

**Communication and Interprofessional
Collaborative Practice:
Collective Sensemaking Work**

by

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Abstract

Communication is often listed as a key ingredient for effective interprofessional collaborative practice (ICP) in health care, and is frequently conceptualized as information transmission. Without denying this important function, I propose to problematize communication as constitutive, social action. This allows us to understand ICP as a process of collective sensemaking that emerges in and through communicative action. Taking seriously the term practice in ICP, this ethnography adopts a practice theory lens, informed by ethnomethodology and interaction analysis, to examine and characterize a specific practice: the interprofessional patient case review in daily team rounds. This practice is seen to be collectively enacted in routines and socio-materially embedded in other practices.

The study draws on observations and audio recordings of 4,000 patient case reviews from 120 daily rounds of 3 interprofessional acute care teams in a university hospital in Western Canada. Variations in practice within and across the teams prompted three interrelated and emergent analyses.

First, I show the importance of introductions to case reviews as salience-framing resources that emplot the patient's situation on the care trajectory for listening team members, thereby underscoring the essential gatekeeping role played by charge nurses. I argue an interprofessional performance has to do with heedful interrelating, discernable in interaction as displayed mindfulness of difference and an attentiveness to expressions of uncertainty. Second, I recast the question of medical dominance in terms of authorship, and consider its interactional enactment. Here, the presence of a medical representative changes the focus of sensemaking work as well as the audience for whom talk is designed. Third, I examine potential stabilizers of sensemaking practice in the context of shifting team composition. Practice is stabilized and continuity of the patient's story maintained through the participation of multiple authors or "story porters," both human and non-human, shedding new light on IP and multivocality.

These findings inform a model of IP sensemaking in the patient case review, especially highlighting the key role of the hybrid nurse-and-notes actor and the importance of sensitivity to expressions of uncertainty. The model could be useful in teaching interprofessional practice to students and practitioners.

Keywords: Interprofessional collaborative practice; Organizational communication; Collective sensemaking; Interaction analysis; Organizational ethnography

For Steve, who always keeps it light

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List of Acronyms

BN	Bedside nurse
CIHC	Canadian Interprofessional Health Collaborative
CCD	Client care coordinator (home care coordinator)
CTU	Clinical teaching unit (medical resident)
DIET	Dietician or nutritionist
GAP	Geriatric assessment program nurse
MD	Hospitalist (attending doctor)
IP	Interprofessional
ICP	Interprofessional collaborative practice
IPE	Interprofessional education
OT	Occupational therapist
PCC	Patient care coordinator
PHARM	Pharmacist
PT	Physiotherapist
SW	Social worker
UC	Utilization clinician (representative of the Integrate program)

Transcription Conventions

Modified from Jefferson's (1984) set of conventions to help reflect speakers' utterances, including pauses, elongations, interruptions and overlapping talk.

- (0.0) Numbers in parentheses indicated elapsed time in silence by tenths of seconds
- (.) A dot in parentheses indicates a tiny 'gap' within or between utterances
- (()) Description of non-verbal action such as ((clears throat))
- (text) Explanation of something in an utterance, such as the identity of an intended recipient of talk
- _ Underscoring indicates some form of stress, via pitch and/or amplitude
- :: Colons indicate prolongation of the immediately prior sound. The length of the colon row indicates length of the prolongation
- ? Question marks indicate rising intonation
- = A dash indicates a cut-off
- [A right square bracket indicates overlapping talk

Partial Glossary

Affiliation	In conversation analysis, this refers to an <i>affective</i> mechanism of facilitating the interaction by supporting the stance taken by a previous speaker, such as through pitch of voice, a nod, etc.
Alignment	In conversation analysis, this refers to a structural level of cooperation; for example, accepting one's positioning as the intended audience or encouraging the speaker to continue. Relevant after almost every interactional contribution.
Collective sensemaking	The process by which two or more actors interpret a situation together. From Karl Weick.
<i>Integrate</i>	An organizational efficiency-boosting initiative rolled out in the hospital where the field work took place. It aimed to "recover capacity from within" by statistical tracking and by structuring talk during daily team rounds.
Interpellation	The act of speaking to or addressing an actor (or being spoken to or addressed) based on situational cues and the actors' identities; implicates two or more actors who can be human or nonhuman. Borrowed from the French <i>interpeller</i> .
Interprofessional collaborative practice	A process of communication for decision making that enables the separate and shared knowledge and skills of different care providers to synergistically influence the care provided through changed attitudes and behaviours
Patient care trajectory	All of the anticipated organizational efforts to care for a patient during a stay in hospital. It is continually adjusted according to contingencies.
Patient case review	The brief discussion during daily team rounds in which a patient's current situation is discussed and circumscribed, making sense of previous occurrences and anticipating future actions and developments. It involves narrative emplotment.
Presentification	The act of making something present in interaction; re-presentation. From the Montreal School's approach to interaction and conversation analysis.

1. Introduction

Gettin' good players is easy. Gettin' 'em to play together is the hard part. —Casey Stengel

No one can whistle a symphony. It takes a whole orchestra to play it. —H.E. Luccock

A doctor, a physiotherapist, a nutritionist, a nurse, a pharmacist, and a social worker walk into a bar together after work. The bartender looks up and says, "What is this? Some kind of joke?"

Seemingly impossible differences. That was the initial inspiration for this study, whose seeds were planted nearly a decade and a half ago, long before I had ever heard the term *interprofessional* or had a glimmer in my mind of studying communication on health care teams. The personal fascination that fuelled this study was born during a previous professional incarnation. I was working in the communications department of a merged health centre foundation about to launch a major fundraising campaign, and my mandate was to help generate interest in the hospital's plans for a mega construction project. One of my tasks was to get sound bites from various employees across the hospital's different sites to demonstrate how the new construction would help them better serve patients. Throughout this admittedly instrumental branding exercise, I was astonished by the variety of perspectives expressed by the different employees with regard to what they valued in patient care.

To this day, I clearly remember being moved to tears by an ambulance driver who shuttled sick kids and their parents from the children's site to the adult sites when more specialized care was needed. His eyes sparkled as he recounted stories about these patients' lives from an intimate, personal perspective; it was clear that during these brief transits, he connected with them at the most human level possible. In contrast, the interview with a transplant researcher could not have been further removed from a personal connection with the patient. Instead, I heard about exactly how sick the animal

research subjects had to be in order to simulate the state of health of the average transplant recipient (a difficult perspective to spin positively). Similarly, a world-renowned geneticist didn't mention the patient at all, focusing instead on the latest techniques for interpreting abstracted data in cancer research. And in my interview with a nurse specialist caring for patients with chronic obstructive pulmonary disease, I had a glimpse into the complexities of nursing coordination work and patient education. Each of these professionals made an important contribution to patient care, but spoke to me with such vastly different understandings of what mattered. I wondered how they could possibly fit together.

Over the course of these interviews and the other promotional work I did, I came to understand the hospital environment as a richly layered context, characterized by rifts between the “worlds” of medicine and management (Cherba & Vasquez, 2014) and marked, as Elliot Mishler (1984, 1997) has described, by the voices of biomedical reductionism and what he calls the patient's lifeworld. In this motley soup of perspectives, values, and professional scopes of practice, health care providers work together and navigate these differences, sometimes adeptly, sometimes not.

My fascination for how they do so—and for where we can locate this work—eventually evolved into this study of communication and interprofessional collaborative practice (ICP) on acute health care teams. Its broad goal is to demonstrate theoretically and empirically how communication practices shape and constitute ICP.

1.1. ICP and Communication in a Nutshell

An interprofessional (IP) approach to collaborative or team-based health care is often touted as a means for integrating the multiplicity of perspectives described above, allowing for a holistic portrayal of the patient's situation and thus providing for more patient-centred care than the traditional “siloe” organization of care can provide (Lingard, Reznick, DeVito, & Espin, 2002; Wacheux & Kosremelli Asmar, 2007). Interprofessional collaboration and teamwork are described as offering many benefits, which include improving organizational effectiveness and efficiency (D'Amour, Ferrada-Videla, San Martín-Rodríguez, & Beaulieu, 2005), ameliorating patient safety and the continuity of care (Rowland & Kitto, 2014), contributing to greater professional

satisfaction (Oandasan et al., 2009), and helping to develop collective competence (Boreham, 2007; Lingard, 2013).

Effective or good communication is very often listed as an essential ingredient or determinant to successful interprofessional collaboration and teamwork (Kozlowski & Ilgen, 2006; Lemieux-Charles & McGuire, 2006; Lingard et al., 2006; Robidoux, 2007). However, communication itself tends to remain largely under-theorized in this literature, often taken for granted as the common-sense understanding of message transmission and information exchange (e.g., Kuziemyky & Varpio, 2011; Mitchell et al., 2012).

Hence there is a knowledge gap regarding how communicative practices *make a difference* to interprofessional teamwork. There is a similar lacuna of empirical observations of actual team practice (Alvarez & Coiera, 2006; Ellingson, 2002; McCallin, 2001; Reeves, 2011), with a preponderance of IP studies focusing on team members' attitudes and perceptions through interview and survey data (Careau, Vincent, & Swaine, 2014; Valentine, Nembhard, & Edmondson, 2013).

1.2. The Research Aims

One of the aims of this ethnographic study is to enrich the understanding in this literature by suggesting a perspective of communication as both consequential to and constitutive of social practice and organizational form (Putnam & Nicotera, 2009; Sigman, 1995). This perspective allows us to examine the processual links between communication and collective sensemaking, which is key to deepening our understanding of how interprofessional teams manage to jointly define problems and coordinate their work in actual practice.

The study is based on 6 months of ethnographic observations of the daily rounds of three interprofessional teams in an acute care teaching hospital in western Canada. They differed in terms of membership stability and shared leadership. There were differences of size, composition, documentary practices, and organizational mandate. On some, physicians attended meetings for a few minutes at a time. On others, physicians were always physically absent, but were made present in talk by attending team members. Within and across the teams, there were marked differences in participatory safety (Jones & Jones, 2011), that is, in how freely members seemed to

contribute to reports and discussions. And yet despite these differences, the common thread that ran throughout was the requirement that, in their daily rounds, they were tasked with figuring out their patients' situations and discussing any future actions that ought to be taken (Drinka & Clark, 2000), in a practice known as the patient case review.

Empirically, this practice became the study's unit of analysis. Below is a typical case to give a flavour of the object studied.

The case of Beatrice Herschen and something on her neck

It was recorded during one team's morning rounds on a day when the unit was bursting at the seams with a patient load exceptionally over capacity. It was just after the winter holidays, which is normally a busy time, but it was also during the peak of the H1N1 crisis. The waiting room was packed, many people wore facemasks, and some patient beds were tented in transparent plastic sheets, sealing them off from the rest of the open floor plan. Rounds for this team were held in a large conference room tucked away from the scurry and bustle, a relative oasis of calm on this hectic day. Nine team members were present at the meeting: two patient care coordinators (PCCs, the charge nurses who co-facilitated rounds); two physiotherapists (PTs), a social worker (SW), an occupational therapist (OT), and three others who are silent during this patient case discussion, including a community liaison coordinator, a geriatric nurse coordinator, and a speech-language pathologist.

- 1 PCC1: 408 is Beatrice¹...
- 2 PT1: Herschen.
- 3 PCC1: Herschen?
- 4 SW: Uh hm.
- 5 PCC1: And she? (0.5) um (0.5) *really* wants to go home I understand.
- 6 ((laughter))
- 7 PCC1: Oh no, it's not her. ((reading)) Anyway, she's the one that's had the TIA,²
- 8 CVA, right-sided weakness, she's schizophrenic. (0.5) Um. (0.5) Her
- 9 urine's been sent, she had, CT of the head is negative, she's home, lives
- 10 with the daughter, she's UTI on Cipro, and CT-angio was done. ((stops
- 11 reading and looks up)) And I'm wondering if she's the one they found

¹ All identifying details have been changed to protect the anonymity and privacy of the patients discussed by participants in the study as well as that of the participant's themselves.

² A glossary of clinical terms can be found in Appendix C of this dissertation.

12 yesterday, I don't have that sheet. A spinal. There's something in her
 13 spine.
 14 PT2: Her neck. I betcha! It might be. (Re)member? The numbness in both
 15 fingers?
 16 OT: Yeah.
 17 PT2: That's what I said to Gertie, "What's going on? Is it neck?"
 18 PCC1: [You know what? I'm getting, there's so many people-
 19 PT2: [I said that to Gertie, I said, "What's with that?"
 20 PCC1: [I just can't remember.
 21 PT2: ["She's got numbness on *both* [sides."
 22 OT: [Both. Bilateral numbness
 23 [and she's got-
 24 PT2: [And bil[ateral—
 25 OT: [Weakness, more weakness in her right, but she's also weak in
 26 her left-
 27 PT2: [Or poor coordination? On both sides.
 28 OT: Yeah.
 29 PCC1: She's the lady that was in 224 yesterday?
 30 OT: Yeah. Yeah.
 31 PT2: Yes. It's interesting!
 32 OT: (inaudible)
 33 PT2: [I said to Gertie, I said-
 34 PCC1: [You know what, I'm not quite sure, but it seems to me I remember
 35 somebody coming to me at the end of the shift yesterday and saying
 36 something about her having something on her spine.
 37 PT2: That would make sense. Because she has symptoms.
 38 OT: Yeah.

As we can see in this sample patient case review, team members work collectively to figure out the situation for this patient. Even in minor details, such as the way that team members work together to identify the patient in question (lines 1-4) and how the charge nurse (PCC1) repairs her initial take on the situation (line 7), we can see how the patient case review is a collective accomplishment requiring the contributions of several team members and material artifacts.

Weick and others call this work *collective sensemaking* (Brummans et al., 2008; Weick, Sutcliffe, & Obstfeld, 2005; Weick, 1979, 1995). *The collective aspect of how this work gets accomplished is the chief preoccupation of this study, and I locate it in communicative practice.* It became apparent to me that fine-grained differences in how the teams communicatively accomplished this work typified differences in their

interprofessional practice. This study is largely articulated around describing and explaining these differences.

1.3. Roadmap and signposts: Overview of the chapters

In this study, I bridge two very separate research worlds. On the one hand we have IP research coming from a particular tradition of qualitative health care inquiry, where studies typically employ grounded theory methods and are generally less informed by broader theoretical frameworks (although there are increasingly interesting exceptions). This literature is richly pragmatic and oriented towards practice and policy, and serves as the subject of the literature review chapter (Chapter 2), where I circumscribe what is currently of interest in IP research, and paves the way for deeper theoretical investigations. The chapter is divided between an exploration of terminological definitions, including *interprofessional*, *interdisciplinary*, *multidisciplinary*, *collaboration*, and *practice*, and a more in-depth examination of how communication is treated in this literature, where I sketch a conceptual continuum from information exchange on one end to constitutive social action at the other.

The second research world, discussed in Chapter 3, is a branch of organizational communication scholarship from the constructivist paradigm that is densely theoretically informed and informing. Known broadly as CCO, or the communicative constitution of organization (e.g., Cooren, Kuhn, Cornelissen, & Clark, 2011), it ontologically unpacks communication and organization from the black boxes in which they are often found, such as in the IP literature, and explores the interplay of language and materiality in the creation and maintenance of social forms in social action. This approach is situated within the practice turn (Schatzki, Knorr Cetina, & von Seivigny, 2001) in social theory, where knowledge is understood as always situated, distributed, and local (Bruni, Gherardi, & Parolin, 2007; Hutchins & Klausen, 1998; Orlikowski, 2002). More specifically, I adopt the Montreal School's approach (e.g., Brummans, 2006), which has an ethnomethodological and discursive orientation and is informed by the sociotechnical research of Latour and others (e.g., Latour, 1988, 2005; John Law, 1992), and I do so in order to examine the collective and synergistic aspects of ICP. Here, the current IP catchphrase of learning and knowing "with, from, and about" different professionals

(John H.V. Gilbert, personal communication) can be understood through Taylor and Van Every's (2000) explanation of communication as co-orientation.

I marry these two research worlds firstly because I find them both fascinating, but ultimately because I think they can inform one another: The IP literature is deepened with richer and denser theoretical insight, and the CCO perspective is challenged by the requirements of pragmatic application.

Chapters 4 and 5 tell my data story, describing the field site and my methods and methodology. I outline the epistemological and ontological stance taken in this ethnography, and I explain my methods for data collection and analysis, in particular conversation analysis. I describe the field site and entrée via an organizational efficiency-boosting initiative that I refer to as the *Integrate* program. The main goal of Integrate was to get teams to include discharge planning as a fundamental component of their care planning, by identifying barriers to discharge early on and thereby decreasing patients' lengths of stay. I sketch a portrait of each of the teams, which I name Intake, Intervention, and Short-stay General Internal Medicine (GIM). Variations in their practice and form are depicted, as well as an understanding of the importance of introductions to patient case reviews as framing resources. The patient care trajectory emerges as an organizing conceptual object to which the teams orient to greater or lesser degrees. These insights lead to the analytical consideration, in the three subsequent chapters, of different aspects in their collective practice of doing the interprofessional patient case review.

Chapter 6 explores the notion of interprofessional performance and collective heedfulness. Drawing on the research of Weick and Roberts (1993) and Cooren (2004b), I apply the notion of collective minding and the contribute-represent-subordinate (CRS) model (Fauré & Arnaud, 2012; Weick & Roberts, 1993) to explain an interprofessional performance as having to do with displayed mindfulness of difference, of heterogeneous knowledges. We can then locate collective heedfulness in the ways that team members make their contributions to ongoing talk, considering how they display their awareness of the collective effort (what Weick and Roberts call subordination). In so doing, they call into being the collective to which they are orienting, and they demonstrate their awareness of how the different professional pieces fit together. Two examples are provided here, focusing on the introductions to patient case

reviews: one heedful and one heedless. This shows the interactional mechanisms by which teams collectively make sense of the patient's situation being described and, importantly, it illustrates the pivotal role played by the charge nurses who facilitate these rounds and who frame each patient's case. These actors hold the key to interprofessional "potentiality" in practice. The chapter closes with an analysis of the discussion of a diachronic, wicked case (Drinka & Clark, 2000; Rittel & Webber, 1984) across the three teams. This analysis reveals differences in the teams' "dispositions to heed" (Weick & Roberts, 1993), that is, they differ in how heedfully they collectively attend to anomalies in what is routine.

Chapter 7 examines the issue of medical dominance through an exploration of how authority and power are enacted in team rounds. It relies on the case of one team that tweaked the format and composition of its rounds during my fieldwork to include bedside nurses and doctors (hospitalists and medical residents). Here, power is understood as the authority to interactionally establish what counts. The chapter is divided into two parts: a quantitative snapshot of their practice before and after the change, and with and without doctors present; and an in-depth, conversation analysis of one lengthy excerpt. Together, the analyses reveal that a medical presence shifts the audience for whom talk is produced and to whom it is accountable, through such factors as the number and richness of orienting details in case reviews, as well as interruptions and the sequence of patients discussed. It shows that the type of sensemaking work accomplished changes when doctors are present, moving from primarily collaborative descriptions to collaborative action planning. The chapter also examines how the team negotiates the salience of what is discussed through questions and sanctions, and suggests that there is a hierarchy of accounts at play. Overall, the chapter illustrates how medical dominance is enacted in the terra firma of interaction.

Chapter 8 compares the practices of two teams—one identified by informants as a collaborative "dream team" and the other as struggling to work together—to address the question of how collective sensemaking can be supported in the face of continual change. It aims to identify potential stabilizers of practice in a context characterized by the tension between inherent contingencies and the organizational push to routinize practices. Specifically, it looks at how the two teams deal with frequent rotation in leadership. Once again, the chapter is divided into two sections. For the former, a sample of diachronic cases from each team is analyzed for interactional markers of

multivocality, attentiveness to expressions of uncertainty, and topical richness of discussions to characterize the differences in the teams' practice of doing the patient case review. It reveals the "dream team" has richer, denser discussions with more contributors, more stable reliance on socio-material supports (nursing and professional notes), and greater collaborative focus on action planning. These findings are echoed by the latter portion, where the analysis demonstrates how the teams differ in terms of organizational memory, understood as story porters, or actors who carry pieces of the patient's story from one meeting to the next. This demonstrates—again, in the terra firm of interaction—how teams appropriate problems as shared or not. Their collective practice is stabilized not by unchanging action routines or scripted talk, but by consistent and collective attentiveness to expressions of uncertainty. This empirically demonstrates the theoretical point that collective, ongoing and knowledgeable mindfulness of the patient's situation is located in the communicative action of co-orientation.

The study concludes with a discussion in Chapter 9 of the lessons that can be gleaned from this research, as well as its limitations. A model of interprofessional practice is proposed to crystallize these findings for potential application in interprofessional pedagogy and practice. It highlights the importance of the expression of uncertainty as a trigger for collective sensemaking as well as the key gatekeeping role of the facilitating charge nurse for the interprofessional performance of the team. It also underscores how the interprofessional practice of the patient case review is embedded and anchored in wider webs of communication practices that involve a plethora of actors, including sociomaterial supports.

Overall, this study shines a focused light on a key practice in collaborative health care. By elaborating what is meant by communication, and by demonstrating how communicative practices are constitutive of the very fabric of organizational life, it allows us to understand with greater clarity what actually happens in interprofessional practice (Buljac-Samardzic, Dekker-van Doorn, van Wijngaarden, & van Wijk, 2010; Lemieux-Charles & McGuire, 2006).

2. Scouting the Terrain: Interprofessional Collaborative Practice and Communication

The landscape of health care has seen significant changes over the past decades. In North America, an aging population means that health care needs are becoming more complex due to increasing rates of chronic disease and comorbidity (Curran, 2007; Lammers, Barbour, & Duggan, 2003). These changes have been met with advances in technology, shifting modes of organization, and swelling costs. In Canada, health care expenditures have almost doubled since 1975,³ and hospitals continued to account for the largest share of health care spending (Health Canada, 2011). The delivery of care has correspondingly seen an increase in the specialization and compartmentalization of expertise, as well as the adoption of managerial models and evidence-based practices. This complexity and fragmentation, as well as concerns about efficiency and effectiveness, require an integrated, collaborative approach to care, often manifest in the form of interprofessional teams (R. A. M. Iedema, Meyerkort, & White, 2005; Klein, 1990, 2005; Poole & Real, 2003; Smelser, 2004). Indeed, twenty years ago, Audrey Leathard, a champion of interprofessional collaboration, explained:

So why go inter-professional? The need to bring together separate but interlinked professional skills has increasingly arisen in response to the growth in the complexity of health and welfare services; the expansion of knowledge and the subsequent increase in specialization [...]; as well as the perceived need for rationalization of resources, for lessening duplication and to provide a more effective, integrated and supportive service for both users and professionals. (Leathard, 1994, p. 7)

³ In 1975, total costs consumed 7% of GDP; by 2010, these costs had risen to nearly 12% (Health Canada, 2011)

Since that time,⁴ interprofessional collaborative and team-based approaches to health care have gained support across the spectrum of health-care delivery, from primary to acute, and from rehabilitation to hospice (e.g., Boaro, Fancott, Baker, Velji, & Andreoli, 2010; Nolte, 2005; Oandasan et al., 2009; Piquette, Reeves, & Leblanc, 2009; Wittenberg-Lyles, Parker Oliver, Demiris, & Regehr, 2010). Various national governments have issued calls for interprofessional teamworking and collaboration, including those of Canada, the United Kingdom, Australia, the United States, South Africa, Japan, and Brazil, among others (Canadian Medical Association, 2004; Maslin-Prothero & Bennion, 2010; Reeves, Lewin, Espin, & Zwarenstein, 2010; Romanow, 2002). International agencies such as the World Health Organization have also endorsed interprofessional collaboration as a model for care delivery (World Health Organization, 2010; Yan, Gilbert, & Hoffman, 2007). Similarly, professional regulatory bodies have recognized interprofessional collaboration as a means to increase efficiency, patient safety, and patient-centeredness across the health care system (Institute of Medicine, 2001). In this context, a burgeoning research field on interprofessional practice, education, and collaboration has emerged, and the current study situates itself in this field.⁵

The goal of this dissertation is to empirically and theoretically locate interprofessional collaborative practice (ICP) in communicative practices, and to

⁴ In fact, 50 years ago, pediatrician Dr. John F. McCreary (1964) wrote in the CMAJ about physician education in Canada: “All of these diverse members of the health care team should be brought together during their undergraduate years, taught by the same teachers, the same classrooms and on the same patients.”

⁵ This new research field has quickly grown roots, including several dedicated academic journals, such as *The Journal of Research in Interprofessional Practice and Education* or JRIFE, *The Journal of Interprofessional Care*, and newcomer HIP (*Health and Interprofessional Practice*). Alongside the research endeavours are various training initiatives and interventions in collaborative practice and teamworking undertaken in recent years; Canada boasts two major research and education hubs promoting interprofessional education and practice, one at the University of British Columbia and another affiliated with the University of Toronto. All of these factors point to what Paradis and Reeves (2012) concluded in their examination of research trends in interprofessional collaboration: It has established itself as a legitimate and vibrant field over the past decades. As evidence, they point to the growing variety of “high impact” journals publishing articles on interprofessional matters, such as *Nursing Times*, *The British Medical Journal*, and *Academic Medicine*. They also claim that the appearance of a number of scoping and systematic literature reviews in the field (e.g., Buljac-Samardzic et al., 2010; Courtenay et al., 2013; Lemieux-Charles & McGuire, 2006; Reeves et al., 2011; San Martín-Rodríguez et al., 2005) indicates a process of historical rooting, while evolving debates about preferred terminology demonstrate significant and ongoing internal and external symbolic struggle in the field.

characterize its collective aspect as shared sensemaking. Consequently, the vistas that this literature review opens up are accordingly targeted, ontologically and epistemologically, on ICP in this growing literature, and on how communication is understood to play a role. The literature was culled in a snowball fashion, beginning with literature searches in PubMed using the terms *interprofessional*, *interdisciplinary*, *multidisciplinary*, and *health care team*. I also focused primarily on the journals dedicated to interprofessional care and practice (see Footnote 2).

This review proceeds in two steps. First, conceptual definitions of *interprofessional collaborative practice* are considered in the extant IP literature. The components of the term are explored and then compared with existing definitions to build towards a working definition of ICP. This discussion includes a description of the current state of research, especially trends and areas for development, pointing to the need for empirical observation of actual practice and concluding by pointing out where it can be found. The second part of the literature review homes in on the disciplinary topic of this dissertation: communication. Here, the theoretical treatment of communication in the literature on interprofessional health care teams is organized along a continuum that runs from a conception of communication as relatively neutral message transmission to one that sees it as constitutive of social forms. Each step along the continuum brings us closer to an understanding of ICP as a *process of collective sensemaking* that emerges in and through communicative action. I conclude with a consideration of sensemaking and communication in the interprofessional practice literature as a springboard for the subsequent chapters.

