problematic discharge planning and their less patient-centred focus.

The counter balance to routinized sensemaking practices is the cultivation of collective vigilance or heedfulness (Jeffs, Lingard, Berta, & Baker, 2012; Weick & Roberts, 1993) and an openness and attentiveness to ambiguity and anomaly (Sutcliffe, 2011; Weick et al., 1999). This manifests as observable collective sensitivity to expressions of uncertainty. We argue that one of the reasons Intake and Short-stay GIM discussed more fine-grained details of patients' cases was because they had cultivated this collective sensitivity. It was not only that they shared mental models and goals (Courtenay, Nancarrow, & Dawson, 2013; Evans & Baker, 2012), but that they took up expressions of uncertainty as shared problems to collectively solve.

For uncertainty to be freely expressed requires what Jones and Jones (2011) call participative safety, the permission to speak up with impunity, to ask questions, and to challenge accepted understandings, a fundamental component of aviation's crew-resource management (CRM) that is making inroads in the health-care collaboration literature (e.g., Buljac-Samardzic et al., 2010; Gordon et al., 2012; Leonard, 2004; Reeves, Kitto, & Masiello, 2013). The Intervention team seemed to devalue such participative safety in its ward-level culture: One of its charge nurses interviewed said of their role:

“You have to have a lot of confidence in yourself, in your opinion. You have to try not to express uncertainty, because otherwise, you have to rationalize everything, especially when talking to doctors.”
Although this charge nurse was speaking about individual-level practice, one can see how the face work (Goffman, 2006) required to present such a chink-free image of certitude when interacting with others could prevent collective sensemaking at the team level, especially given the charge nurse’s status as facilitator of rounds and producer of overviews, as it left little room for the expression of uncertainty. In comparison, an allowance for uncertainty was part and parcel of the routine framing practices on Intake and Short-stay GIM, included in shared authorship. This, as we saw, helped to stabilize practice through story-porting when the charge nurse rotated.

So did documentary supports. Although we did not have ethical access to various working documents such as the patient charts and the nursing notes, we can infer from the way these were invoked and used in different ways by the teams’ charge nurses that they play an immense role in organizing and stabilizing team sensemaking practice in rounds as well as outside of rounds when charge nurses rotated; recall especially the difference in the way the Intervention charge nurses relied on and trusted or doubted the nursing notes. These notes were the starting point for each current version of the patient’s story in case reviews, and also where they concluded (through note-taking in rounds), only to begin again elsewhere. In fact, we argue it is essential to think of team sensemaking in rounds as being embedded in and relying on a web of communicative practices that extend beyond the situated, local interaction: previous conversations that get recounted, nursing notes from shift change that demand clarification, note-taking in rounds that gets transported and recounted elsewhere (Cooren, Fox, Robichaud, & Talih, 2005). This web gets activated in rounds, or as Weick would put it, “enacted.”

Looking forward, we can see some practical implications for IP researchers, practitioners, educators, and organizational policy makers from our reflections. Our broad suggestion is that the patient case review can serve as a site of inquiry into and even evaluation of IP collaboration as it is here that shared mental models, role awareness, and collective sensemaking take place. Two key players, the charge nurse and his or her notes, are inseparable here. This must be kept in mind when designing IP practice interventions to structure talk: Structured talk is only so good as the (web of) documents it relies on.

We also argue that framing practices (Brummans et al., 2008) be taught as an important leadership competency for fostering collective sensemaking on interprofessional care teams. Through their framing practices and the participative safety they cultivate (or not), charge nurses act as “stewards” of interprofessional sensemaking and thus as the primary mediators in the collective weaving of the different strands of the patient’s story. Producing overviews is a skill that can be honed. A thoughtful overview effectively signals professional relevance (i.e., to whom X pertains, who needs to get involved), and in this way “creates” its intended audience by enacting role awareness (Suter et al., 2009). An overview should be more comprehensive when more sensemaking work is needed, for instance when the patient is new to the team, when a team member is new to the case, or when the case is complex and there is a new turn of events—in short, when the team is faced with more ambiguity and must engage in “equivocality reduction” (Weick, 1979a). While these guidelines may seem commonsensical and obvious, it was only through comparison of the different teams’ performance (or lack thereof) that we came to these conclusions.

Conclusion

In summary, this exploratory study provides a detailed map of one important practice of interprofessional collaboration in acute care: the interprofessional patient case review. Relying primarily on naturalistic observations of actual team sensemaking practice, it builds on previous knowledge about determinants and outcomes of interprofessional collaboration and suggests how shared mental models and goals are made relevant in collective sensemaking processes through framing practices and collective sensitivity to expressions of uncertainty. These findings suggest communication (taken in its broadest sense) as a focus for future inquiry into ICP, in tandem with inquiry into health care professionals’ knowledge, attitudes, and beliefs about ICP.

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References


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