2.1. *Interprofessional collaborative practice: Towards a working definition*

In 1994, when Audrey Leathard regretted the “terminological quagmire” that resulted from the rapidly expanding field of interprofessional collaborative practice, she identified more than 50 terms used to denote health and social service professionals

learning and working together (1994, p. 5).⁶ The most commonly used conceptual terms then included *interdisciplinary*, *multidisciplinary*, and *interprofessional*. The situation was little improved nearly a decade later, when McCallin's (2001) literature review of the use of terminology turned up similar results, and she sounded the call for greater specificity in definitional terms and concepts.⁷

That call is still ringing today. For instance, Scott Reeves (editor of *The Journal of Inteprofessional Care*) has voiced the need for increased problematization and theorization of assumptions and concepts held dear in this literature (Reeves & Hean, 2013; Reeves, 2010a, 2010b).⁸ Another example is Reeves, Goldman, Gilbert, et al.'s (2011) scoping review to enhance conceptual clarity in what is meant by an interprofessional intervention. Similarly, John H. V. Gilbert, the founding father of interprofessional education (IPE) in Canada, recently insisted:

It is to the discomfort of the emerging field that the meaning of the word [*interprofessional*] is so little and poorly understood, both in scholarship and practice. The literature is now littered with instances of almost total ignorance of what the term 'interprofessional' means. One is tempted to comment that if you do not know what a word means, it is generally a good idea not to use it until you have found out. (2013, p. 283)

⁶ Indeed, terminology—and acronyms!—abound in the interprofessional literature, a situation eclipsed perhaps only by the terminological soup of the clinical context, leading one to suspect that a majority of the IP authors are clinically trained. Some examples include IPP (interprofessional practice), IPC (inteprofessional collaboration; sometimes interprofessional care), ICP (interprofessional collaborative practice, sometimes referred to as IPCP, Gittel, Godfrey, & Thistlethwaite, 2013), IPE (interprofessional education), IECPCP (Interprofessional Education for Collaborative Practice and Patient-centred Care), CAIPE (Centre for the Advancement of Interprofessional Education), CIHC (Canadian Interprofessional Health Collaborative), IPEC (Interprofessional Education Collaborative), and IPAF (interprofessional acronym fatigue—my invention).

⁷ See also D'Amour, Ferrada-Videla, San Martín-Rodríguez, & Beaulieu, 2005, for similar findings.

⁸ Reeves and Paradis (2012) conducted a macrosociological review of the interprofessional field literature, which indicated a growing preference for the term *interprofessional* over *interdisciplinary* and *multidisciplinary*.

To that end, I will be as explicit as possible in building a definition of *interprofessional collaborative practice*, or ICP.⁹

2.1.1. The composite elements

Inter

I begin by reiterating Bennington's (1999) explanation of the prefix *inter*, pointing out its dialectical meaning. On the one hand, it refers to difference and separateness, while on the other, it refers to joining, connectedness, and overcoming difference.¹⁰ There are inherent tensions related to identity bound up in this dialectic; to *be* interprofessional in one's work identity requires a dual performance of one's profession as well as one's interprofessionality, that is, a translation of one's work across professional boundaries. ICP requires that practitioners have a rudimentary proficiency in several professional languages and cultures (Ginsburg & Tregunno, 2005) so that they can understand the implications for their own practice of another professional's intervention with a patient so as to articulate their own work appropriately (Corbin & Strauss, 1993). "To know each other professionally means to be familiar with each other's conceptual models, roles and responsibilities. Collaboration is not possible if this basic requirement is not fulfilled" (D'Amour & Oandasan, 2005, p. 16).

⁹ I chose to focus on the term ICP rather than its counterparts that appear with perhaps greater frequency, *interprofessional practice*, *collaborative practice*, and *interprofessional collaboration*, because I believe it is more specific. *Collaborative practice* can indicate two nurses or two physiotherapists working together, without referencing the important aspect of working together across professional boundaries. Similarly, it has been pointed out that *interprofessional collaboration* is often conflated or blended with notions of interprofessional education (D'Amour & Oandasan, 2005; Reeves et al., 2011). *Interprofessional practice* is often under-defined, and, according to John Gilbert (personal communication) does not necessarily imply the active work of collaboration. From my view, when we take seriously the term *practice*, ICP can be used to denote what carers from different professions actually *do together*.

¹⁰ He claims that the contradictory senses of separateness and overcoming difference must also join and overcome the initial contradiction "between the two senses of the word, negating the negation, so that 'inter' finds its own truth in the sublation of its two contradictory senses" (Bennington, 1999, p. 1040). This paradoxical nuance might explain in part the terminological tangle behind Gilbert's frustration. Indeed, in their study of organizational coupling on a transplantation team, Lingard et al. (2014) point to a paradox between autonomy and interdependence that is inherent to interprofessional care.

Professional

As for the word *professional* in the term *interprofessional collaborative practice*, Gilbert points out that it is used as an adjective, referring to the “context of being engaged in a specified activity as one’s main paid occupation,” and that, historically, with regard to practice, “interprofessional has taken on a specific meaning, which is inclusive of activities that take place between varieties of health care providers, regardless of their legal or educational status” (2013, p. 283). From this perspective, the term refers to occupation in the health arena, thereby sidestepping the more traditional connotation of regulated and restricted scopes of practice (e.g., doctors and lawyers), and hinting strongly at an ideal of clinical democracy (D. Long, Forsyth, Iedema, & Carroll, 2006).

Perhaps following the lead of D’Amour and Oandasan (2005), Reeves et al. (2010) further differentiate interprofessionalism from interdisciplinarity, the former of which has to do with “those individuals—from different professions—who interact and work together to deliver *health and social care*” whereas the latter is a “*broader activity*” that can involve people from different academic disciplines “for a range of purposes” (p. 9, emphasis added). We can conclude, then, that *interprofessional* denotes a certain kind of working together within the clinical and social services context.

Collaborative

The notion of collaboration in the interprofessional literature is a hairy beast, and requires some combing to tame the conceptual tangles. Indeed, Thistlethwaite, Jackson, and Moran quip, “Perhaps we should keep a glossary to hand when deciding what form our collaboration is taking” (2013, p. 53).

The term *collaborate* of which *collaborative* is derivative¹¹ comes from the Latin verb *collaborare*—labour together—from *col-* ‘together’ + *laborare* ‘to work.’ It has two meanings in most dictionaries. The first implies working “jointly with others or together especially in an intellectual endeavor” (Merriam Webster, 2014). A second usage pertains to traitorous activity: “To cooperate treasonably, as with an enemy occupation force in one’s country” (The Free Dictionary, 2014b).

¹¹ Collaborative, as an adjective, means characterized or “accomplished by collaboration” (The Free Dictionary 2014b).

Both Henneman, Lee, and Cohen (1995) and Thistlethwaite, et al. (2013) invoke these dual meanings with regard to health care as a way to explore questions of teamwork, professional autonomy, competition,¹² cooperation, and shared goals and commitments. Whereas Thistlethwaite et al. remain in a more philosophical register (perhaps reflecting an evolution in nuanced thinking about IP teamwork and collaboration in the 20 years since Henneman et al.'s publication), Henneman et al. are more prescriptive in their discussion:

A significant attribute of collaboration is that two or more individuals must be involved in a joint venture, typically one of an intellectual nature. This cooperative endeavour is one in which the participants willingly participate in planning and decision-making. Collaboration requires that individuals view themselves as members of a team, and contribute to a common product or goal. All participants offer their expertise, share in the responsibility for outcomes, and are acknowledged by other members of the group for their contribution to the process. (Henneman et al., 1995, p. 104)

What I would retain from this definition is the attention to goal-focused knowledge work that is collectively accomplished. However, given the structure of legal accountability, where the individuals held liable are typically physicians (Lahey & Currie, 2005), teams often cannot and do not share responsibility for outcomes.¹³

What's more, given the range of contexts in which teams operate (Valentine et al., 2013), as well as the continuum of collaborative work (Goldman, 2011; Reeves et al., 2010), collaboration does not necessarily imply teamwork, although it often does in much of the literature.¹⁴ To this end, Curran writes:

Collaboration within a team can be described on a continuum of professional autonomy. At one end of the spectrum, professionals may intervene on an autonomous or parallel basis, thus creating a de facto parallel practice as in multidisciplinary practice. At the other end of the spectrum, professionals have a narrower margin of autonomy, but the

¹² Indeed, there are numerous references to "turf" in the IP literature (e.g., Gum et al., 2012; Jansen, 2008; Suter et al., 2009) and mention of the professions as "tribes" (e.g., Beattie, 1995).

¹³ However, some initiatives, such as Pay for Performance, or P4P, intend to motivate teamwork and collective accountability by rewarding performance at the group level (such as processing patients through the Emergency Department and into other services as quickly as possible). The effectiveness of such initiatives remains to be seen.

¹⁴ So much so that Thistlethwaite et al. (2013) ironically write, "If we state that a team collaborates well, is this tautology?" (p. 52).

team as a whole is more independent [sic] and its members are better integrated, as in interdisciplinary/interprofessional teams. (2007, p. 1)

In this description, teamwork and collaboration seem to be synonymous, and the label to be affixed to the team (multidisciplinary or interdisciplinary/interprofessional) is determined by the kind of collective effort (see also D'Amour, Ferrada-Videla, San Martín-Rodríguez, & Beaulieu, 2005; Ellingson, 2002; Lynch, 2006).

In contrast, Reeves, Lewin, Espin, and Zwarenstein (2010) address the question of autonomy versus integration by differentiating between different kinds of interprofessional working. They situate *teamworking* at the most integrated end, and move progressively towards looser integration through *collaboration*, *coordination*, and finally *networking* (pp. 44–45). Looseness and integration, in their view, are determined by the frequency of “interprofessional communication and discussion” (p. xiii), a point to which I will later return.¹⁵

Perhaps more useful for our purposes here, they define collaboration, generally speaking, as “an active and ongoing partnership, often between people from diverse backgrounds, who work together to solve problems or provide services” (Reeves et al., 2010, p. xiii). Elsewhere in this literature, collaboration has been similarly “defined as a collective action aimed at *co-constructing knowledge and reaching a consensus concerning a common goal*” (Careau et al., 2014, p. 14, emphasis added).

When we draw out elements common to most of these definitions and discussions of collaboration in the IP literature, we can see that there is movement towards defining collaboration as *something done by two or more people* (“active...partnership,” “collective action,” “joint venture,” “work together”) *who might or might not be working on a team, which is knowledge-based in nature* (“intellectual endeavor,” “planning and decision-making,” “solve problems and provide services,” “co-constructing knowledge” and “reaching a consensus concerning a common goal”).

¹⁵ To further explicate (or perhaps complicate) matters, they also distinguish interprofessional teamwork from interdisciplinary and multidisciplinary teamwork in terms of context, explaining that the latter two pertain more to academic contexts (pp. xii-xiv). They do not maintain a distinction between the prefixes *inter* and *multi*, although many other authors do.

Practice

The term *practice* has caused less consternation in this literature, probably because it tends to remain black-boxed. Although it is frequently invoked in considerations of collaboration, teamwork, and teamworking, it is seldom *explicitly* problematized or defined (e.g., D'Amour et al., 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, in their playful Derridian deconstruction of this and other notions in this literature.

They propose three definitions of the term:

Practice 1: The enactment of the role of a profession or occupational group in serving or contributing to society. (...)

Practice 2: Practice(s) are moments of human significance beyond self, by which people participate in and thus experience something greater than their own perceptions and perspectives of the world.(...)

Practice 3: A socially institutionalized and socially acceptable form of interaction requiring cognitive understanding and reflection. (Thistlethwaite et al., 2013, p. 54)

With these multiple definitions of *practice*, we can weave together an explanation that serves as a prelude to the in-depth discussion in the next chapter: A practice involves performative *action* that is socially recognizable and socially sanctioned (Garfinkel, 1967; Gherardi, 2009), 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 (Schatzki et al., 2001).

2.1.2. Putting all the pieces together

Surprisingly, very few authors provide a working definition of interprofessional collaborative practice, although several invoke it (e.g., Lemieux-Charles & McGuire, 2006; Lingard et al., 2014; Schroder et al., 2011). Most address two of the composite components. For instance, discussions of *collaborative practice* typically address

healthcare providers working together, but are not specific to working across professional boundaries or to interprofessionality.¹⁶ For example, the Canadian Interprofessional Health Collaborative (CIHC) describes a patient-centred approach to care, a way of doing practice:

“Collaborative practice occurs when healthcare providers work with people from within their own profession, with people outside of their profession and with patients/clients and their families. (...) When healthcare providers are working collaboratively, they seek common goals and can analyze and address any problems that arise.” (CIHC, 2009, p.1)

The World Health Organization weighed in with the following definition, authored by a panel of IP specialists:

Collaborative practice in health-care 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. Practice includes both clinical and non-clinical health-related work, such as diagnosis, treatment, surveillance, health communications, management and sanitation engineering. (2010)

¹⁶ D’Amour and Oandasan (2005, p. 9) specify *interprofessionality* as a process of developing “a cohesive practice between professionals from different disciplines.” Ringing of the reflective practitioner (Schön, 1983), they explain that it involves thinking about “ways of practicing that provides an integrated and cohesive answer to the needs of the client/family/population. Interprofessionality comes from the preoccupation of professionals to reconcile their differences and their sometimes opposing views.” They point out that “it *involves continuous interaction and knowledge sharing between professionals* organized, to solve or explore a variety of education and care issues all while seeking to optimize the patient’s participation” (p. 9, emphasis added). In this way, it is a catchall phrase to describe an integrated way of approaching health care and education.

Here, there is mention of professional variety and plurality, as well as an emphasis on patient-centred ideals.¹⁷ Practice is specified in more detail, but the inclusiveness focuses on arenas of work (clinical and non-clinical health-related; medical and functional care as well as support work), and we lose the notions of interaction and knowledge-integration.

The situation is similar in the CIHC's interprofessional competency framework, where they define *interprofessional collaboration* as: "the process of developing and maintaining effective interprofessional working relationships with learners, practitioners, patients/clients/families and communities to enable optimal health outcomes. Elements of collaboration include respect, trust, shared decision-making, and partnerships" (CIHC, 2010, p. 8). Here, there is a strong focus on relational aspects across a variety of people and on patient-centred care, but the practice component is listed as an element of collaboration, which we could infer is shared decision-making. There is no mention of knowledge-integration or knowledge-work.

In their recent sociological monograph on interprofessional health care practice, Chesters, Thistlethwaite, Reeves, and Kitto (2011, p. 3) define *interprofessional practice* as "two or more health/social care professionals working together as a team with a common purpose, commitment and mutual respect." Here, collaboration has been dropped and team inserted (which we can recall in Reeves, et al., 2010, referred to a more integrated way working together, requiring frequent communication). There is no mention of integration across professional boundaries aside from "common purpose,"

¹⁷ In both the WHO's (2010) and CIHC (2009) definitions of collaborative practice, patient-centred care is underscored. Each advocates for health care providers "working with" patients, their families, and their communities, and this inclusiveness presents a laudable vision of what ideal health care looks like—a standard to strive for. However, health care professionals working together amongst themselves is different from them working with patients and their families, as Goffman's (1959a, 1959b) notions of front and back stage explain (Crepeau, 2000; Ellingson, 2002; Lewin & Reeves, 2011). Although I agree with and support the premises of patient-centred care (i.e., a holistic understanding of the patient, including the patient's and their carers' perspectives, and the provision of services that puts these perspectives at its centre; e.g., Stewart et al., 2003), I am aiming for a definition that focuses on what health-care providers actually do when they work together. In practice, patients are rarely if ever invited to IP team meetings, where much of the discussion and planning take place. Rather, it is the various health care providers at these meetings who do (or do not) speak for the patient, ventriloquizing (Cooren, 2010) his or her expressed desires, and this is evident in my analyses. (As to the "communities" in the WHO's definition, I think this inclusion speaks to the need for better interorganizational collaboration.)

and practice is defined as “working together as a team.” This seems, then, to describe a way of practicing, rather than delineating what the actual practice(s) might be.

One useful and explicit definition of ICP comes from a keynote address to Ryerson University by Gilbert (2009).¹⁸ It builds on Way, Jones, and Busing (2000)¹⁹ and on Kirkpatrick (1967): “*Interprofessional collaborative practice is a process for communication and decision making that enables the separate and shared knowledge and skills of different care providers to synergistically influence the care provided through changed attitudes and behaviours.*”²⁰

This definition acknowledges integrative knowledge work across professional boundaries, work that is accomplished in interaction, and focuses on the outcomes of such practice (changed attitudes and behaviors). However, here again, we see an understanding of practice as a way of approaching working together, rather than the notion of practice as a specific activity, such as accomplishing a tele-consultation (e.g., Bruni et al., 2007). If we make one minor but for my purposes extremely important modification, this can be addressed: ICP is a process *of* communicating *for* decision making. (I would also drop “through changed attitudes and behaviours” if we are trying to refer to specific activities.)

To put it as plainly as possible, communication is precisely the practice: It is where and how ICP happens. When practice is understood as a practical activity (i.e., the actual doing as opposed to a way of approaching the way things get done), it becomes clear that ICP is collectively accomplished in interaction and nowhere else.

However, before turning to a consideration of communication in the IP literature, I would like to briefly sketch the current research landscape, especially the fit between epistemological goals and methodological tools.

¹⁸ While his focus is primarily on interprofessional education (IPE) matters, Gilbert has been very influential in directing national and international understandings of interprofessional collaborative practice (including the WHO’s definition).

¹⁹ Also cited similarly in Schroder et al. (2011) and Suter et al. (2009).

²⁰ Synergism, we can recall, refers to the interaction of the whole being greater than the sum of its parts (Merriam Webster, 2014b).

2.2. The trending peaks and valleys of the IP research landscape

Since Reeves (2010a, 2010b) voiced a strident critique of the lack of theorization and problematization in the IP field, there has been an outpouring of publications that incorporate various social theoretical perspectives (Hall, Weaver, & Grassau, 2013; Hean, Anderson, et al., 2013), including Goffman's work on the presentation of self (Lewin & Reeves, 2011),²¹ Bourdieu's notion of social capital (Hean, O'Halloran, Craddock, Hammick, & Pitt, 2013; Paradis & Reeves, 2012), Engeström's activity theory (Bleakley, 2012; Varpio, Hall, Lingard, & Schryer, 2008; Varpio, 2006), Wenger's communities of practice (e.g., Kislov, Harvey, & Walshe, 2011; MacMillan & Reeves, 2014); Weick's notions of organizational integration (Lingard et al., 2014), and a variety of other mixes coming from the social sciences (e.g., Heldal, 2010; Hood, 2012; Tan, Adzhahar, Lim, Chan, & Lim, 2014a). Clearly, this emerging field is responsive and reflective.

However, along with greater theorization, there has also been a push for stronger empirical evidence of the effectiveness and impact of ICP. Although many authors have pointed to a lack of such (e.g., Buljac-Samardzic et al., 2010; Lemieux-Charles & McGuire, 2006), there is substantial momentum in developing measurement tools (CIHC, 2012). Statistician Kenaszchuk writes, "The recent surge in tool development is striking" (2013) and these tend largely to focus on self-reported outcomes (e.g., Schroder et al., 2011; for a review, see Valentine et al., 2013), especially attitudes. While Kenaszchuk points out that "a significant segment of IPE/IPC measurement lags behind contemporary standards, (...) the field's overall high regard for quantitative measurement is impressive" (2013).

This high regard for the quantitative is not surprising for a field that is "trying to establish its scientific legitimacy" (Paradis & Reeves, 2012, p. 2), and especially one whose agenda is preoccupied with influencing policy and funding decisions in many spheres. However, the effectiveness of ICP remains an elusive and slippery thing to

²¹ Ellingson (2003) had employed Goffman nearly a decade earlier.

quantify,²² and considering the terminological quagmire previously described, some review writers complain that they are comparing apples to oranges (e.g., Buljac-Samardzic et al., 2010).

However, the problem is not only terminological.²³ “One of the limitations in evaluating IPC quality is the lack of knowledge concerning what IPC [interprofessional collaboration] *processes* are exactly. In fact, many researchers seem to adopt a ‘black box’ approach, with more emphasis on IPC determinants and results and ignoring the processes” (Careau et al., 2014, pp. 1–2, emphasis added). Citing Valentine et al. (2013), Careau et al. explain that interprofessional collaborative processes can be divided into two categories: *emerging states* (e.g., psychological safety within the group, role understanding, and group cohesion) and *behavioural processes*.²⁴ They suggest the former are best studied through tools aimed at documenting attitudes and beliefs about ICP, such as surveys and interviews, and the latter are best studied through observations of practice.

Indeed, there is a relative lack of studies of this sort, and “as a result, we only have a limited grasp of the nature of the collaborative (or less collaborative) interactions that can often occur between professions in practice” (Reeves, 2010a, p. 217). This has led to a quieter call for more investigation of actual practices (Alvarez & Coiera, 2006; Ellingson, 2002; McCallin, 2001; Reeves, 2011). In fact, Reeves (2011) calls for a

²² Indeed, Hood (2012) uses complexity theory to make the case that human systems are *open* systems, and, consequently, trying to determine causality—which is the aim of most effectiveness measurement tools based on an input-process-output model—is not simple. Most of these tools, he says, are thus naively misrepresentative: “By disaggregating complex needs into separate, profession-specific needs and treating these separately, causality is effectively treated as non-complex and linear” (p. 8).

²³ Many if not most studies of IP matters are qualitative, and this might be why Buljac-Samardzic et al. (2010) were so scathing in their systematic review of team effectiveness interventions. The majority of the studies that these authors reviewed were qualitative and, aside from variations in rigour and quality within that qualitative tradition, the authors based their evaluation on evidence of a positive or negative effect of the intervention, in other words, a quantitative measurement of some sort. (I must say that I have often wondered at this traditional quantitative-qualitative divide in this literature, and suspect that more mixed-methods studies are needed, although I am not an expert in this area.)

²⁴ At the risk of quibbling, I have to point out that in their division of IPC processes into states and processes, there is still here a conflation of states (often understood as determinants) and processes. A process is a series of steps or actions that lead to a particular end; a state is a condition of being. Practice—understood as specific, practical activity—has to do with process.

connection between the empirical and the theoretical in the research, and this is one contribution the current research study can make.

Before I turn to my own theoretical approach and its interpretation and application with regard to observed practices, I would like to consider how communication is understood in the IP literature, and the direction I propose it should take.

2.3. Where does communication fit?

Communication is so often listed as a necessary component to interprofessional collaboration and teamwork, and is almost as often left unspecified that, on the whole, it has become just as hairy a conceptual beast as collaboration and the other terms. Some untangling is in order. My goal here is not to provide an exhaustive literature review, but rather to use different articles to point out the different ways that communication is typically conceptualized (when it is explicitly considered at all) with regard to ICP and interprofessional teams.²⁵

I organize the representative articles along a continuum of conceptions of communication to begin to build up to the theoretical framework I intend to use. At one end of the continuum we find information theory where communication is conceived as the transmission of messages or as information exchange (Shannon & Weaver, 1949). Next, we move to communication as representation of social reality, then to communication as action, and finally, to communication as constitutive of social order. Obviously, this continuum is an analytical construct and most studies don't fall neatly into place, but I have categorized articles based on the implicit and explicit assumptions made about communication in these studies. As we move along the continuum, we also go from mostly literature written by health professionals conducting research on ICP and IP teams to studies that incorporate more social theory and social scientists.

²⁵ Even within the interdisciplinary field of communication, there is little consensus about what communication "is," and how it ought to be defined. However, Craig's (1999) landmark article, "Communication theory as a field," suggests seven traditions and outlines the various ways they conceive of communication and its place in and relation to the world. He proposes constitutive communication theory as a metadiscourse—a discourse about discourse, or a metamodel of these various theories about practical communication.

2.3.1. Communication as information exchange

The message transmission model or the information theory of communication refers to the commonsensical and widely held understanding of communication as the encoding, sending, and decoding of messages, where issues of interpretation are generally understood as noise. In this view, the process of communicating—the sending and receiving of messages—is thought to be a neutral activity. With regard to organization theory, this model coincides with a conceptualization of the organization as a system (or container) within which communication takes place (Ashcraft, Kuhn, & Cooren, 2009; Fairhurst & Putnam, 1999; Poole & Real, 2003; Taylor & Van Every, 2000), usually as a process input among others that affects outcomes (e.g., Lingard et al., 2006; Robidoux, 2007).

This theory of communication is by far the most commonly found in the interprofessional literature on communication in the health care context, where communication is conceptualized either explicitly or implicitly as the exchange of information (e.g., Kuziemsky & Varpio, 2011), or as the failure to exchange information in the case of communication breakdown. For instance: "Information sharing is the goal of communication, and all team members need to recognize that this includes both technical and affective information" (Mitchell et al., 2012, p. 18).²⁶

In this literature, we very often find that communication skills—implicitly defined as the ability to get one's message properly received by the right people at the right time and place—are listed, along with awareness of one's and others' roles, as a key team process for interprofessional teamwork (e.g., Julia & Thompson, 1994; Lemieux-Charles & McGuire, 2006; Platt, 1994). Likewise, communication is frequently conceived as a *competency* to be acquired and achieved by teams and their individual members (CIHR, 2010; Schroder et al., 2011; Suter et al., 2009; Wilhelmsson et al., 2012; World Health Organization, 2010). Some studies look at how one's profession shapes the way

²⁶ The notion of a transactive memory system (TMS, Wegner, 1984) is an interesting way to conceive of team functioning and distributed knowledge through a cybernetic metaphor. The TMS can be thought of as "an external memory system for individuals" who must know what information exists, where it can be found and how to retrieve it, and the "transactive" quality of TMS refers to the exchanges that take place between members of a group when they are remembering something collectively" (Tan et al., 2014a, p. 240). Communication is a vehicle for information exchange from one mind to another, although the group or team may share a mental map of where information is "stored."

individual team members craft their messages and target their recipients, influenced by such factors as their individual philosophies of teamwork (Freeman, Miller, & Ross, 2000), while others examine the role played by professional difference in interpreting communication events, such as interprofessional tension (Lingard, Regehr, et al., 2005).

The focus on communication skills and proper messaging is not surprising: Adverse events and patient harm are often seen as the result of communication failure where vital information was not received by the right people at the right time (e.g., Orchard, King, Khalili, & Bezzina, 2012). In fact, any time we find the notion of “communication breakdown,” we can be sure that information theory prevails in some form or another (e.g., Sutcliffe, Lewton, & Rosenthal, 2004). For example, Alvarez and Coeira (2006) discuss the problem of latent medical errors, where the effects of communication failure are felt downstream from their situation of origin. Another group of researchers, Lingard et al. (2004), studied team communication in the operating room and its link to health outcomes. They employed a rhetorical framework that focused on communication with regard to audience (i.e., receiver), content (i.e., message), purpose (i.e., sender intention), and occasion (i.e., context and channel), and, inspired by the high reliability culture of aviation, suggest a structured checklist for preoperative briefings (Lingard, Espin, et al., 2005).²⁷

The notion of *structuring communication practices* to improve outcomes is prevalent, but with mixed results. For example, Rice et al. (2010) describe a structured communication intervention aimed at fostering interprofessional relations and the flow of information. The intervention requires practitioners to identify themselves, their role, and the issue at hand, and to elicit feedback from teammates, thereby achieving “collaborative communication,” which they conceptualize as “a two-way exchange of

²⁷ Given its almost trademark sophistication and nuance, Lingard and colleagues’ work is difficult to accurately situate on the continuum here, and is probably in large part due to Lingard’s non-clinical training as a rhetorician. For instance, sometimes communication is implicitly presented as information exchange (e.g., Lingard et al., 2006, 2007), whereas other instances seem to present it as representative as well as actional. For example, the above mentioned work relying on Burkean rhetorical analysis in operating rooms (Lingard, Reznick, DeVito, & Espin, 2002) looked at the role of talk in “othering” as well as how talk influences the process of professional socialization (Lingard, Garwood, Schryer, & Spafford, 2003; Lingard et al., 2002; Spafford, Schryer, Mian, & Lingard, 2006). More recent work employing organizational theory implicitly positions communication as both information exchange but also as organizational mediator (Lingard et al., 2014; Varpio et al., 2008).

information between professionals” (p. 351, or what Weick & Browning, 1986, would call a double-interact). However, the intervention failed, they say, due to professional resistance at the leadership level and to the fast-paced environment of acute care.

Another study explained a comparable lack of uptake of a structured intervention by pointing to the culture of individualism that reigns in medicine (Lingard, et al., 2006). Similar disappointing findings were reported by Cooley (1994) in a study measuring the effects of a communication intervention tool for focusing team discussions and decision-making. Boaro et al. (2010) reported better uptake of an analogous verbal communication intervention tool called SBAR (Situation-Background-Assessment-Recommendation), which they describe as a possible best practice protocol for the rapid transmission of information in hospitals. In a different study investigating structured communication during interdisciplinary team rounds, O’Leary et al. (2011) describe an intervention success that was quantitatively measured by the drop in downstream adverse medical events as reported in patient records.

To sum up, there is a great deal of interest in how to get teams to communicate (i.e., share information) more effectively to improve interprofessional practice and health outcomes, and this interest is increasingly focused on structuring communication practices from an input-process-output (or container) view of organizations and organizational phenomena. But what happens to our understanding of these phenomena when we open up the black box of organization-as-container and see organizational phenomena such as ICP as emerging from and through communication? When we look at communication as more than (but still also) the exchange of information?

2.3.2. *Communication as representation of social reality*

Moving down the communication continuum, we find communication practices considered as less neutral and more consequential (Sigman, 1995).²⁸ The articles included here are grouped together because they claim that something can be gleaned about the social reality studied by examining communication and language use, that the latter are *signs* of the former, indicating an ontological separation of the symbolic (or the ideational) and the sociomaterial (Ashcraft, et al., 2009).

Some of this literature is relatively atheoretical with regard to communication. For example, Reeves and Lewin (who don't problematize communication) looked at how formal clinical communication, "stripped of the normal social elements of communication," (2004, p. 222) between doctors and nurses *reflects* the low levels of teamworking between them. Molyneux (2001) similarly suggests that communication is an *indicator* of positive team working, although she doesn't specify what she means by communication. Sheehan, Robertson, and Ormond (2007) describe the differences between multidisciplinary and interdisciplinary teams through members' use of inclusive pronouns (e.g., "we"), claiming that language use *signals* differences in team members' underlying philosophies of teamwork.

Other authors make more explicit use of social and discourse theory, and they tend to focus specifically on representational practices. For example, in her sociolinguistic study, Sands (1994) examines how interprofessional team members use framing and hedging in different ways when talking to parents versus when talking to teammates, *reflecting* the difference in social status between the two (see also Schryer, Gladkova, Spafford, & Lingard, 2007). Advocating for patient-centered care from a Foucauldian perspective, Opie (1997) shows the consequentiality of representational practices for effective teamworking. She argues that teams ought to engage in reflexive

²⁸ I am not implying that adverse events stemming from the failure to exchange information are inconsequential; rather, I mean that the process itself of communicating is seen as being less than neutral as it does something beyond message transmission; it opens up or closes down social possibilities, among other things. Sigman (1995) proposed to look at the consequentiality of communication rather than its consequences: Communication is consequential both in the sense that it is the primary process engendering and constituting sociocultural reality, and in the sense that, as it transpires, constraints on and affordances to people's behaviour momentarily emerge. (...) Thus, to study consequentiality of communication is to envision a world composed of a continuous process of meaning production, rather than conditions antecedent and subsequent to this production. (p. 2)

“joint thinking” about how their discursive representations of the patient can *reflect* an imbalance of power between care providers and patients and thereby deny the patient’s reality, both of which work against the goal of patient-centered care.²⁹

In a unique study, Quinlan and Robertson (2010) combine social network analysis (SNA) and Habermas’ theory of communicative rationality to test their hypothesis that a flatter hierarchy on interprofessional teams results in greater mutual understanding, which they define as a greater sharing of information and multiplicity of voices during decision making.³⁰ They explain that SNA graphically describes underlying social structures that are *reflected* in communication practices. They found that mutual understanding ebbs and flows over time, suggesting that social structure (i.e., hierarchy) is more fluid than others have found (e.g., Cott, 1997), and this echoes Drinka and Clark’s (2000) stages model of teamwork, which explains that teams don’t attain interdisciplinarity (their term of choice at that time) and remain there in a static state, but rather that interdisciplinarity is a performance, which hints at the next position on our continuum.

Overall, the studies included here tend to be fundamentally interested in representation and the question of power, whether in the form of professional hierarchies or from the desire to recognize the power imbalance between patients and practitioners from the perspective of patient-centered care. They argue that teams’ representational practices *can* have material consequences, but they implicitly insist on an ontological separation of communication practices and social realities. This leads us to the next “position” on the continuum of communication theory, which sees all communication as inherently socially consequential, recognizing communication as action.

²⁹ Similarly, Crepeau (2000) emphasizes the importance of the narrative accounts of patients that team members share with each other in constructing shared understandings of the patient. If biomedical discourse or “chart talk” (Mattingly, 1998) dominates to the point that the patient’s lifeworld (Mishler, 1984) considerations are excluded, she claims, clinical reasoning can be impaired.

³⁰ Here we can see the difficulty in trying to cleanly place studies at one point on my communication theory continuum, because communication is simultaneously about message transmission, interpretation, and social construction and constitution.

2.3.3. Communication as action

The difference between communication as message transmission or as reflective of social reality and communication as performative action—as constitutive and consequential—is ontological. The former two assume that the “significant ‘stuff’ of communication transpires prior to, or at least behind the scenes of, the behaviour being displayed by communicating entities” (Sigman, 1995, p. 5). This is common with an input-process-output approach to interprofessional collaboration.

The latter, however, acknowledges that, while there are many influences on human behaviour (whether we frame these in anthropological, sociological, or psychological terms),

something occurs in the interactional processes of message generation-reception that is not accounted for by either the larger social structure in which interaction occurs or the cognitive and affective processes that enable persons to participate in communication. (Sigman, 1995, p. 5)

Communication—understood broadly as interactional processes³¹—is where meaning is created and negotiated, where culture, identity, roles, hierarchy, and so on are enacted and brought to life.

Indeed, much of the social constructionist theory about communication as action developed from the pragmatists’ observation that utterances are performative, that is, they *do* things (Austin, 1962; Drew & Heritage, 1992; Heritage, 2005; Searle, 1969). Here, the act of communicating influences social reality, especially through what ethnomethodologists call indexicality, that is, the interdependence of meaning with context, or the unfolding of context in interaction. This position is interested in intersubjectivity (Berger & Luckmann, 1967), in how people continuously work to co-create social situations each time they interact, relying on common understandings and contextual cues to infer and imply meaning (Garfinkel, 1967; Goffman, 1959, 1997;

³¹ Here, I am including language use, nonverbal communication, and acknowledging the sociomaterial nature of communication, whether we are talking about texts or conversation, or the dialectical imbrication of both (e.g., Cooren, 2004a; Putnam & Cooren, 2004; Taylor et al., 1996; Taylor & Van Every, 1993, 2000).

Heritage, 1984).³² Accordingly, this research typically focuses on situated communication practices, usually defined as language use.

Approaching communication as action is one way to answer the call in the IP literature for research into “what actually happens in interprofessional collaboration” (Ellingson, 2002; Oandasan, et al., 2009; Opie, 1998; Reeves, et al., 2009). For example, Ellingson (2002, 2003) looks at how shared understandings are created, using Goffman’s dramaturgic metaphors in her feminist ethnography of an IP team in the hospital context.³³ She created a typology of communication processes to show what team members accomplish through communication, such as requests for clarification, relationship building, and formal reporting, explicitly defining the actions accomplished in and through communication.³⁴

In a similar vein, Atwal and Caldwell (2005, 2006) use Bales interaction process analysis to look at the actions team members accomplished through communicative *acts*. They concluded that when higher status team members dominate discussion, they squelch the participation of relatively lower status members (e.g., nurses, physiotherapists), and the team as a whole functioned less effectively; decision-making was hindered by the impossibility of airing conflicting views.

This theme of hierarchy also appears in Arber’s (2008) study of palliative care IP team meetings, which concluded that team members use language to navigate difference in professional status. She highlights nurses’ skill in using questioning and hedging as rhetorical strategies to push forward their agendas while allowing their higher

³² Interestingly, researchers Careau et al. (2009) had difficulty developing rating items on their IP interaction evaluation tool that had to do with communication (e.g., vocabulary used, clinical content of the discussion, and the duration and efficacy of the discussion). They wrote, “It was hard for an observer who does not have intimate knowledge of the clinical unit’s mandate and client’s situation to judge these aspects” (p. 8). One might say that this difficulty has to do with the context-specificity of meaning and appropriateness judgments (Lazega, 1992).

³³ This is similar to Opie’s (1997) concern with the consequences of representational practices and how they reproduce discursive formations or “Big ‘D’ discourse” (Gail Fairhurst & Putnam, 2004) but Ellingson’s focus was on situated talk, what Fairhurst and Putnam call “little ‘d’ discourse” and how people co-create situations.

³⁴ Ellingson’s position oscillates between seeing communication (language use) as representational (“communication within a team is likely to be...a function of its members’ relative power within the medical hierarchy,” 2002, p. 15) and as performative (“The medical context in which teams operate [...] is *enacted* through language in team members’ day-to-day communication with each other,” *Ibid*, emphasis added).

status teammates (MDs) to maintain face. Here, language is used as a mediator between professions, smoothing out potential breaches of hierarchical conduct while allowing the nurses to accomplish their goals.

More recently, Rowland (2011) invokes the coordinated management of meaning (Cronen, 1995) in her analysis of a simulation exercise in interprofessional education. She points out two aspects of communication: the coordination of actions, especially turn-taking, and the management of meaning. Looking at the coordination of actions shifts analysts' focus from the translation of a message "from one head to another" and instead to "patterns of communication," such as the ways communicative turns are put together "and how the pattern of what is said impacts the meaning of what is created in conversation" (p. 123).

Likewise, Clark (2014) explores the role of narratives as meaning makers at three levels: the patient's self-narrative, the narrative that is jointly constructed by the patient and the practitioner in consultation, and the interprofessional "multi-vocal narrative discourse as co-constructed by members of the healthcare team" (p. 34). The role of narrative is one where "seemingly meaningless events" (what Chia, 2000, p. 17 calls the "undifferentiated flux of raw experience," cited in Weick, 2004) are organized into "larger, meaningful structures that are symbolically represented as stories" (Eggy, 2002, p. 342, cited in Clark, 2014, p. 37).

In the literature included here, communication is seen as more socially consequential than message transmission or representation; it is where people can work out shared understandings. Communication is also the site where hierarchical status had the power to silence voices and perspectives, while equally being the tool allowing for the navigation of this hierarchy. In other words, it is conceived of as both site and process (Taylor & Van Every, 2000) in collective meaning making.

2.3.4. Communication and sensemaking

While they do not explicitly address it, these studies suggests that the process of communicating can influence not only what information is shared, but how *collective sensemaking* is accomplished (Brummans et al., 2008; Kuhn & Jackson, 2008; Weick et al., 2005). Sensemaking (Weick et al., 2005; Weick, 1995) is "the process by which

people enact equivocal environments and interact in ways that seek to reduce that equivocality” (Eisenberg, 2006).

The link between organizational communication and collective sensemaking has to do with knowledge:

Gergen (1985) famously summarized the constitutive view of communication with the statement ‘knowledge is something we do together’. Weick’s theory of sensemaking is in many ways a logical extension of this worldview. It stems from his treatment of language less as a tool for sharing information and more as a resource for creating reality. (Eisenberg, 2006)

How this happens can be understood through a particular CCO (the communicative constitution of organization) lens: the Montreal School’s notion of the text-conversation dialectic in discourse. Conversation is seen as the ongoing, dialogic and collective co-orientation to an object³⁵ (Taylor & Robichaud, 2004; Taylor & Van Every, 2000).³⁶ Text, on the other hand, is a manifestation of human sensemaking (Taylor & Robichaud, 2004), a punctuation of the ongoing experience of co-orientation/conversation, and is not limited to written form. Textualization is the narrativization of experience, the making an object of that experience (Robichaud, 1999). Conversation is impossible without this process, because textualization is what allows interactants to negotiate the equivocality of interaction (i.e., it allows us to negotiate, persuade, agree on a meaning of the interaction at hand), and this negotiation is what makes it possible for a given conversation to make sense to its participants (Robichaud, 1999).

As Weick himself explains:

Order emerges when collectively negotiated interpretations of [undifferentiated flux of raw experience] turn circumstances into a situation that is comprehensible and that serves as a springboard for action. What is important is that texts produced in interaction effectively represent both the world around the conversation and the conversation itself and provide a surface that affords narrative reasoning. (2004, p. 408)

³⁵ This object can be the topic at hand.

³⁶ This CCO-inspired view is making inroads in recent research in health care interventions, where conversation was defined as “a collaborative process in which meaning and organization are jointly created” (Jordan et al., 2009).

When we embrace a view of communication as consequential and constitutive, organizational communication has more to offer the nascent field of IP research:

If on the one hand language and communication are simply tools for sharing information, organizational communication offers little more than the development of effective communication skills. On the other, if language and communication function as the ways in which people call reality into being through their choice of categories, then organizational communication has great significance for work on organizational strategy, alignment, and change. (Eisenberg, 2006)

Insofar as interprofessional education, interventions, and practices have to do with the organizational concerns in Eisenberg's excerpt, it becomes more clear how and why communication practices matter: Not only are they how information gets transmitted, they are how and where interprofessional sensemaking takes place.

The remainder of this dissertation focuses on a specific interprofessional collaborative practice that is gaining importance across the spectrum of healthcare delivery: the collective accomplishment of the patient case review. In these reviews, team members co-orient in conversation, invoking various texts or narratives of experience, to construct shared understandings of the patient's situation and what to do about it. These reviews are instances of collective sensemaking, and communication is not only a vehicle for sharing information in this process, it is both the site and the surface where this process of collective meaning making takes place (Taylor & Van Every, 2000). In the next chapter, I offer an account of my own process of sensemaking in the field as a point of departure for theoretical considerations of the communicative aspects of this sensemaking practice.

3. Theoretical Considerations: A Communicative Perspective on Collective Sensemaking in Practice

In August 2009, I sat down apprehensively to my first interprofessional team rounds, having been briefly introduced to the handful of people around the table as I collected their consent forms. Without preamble, the meeting started and I found myself awash in what seemed a continuous stream of talk about the patients on the ward. Acronyms flew faster than I could jot them down, and I scrambled to discern punctuating moments in the discussion. As the weeks passed and my list of clinical and organizational terms grew into the hundreds, I came to understand that rounds themselves were a punctuation of team members' ongoing work activity, an occasion where they made sense and meaning of the patients' situations (Taylor & Van Every, 2000). In fact, my own experience of making sense of what was going on in rounds mirrored the very work of the teams.

I picked up the rhythm that was set by the recurrent sequence in all this talk: the patient case review. I began to carefully track these reviews, looking at who talked about what and when and how, and I started to see patterns and variations in how these reviews were accomplished. As I tried to understand what was *interprofessional* about the work done by the teams I observed, I came to see the patient case review as a shared practice that is collectively accomplished in communicative action. More specifically, it is a negotiated practice of "figuring out" what is going on with each patient and what actions need to happen vis-à-vis the ongoing stream of actions. Materially and discursively embedded in routines and stretched across webs of other practices, the patient case review is a practice of organizational sensemaking (Weick et al., 2005; Weick, 1979, 1993, 1995). It is geared, by varying degrees, to addressing the questions "What is going on?" and "Now what?" (Weick et al., 2005), which is to say, reading the situation and planning actions.

About half of the time, this sensemaking was unproblematic, and the patient case review read like an update. At other times, however, there was less clarity and team members worked to ascertain whether or not they were implicated in the stoppage of action and to create an understanding of the patient's situation that would allow action to move forward. In other words, these patient case reviews were oriented to resolving problematic situations, to the organizational problem of getting things moving in the right direction. This involved knowledge work, negotiation, and storytelling.

In this chapter, I articulate contributions from a variety of perspectives to build a kaleidoscopic theoretical scaffolding that resonates with my understanding of the interprofessional teamwork I observed in these daily rounds. I propose that we take seriously the concept of *practice* when considering interprofessional practice; my overall argument is that interprofessional practice entails discursive, collective knowledge work that is accomplished in communicative action. Underpinning this characterization of interprofessional practice is the contention made in social theory's practice turn (Schatzki et al., 2001) that knowledge is inescapably embodied and situated in local sociomaterial practices. A similar underpinning is the performative and processual leaning inspired by ethnomethodology's program, as taken up by the Montreal School of organizational communication. As a communication scholar, I see communication writ (very) large as the means, medium, and site of collective sensemaking: Communicative action is where collective minding and sensemaking are accomplished and thus where the social scientist may observe this social aspect of knowing.

The chapter takes as its point of departure an interesting contribution from the health care teamwork literature to trace the origin of the notion of interprofessional teamwork as discursive knowledge work. This is followed by a reflection on knowledge and knowing, drawing on sources from organization studies (e.g., Heaton & Taylor, 2002; Tsoukas & Vladimirou, 2001). I explore the implications of emphasizing the problem-oriented nature of knowing activity (Kuhn & Jackson, 2008), and how knowledge claims are always bound up in appropriateness judgments about identity and legitimacy. I then discuss the link between knowledge and practice (e.g., Orlikowski, 2002) both to show how knowing is always a situated activity that implicates the material (Bruni et al., 2007; Latour, 1994) and to establish its social character, whether we qualify that character as distributed (Hutchins & Klausen, 1998; e.g., Hutchins, 1990), fragmented (e.g., Gherardi, 2010), or stretched (Star, 1998).

With this foundation in place, I turn to an explanation of how knowing together, or collective sensemaking, is communicatively accomplished, inspired by Weick's model of contribution, representation, and subordination (Fauré & Arnaud, 2012; Weick & Roberts, 1993) and the notion of collective minding as a communicative achievement (Cooren, 2004b). The latter stems from a constitutive theory of communication (Craig, 2001), which insists on a communicative explanation of the social (Cooren, 2012). More specifically, it comes from the Montreal School of organizational communication (e.g., Brummans, 2006; Cooren, Taylor, & Van Every, 2006; Taylor & Van Every, 2000), one of several views of what is called the communicative constitution of organization perspective, or CCO (Putnam & Nicotera, 2009). Throughout this discussion, I draw on observations from my fieldwork to consider what is specific to interprofessionality with regard to the communicative achievement of the patient case review.

This view allows us to deepen our understanding of the role of communication in facilitating interprofessional collaboration. Much more than a process input, communication is how such collaboration can take place. The chapter ends on an empirical note, implicitly introducing the next section on methodology and the field work case study.

3.1. Discursive knowledge work: “Thinking Teams”

In the late 1990s, social-worker-turned-ethnographer Anne Opie made the then novel argument that interdisciplinary³⁷ teamwork should be considered *discursive knowledge work* (Opie, 1997a, 1997b, 2000). She claimed to make a paradigmatic break from the social constructivist, grounded theory approach adopted by most studies of health care teamwork at that time, which she categorized as “modernist.” Whereas they looked at interpersonal dynamics on teams, Opie focused on the team's actual work and its anchoring in specific organizational contexts. She took her inspiration from postmodern Continental theory, in particular French thinkers such as Foucault, Barthes, and Deleuze and Guattari. Opie was interested in how teams provide effective care, which she defined as doing the right thing at the right time, differentiated from efficient care, which she saw as a concern with maximizing returns on scarce organizational

³⁷ Her choice of terms.

resources. As she and many others point out, interdisciplinary teams exist to address complexity in patient care, and complex cases require that teams view problems from multiple perspectives, engaging with epistemological differences and identifying on a case-by-case basis which knowledges are appropriate.

For Opie, different knowledges are represented by the different professional members on these teams as well as by the patient and his or her family. For example, biomedical knowledge, enacted by doctors and sometimes nurses, will intersect with other ways of knowing, such as the narrative, psychosocial knowledge she sees as enacted by social workers, for instance. She summarizes her argument:

My foregrounding of the significance of knowledge-based work [on interdisciplinary teams] turns in part on the assumptions (1) that the work of the team is the production of discussions or reviews of clients' situations and how they are to be progressed and (2) that each member of the team is there as a representative of a particular discipline because the different perspectives of or knowledge about the client held by those different disciplines are necessary to achieve effective work with that client. A major task facing a team as it develops care plans is to attend to and work productively with the different accounts or representations of clients held by its members from different disciplines as well as those accounts held by clients and their families. (Opie, 2000, pp. 5-6)

In Opie's view, the knowledges represented in the accounts given by various members of the team offer different points of entry to understanding patient care issues. Opie's ultimate concern is how the team attends to this multiplicity: Effective care, in her view, requires a conscious and continual effort to engage with these heterogeneous knowledges.

Opie draws on Deleuze and Guattari's (1987) notion of rhizome to make the point that heterogeneous knowledges ought to be seen as an "and-and" proposition when it comes to interprofessional teamwork (rather than as mutually exclusive and hierarchically organized). A simpler heuristic than the rhizome analogy might be the famous parable of the blind men and the elephant, wherein each blind man perceives a different part of the elephant and find himself in disagreement with the others as to its real nature. In one version of the parable, the men reach agreement that they each have a different and legitimate perspective on the object, and when taken together, their

collective understanding of the elephant is enriched. (We shall leave aside the ending where a sighted person comes along and the men realize that they are in fact blind.)

This unifying potential is sometimes referred to as a synoptic justification for interdisciplinarity (Klein, 1990), where interdisciplinarity is designed to address the fragmentation of knowledge, an ancient concern that dates back to Plato and Aristotle (Moran, 2002). This justification invokes the cliché that the whole is greater than the sum of its parts. One point I would make is that this “and-and” transformative potential of interdisciplinary teamwork is realized in communicative action.

Without theorizing communication, Opie underscores its primacy to interprofessional practice by making the explicit claim that the team’s work is the *production of discussions*. In other words, the talk *is* the interprofessional practice, a perspective that is old hat in the field of organizational communication (e.g., Boden, 1994; Lacoste, 2001a), which has a rich history of theorizing language use as social action (Austin, 1962, 1970; Searle, 1969). Just like the blind men and the elephant, it is in and through the production of talk that different representations of the patient are integrated to produce a shared account of the patient’s situation. As I shall elaborate later in this chapter, this integration requires sensemaking work.

The discursive knowledge work Opie describes is pragmatically goal-oriented, and the passage above highlights that team members are attuned to the patient’s progress in his or her care, what Anselm Strauss and colleagues would refer to as the care trajectory (Strauss, Fagerhaugh, Suczek, & Wiener, 1985). Team members contribute and attend to different accounts of the patient, negotiating between these accounts, aligning and disaligning with the various representations as they try to figure out what matters most at a given point in time. Indeed, this process of figuring out, making sense of, or knowing together is a main preoccupation of this dissertation. Whereas Opie was more interested in the *form* of these discussions, distinguishing between linear and nonlinear forms (Opie, 2000), the focus on my work deals principally with the processual nature of these discussions, that is, with how they unfold.

Multidisciplinary discussions are relatively linear in Opie’s view, with sequential reports by each professional representative on his or her past and planned care actions, and there is little engagement with differing accounts. In contrast, she claims that an

effective (interdisciplinary) patient case discussion displays a nonlinear, recursive form, looping forward and then back around again to previously mentioned points as an understanding of the evolving situation develops. Following Deleuze and Guattari (1987), she calls this form of discussion a *knowledge spiral* and explains that it demonstrates engagement with multiple knowledges.

Concerned as she was with the form of the patient case discussion, Opie (2000) paid relatively little attention to the process of collective knowing and did not empirically explore in fine-grained detail how members accomplish the knowledge spiral. Instead, she was critically interested in how larger structures shape and determine local practices, and how each professional member is epistemologically informed by and speaks as a representative of his or her disciplinary training. Opie's notion of discursive knowledge work is informed in part by the preoccupations in Foucauldian discourse analysis with how individuals are produced in discourse and how some knowledges, by virtue of their historical position of power and status, are privileged over others (Foucault, 1972b, 1980).³⁸

This preoccupation is what Alvesson and Karreman (2000) refer to as "big D Discourse," related to Foucault's notion of discursive formations (Foucault, 1972a), referring to "macro-systemic" discourses that are relatively universal and historically situated sets of vocabularies that refer to or constitute a particular phenomenon, circumscribing what is possible to say and know about that phenomenon (Alvesson & Karreman, 2000, p. 1133). "D"iscourse is equated with patterns of thought and socially sanctioned practice (Jian, Schmisser, & Fairhurst, 2008), and sits on the opposite end of the continuum from small "d" discourse, which is more "close range," often considered talk-in-interaction, and calls for the detailed study of language use in a specific micro-context (Alvesson & Karreman, 2000, p. 1133). Some explain "D"iscourse analysis as a top-down consideration of agency, in contrast to "d"iscourse analysis (typically conversation analysis and other micro techniques of analysis) where agency is seen to be "bottom-up" (Jian et al., 2008). Despite Opie's use of transcriptions of talk in team meetings, she was primarily interested in "Discourse," and following deconstructionism, focused on missed opportunities in team discussions to engage with difference in the

³⁸ For instance, the biomedical perspective over the patient's (Barry et al., 2001; Mishler, 1984).

team's narrative constructions of the patient. In this way, Opie's work was prescriptive of what interdisciplinary practice ought to look like rather than accounting for what it did look like (M. Lynch, 2001).

Opie's work was quite fashionable at the time of its writing (and still valuable), implicitly focusing as it did on the difference between interdisciplinary and multidisciplinary teamwork. Since then, however, the terms *multidisciplinary* and *interdisciplinary* have been eclipsed by the new term of choice, *interprofessional* (Paradis & Reeves, 2012). Making the case for this newcomer, D'Amour and Oandasan (2005) distinguish between interdisciplinarity and interprofessionalism according to an implicit separation between knowledge and practice:

Interdisciplinarity is a response to the fragmented knowledge of numerous disciplines. Each discipline is based on a sum of organized knowledge, and the emergence of numerous disciplines has resulted in an artificial division of knowledge that does not match the needs of the researchers who are investigating complex research areas. [...] Interdisciplinarity wishes to reconcile and foster cohesion to this fragmented knowledge. As a result, whole new disciplines may emerge.

In the same manner that disciplines have developed, so too have numerous professions, defined by fragmented disciplinary specific knowledge. Each profession owns a professional jurisdiction or scope of practice, which impacts the delivery of services. This silo-like division of professional responsibilities is rarely naturally nor cohesively integrated in a manner which meets the needs of both the clients and the professionals. The notion of interprofessionalism is useful to direct our attention to the emergence of a more cohesive and less fragmented interprofessional practice. This does not imply the development of new professions,³⁹ but rather a means by which professionals can practice in a more collaborative or integrated fashion. This distinction separates interprofessionalism from interdisciplinarity. (D'Amour & Oandasan, 2005, p. 9)

³⁹ If interdisciplinarity can result in the birth of new disciplines, which we may recall D'Amour and Oandasan (2005) positing, why should interprofessionalism not result in, say, nurse-physiotherapists? *A priori* and in theory, there isn't a reason why not. However, we can find the beginning of an answer to this question in D'Amour and Oandasan's remark that each profession "owns a professional jurisdiction or scope of practice." Indeed, this notion of ownership is at the heart of Beattie's (1995) description of the health professions as tribes at war. The borders around academic scopes of jurisdiction might tend to be less jealously guarded, where questions of "ownership" are addressed through the practice of publishing, and where legitimate borrowing via citation actually lends a form of academic capital for the "lender."

They point out that both interdisciplinarity and interprofessionalism, as they define the two, are born of a desire to integrate an artificial fragmentation—of knowledge in the case of interdisciplinarity and of practice in that of interprofessionalism—that becomes problematic for practitioners when trying to address complexity.

While we can acknowledge that the authors are also likely trying to distinguish between *realms* of practice—on the one hand the academic and research world, and on the other, the world of health and social care—their separation of knowledge and practice can obscure the very work of integration that they describe as essential. What's more, it seems that they grant a thingness to an (inter)discipline, such as biochemistry, which emerged as an outcome of integrated, interdisciplinary collaboration, whereas they don't grant such status to interprofessionalism, which they explicitly define as a mode of doing practice. Their conceptual separation of knowledge and practice and their inconsistent treatment of interdisciplinarity and interprofessionalism impede a fuller understanding of the relationship between knowledge and practice, as well as an understanding of how interprofessionalism emerges from a shared set of knowledgeable practices, such as accomplishing the patient case review. The limitation lies in their emphasis of object over process in the case of interdisciplinarity and the inverse with regard to interprofessionalism.

Pickering (1990) discusses precisely this kind of conceptual separation in his article "Knowledge, practice and mere construction" in the sociology of science. He argues that our discourse on the objectified knowledge of a scientific discipline, what he calls "*science-as-knowledge*," tends to overshadow the practical craft of engaging with the world so as to learn about it, what he calls "*science-as-practice*" (1990, p. 685). This objectification of knowledge masks how knowledge and practice are irretrievably intertwined in our engagement with the world, whether we are talking about science, disciplines, or professions. We could easily substitute "discipline" or "profession" for "science," and come to a similar understanding. A discipline, much like a profession, is a way of doing and knowing (engaging) that must be performed and enacted (Vasquez, Fox, & Cooren, 2009). It involves acquiring "the ability to act in the world in socially recognized ways" (Brown & Daguid, 2001, p. 200), becoming part of an epistemic community (Lazega, 1992) or community of knowers. So, too, does interprofessionalism.

For the individual team member, doing interprofessionality implies a dual performance of one's own profession and of one's interprofessionality, for lack of a better term. It is a discursive performance of attending to the whole (i.e., the broad context of ongoing action) while doing one's own profession, similar to the soloist in a choir who "makes a show" of harmonizing with the other singers who are doing back-up.⁴⁰ Iedema and Scheeres (2003) call this a *textualization of work*, and critically situate it in what they identify as a new work order, where health and social care workers (among others) are increasingly called upon to explain their professional scope and to understand that of others. They must produce "discourse that goes outside the boundaries of their conventional worker habitus" (p. 317). When applied to interprofessional practice, especially on organizationally mandated teams, this means that workers must not only embody the traditional discourses into which they were inducted as workers (i.e., doctors must talk like doctors), but they must also be able to talk about their work across hierarchical, occupational, professional, or organizational boundaries. The authors explain that this reflexivity requires new language and literacy tasks, which in turn require skills that, in an ideal world, all health and social care professionals would need to learn to accomplish as part of their accreditation process *in addition to* learning to be a professional (Interprofessional Education Collaborative Expert Panel, 2011; Wilhelmsson et al., 2012).⁴¹

While Iedema and Scheeres' (2003) explanation of new language and literacy tasks are exactly what I conceive of as the stuff of interprofessional practice and their remarks intuit communicative practices as the locus of interprofessional practice, they don't explicitly address the collective mode of the accomplishment of this work nor that the work itself is goal-oriented, which is to say that the new reflexivity serves a collective purpose. More often than not, that purpose is solving problems and addressing uncertainty, as we shall later see. Returning to our opening discussion, if we are to think of interprofessional *practice* on teams as knowledge work, or as the knowledgeable

⁴⁰ This is not unlike what Goffman describes in his chapter on the enactment of teamwork (Goffman, 1959a; Lewin & Reeves, 2011).

⁴¹ Ironically, the IP education literature bemoans the opposite: Newly minted health and social care professionals (with the exception, perhaps of MDs) are increasingly trained in teamwork and the production of this reflexive practice, only to find that in the "real world" of work relations, this reflexivity is startlingly absent.

integration of practices as D'Amour and Oandasan (2005) suggest, we must address the intertwining of knowledge and practice.

One way to do so is by adopting a practice lens, in particular, one that sees knowledge and practice as inescapably intertwined, such as Orlikowski's conception of knowing-in-practice (Bruni et al., 2007; Orlikowski, 2002). An overview of what practice theory has to offer is in order.

3.2. Practice Lens

Given the myriad ways of conceptualizing practice and its social significance, writing about "practice theory" is necessarily an exercise in bridging boundaries and engaging with a multiplicity of perspectives that is quite similar to Opie's recipe for effective care. Nicolini's (2013) recent overview of practice theory in the organizational context maps an array of contemporary approaches, starting with the social praxeology of Bourdieu's (1977, 1990, 1998) notions of field and habitus and Giddens's (1984) theory of structuration, each of which contend in their own way that those "macro" things we experience as social order are best understood as effects deriving from the structures and relations among practices.

Other approaches centre on the individual agent situated in a nexus of activities, such as Marxian- and Vygotskian-inspired activity theory (Engeström, Mietinen, & Punamäki, 1999), which is showing up in some *avant garde* research in the interprofessional literature on collaboration (e.g., Bleakley, 2012; Engeström, Engeström, & Vahaaho, 1999; Varpio et al., 2008). Processual and ethnomethodologically inspired approaches (Garfinkel, 1967; M. Lynch, 2001) focus on practice as local accomplishment, while others are preoccupied with practice as the locus and explanans of community, socialization, and learning (Lave & Wenger, 1991; Wenger, 1998). Finally, discursive approaches, both "D"iscourse and "d"iscourse analysis, examine language as discursive practice, as "a form of action, a way of making things happen in the world, and not a mere way of representing it" (Nicolini, 2013, p. 189). The strands of practice theories that I take up are a blend of the ethnomethodological and discursive approaches, as they allow for a focus on interaction and communicative practices.

Despite the disparateness of the practice approaches on this spectrum (and Nicolini's array is not exhaustive),

practice accounts are joined in the belief that such phenomena as knowledge, meaning, human activity, science, power, language, social institutions, and historical transformation occur within and are aspects or components of the field of practices. The field of practices is the total nexus of interconnected human practices. The 'practice approach' can thus be demarcated as all analyses that (1) develop an account of practices, either the field of practices or some subdomain thereof (e.g., science), or (2) treat the field of practices as the place to study the nature and transformation of their subject matter. (Schatzki, 2001, p. 2)

As some have pointed out, the practice turn in social theory (Schatzki et al., 2001) attempts to transcend "some conceptual antinomies that have bedevilled modern social and political thought, such as the unresolvable divides between structure and agency, group and individual" (Woo, 2012, p. 67), knowledge and practice, and subject and object.

For my purposes here, adopting a practice lens allows us to see knowledge and practice as inevitably intertwined, and it provides a set of tools for taking seriously the "practice" in interprofessional practice. This in turn lets us set aside, at least analytically if not politically, the need to stringently differentiate between interdisciplinarity and interprofessionality.⁴² Bennington (1999) draws our attention to these terms' shared prefix, implicitly developing D'Amour and Oandasan's (2005) theme of fragmentation/integration: The prefix *inter* is dialectical. On the one hand, it refers to difference and separateness; on the other, it refers to joining, connectedness, and overcoming difference. The integration that makes the whole greater than the sum of its parts—the enriched and synergistic understanding of the elephant, if you will—is accomplished through shared communicative *practice*.

⁴² Aside from D'Amour and Oandasan's (2004) differentiation between the two terms following a differentiation between knowledge and practice, there is also a politically motivated distinction between the terms that has to do with the traditional status (power) difference held by physicians on teams, and also increasingly by nurses (Bainbridge & Purkis, 2011; Cott, 1997). The term *interprofessional* stands in alignment with the World Health Organization's definition of health, which encompasses all health care providers regardless of whether or not their fields are regulated. (My thanks to John Gilbert for pointing this out.)

3.2.1. Knowing: The link between knowledge and practice

In the knowledge management literature that was popular in organization studies during the 1990s and 2000s, several authors describe two perspectives on organizational knowledge. The first and more traditional perspective focuses on the universality of knowledge, and conceives it as a discrete thing, a stock, an object that one has or doesn't have in given measure (Orlikowski, 2002; Tsoukas, 2000; Tsoukas & Vladimirou, 2001). As a discrete thing, knowledge can be classified into different types to be harnessed and managed (Blackler, 1995), such as "sticky" and "leaky" (Brown & Daguid, 2001), or "tacit" and "explicit" (Polyani, 1967, cited in Orlikowski, 2002; also taken up by Opie, 2000). On this view, the locus of knowledge is the individual mind, and what is of interest is how best to manage its transfer from one person to another.

Nonaka's (1994) much cited theory of organizational knowledge creation is based on this distinction, explaining knowledge creation and transfer as a cycle involving the tacit knowledge of one mind being made explicit so as to transfer it to another mind, where it is internalized and eventually becomes part of the recipient's stock of tacit knowledge (Heaton & Taylor, 2002; Tsoukas & Vladimirou, 2001). This view of knowledge is compatible with the transmission model of communication described in Chapter 2, where tacit knowledge is encoded into a message—or made explicit—for transmission. This view often equates knowledge with information, and is prevalent in the interprofessional and health sector literature on medical error and patient safety, where effort is expended to ensure that the necessary information is communicated to the right people at the right time and for the right reasons.⁴³

Critics of this conception of knowledge argue that it reifies knowledge as singular, universal truth and that it fails to account for the mutual constitution of tacit and explicit knowledge in practice (Orlikowski, 2002). They draw attention instead to a second understanding of knowledge as processual and contextual, and suggest that attention ought to be also focused on the *process of knowing* (e.g., Blackler, 1995). Lazega (1992) situates this line of inquiry in the sociology of knowledge, broadly understood as constructivism, focused at the micro level and informed by the philosophical movements

⁴³ However, in their typically sophisticated approach to IP research, Lingard and colleagues subtly reject this generally accepted equivalence of knowledge and information by specifying this kind of work as *information work* (Lingard et al., 2007).

of American pragmatism and European phenomenology.⁴⁴ Both of these movements take the everyday practices of people as their objects of inquiry and as the explanatory premises of emergent social forms and processes.

Writing from this perspective, Lazega (1992) tells us that the social constructionist conception of knowledge, in particular Berger and Luckmann's (1967), is a relational and praxeological, or goal-oriented, one. It recognizes that knowledge is provisional and constantly evolving, bound up in and emergent from an interactive and situated process of knowing. In the words of organization studies scholar Haridimos Tsoukas (2000): "Knowledge is of *someone* about *something*" (p. 105).

Landry (1995), drawing on Piaget's theory of genetic epistemology, writes from a perspective that sees cognition as primarily an individual affair. He explains that knowledge is made up of constructed objects or representations, and the constructivist⁴⁵ conception of knowledge and "knowing activity" (p. 326) considers the process as a constant and dialectical engagement between an objective world and a knowing subject who reacts and adapts. Landry's view on cognition sees mind as being "in the head" of the individual. "The cognitive structures of the subject are the lens through which the subject can interact with the world around him or her. In the knowing activity, the subject has to assimilate the object within these structures otherwise the object could not be 'recognized'" (Landry, 1995, p. 327). Indeed, if there is perfect fit between the object and cognitive structures, he tells us, there is no knowing activity at all because knowing involves a modification of the cognitive structures or representations to fit what is perceived of the object: "The structures must be transformed to accommodate the 'newness' of the object" (Landry, 1995, p. 327). In other words, *knowing occurs when actors are faced with some equivocality or uncertainty*. This will be important for my model.

Tsoukas refines our conception of the process of knowing by incorporating language into the equation, and offers a view of cognition as inherently social. When we

⁴⁴ These two movements also inform the theory of communication used in this dissertation, namely the Montreal School's brand of CCO.

⁴⁵ Here, I am using the terms *constructionist* and *constructivist* quasi synonymously, but I do recognize that the former has typically been used in sociological inquiry, while the latter has been mostly employed in psychological and cognitive inquiry ("Constructionist versus Constructivist," n.d.).

no longer view knowledge as equivalent to information but rather as grounded in a situated and *interactive* cognitive process, we can then see knowing as a process of skilfully sifting through details with an eye to relevance. More precisely, knowing is the process of someone making distinctions between focal and subsidiary information, of knowing what to pay attention to and what to put on the back burner (Tsoukas & Vladimirou, 2001; Tsoukas, 2000). It is about foregrounding and backgrounding: emphasizing one thing and either leaving other things in the shadows or showing how they relate to that which is emphasized. From this view, we increase our capacity for knowing by increasing and refining our capacity for making distinctions. (Expertise, then, is the ability to make finer and finer distinctions; one can see in more fine-grained detail what there is to pay attention to.)

"When we draw a distinction, we split the world into 'this' and 'that;' through language we constantly bring forth and ascribe significance to certain aspects of the world" (Tsoukas, 2000, pp. 105–106).⁴⁶ From this perspective, we might say that it is through language that we are able to know. Indeed, language is decidedly a primary—and shared—cognitive structure through which individuals engage with the objective world. This resonates with the much debated Sapir-Whorf hypothesis of linguistic relativity that sees the expression of thought to be constrained by language such that some thoughts are not expressible in some languages (L. B. Resnick, 1991).⁴⁷ Heaton and Taylor (2002) write about the linguistically contextual grounding of knowledge in their empirical study of a Japanese manufacturing firm and its Danish counterpart, claiming:

The only kind of reality we can consciously know is constituted by the kind of distinctions we make in language. And because the distinctions we make are grounded in our practice, knowledge is necessarily operationally based. When people live in different operational contexts—and thus make different distinctions—they perceive different realities. (p. 212)

⁴⁶ Narratology structuralists such as Greimas (1970) would go so far as to say the binary logic of “this” and “that” are inherent to human experience, at least as evidenced in narrative form.

⁴⁷ Among linguists and other related researchers, the controversy about the so-called Sapir-Whorf hypothesis centres around the question of linguistic determinism and human cognition, that is, to what extent thought is shaped and limited by language. This debate has continued for nearly two centuries. Ongoing empirical inquiry suggests a limited role of language on cognition, especially involved in shared systems of classification and categorization.

This is similar to the claim Opie (2000) was making: Heterogeneous knowledges offer different representations of the patient because they allow different realities to be perceived.

However, in keeping with a view of language as social action, it is the action of bringing forth and ascribing significance when making distinctions that is of interest to me here. François Cooren and his colleagues who make up the Montreal School of organizational communication would call this action *figuregrounding* (e.g., Bergeron & Cooren, 2012; Cooren, 2010), a process that is inherent to the act of communicating, wherein speakers mobilize in their discourse any number of “figures.” Matte writes:

A figure represents (and in so doing makes present [or presentifies]) a factor/aspect that, according to the person who invokes or evokes it, must be taken into account and that seems to make a difference in a given situation or interaction. This happens in every discussion and interaction, but also, importantly, during decisional processes or when taking a position with regard to an issue or a partner/collaborator. (Matte, 2012, p. 19, my translation)

Neither Cooren nor his colleagues are primarily concerned with cognition, and certainly not with individual cognition, but this notion of figuregrounding can be used to specify Tsoukas’ intuitive link between language and knowing. Figuregrounding is a form of making distinctions that is both grounded in social context (i.e., what ethnomethodologists call indexicality) and entirely communicational. It is part and parcel of—that is, an ethno-method for—the collective maintenance of intersubjectivity (Garfinkel, 1967). The act of making a figure present for others—or presentification (e.g., Benoit-Barné & Cooren, 2009; Cooren & Matte, 2010)—lies at the very heart of the social construction of social reality (Berger & Luckmann, 1966).

There are two other points with regard to the excerpt from Matte on figures that I would like to make. First, the constructionist proposition that people attend to the ongoing, unfolding, accountable, and situated nature of social action has become so commonplace that it can almost go without saying, but it does however provide a theoretical location (i.e., the broad constructivist project) of what Orlikowski (2002) means when she says that knowledge is always situated and provisional. Knowledge emerges from the act of knowing, which, as we saw above, is a process of making distinctions about something in the world. Secondly, we can see that making distinctions,

especially in figuregrounding, is rhetorical and purposive, often directed at problem-solving and involved in decisional processes, as I will discuss next.

3.2.2. *Knowing as practically oriented to problematic situations*

Most practice theorists across the spectrum view “practices as embodied, materially mediated arrays of human activity centrally organized around *shared practical understanding*” (Schatzki, 2001, p. 11, emphasis added). Ethnomethodology is one strand of practice theory for which a focus on shared practical understanding is central to its research program. It aims to explain “members methods,” that is, how people in particular contexts make their actions accountable and intelligible to others, as Garfinkel’s famous breaching experiments pointed out (Garfinkel, 1967). Some trace ethnomethodology’s practical focus back to 19th century American pragmatist Charles Sanders Peirce, who contended that knowledge—or perhaps more accurately knowing—is always practically oriented. His pragmatic maxim holds “that our theories and concepts must be linked to experience, expectations, or consequences” (Misak, 2013, p. 29). In other words, we attend to those things that are meaningful to us and to the ways in which they are meaningful to us. Certainly, during patient case discussions, team members orient to those considerations that are meaningful to their work.

Shared practical understanding is often understood in the interprofessional practice literature in terms of shared problem solving. Drinka and Clark explain that interprofessional health care teams are made up of heterogeneous “knowers” who come together to “solve patient problems that are too complex to be solved by one discipline or by many disciplines in sequence” (2000, p. 6). The Interprofessional Education Collaborative, or IPEC, recognizes shared problem solving and shared decision making as a core competency for interprofessional teamwork and practice, “especially in circumstances of uncertainty” (Interprofessional Education Collaborative Expert Panel, 2011, p. 24). This resonates with Landry’s (1995) claim discussed earlier that cognition is triggered when an individual encounters something that does not match his or her expectations (i.e., its “newness”). Knowing action, then, is geared to reducing this uncertainty, as I shall discuss below.

Because problems vary in complexity, ranging from the mundane and routine to the complex and ambiguous—Drinka and Clark (2000) describe a continuum from tame

to wicked problems (Rittel & Webber, 1973), what Strauss (1988) would characterize as simple and routine to complex and non-routine—an important task for interprofessional health care teams is to assess the type of problem they face. In fact, assessing the patient's situation is an ongoing interprofessional task.

Drinka and Clark suggest considering wicked problems as sites of interdisciplinarity, requiring dialogue, collaboration, and joint action. “How an [interdisciplinary health care team] assesses and treats a wicked problem is a good indicator of the depth of the team's interdisciplinary culture and of the efficiency and effectiveness of the team” (2000, p. 38). They write that to be effective and efficient, teams must learn to identify the scope of the problem, to identify the fewest disciplines necessary to address the problem well, and then to prioritize the assessments and interventions necessary to address the problem. This requires that health care workers be educated about the core competencies of other disciplines and professions, which is to say that practitioners must have a rudimentary proficiency in several professional languages and cultures (Ginsburg & Tregunno, 2005).

The process of problem solving outlined by Drinka and Clark is a rational, linear one where the problem is defined, actors are identified to address it, and a solution is planned. However, “agency is involved in that: Someone calls the problem into being, someone or thing caused the problem to occur, someone or thing can solve the problem” (Castor & Cooren, 2006, p. 578); a situation is read by someone and made to say something.

Indeed, in this literature, problems often seem to be treated as givens to be discovered and apprehended, without necessarily addressing the creative, constructive role that practitioners play in authoring those problems through their discussions.⁴⁸ Given Drinka and Clark's insistence that the strength of interdisciplinary health care teams is the heterogeneity of their perspectives, one can only assume this was not their intent, but it does bring up an important point. One of the main arguments of Rittel and Webber's (1973) famous article on wicked problems is that they are wicked precisely because their definition is ambiguous and multiple; it is through the proposed solution that the problem gets defined. “To solve a problem implies reflection on the selected

⁴⁸ Opie is a notable exception (e.g., Opie, 1997a).

representations, in order to plan and instigate an adaptation activity” (Landry, 1995, p. 329). Certainly, this seems to be what Opie was referring to when she prescribed knowledge spirals as an interdisciplinary mode of practice: Practitioners engage with knowledge differences by examining their representations of the patient’s situation.

However, as Castor and Cooren (2006) point out, the role of communication here is assumed to be representational, descriptive of the different agents involved. They suggest that with a constitutive perspective, communication also functions to constitute agencies. The representations in problem formulation from Opie’s perspective are then understood as human actors selecting an agent in a chain of (potential) agencies, a point I shall take up in the next section. “The role of different agencies then becomes ambiguous. Agents are not fixed or given but instead may be called on in a variety of ways to describe and explain problems” (2006, p. 578). They point to Schön (1983), who addresses the authoring role of practitioners:

In real-world practice, problems do not present themselves to the practitioner as givens. They must be constructed from the materials of problematic situations which are puzzling, troubling, and uncertain. [...] When we set the problem, we select what we will treat as the “things” of the situation, we set the boundaries of our attention to it, and we impose upon it a coherence which allows us to say what is wrong and in what directions the situation needs to be changed. (p. 40)

In other words, one “sets” problems by making distinctions and determining what counts, which is always an open question, but one bound by situational dictates (Bitzer, 1968). It requires defining the situation in which the problem is occurring, locating it temporally by identifying its antecedents and anticipating future developments (Landry, 1995), which the teams in my study did each time they implicitly referred to the patient care trajectory (Strauss, 1993). The situational dictates are an especially important consideration when we are regarding the collective accomplishment of problem definition, as well as the situational contingency of knowledge (Lazega, 1992), as we shall see.

This question of authoring also raises questions of authority and legitimacy: Who is allowed to define the problem? Allowed by whom and what? In whose terms can the problem be defined? In biomedical, objectivist terms? (c.f., Mackintosh & Sandall, 2010). Lifeworld terms? (Mishler, 1984) Or a blend of multiple perspectives? (Barry, Stevenson,

Britten, Barber, & Bradley, 2001). How does this definition take place, interactionally speaking? Who speaks for the patient? (Stewart et al., 2003). What organizational resources, procedures, or protocols guide action in problem setting and decision making, and under what conditions? Conversely, how much is “up for grabs” and negotiable? (Degeling & Maxwell, 2004; St-Martin, 2011). How is uncertainty handled? These were all questions I pondered when doing my fieldwork and noticed the variations across patient case discussions that occurred in rounds.

Organizational communication scholars Kuhn and Jackson (2008) offer a framework for contemplating these questions empirically from a communicational perspective. Locating their approach within an ethnomethodologically-inspired practice tradition, they claim that knowledge is always a part of problem-oriented action and is grounded in a community of knowers, a perspective informed by Lazega’s (1992) symbolic interactionist approach to knowledge. Specifically, they claim that knowledge is a “capacity to act within a situation,” (p. 455) and a problematic situation is one where action cannot move forward.⁴⁹

Problematic situations emerge (and are transformed) in interaction constructed by individuals who find their purposes and actions linked (Giddens, 1984) and shaped by the “culturally constituted relations of persons, settings, and activity” (Suchman, 1996, p. 56). Furthermore, different situations evoke different problem-solving approaches, because settings supply resources that people use to define problems and craft solutions (Hutchins, 1990; Lave, 1988). Variations across problematic situations imply differences that make some situations appear open and unstructured and others straightforward and closed. (Kuhn & Jackson, 2008, p. 457)

Social actors must work to make sense of the problematic situation so as to recover a capacity to act. They interactively negotiate how to frame and reframe the situation through what these authors call knowledge accomplishing moves, which generate or apply knowledge with the general aim of reducing uncertainty or at least of bringing a measure of determinateness to a given situation. These moves don’t always resolve dilemmas or solve problems, but it is “the offering, interpreting and perceived

⁴⁹ Indeed, one could even refer to the etymology of the word *problema*, which stems from the Ancient Greek: “(probállō, “to throw or lay something in front of someone, to put forward”), from *προ-* (pro-, “in front of”)” (<http://en.wiktionary.org/wiki/problem#Etymology>, consulted Sept. 3, 2014).

value of the knowledge signalled in the moves that give existence and status to things and people while simultaneously ordering the environment" (p. 461). They identify this kind of relational thinking (Østerlund & Carlile, 2005) as typical of the practice approach, where people, groups, and objects derive the significance of their properties from the relations that link them.

It is important to note that there are two takes on what is meant here by "situation."⁵⁰ First is the situation of rounds itself where different professional representatives with different approaches to problem-solving and with varied organizational status come together in a given geographic locale to define the second kind of situation, which is what is going on with the patient. We can think of the former as *setting* or *context*, which does not deny its interactive enactment; it is still talked into existence (Vasquez, 2009; Weick et al., 2005) or at least into significance. Rather, I simply wish to distinguish it from the patient's situation. The former decidedly influences how the latter is constructed or authored, and this is exactly the point that Lazega (1992) makes.

Questions of authoring the patient's situation—who gets to define which parts of it—depend on what Lazega calls appropriateness judgments about the epistemic claims a team member can make. To make a knowledge claim depends on three situation-framing resources: (a) actors' identifications, understood as affiliations or allegiances in Goffman's sense (1959b) that afford actors the perspective from which they may take their identity, (b) the legitimacy of their action, understood as what is expected of actors given their identity in a specific situation (e.g., Cicourel, 1990), and (c) sources of actors' accountability, wherein they must determine to whom in that specific situation their actions are accountable (i.e., who is their audience?).

With regard to interprofessional rounds and patient case reviews, for example, the dietician can make legitimate knowledge claims about certain things but not others. She, like anyone else, can be seen to legitimately remark on the patient's age or his seeming willingness to comply with treatment recommendations, because both of these are claims about reality that are available to all team members and therefore require no

⁵⁰ My thanks to Boris Brummans who raised this point at a data analysis session of the Groupe Langage, organisation, et gouvernance (LOG), Université de Montréal.

expert ratification. On the other hand, it is likely that only the dietician can legitimately recommend a specific diet for a newly diagnosed case of diabetes, because this claim draws on expert knowledge and gets its legitimacy from her professional identity as a dietician and is thus challengeable only by others deemed similarly competent. (In this case, according to Lazega, the dietician's authority to know depends on the fit between her statements and reality, but the ability to measure that fit belongs to an exclusive subset who can claim to speak on its behalf, which here is the profession of nutrition.) Likewise, the dietician would be hard-pressed to make a legitimate knowledge claim about rehabilitating a knee-replacement patient or about surgical techniques for abrading the knee joint, unless she were to call upon some other identity.

To Lazega's situation-framing resources, Kuhn and Jackson add two communicative moves through which situations are framed: classifications (Silverman, 1998; Suchman, 1994) and discursive closures, both of which they contend are useful for an examination of hierarchy and authority during episodes of problem setting (i.e., knowledge episodes, 2008, p. 461). For example, on the teams in my study, the dietician would not be considered to be acting in a procedurally appropriate manner if she were to "take over" rounds facilitation, opening up and closing down each patient case review, because that is usually the role of the charge nurse.⁵¹ On the contrary, the physicians who occasionally attended rounds were able to take the reins of the meeting without any challenge, controlling the pace of discussion, requesting information, making declarative statements that might be seen to "belong" to other professional scopes of practice such as physiotherapy, and the like. Interestingly, when medical residents attempted to do this, they were sometimes met with subtle resistance from the charge nurse. "Classifications of persons (e.g., by ethnicity, collar color, leadership ability, professional status) do not therefore merely create hierarchies and divide tasks; they also discipline work by enforcing appropriate interpretation, action, and self-construction [...] Thus, classifications make claims on identities and discursive moves during knowledge episodes such that particular and often dominant expressions are elicited, fostered, promoted, discouraged, or resisted" (Kuhn & Jackson, 2008, p. 463).

⁵¹ One of the teams did experiment with shared leadership at one point, and I observed a social worker facilitating discussion. This was, however, an isolated incident.

The authors suggest that differences in appropriateness judgments are correlated to situational determinacy. So, whereas Drinka and Clark referred to tame and wicked problems and Strauss would talk about simple/routine versus complex/non-routine trajectories, Kuhn and Jackson understand problem solving as a function of perceived determinateness. In determinate situations, circumstances seem straightforward, situation-framing resources are portrayed as being unproblematic, and responses appear clear-cut. In these circumstances, all that seems to be required to move action forward is what they call *knowledge deployment*, of which they outline two types: *information transmission* and *information requests*.

In an indeterminate situation, however, actors might not agree about the identifications that give sense to their coordinated action, they might not be able to anticipate the moves of others or agree about the meaning of their activity. They might not understand the requirements or resources needed to realize a capacity to act. This has echoes in the interprofessional practice literature, where questions of role awareness and blurred boundaries and scopes of practice loom large (e.g., Christensen & Larson, 1993; Kuziemyky & Varpio, 2011; Schroder et al., 2011). As I will discuss in the analysis section, one of the main functions of introductions to patient case discussions is to render the situation more determinate by signalling the nature of the situation facing the team with a given patient. As I will discuss, they can be performed with more or less heed with regard to the collective action needed and the different professions required.

In an indeterminate situation, the problem may seem so wicked (Drinka & Clark, 2000; Rittel & Webber, 1973) that there is no one clear approach to its resolution.

In other words, interpretations of and responses to a problematic situation are less clear when there are multiple and conflicting identities, when the validation of action is uncertain, and when ambiguity marks both role requirements and action scripts. In highly indeterminate situations, information transmission will never be adequate—no matter the amount transmitted or the manner of its transmission—because what counts as being relevant or useful is not held in common by the actors. (Kuhn & Jackson, 2008, p. 459)

Indeterminate situations often require actors to resolve ambiguity and invent responses, which the authors call *knowledge developing* moves. *Instruction* is one of two forms of developing moves; people tend to look for who (or what) has the needed information or

can handle the uncertainty, and this happens primarily in moderately indeterminate situations.

For instance, the team might call upon the home care coordinator for his or her expertise about the rules and procedures for discharging a patient to a given long-term care facility. This not only renders the current situation less indeterminate, it provides them with resources for dealing with similar cases in the future. *Improvisation*, the second form of knowledge development, occurs when conventional grounds for action are disrupted because initial expectations are violated by “new events, discursive moves, or recalcitrant artifacts” (p. 462). I contend that what Drinka and Clark (2000) call wicked problems, that is, problems that are persistent, complex, and unresponsive to typical, routine, or codified approaches to addressing them, offer privileged moments for the analyst to observe how teams deal with indeterminacy because they require more observable sensemaking activity from team members.

Broadly speaking, the issue of indeterminacy is inherent to health care practice (Reeves et al., 2010; Woods, 1999). Work in the acute care hospital involves a continual dance between innovating in the face of contingency and adhering to predetermined practice protocols, rules, and care pathways that dictate the actions to follow. In this organizational context, practitioners work to define and make sense of the patient’s situation on an almost constant basis. When I was looking for a way to depict what I had observed in rounds, Kuhn and Jackson’s framework seemed particularly relevant. I understood each patient case review to be what they call a knowledge episode, or an episode in sensemaking (Weick, 1995), where team members attend to the flow of action in a patient’s treatment, which they tacitly emplot on his or her care trajectory. Kuhn and Jackson’s framework affords a consideration of variation in sensemaking practices, from the routine to the complex (Strauss, 1988), or from tame to wicked (Drinka & Clark, 2000; Rittel & Webber, 1973), and this resonated with what I observed. It also, and importantly, allows for a consideration of how hierarchy and authority are enacted through knowledge claims and with what effects on collective sensemaking, which was an issue for the teams I observed and which I take up in my analyses.

To sum up our theoretical scaffold thus far, I have argued that insofar as interprofessional practice is integrative (“and + and”), it occurs in and through interaction. It is discursive knowledge work that is goal oriented, focused on figuring out what

matters most in a given situation. It involves team members actively authoring their understanding of the patient's situation. Kuhn and Jackson's framework is useful for grasping how this work is done through knowledge claims, which are interactional moves that aim to reduce uncertainty and indeterminateness. But what Kuhn and Jackson's framework doesn't account for is the role of material agents. Indeed, as Latour is often quoted as saying, "We are not alone at the construction site" of social constructivism (Latour, 1994, p. 51).

3.2.3. *Incorporating the material: Knowing-in-practice*

A practice view of knowing, knowledge, and sensemaking decentres the individual knower, taking as its analytic focus not the individual mind but the system of cognition composed of individuals, objects, ways of speaking and thinking, and setting. Lave (1988, p. 1) writes:

There is reason to suspect that what we call cognition is in fact a complex social phenomenon. The point is not so much that arrangements of knowledge in the head correspond in a complicated way to the social world outside the head, but that they are socially organized in such a fashion as to be indivisible. "Cognition" observed in everyday practices is distributed—stretched over, not divided among—mind, body, activity and culturally organized settings (which include other actors).
(cited in Star, 1998, p. 297)

Organizational studies scholar Orlikowski (2002) and her Italian counterparts Bruni (2007) and Gherardi (2009) suggest the term *knowing-in-practice*⁵² to describe the situated intertwining of knowledge and practice, of object and process. On this view, subject and world (object) combine and recursively interact: "Things" such as identity and knowledge are seen to be emergent from relations, and the actor is made possible only in and through relations (Østerlund & Carlile, 2005). From this perspective, what becomes reified as "knowledge" is the outcome of situated knowing-in-practice

⁵² This is distinct from the same term used in Walsh et al. (2005), where "Knowledge in Practice" emerged as a domain of their grounded theory study of what professionals need to learn to become interprofessionally capable. Their focus was not on knowing activity although they do hint at its situatedness: Their normative use of the term "captures awareness of others' professional regulations in the interprofessional team, the structures, functions and processes of the team in the specific area of practice and how anti-discriminatory non-judgemental practice informs a patient/user-centred participatory service" (p. 235).

(Orlikowski, 2002).⁵³ In fact, we could say that knowledge is what is *activated* or mobilized during knowing-in-practice; if it is not engaged in practice, it lies dormant as a potentiality.

They claim that a practice-based approach to knowledge “privilege[s] a process conception of practising as knowing-in-practice in order to study knowledge not as an object but as a situated *material and semiotic activity mediated by a plurality of artefacts and institutions*” (Gherardi, 2010, p. 504, emphasis added). Practice integrates embedded and embodied knowledges through both symbolic and material means. These authors emphasize relational thinking and the implication of material objects in the notion of agency, taking inspiration from information systems theory, especially computer supported cooperative work (CSCW, e.g., Star, 1998), and distributed cognition (e.g., Hutchins & Klausen, 1998; Hutchins, 1990) as well as actor-network theory (e.g., Latour, 2005; Law, 1992). Material artifacts change not only the distribution of knowledge in collectives (e.g., Hutchins, 1990, 1995), but they also orient, stabilize, and articulate collective action (Grosjean & Lacoste, 1998), mediating or translating between social actors (Latour, 1983, 1992).

Writing about the practice of telemedicine consultations, Gherardi defines *practice*, when viewed “from inside,” as a recursive, knowledgeable, collective action (2010, p. 510), what Brown and Daguid (2001) qualify as “the way in which work gets done and knowledge gets created” (p. 200). Practice is both socially recognized and relatively stable over time (i.e., it occurs recursively). Gherardi sees it as a mode of ordering heterogeneous items, such as people, technologies, and ways of doing things, into a coherent set. “To know,” she writes, “is to be able to participate with the requisite competence in the complex web of relationships among people, material artefacts, and activities. [...] Acting as a competent practitioner is synonymous with knowing how to connect successfully with the field of practices thus activated. In fact decontextualized

⁵³ We can understand a commonly used term in the interprofessional research community, *knowledge of practice*—which refers to knowledge of other professions’ practice(s)—through the lens presented here: The knowledge of practice would only become knowledge when put into practice in one’s own work. So, for instance, a dietician’s knowledge of proprioception (one’s perception or awareness of one’s body parts in space and one’s sense of balance) would only become relevant *knowledge* when her work practices brought her in contact with professionals such as physiotherapists.

knowledge – medicine in the present case – is a resource for action and practical reasoning; it is not the stock of knowledge that must be applied” (2010, pp. 505–506).

Researchers in the interprofessional field put it this way: “Interprofessional knowledge is not discipline specific, but *situated in the working environment*” (Walsh, Gordon, Marshall, Wilson, & Hunt, 2005, p. 233, emphasis added). Indeed, knowledge situated in the working environment is what Bruni and his colleagues (2007) call fragmented knowledge, and what others call heterogeneous knowledge (Heaton & Taylor, 2002; Kuhn & Jackson, 2008). This is to say that interprofessional knowledge is enacted not only by the professional representatives on teams, but it is also embedded in the environment, in particular, in textual resources. In other words, the integrative “and-and” discursive practice described by Opie involves more than the human actors on the team, and the interprofessional practice of doing the patient case review, as Gherardi might see it, is a mode of ordering and arranging these heterogeneous agents.

Bruni et al. (2007) would explain this ordering activity as a process of aligning various embedded knowledges in a system of fragmented knowledge. They write:

The heuristic value of the concept of practice, therefore, resides in the possibility of articulating spatiality (the locus of knowledge) and facticity (the situated production of knowledge). Knowing can, hence, be conceived as a situated activity, an activity that is repeated, stabilized, and institutionalized, but that is enacted again and again as the work practice is performed repeatedly. When we conceive knowledge as substance, we see it as materialized in objects; when we conceive it as a property, we see it as owned by individuals. When we look at knowing-in-practice, we define it as the mobilization of the knowledge embedded in humans and nonhumans performing workplace practices. (Bruni et al., 2007, p. 85)

The patient case review is precisely the kind of knowing-in-practice that Bruni et al. describe, and it is performed in and through communicative action. It connects the oral and the written (Grosjean & Lacoste, 1998), the conversation and the text (Taylor, Cooren, Giroux, & Robichaud, 1996); its accomplishment by the teams I observed was more or less stabilized and routine.

As we shall see, in this study, nonhumans were fundamentally implicated in the stabilization and institutionalization of the patient case review: Certain material artifacts made a difference to how the practice was accomplished (Putnam & Cooren, 2004). For instance, the goals of the organizational efficiency-boosting pilot program, Integrate, by

which I gained entrée to the field (described in more detail in Chapter 5 Case Studies), were instantiated in various documents, including posters on the walls of the conference rooms where team rounds were usually held, the training manual for the Integrate representatives who often facilitated team rounds (called Utilization Clinicians, or UCs), as well as the daily documents that the UCs were mandated to complete (see Figures 4.1, 4.2, and 4.3 in the next chapter). These documents outlined a script of goal-focused questions (see Chapter 4) to be addressed during each patient case discussion, circumscribing domains of concern to be discussed by the team when reviewing the situation of each patient: (a) medical status and goal, (b) functional status and goal, and (c) discharge concerns.

These domains of concern compartmentalized the ways that problems were to be defined and understood, and it implicitly emplotted them on the patient care trajectory, providing a narrative framework for retrospective and prospective sensemaking (Robichaud, Giroux, & Taylor, 2004). Different professions were attributed scopes of practice or “fit” according to these domains, so for example occupational therapy would be involved both in assessing the patient’s functional and cognitive capacity but also in planning discharge needs at home based on the patient’s function and on the home environment. We can see then how Lazega’s (1992) claims about appropriateness judgments were literally inscribed into these documents and this script. However, until this script was activated in sociomaterial practice, its agentic potential remained dormant.

By dint of repeating these questions over time, the scripted domains of concern became part of the practice of doing the patient case review, at least on the teams that Integrate considered to be functioning well, as will be discussed in Chapters 4 and 5. The point I make here is that the UC’s material documents and the script embedded in them, when activated, made a difference to the team’s mode of practicing, constituting and structuring the way that collective sensemaking, problem setting, and so forth, took place during patient case reviews. This is similar to what Berg (1996) found in his sociotechnical study of patient records. He describes the constitutive role of the patient record in structuring the interaction between physician and patient during routine consultations, arguing that the organizational and institutional mandates inscribed in the structure of the patient record (i.e., what the organization/institution considered salient) often took precedence over the patient’s own set of concerns to be discussed.

Other material aspects that influenced the way that the practice of the patient case review was carried out were geographic considerations. The location of rounds dictated the levels of noise and other activity; one of the teams in my study moved its rounds from a secluded, closed conference room to the nursing station, and then to a cramped office off the nursing station when this proved to be too chaotic. They did this to be able to include the bedside nurses, doctors, and medical residents so as to get “real-time information” about the patients. As will be discussed in the analysis chapter on Authority, this setting impacted collective sensemaking in many ways, including the enactment of hierarchy and authority, but also in relation to interruptions and distractions.

One of the most important material artifacts that shaped the way that patient case discussions proceeded was the nursing notes. On some teams, these notes were relied on in routinized fashion, which stabilized the performance of the case review in spite of membership instability due to rotation. Variation in how nursing notes were relied upon, invoked, or activated in patient case reviews was particularly consequential to how heedfully or heedlessly the practice was accomplished, and served as an analytical proxy for examining the continuity of care across rotation of professional representatives. For our purposes in this chapter, it is sufficient to mention that the nursing notes, and in fact all the daily patient information sheets used by the different professional representatives on the teams, were generated by the central computer database and then modified with hand-written notes by the professional representatives (a practice worthy of study in and of itself). Insofar as the patient case review necessitated reliance on these documents, we can understand its performance as stretching across the organization temporally and spatially (Vasquez, 2009), which Cooren and colleagues refer to as transcending or dislocating the here and now to the there and then (Cooren, Fox, Robichaud, & Talih, 2005). That is, these nonhumans connect agents who otherwise might not have been in communication (Castor & Cooren, 2006). Hence, we can now see that when D’Amour and Oandasan (2005) claim that the notion of interprofessionality refers to an emergent and integrated way of “doing practice,” this practice has to do in fact with the integration of fragmented knowledge and heterogeneous ways of knowing. Returning to Opie’s work at the opening of this chapter, this integration happens discursively, through “discussions of client’s situations” (2000, p. 5). In other words, it happens in and through communicative action.

3.3. Bringing it Back to Communication

What then is meant by *communication*? As discussed in the literature review, communication is most commonly conceived as a means for sharing information, what is known as the transmission or Shannon-Weaver model (Koschmann, 2009; Shannon & Weaver, 1949). When we think of communication as a vehicle for representations, as Opie (2000) seems to, it remains a “process input” to collaborative problem-solving, which is indeed how it is conceived in much of the interprofessional practice literature. However, as its etymological roots from the past participle stem of the Latin verb *communicare* indicate, communication also means: “to share, divide out; communicate, impart, inform; join, unite, participate in,” literally “to make common,” from “*communis*” (Online Etymology Dictionary, n.d.). In this sense, communication is intrinsically implicated in the creation and continuance (i.e., constitution) of organizational forms and phenomena, what some refer to as its organizing properties (Cooren, 2000).

This is precisely the concern of the Montreal School of organizational communication, which posits that communication can be understood not only as a vehicle for transmission, but also and importantly as constitutive of organizational phenomena. This is called the communicative constitution of organization approach, or CCO, a theoretical and methodological position that sees equivalence between communication and organizing (e.g., Cooren & Taylor, 1997; Schoeneborn, 2011). In other words, social order emerges in and through communicative practices. These researchers are chiefly concerned with demonstrating organization as simultaneously process and emergent product, with communication as its “site and surface” (Taylor & Van Every, 2000). In other words, communication has not only to do with representations, but also with putting-in-relation: It links or mediates different actors, and it is how relations and identities are enacted and embodied.

From this view, communication is the meeting place of the material and the symbolic or ideational (Ashcraft et al., 2009). This perspective subsumes the contributions of both the knowing-in-practice researchers concerned with materiality (Bruni et al., 2007; Gherardi, 2010; Orlikowski, 2002) and the symbolic interactionist contributions of Kuhn and Jackson (2008) and Lazega (1992) with regard to knowledge claims. As Ashcraft et al. put it, this perspective directs attention to how communication assembles site-specific social and material elements in the act of problem-solving:

A practice-based CCO lens sees knowledge as an attribution made about practice, not as a discrete entity. Analytical interest thus shifts to processes of knowing—to the activity of problem-solving, which is always embodied, embedded in sites, and connected to the material circumstances through which it emerges. [...] This approach holds that work is not so much interdependent lines of action among autonomous agents [...] as it is ongoing problem-solving across intra-organizational sites. Such dispersed activity may well lack coordination and work at cross-purposes; in short, knowing is heterogeneous. Foregrounding communication means exploring how the physical and symbolic features of sites become resources for interactive problem-solving. (Ashcraft et al., 2009, p. 38)

Castor and Cooren point out that agency is an inherent concern of problem setting: “Problem formulation implicates the past and future, and agents who may have caused the problem or who can address the problem” (2006, p. 593). They explain that through the process of sensemaking, human actors continually attribute agency to other types of entities, whether these are collective, textual, or even circumstantial. Humans explicitly or implicitly mobilize various types of agents in their discourses and actions, and “problem formulation is a process of human actors selecting an agent in a chain of agencies” (p. 574). For example, a rule or a document might be identified in a patient case discussion as a relevant agent in determining the nature or existence of a problem.

Their point is not that nonhumans such as rules and documents have agency independent of situated human interaction, (i.e., that they are not constructions), but rather that they have a mode of being that precedes the interaction and that, in the interaction, they are invoked in appropriate ways, in Lazega’s sense of the term, to frame problems from particular perspectives. In his famous article, “The Rhetorical Situation,” Bitzer (1968) explains that this appropriateness is understood to be dictated by the situation itself, which, as Cooren (n.d.-b) elaborates, describes one side of the relational agency equation, for the situation also presumes an active agent who reads its mandates. So, for example, nursing notes are understood to stand in for or make present *in situ* the combined care efforts to date on a given patient, and the charge nurse facilitating rounds might distance herself from a particular framing of a problem by saying, “Well, that’s what I’ve got here in my notes” or “I’m not sure who wrote this, but it says, ‘PT-OT to assess.’” Similarly, when it is enacted by the teams during rounds, the Integrate script of goal-focused questions can be considered another nonhuman agent that structures how collective sensemaking unfolds, and it is in the habitual situation of

rounds particular to this health authority's hospital that this script can be seen to be "acting" or "enacted" appropriately.

3.3.1. Communication: Co-orientation, shared practice, and collective mind

The centrality of communication to collective sensemaking practice can be grasped in another way, by appealing to Montreal School founder Jim Taylor's explanation of communication as co-orientation (Taylor & Van Every, 2000). As some explain:

Co-orientation (1) is negotiated through dialogue, (2) aims to produce coordination of belief, action, and emotions with some mutually understood object, and (3) is mediated by text. (...) Co-orientation is a triplet of (minimally) two actors and one object, 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)

Co-orientation is part and parcel of shared practice, according to practice theorist Barnes (2001) who explains that collective accomplishment is best understood as practitioners being oriented to each other. Likewise, as ethnomethodologists and conversation analysts have pointed out (Heritage, 1984; Leiter, 1980), communication involves interlocutors reciprocally attending to one another as well as to contextual cues and the topic at hand, which is how intersubjectivity gets accomplished in general (Cooren, 2004b; Schegloff, 1991). Taylor and Van Every's (2000) explanation of communication as co-orientation draws on Newcomb's (1953) notion of an A-B-X exchange, where X is the "object," problem, or situation to which actors/actants A and B both orient, for example when looking for a way to move a problematic situation forward: A provides B with information X_a that change's B's capacity to act on X.⁵⁴ Given the contingent nature of hospital work (Lacoste, 2001b; Strauss, 1993), the X is usually a moving target, and in interprofessional practice, it can mean different things to different

⁵⁴ In this sense, communication does more than represent; it transforms states of being. In Taylor's view, it is the phenomenon of ditransivity in language that gives rise to the organizing properties of communication—the fact that an object can have a direct and indirect subject/recipient—and that communication is transactional in nature: A and B orient to X, but it may be an exchange where A gives B information X, thereby changing the states of both A and B.

professionals on the team. For example, a patient's rate of blood oxygen saturation means one thing to the physiotherapist and another to the home care coordinator. To the former, it is an indication of a patient's ability to mobilize in rehabilitation; to the latter, it can categorize the patient as needing placement in certain institutions in the community post-discharge.

Indeed, it bears repeating that a principal challenge of interprofessional practice is denoted by the prefix *inter* (Bennington, 1999): Practitioners must attend not only to representing their own professions and to enacting these bodies of knowledge with regard to X, but also to bridging the epistemic-practice differences between the professions as they integrate their efforts in patient care. The interprofessional performance is then precisely this attending to the problem at hand (X) from one's professional perspective *as well as* attending to the perspectives of the other professionals involved, which we might represent as:

$$A \rightarrow Xf(A)$$

$$A \rightarrow Xf(B)$$

$$A \rightarrow Xf(C)$$

...etc., where A, B, and C stand for professional representatives.

These equations illustrate in simplified form what I discussed earlier as a challenge of interprofessional practice: a rudimentary proficiency in multiple professional languages and cultures. We may recall that Opie (1997b, 2000) would call these languages and cultures *Discourses* (Alvesson & Karreman, 2000), following Foucault (1972b, 1980) to emphasize how professional perspectives afford particular perceptual and interpretive resources for framing problems. For our purposes here, interprofessional sensemaking in the patient case review means attending to the mutations of X in interactional flow and having some sense of what X means to other professions. Indeed, the meaning of X is never a given and is rarely singular, and how team members frame X in their discourse mobilizes certain agents (Castor & Cooren, 2006). In patient case reviews, this framing is often accomplished through knowledge claims that foreground (or figureground) certain aspects over others. As Weick explains, this framing is a way of reducing equivocality, of making sense, of determining the

values, priorities, and clarity about preferences to help determine what matters or counts most (1995, p. 27-28).

3.3.2. *Heedfulness in interaction: Collective minding*

The interprofessional practice of problem definition in the patient case review is consequential to articulation work on the team and in the hospital (Strauss, 1988), wherein one is attuned not only to how his or her own efforts fit into the general stream of actions, but also to others' need to articulate their efforts. It is consequential because the definition of problems can be accomplished with more or less heed, which, when taken in the aggregate, contributes to what Lingard and others call collective competence (Boreham, 2010; Lingard, 2013). The notion of heed was developed by Weick and Roberts (1993) to explain predispositions to action in high reliability organizations (HROs, Weick, Sutcliffe, & Obstfeld, 1999), that is, organizations whose failure would be so catastrophic that organizational resources are focused intensely on rendering work processes reliable, such as firefighting teams, air traffic controllers, NASA, and nuclear plants.

A predisposition to “heedful interrelating” means articulating one’s actions with those of others attentively, carefully, conscientiously, vigilantly—in other words, heed is a quality of attention to action (Weick & Roberts, 1993, p. 361). The health care literature often invokes the HRO literature with regard to questions of patient safety, medical error, and adverse events (e.g., S. Gordon, Mendenhall, & O’Connor, 2012; Leonard, 2004; Spear & Schmidhofer, 2005), all of which are concerns inherent to a notion of collective competence. The basic argument is that in HROs, there is stability in the sensemaking or cognitive processes and variation in activity patterns (Weick et al., 1999), and that this fosters effectiveness, which we will recall from Opie means doing the right thing at the right time.

Weick and Roberts (1993) suggest a model of heedful interrelating that situates mind not “in the heads” of individuals but in the system invoked or created by their interrelating. This perspective resonates with our earlier discussion of knowing-in-practice, and indeed, draws on Hutchins’ notion of distributed cognition to introduce the idea of collective mind. They call it the CRS model (for contribute-represent-subordinate), and they offer the example of the flight deck, defined as a system of

people, artifacts, and routines implicated in the take-off and landing of an aircraft. Both the pilot and the flight director on the ground represent their actions to the others in the system through symbolic means (i.e., communication in interaction), and then articulate their own actions accordingly, which means they subordinate their individual choices for subsequent actions to the current situation that is collectively defined.

Collective mind emerges from this interrelating; “the actual completion of the taxiing cannot be attributed solely to the pilot’s or the flight director’s knowledge” (Cooren, 2004, p. 523). Collective action can become heedless when representation of the collective situation fails; hence representations have to do with the capacity to coordinate participants’ contributions. To explain interprofessional sensemaking and collective mind in the terms that Weick and Roberts suggest, interprofessional team members *contribute* their individual actions to care while envisaging—*representing*—a social system of joint actions and, in fitting in their actions vis-à-vis this representation, they can be said to be *subordinating* their actions to this representation. This *representation of the social system* is a key component to articulation work, and this fact clearly demonstrates how the practice of the patient case review in rounds is situated in a web of other practices and as such, impacts from its heedful or heedless performance can be felt downstream.

“Whatever the representations are, what is at stake is not necessarily shared meaning or representation but the capacity of these representations to coordinate the contributions to make them minimally compatible and harmonious” (Cooren, 2004, p. 524). When interrelating breaks down, individuals represent others in the system in less detail. When the representation is impoverished, such as when certain salient domains of concern are not made available to all, heedful collective minding is impaired and articulation work becomes more challenging. Linking this back to the interprofessional practice literature, we know that team members do not necessarily share mental models or representations (Courtenay, Nancarrow, & Dawson, 2013), but when we take a knowing-in-practice view that focuses on communicative action and heedful interrelating, we have a different framing that sheds light on how heedful interrelating might have an impact on issues such as medical error, continuity of care, and patient safety.

As Cooren (2004b) points out, the enacted quality of collective heedfulness is not limited to the high-reliability organizational situations studied by Weick and Roberts, but

can be present in mundane organizational situations, such as interprofessional team rounds. Indeed, while acute care hospitals are decidedly concerned with effectiveness and reliability—making the right decisions at the right times so as to reduce adverse events—they are also equally concerned with efficiency and the bottom line. (This was evidenced in my field work by one UC who occasionally reminded the team, “It costs \$1500 a day to keep them in acute; if they don’t need to be here, then let’s discharge or transfer to a lower level of care.”)

Cooren (2004) develops the CRS model to show what collective mind or distributed cognition looks like at the level of talk-in-interaction, redubbing it “collective *mind*ing” to underscore his processual focus. Citing Schegloff (1991), he claims that conversation can be understood as an “understanding-display device” (Cooren, 2004b, p. 528), and explains that, through turn-taking machinery, a joint situation—an envisaged system—can be created. Indeed, fellow organizational communication scholars Fauré and Arnaud explain that studying “how interactions work [can] reveal patterns of collective intelligence,” which they argue has to do with a “capacity to connect—coordinate and co-orientate—distributed forms of cognition” (2012, p. 216), which resonates with the knowing-in-practice perspective that sees practice as ordering heterogeneous knowledges. The representations of this system (the Xs) must be made present or *presentified* in interaction (e.g., Cooren & Matte, 2010), which presupposes someone who is able to recognize what is being made present (i.e., the A-B from our previous triad). The notion of the presence and absence of collective heedfulness helps to explain the differences across the teams I observed. In fact, one of the major variations in how teams accomplished the patient case review, namely their introductions, can be explained by turning to this CRS model understood through a communication lens, and this is explored in more detail in Chapter 6.

3.4. Focusing the kaleidoscope

In this chapter, I have covered a lot of ground bringing together what I called a kaleidoscopic scaffolding to theorize the patient case review as a situated practice of collective sensemaking accomplished in communicative action. The discussion opened with Opie’s (1997b, 2000) description of interprofessional teamwork as discursive knowledge work to offer an interesting perspective from the IP literature. This move

provided a sounding board for contributions from organization studies that questioned the analytic division between knowledge and practice presumed by some in the interprofessional practice literature. I then began building a multi-layered case for seeing the discursive knowledge work accomplished in interprofessional rounds as instances of authoring through problem setting. The first layer was a discussion of knowledge and knowing as being inherently tied to newness or ambiguity in order to move towards a perspective on problem setting. Next, the process of knowing was described as a situated and embodied one of making distinctions—or foregrounding or figuregrounding. Contributions from pragmatists were put forward to underscore how knowledge and knowing are oriented to problematic situations and the ongoing stream of action.

With this foundation in place, perspectives from symbolic interactionism were drawn on to discuss how knowledge claims depend on (and define) situational resources involving identity, legitimacy, and sanction in the form of appropriateness judgments. This view was enriched with a consideration of how practice incorporates and orders the material into the social, under the moniker of knowing-in-practice. I then brought this back to a CCO view of communication to show how communicative action is much more than simple transmission of information: It is where and how collective sensemaking practices take place through co-orientation. At the interactional level, as will be shown in subsequent sections, the patient case review can be accomplished with more or less heed, which has to do with how contributions and representations (and subordinations) are made present in interaction.

Three strands of thought mentioned here will be taken up in the Analyses section: the issue of heed in the performance of introductions to patient case reviews, questions of hierarchy and power in problem setting in the presence of medical authority, and the question of stabilizers of shared sensemaking practice. But before taking up these issues, an introduction to the field site and the teams in the study is in order.

4. The Teams and The Fieldsite

In the literature on health care teams, there is a dual approach to studying teams and teamwork. On one hand, the entativity of teams is considered, for example through typologies of various forms of collaborative work (e.g., Reeves et al., 2010), and explanations are found in variables such as team membership stability, history and maturity, composition, and the like (e.g., Drinka & Clark, 2000; Lemieux-Charles & McGuire, 2006). Some authors point out health care teams' often porous and fluid boundaries, suggesting instead the concepts of *knotworking* (e.g., Varpio et al., 2008) or *teaming* (Bleakley, 2012) to draw attention to contextual complexities that cloud team boundaries or render them less relevant. On the other hand, team *process* is equally highlighted in this literature, and the focus is on *teamworking* or collaboration—as activity—and its determinants (e.g., Clarke, 2010; Molyneux, 2001; Poulton & West, 1999). This duality of approach appears in much of the literature, for example as represented by D'Amour's (1997; 1998) application of structuration theory to teamwork, which insists on the interaction between structure and process.

This literature was fresh in my mind when I plunged into the newness of both my field site and my role as ethnographic researcher, and it undeniably influenced my foci. Consequently, this chapter embraces these dual considerations, addressing questions of entativity as well as considerations of process with regard to the teams in this study. I open by setting the stage and walking the reader through my field site before describing in greater detail the three teams, including their composition and their communicative practices. These mini case studies highlight aspects of team practice that emerged from comparison within and across teams that proved meaningful to the overall research narrative this study tells. These aspects inform and introduce the three main questions or concerns that will preoccupy the three Analysis chapters.

4.1. Setting the stage

When I was negotiating access to my field site, the health authority project administrators with whom I was communicating asked if I wanted to study “good teams” or “bad teams” or both? Given my novice status in the hospital context, I chose to observe both, temporarily suspending my own critical reservation about these evaluative labels and knowing that such a choice offered a broad exposure of the gamut of team communication dynamics. The choice to study acute care teams was largely serendipitous, as the health authority was in the midst of unrolling the Integrate pilot project (described in detail below), which focused on communication in acute care teams, and my access to the site was facilitated by this pilot project.

I was initially assigned to three acute care teams, one considered by Integrate representatives to be a “dream” team and the other two “dysfunctional.” Over the course of my field observations, things shifted a bit as I was invited to observe another “amazing” team, and one of the poorly functioning teams was restructured and given a sub-acute mandate, so in the end, I followed three teams: an Intake team, an Intervention team, and a Short-Stay General Internal Medicine (GIM) team.⁵⁵ These three teams offered a bounty of data during my time in the field, which I waded through during coding, transcription, and analysis. Over the course of the data collection and analysis processes, I focused my attention on figuring out *in my own terms* how these “good” or “bad” teams differed in their practices, and why these differences might be important, as Integrate representatives so obviously thought they were.

4.1.1. *The hospital*

The field work took place in a major metropolitan teaching hospital in Western Canada. With over 400 acute care beds, the hospital serves as a trauma centre for the regional health authority as well as a repository of expertise in specialties such as neurosurgery and at-risk maternity care. The hospital’s catchment area encompasses nearly a third of its province’s population base, and patients from remote regions of the

⁵⁵ For reasons of participant confidentiality, I identify these teams generically by the focus of their work rather than by their titles within the hospital (such as Diagnostics or Birthing Unit). Similarly, the identities of all participants and the patients they discuss have been anonymized through the use of pseudonyms.

province are frequently brought here for specialty care. With an emergency room that is one of the province's busiest at nearly 70,000 visits per year, the need to get patients efficiently through the hospital is a major organizational concern. Consequently, the push for rapid patient flow can be felt on most wards, and it is not uncommon to see patients set up in beds in hallways, sometimes with curtains around them for privacy.

4.1.2. *The Integrate project*

As mentioned, I gained access to my field site on the coattails of a Ministry of Health project that I've given the pseudonym *Integrate*. Implemented in several hospitals under two regional health authorities, Integrate was based on the concept of "streamlining the patient journey" and addressing "the complexity of interdisciplinary care" (Fraser Health Authority, 2008) by "increasing communication" among health care providers caring for the same patient (Health, 2008). The project aimed to increase organizational efficiency in the participating hospitals by reducing wait times for emergency services and by eliminating the duplication of services. Integrate was comprised of two parts, the first of which was geared to structuring talk during daily team rounds through goal-focused questions to direct team attention to issues of efficiency (e.g., "What do we need to do to get this patient moving towards discharge?" or "If we can discharge tomorrow, why can't we discharge today?"). This aspect of the project aimed to have practitioners incorporate patient discharge planning into their care planning activities at rounds. The second part, TRAC, was a systematic tracking of each unit's and each team's rates of discharge and readmission, average patient lengths of stay, unnecessary delays and so forth—data which was used to map and monitor bottlenecks and other patterns of inefficiency in service delivery. My access was granted to observe talk in team rounds, although I heard informally about the second from the Integrate UCs.

During the project's initial 6-month deployment phase, Integrate sent UCs to help facilitate rounds on the participating teams, some of whose members had no history of conducting daily interdisciplinary rounds. The UC would lead or co-lead rounds with the team's charge nurse, the PCC (for Patient Care Coordinator). The UC's task was to structure and frame patient case discussions by posing a scripted set of questions that focused talk around goal-oriented domains of concern: the patient's medical status and goal and any relevant medical history; the patient's socio-functional status and goal; and

any concerns around discharge such as housing, care needs in the community, and so forth (see Figure 4.1).

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Goal Focused Question	Required interprofessional Team Reporting
1. What is the patient's medical status?	The physician or delegate (RN/PCC) reports on: <ul style="list-style-type: none"> Current medical status today Relevant medical history (for newly admitted patients only) <ul style="list-style-type: none"> - Describe medical status as of today - Report changes from previous day - Identify treatment plan/progression of treatment plan
2. What is the patient's functional status (physical and social)?	The interprofessional team reports on: <ul style="list-style-type: none"> Baseline (usual) functioning and social situation (identified for newly admitted patients only): <ul style="list-style-type: none"> - Mobility, ADL's, cognitive status prior to acute episode - Previous living situation/support system - Home Health/private supports history - Existing barriers/challenges to return to previous living situation Current functioning in relation to baseline: <ul style="list-style-type: none"> - Current mobility, ADL's, cognitive status - Potential to reach baseline* - Newly identified barriers/challenges to return to previous living situation
3. What is the discharge goal?	The interprofessional team: <ul style="list-style-type: none"> Determines the most appropriate discharge destination based on the current and projected medical and functional status* Identifies the medical goal in order for the patient to be discharged to the identified destination Identifies the functional goal in order for the patient to be discharged to the identified destination Identifies the projected discharge date based on projected time for the patient to meet medical and functional goals Clarifies service registrations
4. What is today's medical/functional plan to reach the discharge goal?	The interprofessional team: <ul style="list-style-type: none"> Reviews tasks assigned to team yesterday, indicates if they were completed and reports any barriers to completing tasks Identifies tasks to do today to progress patient to discharge goal Identifies and notifies team of any barriers/delays in progressing the patient to discharge goal Identifies patients requiring TRAC referral and places purple sticker on the Kardex
As soon as the team is able to predict when the identified medical/functional goals will be met:	
5. What is the confirmed discharge plan and date of discharge?	The interprofessional team: <ul style="list-style-type: none"> Confirms discharge plan and date of discharge Reviews discharge checklist and correlating tasks are assigned Identifies potential discharges within 48 hours and places red sticker on the Kardex Identifies ALC status if applicable and completes green ALC sticker and places it in the physician order section of chart

Purple sticker?

Figure 4.1. Integrate's goal-focused questions, taken from the UC training manual

The overall aim of daily rounds was to identify any changes in the patients' status and to share this information with other team members and, especially, to identify barriers for discharge. The UCs recorded and tracked this data, sometimes prompting

the PCC to provide information (see Figure 4.2). Instructions were clearly written in bold font at the top of each patient's information log: "Document ongoing medical plan, current functional/social status and plan to reach functional/social goal" (see Figure 4.3). When the Integrate project was in its early days, the UCs would facilitate rounds, asking questions that circumscribed sensemaking organized around these domains of concern. By the time I got on the scene, at the rounds of certain teams, the UCs would only occasionally call out "Function?" to reorient team discussion back to the sanctioned matters of concern and to request the information they needed to fill in their documents. (For other teams, the UCs ceased attending rounds altogether because they covered these domains of concern "independently.")

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Targeted Rounds for Assessment and Care Planning
(TRAC)

Documentation Form

Patient Issue (Foci): _____

Date	Review of Previously Assigned Task(s)	Goal (revised as necessary)	Plan to Reach Identified Goal(s)	Assigned Tasks	Review Date

Patient Issue (Foci): _____

Date	Review of Previously Assigned Task(s)	Goal (revised as necessary)	Plan to Reach Identified Goal(s)	Assigned Tasks	Review Date

Figure 4.2 UC's documentation form, taken from UC training manual

Easy Peel Label

NW

ONGOING INTERPROFESSIONAL CARE PLAN
Document ongoing medical plan, current functional/social status and plan to reach functional/social goal

DATE	COMMENTS

Figure 4.3 UC's care plan documentation, taken from daily practice

From Integrate's perspective, a team was deemed "good" or "high functioning" when it could and would independently address the loosely scripted domains of concern during patient case reviews. These teams also tracked patients across diachronic rounds discussions, for example, recalling on Wednesday that a test was ordered for Patient Chan on Monday and asking whether the test had been administered and if not, why not. A "good" team also did not raise red flags in the efficiency tracking component of the Integrate program. In contrast, some teams had high rates of discharge and immediate readmission, and they were flagged by the Integrate systems analysts for monitoring by a UC during rounds. By the time I came on the scene,, the UCs no longer attended the Short-stay GIM team's rounds, only attended about half the time for the Intake team, and attended the rounds of a "dysfunctional" team, the Intervention team, on a daily basis (in fact, when the UC was not present, this team sometimes elected not to hold rounds at all).

4.1.3. *The health care professionals*

The health care professionals who were present at rounds varied from team to team and from day to day, but rounds never took place without the presence of a PCC. Other health care providers were also part of the “core interdisciplinary teams” (Fraser Health Authority, 2008), and Integrate documents described the scope of practice of each with regard to the team, my synopsis of which is offered in Table 4.1.

Table 4.1 *Team members and their professional Jurisdictions*

Title	Explanation	Team Role and/or Professional Jurisdiction
UC	Utilization Clinician with the <i>Integrate</i> project, always a nurse. This person must take notes on the issues discussed and the actions to be taken. These notes are used to analyze trends in the system (delays, bottlenecks, inefficiencies).	Information gathering. This person usually opens and closes each patient case discussion. On teams deemed to function autonomously, the UC does necessarily attend rounds.
PCC	Patient Care Coordinator, always a charge nurse.	Information and action management (articulation work); leads patient discussions during rounds. She or he is in charge of the other nurses in the unit. Rounds do not take place without a PCC.
PT	Physiotherapist	Assessment and rehabilitation of patients' physical functioning and anticipation of needs post-discharge.
OT	Occupational therapist	Assessment and aid of patients' functional and cognitive abilities to complete activities of daily life (ADLs), such as self care, cooking, navigation of their living environments, etc.
SW	Social Worker	Deals with the psychosocial aspects of patient care that do not fall strictly into the domain of psychiatry, e.g., family issues, substance abuse, aid programs for disadvantaged patients.
PHARM	Pharmacist	Manages patients' medications for medical issues. Cannot prescribe (only an MD can).
GAP	Geriatric Assessment Program representative, always a nurse with experience in geriatrics. Only present at the Intake team rounds (see below)	Assesses geriatric patients regarding dementia-related cognition and physical function; meets with family members and liaises with the geriatric MDs and other MDs.
DIET	Dietician	Manages patients' diets and diet-related physical concerns when needed, such as before and after surgery or diagnostic tests.

Title	Explanation	Team Role and/or Professional Jurisdiction
CCD	Client Care Coordinator Department representative, usually a nurse, but sometimes a SW	Coordinates home care services in the community for patients being discharged and liaises with alternative levels of care such as nursing homes and long-term care facilities. Not an employee of the hospital.
MD	Medical Doctor, or hospitalist attached to the hospital in question. Only present at the Short-stay GIM team rounds (see below)	Responsible for all medical decisions for the patient's care, including writing orders for various services, orders without which many of the other team members cannot take action.
CTU	Clinical Teaching Unit, refers to medical students and residents. Only present at the Short-stay GIM team rounds (See below)	Responsible for some medical decisions for the patient's care, and usually referring more important medical decisions to their supervising MD. Can write some orders. (Not explicitly mentioned in the Integrate documents.)
BN	Bedside Nurse. Only present at the Short-Stay GIM team rounds, see below)	Bedside care of assigned patients, including administering medications, monitoring vital signs, wound care, mobilization, toileting, etc.

4.1.4. The teams

When I began data collection in late summer of 2009, the Integrate project had already been in place at this hospital for 4 months. I started out observing three teams, what I call here the Intervention team, the Short-stay GIM (general internal medicine), and another GIM team. I was later invited to observe a fourth, the Intake team. By the end of the field work, I had retained three teams, dropping the second GIM team because its acute care status, mandate, and membership changed half-way through my data collection.

Over time, I built a rapport with different members of each of the three retained teams. In the beginning, however, my primary informants were the UCs, whose presence at daily rounds was a function of their administrative data monitoring mandate rather than the provision of care, and in this sense, they were relative outsiders to the teams if not to the hospital context. Their position offered a unique perspective on the different teams because each UC had attended the rounds of most of the participating teams, and they corroborated stories about these teams with each other in their backstage offices (Ellingson, 2003; Goffman, 1959b). The Intake team and the Short-Stay GIM were considered “dream” teams that required little or no surveillance or

facilitation by the UCs, while the Intervention team was considered dysfunctional to the point of being painful for the UC who, in their words, had “to babysit them.”

The UCs explained the differences across the teams in various ways, particularly in psychological terms, such as the individual personalities of a team’s PCCs (the charge nurses) and the attitudes held by each unit’s manager regarding the Integrate program and interprofessional rounds in general. For example, a PCC might be described as a “drill sergeant,” and a manager as “completely out of touch with what makes a team work,” or conversely as “on board.” They described an ideal team as one where all members participated and contributed, and didn’t need to be “spoon fed” by the UC or the PCC. They oriented to how autonomous each team was, meaning the ease (and compliance) with which each team accomplished the tasks set out by the Integrate project; in other words, how well the team addressed Integrate’s scripted set of goal-focused questions, as mentioned above. A “good” team was independent enough not to require the presence of a UC to enact the script, whereas the “poor functioning” teams had to be prodded to address the questions.

I paid attention to these explanations, especially in the beginning, when I was building an understanding of Integrate’s goal-focused questions and of how a hospital functions. But as time wore on, I focused more on the differences, similarities, and patterns in communicative practices and on differences in the ways in which the teams accomplished rounds, including what seemed to help or hinder their performances.

In terms of similarities and at the most fundamental level, every team talked about every patient on their ward, and the person who reported most often was the PCC, the undeclared team leader who was present at every rounds meeting. All of the teams also tacitly or explicitly attended to the patient care trajectory, situating the patient’s current status in time and space, making sense of previous events and anticipated future contingencies.

The teams differed however in many other ways, including their composition; the stability of their membership; the rotation of their leaders; the geographic locale where rounds were held; the average length of their rounds and of each patient case review; the recursivity of their patterns of talk, especially in the introductions to patient case reviews; the sharing of the conversational floor; and the degree to which Integrate’s

scripted domains of concern were addressed. Below, I introduce each team, following their typical chronological involvement in the patient care trajectory (i.e., Intake, Intervention, and then Short-Stay GIM), and describe some of their differences and the characteristics of their communication practices. These differences (and the similarities) will inform the three main lines of inquiry considered in the Analysis.

The Intake team

The interdisciplinary rounds of the Intake team were lively affairs where their pragmatic, no-nonsense approach was spiced with dark humour, and I was glad for the invitation by a UC to attend the rounds of this “dream team.” Rounds were held first thing in the morning, just after the shift change for nurses. Team members would slide into their seats with a cup of coffee and scan their patient information or census sheets⁵⁶ and crack a joke or two with other team members before things got underway. In terms of friendly social relations, team members shared important events with one another, such as family illnesses and weddings, and they seemed to know of each other’s pastimes in some cases, as these were mentioned in rounds talk. Generally speaking, the care professionals on this team were quite experienced and appeared confident in their professional roles, describing themselves as self-selected for work on this kind of unit (“You gotta have a Type A personality around here or you won’t last long,” one informant told me). They also appeared comfortable in their interprofessional team roles, and most of them participated freely and easily in discussions, without needing to be being called upon by the PCC or the UC to provide information, which would seem to signal a considerable measure of participatory safety, described by Jones and Jones (2011) as a climate in which all team members feel free to contribute without fear of recrimination. Talk was fast-paced, problem-focused, and sometimes brusque but not without compassion.

On this team more than the others, there were constant reminders of the organizational need to move patients through the system. In fact, one CCD described Intake as the hub of the hospital, because its patient load dictated the pressure for patient flow throughout the other wards. Rounds were held in an oversized conference room in the ward’s backstage (Ellingson, 2003; Lewin & Reeves, 2011). The room also

⁵⁶ Daily list of patients on the unit, generated by their professional department, e.g., Social Work.

hosted what was called the daily “Bed Meeting,” which was usually attended by PCCs from all wards.⁵⁷ The notes from this meeting were always posted on a huge white board on one wall in the room, displaying the patient loads and overcapacities of each ward of the hospital, and serving as a perpetual visual reminder of the organizational patient flow concerns. In addition, a representative from a “pay for performance” initiative, or P4P, occasionally attended rounds, thus embodying the organizational ideal of efficiency.⁵⁸ Sometimes the unit manager would sit in on rounds, the only team for which this was the case.

Discussions during this team’s rounds often focused on questions of jurisdiction (e.g., Medicine versus Psychiatry; Psychiatry versus Social Work) and where they anticipated sending the patient next, just as it focused on trying to figure out why the patient was in the hospital, or what Robichaud et al. (2004) call retrospective and prospective narrative sensemaking. In this way, the patient care trajectory was made present in most patient case discussions.

Membership and attendance

This team had more regular members attending meetings than the other teams, usually between 9 and 10 people, including two PCCs who shared the task of facilitating discussions by splitting the patient load according to the different areas of the unit. Indeed this unit saw the most rotation in team leadership: The rounds facilitation responsibility rotated daily among the nurses on the unit, so for example, “Darlene” would serve as PCC1 at rounds on Monday, as PCC2 on Tuesday and then not attend at all on Wednesday, so that there was never the same duo of PCCs two days in a row. In all, I observed 14 different PCCs fill the facilitator role in various combinations. Given the PCCs’ team leadership role, we might expect this frequent rotation to hinder the trust that is necessary for team effectiveness (Drinka & Clark, 2000; Ellingson, 2002; Jones & Jones, 2011; Salas, Sims, & Burke, 2005). However, this never seemed to be an

⁵⁷ The Bed Meeting was run by the hospital’s nurse-administrators and it had an almost marketplace feel to it, with the meeting facilitators announcing the beds available in the community and other hospitals, and the PCCs negotiating to claim them for the patients on their wards.

⁵⁸ The objective of the P4P initiative was to motivate employees to attend to patient flow by rewarding the ward as a whole for moving patients quickly from Intake to a bed on another ward, discharged to home, or somewhere in the community. I don’t know how successful it was.

impediment to this team the way it was to another, which raised the question of what made a difference, an issue I consider in Chapter 8, which considers stabilizers of practice.

Also present at the table were two PT representatives, who remained relatively stable (i.e., usually the same people filled these roles) over the course of the 4 months I observed this team.⁵⁹ There was a CCD present at almost all the meetings, and was the same person throughout the fieldwork. Similarly there was one main representative for OT, and two others who filled in during that person's vacation. There was one SW representative who attended regularly throughout the fieldwork. The UC representative also remained the same over the course of the field work, but was often absent. (UC presence might suggest that the Integrate representatives considered the Intake team to be only semi-independent, but the UC presence was explained by Intake's importance as the hospital "hub" and as the starting point for many patient care trajectories in the hospital, trajectories that were closely followed by the Integrate UCs.) This team had no DIET representative as the other teams did, but it had two regular members that the other teams did not. The first was a speech language pathologist, who almost never spoke during rounds but who was present on the team to help with quick assessments for potential stroke patients, among other things. The other was an experienced geriatric assessment nurse, or GAP. She spoke regularly during discussions and served as an informal leader and strategist in complex cases concerning geriatric patients. As mentioned earlier, there was occasionally a representative from the P4P project, and a handful of times, a manager came to the meetings. There were never any MDs or CTUs present at these meetings, and they were invoked in discussion less often than on the other teams I observed.

Quantitative snapshot of rounds

The average patient case load for this team was 36 patients n=16, based on structured observations, see Appendix A for sample), but at one point they had over 50

⁵⁹ I began observing the Intake team two months into my six months in the field at the invitation of a UC.

“admits.” Their rounds averaged just over 35 minutes long, and the average length of the patient discussion was just under a minute (0:58).⁶⁰

Table 4.2 Intake team membership rotation

Profession	Number of representatives over fieldwork (n= 21 meetings) and frequency of attendance	Number of representatives during recorded meetings (n=12) ⁶¹	Days present	Time present
PCC (two present who rotated daily)	14*	12	21	100%
UC	1	1	14	67%
OT	3 (a=6, b=2, c=5)	3	13	62%
PT (usually two present)	6 (a=1, b=17, c=1, d=13, e=1, f=1)	3	20 with two PTs; 16 days with one PT	95%; 76%
CCD	1	1	15	71%
SW	1	1	18	86%
GAP	1	1	16	76%
SLP	1	1	15	71%

* a=3, b=7, c=1, d=3, e=3, f=1, g=2, h=2, i=1, j=3, k=4, l=5, m=1, n=1

Format of rounds

This team was unique from all the other teams observed in that there were two PCCs who split the list of patients. A UC attended approximately half of the rounds that I observed and, when present, she introduced case discussions by providing the patient’s name, age, bed number, general diagnosis or diagnostic query, and the number of days that the patient had been in Intake.

⁶⁰ These averages are based on the recorded meetings, n = 12 for this team (see Table 4.2).

⁶¹ The discrepancy between meetings observed and meetings recorded is explained by two considerations: First, I obtained ethics permission to conduct audio recordings after the fieldwork had begun, and second, I chose to start recording once I felt that I had gained sufficient familiarity with what was going on and had established rapport with participants.

Because this was an Intake team that dealt with patients at the beginning of their care trajectories, there was a lot of sensemaking activity to draw a comprehensive picture of each patient. Introductions to patient case reviews tended to be the most tightly scripted on this team and covered the components of the Integrate goal-focused questions. They followed the order of patients listed on team members' daily patient information sheets (i.e., "face" or census sheets) and typically included the patient's name, age, living situation, bed number, and a brief description of the problems the patient presented upon admittance as well as the patient's functional status. Psychosocial issues were often mentioned and discussed further when deemed relevant.

The team only discussed patients who had already been admitted, but sometimes they made reference to those patients in the waiting areas whom they anticipated would be admitted. Of course, there was little discussion of patients for whom PCCs had limited information, sometimes because they were newly admitted and diagnostic work had yet to take place.

The Intervention team

This team was identified by the Integrate directors and UCs as being poor functioning in terms of its communication. The flavour of rounds depended greatly on the facilitating PCC, with significant variation across the three main PCCs who led rounds, as I will describe shortly. Patient case discussions were primarily between the UC and the PCC, although other team members did contribute, to request or offer information when it was solicited by the UC or PCC or when it was within their professional scope of practice. The joviality of the Intake team's rounds was generally absent here, and there was little discussion of social or personal affairs; attendance sometimes seemed to be a chore for some members, including PCCs. (One UC once exclaimed to me that attendance on these rounds felt like "babysitting" and "pulling teeth.") Indeed, my informants reported that the team had no previous history of doing interdisciplinary rounds, and that there was little buy-in for them at the managerial level on the ward. They also reported tension between ward employees and the new manager.

Whereas on the Intake team, hospital-wide concerns of organizational efficiency were woven into the team's ongoing preoccupations, on the Intervention unit,⁶² they seemed at times to be a source of friction, rubbing against the unit's own goals. It bears mentioning that this unit was specialized in certain interventions, so that a backlog here could cause flow problems elsewhere in the hospital, especially in the Intake unit, and one UC described this as an "external push" for the Intervention team to get patients moving and to open up the beds for other patients needing this intervention. Additionally, when beds opened up on the Intervention unit and there were no patients needing intervention immediately in the queue, "off-service" patients could be sent to occupy them, which made at least one Intervention PCC express resentment because they thought this practice interfered with the unit's own patient flow.

Not surprisingly, talk on this team focused primarily on medical and nursing considerations related to the intervention, especially wound care, drains, diet, medications, and diagnostic tests, so in some ways, the Integrate project, which had a more organizational focus, didn't fit with the team's more ward-level focus. Relatedly, this meant that the patient care trajectory was considered primarily at the point of intervention, although discharge concerns were also discussed at times. Talk did not flow as freely on this team, and tended to be dominated by the PCC; as mentioned above, discussion dynamics varied greatly across PCC facilitators.

Team rounds were held in a secluded multipurpose conference room down the hall from the nursing station, with a large table with ample seating for the handful of team members who attended. One PCC on the team would sometimes start reporting on patients before other team members had settled into their seats, and would sometimes give no indication when a new patient discussion was starting other than a brief mention of the patient's last name.

Membership and attendance

This team had the fewest members in attendance, between three and seven people on average, including the Integrate UC, who was almost always present. In fact,

⁶² I use the terms *unit* and *ward* interchangeably, following my study participants' use of terminology. Each ward or unit was usually divided into two teams, with a common manager for both.

on one of the few occasions when the UC was absent, the PCC decided to cancel rounds that day because “the boss” wasn’t there. This off-hand comment and the cancellation of rounds indicate low buy-in on the part of the team leaders (the PCC and potentially their manager) for the Integrate initiative and interprofessional rounds in general. It also suggests that talk was perhaps designed to be accountable to the UC rather than to the team, something I consider in Chapter 8.

The PCC role on this team alternated, mainly between three charge nurses who rotated every three to five days. Other charge nurses also replaced them during vacations and the like, but these three were the regular players. Other members on the team included representatives for DIET, physiotherapy (PT), pharmacy (PHARMA), social work (SW), and home care coordination (CCD, or client care coordinator), which liaised with services in the community.

Quantitative snapshot of rounds

The average length of these rounds was 30:27 minutes (n=12 for this team, see Table 4.3), with the average length of patient case reviews at 57 seconds, and an average load of 32 patients (n=13 from structured observations; in this count, I have discarded two meetings to which I arrived late). However, these averages are somewhat misleading because the lengths of rounds and of patient case reviews varied depending on the PCC facilitating rounds: PCC-1 averaged a length of 23:21 minutes (n=3 recorded meetings), PCC-2 a length of 27:19 minutes (n=5), and PCC-3 nearly doubled PCC-1’s average with 40:54 minutes (n=3)⁶³. This variation in average lengths was matched by variation in format, as we shall see below.

Besides the UC and PCC, typical attendance at rounds included a pharmacist (PHARM), a regular DIET representative; a CCD that rotated somewhat frequently; a steady representative of SW; and a physiotherapist (PT). Their attendance and number of representatives are listed in the table below. The professions with less frequent attendance, especially SW and CCD, were also the ones with the least number of representatives within the hospital, and they were often stretched to limit, needing to

⁶³ These sample sizes are admittedly very small and I make no claim as to their statistical significance. However, given that I had observed this team for several months before starting recordings, I can say that this pattern was representative of what I had previously observed of these PCCs.

cover the patient needs of several wards. In particular, the CCD would sometimes arrive late to rounds, obviously harried, and would beg, “Can we please talk right now about the patients for discharge who need homecare so I can leave and start making arrangements?” This request was sometimes granted, more or less grudgingly depending on the PCC.

Table 4.3 Intervention team membership rotation

Profession	Number of representatives over fieldwork (n=35 meetings) and frequency of attendance	Number of representatives during recorded meetings (n=12)	Days present	Time present
PCC	7 (a=1, b=3, c=12, d=3, e=7, f=1, g=1)	4	35	100%
UC	3	1	29	83%
PHARM	6 (a=13, b=4, c=1, d=3, e=4, f=3) (a and b overlapped 2 days)	3	26	74%
DIET	3 (a=8, b=16, c=1)	3	24	69%
CCD	7 (a=3, b=1, c=2, d=1, e=1, f=1, g=13)	3	22	63%
SW	2 (a=16, b=2)	2	17	49%
PT	4 (a=2, b=4, c=10, d=1; c and d overlapped 1 day)	2	16	46%

Format of rounds

The format, pace, and mood of rounds were extremely dependent on the PCC leadership on a given day and, because of this, communication patterns were inconsistent on this team: patient introductions were not standardized across the different leaders, and the scripted domains of concern were intermittently present. Leadership rotated on this team every three to four days, with three main PCCs who set the tone. Because this team’s rounds stood out for me as having much more variation

(and because they were singled out by the Integrate representatives), I will spend more time discussing the communication patterns of the different PCCs.

PCC-1 tended to race through rounds and often told stories tinged with moral overtones about professional incompetence or patient noncompliance but that lacked pertinent information for listening team members, especially with regard to patients ready for discharge (for whom homecare services might need to be arranged in advance). PCC-1 tended to hog the conversational floor, interrupting or talking over other team members, and frequently failed to mark acknowledgement of their contributions and sometimes ridiculed them. This PCC often used the first-person pronoun (e.g., “I want to,” “I think this patient is a pain”) to author and claim ownership of planned actions in the care plan, and also opened and closed each patient case discussion. Less time was spent referring to the nursing notes, and overall, this PCC did not often invoke or otherwise refer to written documents in talk (e.g., “It says here...”). Instead, PCC-1 would paint a portrait for each patient with assurance, almost by free recall, an impressive mnemonic feat. S/he relayed most information in narrative or story form, and did not seem to follow a recurrent script (certainly not the Integrate script) that focused talk.

In contrast, PCC-2 lurched through case presentations with long pauses, frequent sighs and exclamations of “I don’t know” as s/he looked over the nursing notes, piecing together the information for each patient in a very halting fashion. The other team members often responded to these frequent expressions of uncertainty by “filling in” the missing bits. PCC-2 produced introductions to patient case reviews with a recurrent if idiosyncratic format that favoured nursing-specific information in nursing jargon (such as “Q4H vital signs, wounds draining 30ccs”), which may or may not have been relevant to the scopes of practice of the listening team members. When I asked other members informally about the language used by this PCC to introduce cases, some indicated that they did not understand or that it was not pertinent to their scope of practice. In other words, PCC-2 did not seem to attend to the differing perspectives and concerns of the other professionals present.

The third PCC on rotation, PCC-3, also frequently expressed uncertainty, but tended to spend a lot of time trying to make sense of what was happening for each patient, stitching together disparate pieces of information from different sources including

the nursing notes and sometimes the patient charts,⁶⁴ and would often ask for the contributions of other team members. In contrast to the other two PCCs, PCC-3 gave comprehensive backgrounds on each patient, including the medical status and goal and psychosocial considerations, and frequently checked in with listening team members for their agreement or their knowledge of the patient's situation. Ironically, this extensive and inclusive sensemaking work at times seemed to frustrate the listening team members because rounds ran longer than usual when s/he was facilitating. In fact, the UC sometimes cut case reviews short by calling out the name of the next patient on the list.

From my perspective as non-participant observer, the wide variation in how these PCCs facilitated rounds discussions was a window into what made rounds seem to proceed smoothly on the other two teams. These were the basis for my conceptualization of the patient case review as a shared practice. Before reflecting on this further, I will introduce the third team in my study.

The Short-stay GIM team

The Short-stay unit cared for patients whose anticipated length of stay on the ward was a maximum of 7 days, and thus the notions of length-of-stay and organizational efficiency were written into their very mandate. Their patients required acute care, but typically not specialized care. This team was described to me by Integrate representatives as a “dream team,” one that carried out rounds with almost complete independence from the Integrate program. In fact, a UC was present at rounds only 4 times over the 6 months that I followed this team's meetings, and only within my first two weeks of data collection. The members of this team seemed to know each other socially, and sometimes talked about their families or their personal lives before and after rounds.

This team had a history of conducting interdisciplinary rounds before the Integrate project was put in place, and was reported to have had little trouble adapting to the pilot project's requirements. Both UC and PCC informants spoke glowingly to me of this unit's management and its approach to interprofessional teamwork and information

⁶⁴ Indeed, PCC-3 was the only PCC in my study that I observed bringing patient charts to rounds, which happened only occasionally.

sharing. Allied health (PT, OT, DIET, SW) and CCD spoke freely during this team's patient case discussions, sharing and requesting information, and regularly participating in shared sensemaking work. Most of the patients on this ward came from other parts of the hospital before being discharged and, accordingly, much of the team's talk in rounds was focused on discharge planning. (Incidentally, this was the only team that talked about an end-of-life, or EOL, room for palliative patients.) This was the only team of the three that ever saw hospitalists (MDs) attend rounds, who would drop in to discuss the two or three patients in their care on this ward.

One of the PCCs on this team worked with the unit's manager to experiment with the format of rounds, and their goal was to make "real-time information" available to all, especially the information held by bedside nurses (BNs) who were previously absent from these meetings. This experimentation took place during the last two months of my field work, and there was a major change in the physical location, format, and attendance of rounds (some of which is discussed in detail in Chapter 7 where I consider what these changes might have meant for collective sensemaking). Interestingly, rounds went from being called "Interdisciplinary Rounds" to "Nursing Rounds." Originally, rounds were held in a secluded multipurpose conference room almost identical to that of the Intervention team, with a conference table and ample seating, unused whiteboards, and miscellaneous equipment. However, with the change, the team moved rounds first to the nursing station and then to a cramped computer room right off the nursing station.

Membership and attendance

The core group of health care providers who were usually present at each daily team meeting included PCC, PT, OT, CCD, and PHARMA; DIET was also present 3 to 4 days a week, and SW was intermittently present depending on case load requirements. This core membership was quite stable over time. The representative for PT was the same person throughout the data collection. OT was similarly constant except for an overlap at the end of my study when the OT began training a replacement for an anticipated leave. Two people filled the CCD role, changing halfway through my data collection. The same person served as DIET throughout my study, except for one meeting. The SW position was intermittently filled by the same two people, and they did not attend rounds after the format changed (see below). The PHARMA role saw the most rotation, with 6 different pharmacists over the course of the study. The regular PCC

also changed part-way through my data collection as the permanent PCC returned from a scheduled leave.

With the change in rounds format, MDs continued to drop in to discuss the handful of patients in their care, and the medical residents (CTUs) also began to do so. In addition, the change saw the bedside nurses (BNs) being summoned to rounds to report on the patients in their care as the meeting progressed.

Leadership was relatively stable, with two PCCs on rotation to split the work load over the course of a week: One PCC led rounds from Monday to Thursday, while the other led rounds on Fridays. (No team held rounds on weekends because allied health did not work weekends.) The PCCs communicated regularly with each other on their face sheets (daily patient lists replete with relevant information), leaving notes to one another on which they sometimes commented while leading rounds.

Quantitative snapshot of rounds

Their rounds tended to last the longest of the teams, at an average of 49:54 minutes per meeting (n=6 recorded meetings), and an average of 33 patients were discussed (n=13, based on structured observations, see Appendix A for sample). The length of the average patient case discussion was 1:28 minutes, which was one and a half times the average length of the other two teams in the study.

Table 4.4 Short-stay GIM team membership rotation

Profession	Number of representatives over fieldwork (n=26 meetings)	Number of representatives during recorded meetings (n=6) ⁶⁵	Days present	Time present
PCC	3 (a=12, b=2, c=12)	2	26	100%
UC	3 (1 day each)	0	3	12%
PHARM	6 (a=1, b=2, 3=1, d=1, e=12, f=1)	2	18	69%

⁶⁵ Fewer meetings were recorded for this team because they changed the format of their rounds just as I started doing recordings, and the first few weeks post-change were too chaotic to permit audible recordings.

Profession	Number of representatives over fieldwork (n=26 meetings)	Number of representatives during recorded meetings (n=6) ⁶⁵	Days present	Time present
DIET	2 (a=12; b=1)	2	13	50%
CCD	2 (a=12, b=10)	1	23	88%
SW	2 (a=9, b=6)	1	15	58%
OT	1 (a=23)	1	23	88%
PT	1 (a=19)	1	19	73%
Hospitalist	11	6	19 (but only present for a few minutes each)	73%
Bedside Nurse	26	26	6	23%
CTU	6	6	3	12%

Format of rounds

Rounds started when everyone had arrived and settled in. Patients were identified by and discussed in order of bed number and name, which was how they were listed on each professional's daily list of the patients on the ward. Occasionally, MDs stopped by and discussion was reoriented to talk about the patients in that doctor's care. Some doctors immediately took control of the tone and agenda of the patient case discussion, interrogating other members for information and otherwise interpreting each case primarily from a medical standpoint. Other doctors let the PCC maintain her role as discussion facilitator. However, this variation depended on the doctor, and everyone else present appeared to acquiesce to the style thus imposed by each MD.

The experimental format of rounds was designed to include doctors and bedside nurses. The CTUs (to whom the PCCs referred only by the clinical teaching team they represented and never by their names as they did with the MDs) were supposed to drop in during the first half of rounds, and after much apparent prodding by the PCCs and the ward manager, they eventually began participating on a regular basis. Various MDs dropped in during the second half of rounds to discuss the one or two patients for whose

care they were responsible, although their attendance was not regular and nobody else on the team ever made mention of holding them accountable for attendance in the same way that they grumbled about the CTUs. When each CTU or MD arrived and announced his or her presence and the name of the patient s/he wanted to discuss, the PCC would first identify the patient by his or her bed number and then call in the assigned bedside nurse (BN) for the patient in question. The other core team members would have to flip back and forth in their own professional notes to follow along. When there was no MD or CTU present, the PCC would follow the patient list, which was still organized according to room and bed numbers, and s/he would still summon the respective bedside nurses as necessary.

This new format of rounds did manage to include more care providers, especially the “front line” nurses and the decision-making MDs and CTUs, but it tended to unfold in a much more interrupted fashion. Occasionally, a member of allied health or a CCD would request permission to return the discussion to a previously discussed patient. The frequent interruptions likely increased the cognitive load for participants (Alvarez & Coiera, 2006), but no one complained when I asked them about it. The new format of rounds also saw fewer contributions by allied health members as the discussions were now focused primarily between the PCC, the BN, and any medical representative present (MD or CTU). The PCC played a key gatekeeping role, maintaining or ceding control of the conversational floor. S/he tended to control the openings and closings of discussions, but otherwise shared and sometimes ceded control of discussions to the MDs and, to a lesser extent, the CTUs. S/he often called upon bedside nurses to provide information, but also frequently interrupted them or spoke over them. This oscillation between maintaining and ceding control of the conversational floor, as well as the question of allied health voices, are considered in Chapter 7.

4.2. Emergent questions and concepts

The main concept that emerged from my comparison of communication patterns within and across teams was the notion of the patient case review as a shared interprofessional practice of sensemaking, which I outline in the Chapter 3. Despite the variation observed across the teams, its recursive form was easily socially recognizable, and in fact, the variation itself offered opportunities for exploring different aspects of the

practice. Three principal differences were observed across these teams that will serve as points of articulation in the analysis chapters.

First is the question of collective performance. If we recall that the purpose of the patient case review is to describe (i.e., frame) and sometimes negotiate (i.e., reframe) a collective understanding of each patient's situation, drawing on the heterogeneous professional expertise represented by the different members of the interprofessional team in order to address complexity, it follows that talk during these reviews ought to be designed to be inclusive, signalling the relevant salience to different scopes of practice. In other words, I contend that differences in practice are a function of the quality of collective attention brought to the interprofessionality of the practice. Specifically, this quality of attention can be thought of as *heedfulness* (Weick & Roberts, 1993), and is particularly apparent in collective sensitivity to expressions of uncertainty. As we shall see in Chapter 6, the structured introductions to patient case reviews served to foster co-orientation among the listening team members.

A second question that flows from the issue of heedful and inclusive talk is how the design of talk interpellates and positions particular team members as the intended audience. Chapter 7 examines this question and the attendant issues of hierarchy and authority that were evident in the changed format of Short-Stay GIM rounds as a case study and considers what happens when doctors and bedside nurses attend rounds. Given the unique format and attendance of the Short-stay GIM rounds, we have an excellent window on the enactment of hierarchy, authority, and knowledge claims. These rounds revealed how effects of hierarchy and authority are accomplished, or, in other words, how power functions in collective sensemaking.

The third and final aspect that I take up in the analysis section is how collective sensemaking practice changes or remains stable in the face of membership rotation, especially when the rotating members are in leadership roles. Chapter 8 compares the stability of collective practice on the Intake and Intervention teams. The Intake team saw the most rotation in leadership (i.e., PCCs) but, especially in comparison to the Intervention team, also the most stability in how it collectively practiced the patient case review, which is to say how it recurrently made sense of the patient's situation. One obvious explanation can be found in the teams' relative differences in their prior history of conducting interprofessional rounds. The Intake team was collectively experienced at

doing patient case reviews, and had developed—or adopted from the Integrate project—a routinized way of doing them. On the contrary, the Intervention team had no such prior history and despite greater stability in leadership representation (i.e., less rotation), there was significantly more instability (i.e., variation), in how they did the patient case reviews, especially the introductions.

This suggests that the Intake team's practice was supported in three important ways. First, there was a routinized and structured way of introducing patient cases that was shared across PCCs, and this recurrent format of introductions served as an informal checklist of sorts. Second, the performance of this checklist required the activation of heterogeneous knowledges. These knowledges were incarnated by a multitude of "voices," by various actors carrying—or to use the term I propose, *story-porting*—previous sensemaking work from one time and place to the next and thus serving as organizational memory, whether these actors were other team members recounting what had been previously discussed during rounds or whether we consider the role played by the PCCs' nursing notes. As outlined in Chapter 3, practices are woven into the sociomaterial webs of other practices, and I suspect that the upstream (from interprofessional team rounds) practice of nursing documentation among the PCCs was more stabilized on the Intake team than it likely was on the Intervention team. Third, knowledge was typically invoked and activated (i.e., shared with others) in response to something problematic in the ongoing situation, and this was usually the expression of some sort of uncertainty, doubt, or ambiguity, although these expressions were not always in the form of an explicit question.

Chapters 6, 7, and 8 examine the data from multiple perspectives, especially that of the Montreal School's approach to conversation analysis. Before turning to these analyses chapters, Chapter 5 presents the study's methodological approach and describes in more detail the methods used, both for gathering and also especially for analyzing the data.

5. Methodology and Methods: The Research Journey

Two diametric experiences gave me serious pause in approaching this chapter, and they both happened during the same week. One took place on a sunny afternoon over beers with one of my supervisory committee members as we discussed the general process of writing a dissertation. Speaking from a philosophy and cultural studies perspective, he explained that the methods chapter is often plunked in the middle of a dissertation and written in such a different voice from the others that it can cause the reader to stumble over the seams between chapters and, sometimes, to yawn repeatedly. He floated the suggestion that I compress the methods into another chapter or even include them in the appendix to avoid such stylistic problems. As you can see, I chose not to, and it was because of the *other* thing that happened that week. I was giving a poster presentation to an audience of health care educators, decoding in a sample patient case review the underlying collective practice of narratively emplotting (Mattingly, 1998a) the patient's situation on the care trajectory to show how communication is more than just information transmission. When I had finished my five-minute spiel, a program administrator who is a physician by trade exclaimed, "But that's just *your* interpretation!" and seemed to imply that I make my testable hypotheses more apparent next time round.

Clearly from these two experiences, it seems this dissertation must address at least two very different audiences. On the one hand, there is interest in the narrative and the ideas, and on the other, the pressing question has to do with the "truth" of the matter. This difference is in fact reminiscent of perspectival schisms in interprofessional practice itself, for instance the difference between how social work conceives of the patient compared to a more biomedical view (an irony that did not pass unnoticed). So, to try to bridge these two preoccupations, the present chapter will serve the dual purpose of more specifically locating my approach and outlining the methods I took to author the research story.

The chapter is divided into two parts: The first considers the study's methodology and the second, the methods used for data collection and analysis. I begin by locating my approach within the tradition of organizational ethnography, discussing the epistemological stance of subtle realism that informs my methodological approach. I address the questions of hypothesis testing, culture, sample selection, and data sources within this tradition. Because my questioning of the data evolved after data collection was complete, and because I approach the data in slightly different ways across the analyses chapters, the present chapter serves as an overview and introduction to the ones that follow, and additional explanation of the methods appears in these subsequent chapters.

5.1. Methodology: Epistemological and ontological location

The object of this research project is the communication practices and dynamics on interprofessional teams in an acute care hospital. Its goal is to offer a new explanation of the specificity and consequentiality of communication practices (Sigman, 1995) to interprofessional collaborative practice, as discussed in the literature review (Chapter 2) and the theoretical scaffolding (Chapter 3). It relies on ethnographic methods in the tradition of organizational ethnography (e.g., Schwartzman, 1993; Van Maanen, 2010a, 2010b, 2011).

My particular approach is located within the tradition of constructionism, broadly informed by symbolic interactionism, ethnomethodology and its offshoot conversation analysis, as well as the distinctive approach developed by the École de Montréal to interaction analysis (e.g., Vásquez, Brummans, & Groleau, 2012). In short, it is a micro study of situated practices of sensemaking.

I adopt the position that Hammersley (1992) calls *subtle realism*, which seeks to find a middle ground between the realist rational for ethnography that can asymmetrically privilege the ethnographer's voice and the relativism associated with the constructionist perspective that can "leave us abandoned in circularity" (p. 49). Subtle realism, he says,

retains from naïve realism the idea that research investigates independent, knowable phenomena. But it breaks with it in denying

that we have direct access to those phenomena, in accepting that we must always rely on cultural assumptions, and in denying that our aim is to reproduce social phenomena in some way that is uniquely appropriate to them. Obversely, subtle realism shares with scepticism and relativism a recognition that all knowledge is based on assumptions and purposes and is a human construction, but it rejects these positions' abandonment of the regulative idea of independent and knowable phenomena. Perhaps most important of all, subtle realism is distinct from both naïve realism and relativism in its rejection of the notion that knowledge must be defined as beliefs whose validity is known with certainty. (p. 52)

From this perspective, then, this study also is *necessarily* my own interpretation, but it is an interpretation based on an immersive observation experience with the people, places, and things studied and described. Indeed, this approach maintains a methodological commitment to get as close as possible to the groups or phenomena studied so as to understand, as much as possible, the meanings and purposes of participants' practices. In fact, the mandate to "get close" to human action and interaction "must surely apply even more to research that prioritizes the notion of 'practice'" (Watson, 2011, p. 205).

The position of subtle realism is also compatible with the adoption of an ethnomethodological stance, wherein one focuses on how people, in their daily activities, continually make sense of those activities and the social world in which they are embedded (Heritage, 1984), which is to say, the ethno-methods by which they do so (Garfinkel, 1967). The patient case review is one such sense-making practice: The meaning making practices that are evident in conversational interaction can be objectively observed and understood: for instance, topical openings and closings are designed to be comprehensible as such, and from this perspective, the analyst as well as the study participant can treat them in a straightforward—that is, objective—fashion. However, these and other interactional moves are negotiable and contestable, and because of this, among other considerations, we can empirically see how meaning is socially constructed.

5.1.1. A word on organizational ethnography

As Van Maanen explains, "Ethnography aims to reduce puzzlement—of the ethnographer as well as the reader. What readers learn are what particular people, in particular places and at particular times are doing and what it may mean to 'them'"

(2011, p. 229). This is what I have aimed to do in this study, although my representation of them is inescapably a selective representation, given that “empirical phenomena are descriptively inexhaustible” (Hammersley, 1992, p. 24).

Eberle and Maeder (2011) distinguish ethnography from other approaches to investigating the social world by the physical presence of the researcher in the field doing fieldwork as means of collecting data. It is research based primarily on “*observational data* about how actors work, act and interact in their natural environment and go about their daily activities” (pp. 54-55, emphasis in original). The methodological guidelines that one can find for organizational ethnography, such as outlined by Neyland (2008), are valid for any kind of ethnography, including the commonly held conception of exploring tribal cultures in far-off lands.

What is specific to organizational ethnography is the study of and in organizations, and organizing activities. As Yanow, Ybema, and van Hulst (2012) explain, “Organizational ethnography promises to elucidate two aspects [of organizational life] for which other methods, such as surveys, are less suitable: (1) its “hidden” dimensions, and (2) is actor-context relations” (p. 337). The hidden dimensions of organizational life that this study aims to elucidate are the communication practices by which organizational members make sense of their main shared object of focus: the patient and what to do about him or her. While these practices are not necessarily hidden from view, they do tend to remain obscured from direct focus, as Chapter 2 detailed. In exploring these practices, we also unavoidably explore the intertwining of context, identities, roles, and material supports.

5.1.2. *Where are the hypotheses?*

With regard to the question of testable hypotheses, I was not testing any. In fact, I started out with a rather broad notion of examining patterns of talk in team meetings and it was not until much later that I realized that what I was coding in my fieldnotes, memos, and transcriptions could be understood as variations in the process of collective sensemaking (Weick et al., 1999; Weick, 1995). This is apparently not unusual: With ethnography, “it is frequently well into the process of inquiry that one discovers what the research is really about” (Hammersley & Atkinson, 2007, p. 160). In fact, organizational ethnographers are encouraged to develop a strategy with regard to their object of study

but to remain flexible and fluid in their questioning (Maeder & Eberle, 2011; Neyland, 2008).

This might be characteristic of most exploratory qualitative research, as it employs abductive reasoning, which results in conclusions that are most likely true, hopefully cogent, but not necessarily confirmable beyond doubt. “As exploratory data analysis performs the function as a model builder for confirmatory data analysis, abduction plays a role of explorer of viable paths to further inquiry,” writes Yu (1994, p. 1), “thus, the logic of abduction fits well into exploratory data analysis. At the stage of abduction, the goal is to explore the data, find a pattern, and suggest a plausible hypothesis; deduction is to refine the hypothesis based upon other plausible premises; and induction is the empirical substantiation.”⁶⁶

5.1.3. *How trustworthy is the data and the data story?*

Without testable hypotheses and with interpretations, how can we assess an ethnographic work? Van Maanen seems to imply that it is in the details of the narrative, in the style of the discursive account that convinces readers that one was really there and really knows what one is writing about (2010a, 2014). If we stop with this explanation, we might be left with a rather soft impression of only “tales” from the field, and the maxim that “you’ll know a good one when you read one.” Fortunately, Hammersley (1992) helps us out by specifying that the position of subtle realism considers validity as a rhetorical judgement call, requiring that the ethnographer’s knowledge claims—constructions as they undoubtedly are—are subject to a sort of Goldilocks factor (my term), knowing how much and what kind of evidence to provide given assumptions about the readers’ familiarity with the topic, what Tracy (2013, p. 230) calls resonance. Additionally, given that knowledge claims are based “on assumptions and purposes,” we ought to look for fit between the ethnographer’s proclaimed purposes (Hammersley, 1992, bemoans the fact that they are very seldom proclaimed) and the evidence presented throughout the narrative. To repeat, my purpose was to understand the consequentiality of communication to interprofessional practice through a single-site,

⁶⁶ In other words, insofar as the notion of falsifiable theories as developed by Karl Popper and others has to do with deductive reasoning (the gold standard of science for many), an ethnographic work such as this one might be situated at the beginning of the cycle described above by Yu (1994).

multi-team case study. This evolved into pondering potential explanations of the differences between and across the teams' practices in rounds.

The question of trustworthiness of the data, the researcher, and the data story is an important and controversial one with regard to qualitative research in general (Lincoln & Guba, 2000). Credibility and rigour are frequently listed as evaluative criteria for verifying the quality of qualitative research (Creswell, 2007; Lincoln & Guba, 1985). "A qualitative study is credible when it presents such accurate descriptions or interpretation of human experience that people who also share that experience would immediately recognize the descriptions" (Krefting, 1991, p. 216). Prolonged engagement in the field, persistent observations, and triangulation of data sources are all recommended strategies for establishing credibility and rigour.

With regard to this study, I have aimed to establish credibility through six months in the field observing over 4,000 patient case reviews. Through the audio recording of 1,000 of these, and the transcribed 300+, this study can be subjected to external audits and peer debriefing (Creswell, 2007; Lincoln & Guba, 1985). In fact, I did peer debriefing in the presentations and data analysis sessions at the Groupe LOG at the Université de Montréal, which aided in theory selection and application. Furthermore, portions of this data were presented to a group of graduate students in a course I was teaching, most of whom were health care professionals studying communication, and they could all quickly and easily identify the practice I describe here as the patient case review.

Triangulation of data sources was done through the use of fieldnotes and memos generated in observations; interviews conducted at the end of data collection to explore emerging notions; audio recordings of rounds meetings; and documentary analysis, primarily of the Integrate project's documents. Even though the fieldwork took place in one hospital, I observed a variety of teams with different mandates, histories, and cultures. Through this variety of data sources, I gained an in-depth understanding of the organizational context and its members, the practice accomplished at rounds, and some inkling of what interprofessional practice is when it works well and when it doesn't.

5.1.4. *And what about theory?*

Within the ethnographic tradition, there is debate about the role of theory (Hammersley & Atkinson, 2007; Hammersley, 1992; Snow, Morrill, & Anderson, 2003). And yet, no one enters the field as a theoretical tabula rasa, devoid of pre-existing theoretical commitments and leanings. Some argue that theory enters into the research equation during the phase in between fieldwork and writing, but deplore that this process of “interpenetration between data and analysis” (Snow et al., 2003, p. 166) tends to be obscured in the final, published product. Indeed, they posit that theory development, extension, and refinement are all valuable goals of ethnographic work, even if they are sometimes overlooked.

With regard to this study, it was in one sense very theoretically pre-informed from the start, as I took as my point of departure the CCO premises that social order or forms emerge from interaction. This had implications for what data sources would be privileged: situated interactions in their material and symbolic aspects. On the other hand, looking at my data through a practice lens was something that emerged from a somewhat in tandem immersion in both my data and a wide variety of readings from organization studies and organizational communication, among other things. It was a messy process, involving periods of profound doubt and lassitude, an investment in a stovetop espresso maker, and occasional rays of analytic sunshine when serendipitous readings led to eureka moments. But as Charles Sanders Peirce is supposed to have said, doubt is the cornerstone of abductive reasoning (Yu, 1994), and a reliance on serendipity seems to be rather the (lamentable to some) norm in ethnographic circles (Snow et al., 2003); at least that is how I justify and tidy up my choices.

5.1.5. *Why meetings? and other sampling questions*

The goal of identifying the consequentiality of communication to interprofessional practice meant first of all locating interprofessionalism, and as mentioned above, a prior commitment to CCO premises meant examining interactions. This led to the choice of rounds as a site of study. In organization studies, meetings have long been a favoured site for investigation (e.g., Taylor & Robichaud, 2004), and in the IPP literature, Ellingson (2003) complains that they have been overly privileged (e.g., Arber, 2008; Bokhour, 2006; Crepeau, 1994, 2000; Lanceley, Savage, Menon, & Jacobs, 2007; Wittenberg-

Lyles et al., 2010; Wittenberg-Lyles, 2005) at the expense of consideration of what she called “backstage” communication. However, their importance in organizational life cannot be denied: “In short, organizations do substantial knowledge accomplishing in meetings” (Kuhn & Jackson, 2008, p. 471). Indeed, as organizational ethnographer Schwartzman writes, “An anthropology of meetings conceptualizes meetings as communication events that must be examined because they are embedded within a sociocultural setting (an organization, a community, a society) as a constitutive social form” (1993, p. 39).

French communication researchers Grosjean and Lacoste (1999) echo this, and explain that the centrality of communication is linked to the situated nature of human activity, which is always local, always incarnated. Work requires ongoing contextualization that can only be done through communication, and the indexicality of situated action points to micro-studies if we want to understand work communication (Lacoste, 2001b). Meetings, they argue, represent *des moments collectifs*—collective moments or moments of the collective—where collaboration and coordination can be observed. Indeed, meetings are the place where social relations are enacted, where structures are brought to bear, made relevant (Schwartzman, 1993). This points to meetings as a natural choice for study, and indeed, my study relied primarily on my observations of team meetings.

Why *acute care* team meetings? In other words, why these teams and not others? As mentioned in Chapter 4, the choice of these teams was largely serendipitous. I was interested in looking at the role of communication in interprofessional collaborative practice, and I obtained entrée to the field through the Integrate pilot project, which targeted acute care interprofessional teams. One of the characteristics of collective sensemaking in acute care collaboration is time pressure: The patient case reviews observed in this study were not the lengthy discussions that Opie (1997b, 2000) observed in rehabilitation care, nor the back and forth exchange that Arber (2008) studied in palliative care. They were short and usually focused; medical concerns prevailed and, perhaps correspondingly, discussions were led by medical

representatives (charge nurses or doctors).⁶⁷ This in turn influenced what I chose to focus on, especially with regard to Chapter 7 on authority and hierarchy.

5.1.6. Do observations trump all?

My answer to the question in the above subheading is a qualified yes. If one is interested in actions and practices (as opposed to attitudes and perceptions), it follows that one observes actions and practices. I was interested in communication practices, so observations of communication events were the appropriate choice for a primary data source. Practice theorist Knorr-Cetina labels this stance as *methodological situationalism*, which argues against the use of reflections and abstractions from action (such as interviews and documents) as a basis for understanding situated social practices (1981, cited in Kuhn & Jackson, 2008). In other words, it insists that the analyst access the ongoing social action in question to better understand it (Yanow et al., 2012). Pragmatically, some point out that observation, as an ethnographic data-gathering method, has a higher “information yield” than interviews in work studies (Tope, Chamberlain, Crowley, & Hodson, 2005). This was certainly the case in my study.

However, a strong commitment to methodological situationalism flies in the face of what we might call the ethnographic “triad of validity”: observations *and* interviews *and* documentary analysis. What’s more, when the analyst is both a neophyte and an outsider to the context under study, as I was, observations alone will not suffice, and a softer stance is required. Indeed, I would have understood little of how the teams made sense of their work without asking many questions on an informal, ongoing basis.

These conversations were supplemented by semi-structured interviews with key informants on their thoughts of and experiences with interprofessional practice and collaborating across boundaries. These, however, were less informative for the current study than I had wished.⁶⁸ In part, this was because the ephemeral, collective quality specific to interprofessional practice was just as hard for them to put their finger on as it

⁶⁷ Incidentally, before I stopped attending the rounds of the other short-stay team whose mandate changed to sub-acute, I did notice that in these sub-acute meetings, physiotherapy tended to dominate the conversational floor.

⁶⁸ Grosjean and Lacoste (1999) had similar results with their interviews of nurses about coordination work, and subsequently based most of their study findings on the observation portion of their data collection.

is for IPP scholars (if the abundance of definitional publications are any indication). It was also because the focus of my attention evolved after data collection had ended, when I started comparing communication practices across the teams through a practice lens and a sensemaking framework, and informants' *accounts* of collaboration were less a focal point than what they actually did in rounds. This interview data was only semi-abandoned; I certainly did consult it in my data analysis, but I did not conduct a constant, comparative analysis in the fashion prescribed by grounded theory (Bryant & Charmaz, 2007; Strauss & Corbin, 1994), comparing answers to similar questions across professional representatives.

As for documentary evidence, it would have been ideal for me to have consulted these to a much greater extent, but my informants were reluctant to let me see their face sheets, patient charts, Kardexes, and the like, citing concern for patient privacy as the reason for their refusal. I sincerely hope to pursue this avenue in future research, and will structure my requests for permission to the various ethics boards more strategically so as to include this component. As it stood, I relied on the documentary supports given to me by the Integrate representatives (see Chapter 4), including their training manuals, posters, daily sheets to be filled in, and the like. Moreover, I used the partial workaround of relying on my recorded observations of how team members referred to, invoked, and otherwise relied on their documentary supports in their sensemaking work in rounds.

5.1.7. *Reflections on the effect of my presence*

If collective sensemaking is sensitive to, even dependent upon, the presence of the actors on the scene, it follows that my own presence in the field would have some kind of impact on the team's sensemaking practices. Knowing that they were being observed and sometimes recorded, team members may have altered the way they conducted rounds. I tried to remain as inconspicuous as possible during meetings: I never spoke during patient case reviews, and I always made an effort to occupy a spot in the room that would not interfere with others' participation (this was particularly challenging for the Short-stay GIM team's rounds once they moved to the cramped computer room off the nursing station). However, I engaged in conversation with team members in the lull before rounds got underway and during the time that people were gathering up their things once the meeting wrapped up. I would ask clarification questions during any natural lag in interaction (such as when bedside nurses were being

summoned, or when the PCC was called outside the meeting for a moment), and I frequently asked the UCs for explanations about terminology and the like as we would often walk to rounds together. When possible and appropriate, I (sometimes shamelessly) used humour to fit in, especially on teams for which dark humour was a part of their culture, such as on the Intake team. I also chatted with team members about topics unrelated to their work, such as vacation plans, parenting challenges, and so forth.

Given that the majority of the participants were Caucasian, English-speaking women around my own age and with cultural points of reference that seemed to be similar to my own, I blended in with relative ease. Even so, my presence was definitely noticed; when new people dropped into rounds, the PCC would usually explain my being there as “the girl who is studying communication on teams,” and someone would almost invariably crack a joke about self-censoring. However, the black humour, the moral tales about (un)deserving patients, the grumblings about doctors, and so on didn’t seem to stop because I was there.

Some people treated me with a reverence with which I was decidedly uncomfortable, especially with regard to their own communication practices and my presumed expertise. This was a fine line to walk, as I didn’t want to undermine my credibility (and hence justification for being there), but I also was clear that I did not want to influence how they performed their practice. On the few occasions when this arose, I explained that I was actually there to learn from them, and asked what they thought made for good communication on teams. And then I would try to change the subject.

The effect of my recording device must also be taken into account here. I was hesitant to start recording because I was certain it would make people uncomfortable (I certainly do not enjoy being recorded!). However, I was surprised by the generosity of the participants and by their continuing to go about their business after the first few patient case reviews once the recorder was switched on in the first days that recordings took place. There was not an appreciable difference in how they interacted before and after I introduced the recording device. However, they did refer to it on occasion, sometimes joking, “Oh, strike that from the record!” after uttering something tinged with macabre humour, or “See, I promised I would be good and I wouldn’t use bad language and make us all look bad on record!”

Overall then, just as this writing is unavoidably my own interpretation of “what happened,” my presence certainly had some impact on what I observed but it was likely minimal.

5.1.8. *Methodological summary*

The goal of observing actions and practices is to understand what is going on, to understand it both from the analyst’s perspective with all its theoretical commitments, as well as from the informants’. To understand the meaning given to informants’ practices, unless the observer is a native, some supplementary support is necessary. Furthermore, I suspect that the precise mix tends to be the result of both planning and flukes in the field. Similarly, I think that methodological choices emerge from experiences in the field as much as they inform the field work, and that it is in retrospect, as Karl Weick is so fond of saying, that we make sense of it all. Let’s turn now to my actual research practices—the methods—for anyone who might desire to replicate what I did, or more likely, to recognize the generic research journey in the particulars recounted here.

5.2. Methods

5.2.1. *Entrée into field*

As mentioned previously, my access to the field was facilitated by piggy-backing on the coat-tails of the Integrate pilot project (see Chapter 4). Once the field site had been identified, I obtained the approval of both my university’s Office of Research Ethics and the regional health authority’s research ethics board. I followed the health authority’s suggested format for research involving human subjects, and accordingly, focused on specifying interview questions and drawing up the consent form (see Appendix B). Field observations began in August, 2009, and I submitted an amended ethics request to be allowed to conduct audio recordings of rounds.

5.2.2. *Fieldwork and data collection*

Overall, I observed three acute care teams (initially 4, see Chapter 4) during their daily rounds for a total of approximately 120 rounds meetings over the six months I was

in the field. In total, I observed nearly 4,000 patient case discussions (an average of 33 patients were discussed in each meeting). The fieldwork took place in three different phases of data collection: fieldnotes, structured observations, and recordings and interviews.

Traditional fieldnotes and memos

During the first three months, I spent my time developing rapport with the members of the different teams and generally acculturating myself to the acute clinical context. During this period, I typed up over 300 pages of fieldnotes and memos (Emerson, Fretz, & Shaw, 1995; Yin, 2003). My principal informants at the beginning of this period were the representatives of the Integrate pilot project (see Chapter 4), but I also spoke quite frequently with the teams' physiotherapists, occupational therapists, nutritionists, and home care coordinators, largely because they sat in proximity to me in the meeting rooms where rounds were held. These conversations allowed me to develop an extensive glossary of institutional and medical terms and acronyms (see Appendix C) that cropped up during rounds talk and that initially baffled me.

During this phase, I began noticing patterns in talk, such as the frequent mention of barriers and classifications during discussions, which referenced movement, change, and contingency, and which later analytically developed into the notion of the patient care trajectory as a narrative framework. I noticed differences in the comprehensiveness and structuring of introductions, which suggested a script of sorts that coincided with the Integrate project's mandates. Relatedly, I remarked on differences in the complexity of case reviews, which implied a typology of discussions or problem definitions. My attention was also focused on the teams as cultural entities, and I noted differences in rapport between team members on the different teams, their overall style of talk (e.g., clinical accounts or stories from the bedside), leadership styles and any struggle for position in discussions, and apparent openness and commitment to conducting rounds. I also noted what I perceived to be individual team members' attitudes, how attentive they were to ongoing talk (one team member sometimes fell asleep in rounds), and especially, the influence MDs had when they occasionally attended rounds and "hijacked" discussion. I paid attention to the material supports relied on during rounds, especially the PCC- and profession-specific patient information sheets, as well as to who

brought a binder of notes to rounds (typically social workers, CCDs, and pharmacists) and how often they consulted these.

These first months marked a process of refinement in my reflection; I noticed that some members belonged to other teams in the hospital, and began to question the usefulness and accuracy of the notion of “team” to this study. I strove to identify precisely what was the interprofessional practice in question, and more specifically, what was collective about it.⁶⁹ At this point, I moved to define my unit of analysis as the patient case review, and this move was informed by Hunter (1991, cited in P. Atkinson, 1994), who explains that in medicine, the case is the basic unit of thought and discourse. This led to the second stage of data collection.

Structured observations of interaction patterns

Once the patient case review was identified as a unit of analysis, a new method of tracking interactions was suggested to me by committee member, Kitty Corbett (n.d.). I designed a grid for tracking participation and broad topics in interaction; a sample tracking sheet is included in Appendix A. On its own, this method allows one to examine questions of the directionality of talk, the sequence of turn taking, and multivocality as the observer can quickly identify the speakers in a patient case review, briefly note the topics raised by whom, and mark any interruptions and so forth.

The structured observations were of greatest use to me, however, as a complement to audio recordings during transcription. When there are up to ten people at a meeting who might be speaking, most of whom have female voices and some with similar accents, this data collection device can help decipher who is speaking. This is especially the case when video recording is not possible or not permitted. Moreover, when my analyses started in earnest after the data collection, these structured observations gave a succinct visual overview of each case and offered an indication of the type of discussion (e.g., briefing or more complex, as will be discussed later).

⁶⁹ While I acknowledge and accept Barnes’s (2001) insistence that to call a practice *social* or *collective* is redundant, I do want to point out that its collective aspect is, analytically at least, what is particular to its interprofessionalism here.

Recordings, interviews, and transcriptions

In the last three months of data collection, I received ethics approval to begin audio recordings of rounds. In total, I recorded 30 meetings of three of the teams in my study (12 from Intake, 14 from Intervention, and only 6 from Short-stay GIM, who changed the format of their rounds during recordings, see Chapter 4). I recorded on every day that I was in the field from the time that I began recording. However, because the Short-stay GIM team changed the format of its rounds shortly after I began recording and moved to the hectic nursing station where the meetings were chaotic, I did not record their rounds until after they moved into an adjacent room. There, the form of meetings was more structured and I could identify who was part of the team discussion and who was not (important for collecting informed consent, if nothing else).

Overall, these recordings represent just more than 1,000 patient case reviews, a third of which were later transcribed according to the conversation analytic transcription conventions established by Jefferson (1984), but without attending to pronunciation. The transcribed material totalled nearly 300 pages of single-spaced transcriptions. At first, I transcribed patient case reviews that I thought represented more complex cases based on their length and the number of speakers. When I began to become interested in introductions to and transitions between cases, I moved to transcribing entire meetings. When I became interested in diachronic cases and cross-team cases, I transcribed several consecutive days of meetings for a given team or for a given patient who was treated by more than one team.

This process was incredibly time intensive, as I aimed to represent minute interaction details, such as overlapping talk and interruptions. A 45-minute meeting with nine or 10 team members participating, sometimes with simultaneous streams of talk, could take up to 25 hours to transcribe. I stopped transcribing when I felt that representative patterns were evident in what I had already transcribed; however, there is decidedly more data here to be examined in the future.

I also conducted semi-structured interviews (Creswell, 2007; Marshall & Rossman, 2006; Mishler, 1986; Yin, 2003) with key informants from some of these teams, for a total of 16 interviews, with at least one representative from each profession or core team role, and at least 4 members from each of the three teams. These interviews were based on the questions that I had submitted to the ethics boards of the

health authority and my university, before the fieldwork began (see Appendix D) and before I became interested in collective sensemaking as a practice. As mentioned earlier, the interviews turned out to be of secondary importance as I wanted to focus primarily on the communication events that I observed. The interview data did however help to give the participants' general perspectives on interprofessional collaboration and teamwork, and helped to explain some of the differences of "culture" idiosyncratic to each team.

5.2.3. Data analysis

Data analysis was concomitant with data collection, in the form of written memos based on my typed fieldnotes, and was ongoing throughout the writing process. As Hammersley (2007; 1992) and Van Maanen (2010a, 2011) both point out, much of the ethnographic analysis occurs during the writing phase, and this was also true in this study. That said, there were three iterative processes of data analysis that took place, simultaneously at first: immersion, coding for figures, and interaction analysis. These were then supplemented with a content analysis of actions accomplished in interaction, especially for Chapters 8 and 9.

Immersion and transcription

The fieldwork wrapped up in mid-February 2010, dictated in part by family circumstances as we relocated across the country and awaited a second baby. When I picked up the mantle many moons later, I began by listening to each recording several times, following along with the structured observation sheets, and writing down everything that seemed to be of significance, including the length of case reviews and patient identifiers to help me navigate the large data set. As I began the process of transcription, I started to notice patterns that had escaped me when in the field, patterns that were only observable in the fine-grained details (as Tsoukas, 2000, might put it, my own knowing became more expert). These I jotted down in handwritten reflections that by this writing have totalled hundreds of pages.

I began to classify case discussions into general types: briefings, semi-complex discussions involving more speakers and more turns of talk, and extended discussions that lasted several minutes. Introductions to patient case reviews began to appear very consequential to subsequent discussion in case reviews, especially the expression of

uncertainty by the team facilitator. This analysis process also included mapping the patients discussed in rounds, noting how many days each one appeared in team talk and which ones traveled across the teams. I could then start to think about the different ways they were discussed and what themes or matters of concern (Latour, 2008) were transported from one day or one team to the next. I set aside considerations of the entativity of teams and turned my thinking to their proclivities to collective processes, of their being animated by different matters of concern, which influenced another simultaneous analysis process: rough coding.

Coding fieldnotes for figures

Alongside repeatedly listening to my recordings, I also pored over my hundreds of pages of fieldnotes. Immersing myself in my early impressions from the field, I began a rough coding of them loosely based on Cooren's notion of *figure*, or that which drives a logic of action (Bergeron & Cooren, 2012; Cooren & Matte, 2010; Cooren, 2012). Figures tell us what animates organizational actors, on whose behalf they speak (Matte, 2012). I coded the fieldnotes with an eye to what participants oriented to and to what seemed to motivate action, according to what I observed from their interactions. This was not a constant, comparative process such as that advocated in grounded theory (e.g., Bryant & Charmaz, 2007) but was very organic and served mostly to orient subsequent analysis of portions of the data.

I combed through these fieldnotes, characterizing in the left-hand margin what had caught my attention as noteworthy with regard to the teams' practices (e.g., "authority," "jurisdiction," "patient flow," "efficiency," "conflict," "speaking for the patient"). For instance, on Intake, what I noticed that the team members discussed most were issues of jurisdiction, barriers to planned actions, classifications, and the like that were related to where to send the patient next, or in other words, trajectory issues. I also frequently noted on this team a recurrent pattern in presenting patient case information, which I labeled "script." On Intervention, "efficiency" appeared frequently as a figure (i.e., that to which the team seemed to attend, or which seemed to motivate their action in the accounts that they gave). Documents also appeared frequently in my fieldnotes for this team, as there was a lot of variation in how they were used during meetings.

In broad strokes, what emerged from this data analysis (combined with the immersion and transcription) was a characterization of the interprofessional practice

accomplished across the teams as collective sensemaking, accomplished in and through communication. I explored variations in how this practice was done across and between the teams, attending to what seemed to be collective and what crossed professional boundaries. From this phase emerged the notion of the patient care trajectory as a guiding concept and organizing object that helped to structure collective thinking, and to which the different teams oriented to varying degrees. The notion of narrative emplotment (Mattingly, 1998a, 1998b) on the care trajectory was a natural fit from the theoretical readings I was doing at the same time.

This process informed the three analyses chapters that follow this section. The differences I noted in the introductions to patient case reviews resonated with readings on high reliability organizations and the notion of heed in collective practice, and together, these informed Chapter 6 on heedful interrelating. The figures of leadership, authority, jurisdiction, and hierarchy were ubiquitous in my fieldnotes, and these nourished my thinking for Chapter 7, “Hierarchy and precedence.” I noted early on in my fieldwork differences in the mobilization of documents and the presence or absence of what I then called “scripted talk” in case reviews, that is, the Integrate prescribed domains of concern (the goal-focused questions, see Figure 4.1), and this inspired the analytical Chapter 8, “Stabilizers of practice.”

My analysis did not stop here. Just as in Atkinson’s (1994) ethnographic study of haematologists, fieldnotes and memos were not enough for me to characterize and *illustrate* how work was accomplished, especially not when that work is “rhetorically accomplished in narrative.” This is where my transcribed case reviews came in.

Interaction analysis à l’École de Montréal

With hundreds of pages of transcribed interactions and *without* the goal (at least initially) of doing content analysis, the size of my dataset was formidable. From the other two phases or processes of analysis, I had a developing framework in mind of collective sensemaking and knowing-in-practice as the interprofessional practice that was accomplished with more or less heed and stability, but had yet to illustrate this in the details. If I were using a grounded theory approach, I could cite quotes from interview data that were representative of general themes or patterns discerned through coding. But I was interested in interactions (rather than accounts of interactions), and I struggled to come up with codes that would capture the wide variation in case discussions.

Instead, in order to “drill down” into my data and to provide illustrating analyses, I turned to a variant of conversation analysis (CA) developed by what is known as the École de Montréal (or the Montreal School) in organizational communication circles.

This variant does not adhere dogmatically to the strict and stringent precepts of traditional CA, where the analyst considers only what is “in the text,” and excludes reflections on context, other space-times, or agents. The École de Montréal’s interaction analysis method retains traditional CA’s emphasis on talk-as-action as well as its commitment to remain focused on the “terra firma of interaction” (Ashcraft et al., 2009). However, it allows for a broader focus, examining material aspects of agency, such as the role of documents, rules, or classifications to the unfolding of interaction, and it examines both how organization is woven into existence in interaction and how it is made to preside over interaction, thus linking the terra firma of interaction to more macro considerations, through what they call “scaling up” (Putnam & Cooren, 2004). While my chief interest was not in the ontological constitution of organizations in communicative practice, this approach fit nicely with the practice lens through which I was viewing the teams in my study. Furthermore, it is an approach that complements the ethnographic methodology discussed above. As ethnographers Atkinson (1994) and Hammersley (2003) point out, conversation analysis does not need to be thought of as a standalone paradigm, but can be used as a supplementary device in the ethnographer’s analytic toolkit.

So what did I do in this regard? For anyone familiar with conversation analysis, doing a fine-grained reading of my hundreds of pages of interactions could prove to be a life-long endeavour. Instead, I read through the case reviews paying attention to the actions that were accomplished and how they were accomplished, especially in terms of who made what kind of knowledge claims and how.

In this regard, Pomerantz and Fehr (1997) lay out five basic steps for conducting conversation analysis. In step 1, the analyst selects the sequence of interest by looking for identifiable boundaries. These could be the openings and closings of each patient case review, or they could be the turns of talk involved in asking and discussing a certain question within a case review. I focused on both openings and closings, as well as how the teams addressed expressions of uncertainty within case reviews. Step 2 involves characterizing the actions in the sequence’s turns of talk, such as announcing news or

acknowledging news (p. 72), and the relationship between the actions. This is a descriptive phase. For instance, “requests information” or “provides case overview”. In step 3, the analyst considers how the actions are “packaged”: knowledge of the situation and the interactional consequences of this packaging. For instance, a direct question typically obliges some kind of response from an intended recipient, whereas noticing a discrepancy between what is written in one’s notes and what someone recounted to you just before the meeting leaves open the question of who is “permitted” to answer. (I discuss this further in Chapter 7) Here, I focused largely on how team members established what “mattered” in their consideration of the case. In step 4, the analyst looks at how actors obtain the conversational floor, that is, how they time and how they take their turns, which leads to step 5, where the analyst considers how the design of talk (and turns of talk) is revelatory of the actor relations, roles, and identities being enacted in the situation. This was useful in examining how hierarchy and authority were enacted in interactions. The Montreal School’s take on this suggests a sixth step, where the analyst considers the organizational implications of these actions.

Examining the actions accomplished in interactions during patient case reviews allowed me to define a typology of case reviews based on the interactants involved and the work that was accomplished. This typology, discussed in more detail in later chapters, included *briefings*, where typically the charge nurse provided information to the listening team members (sometimes referred to as sensegiving, Cornelissen, Clarke, & Cienki, 2012; Gioia & Chittipeddi, 1991); *collaborative definition of the situation*, where two or more team members worked to stitch together a collective understanding of the patient’s situation by drawing on a variety of supports; and *collaborative action planning*, where two or more team members planned future actions as a consequence of their understanding of the situation.

Looking at the actions accomplished in interactions led me to discover that most case reviews that went beyond briefings (i.e., extended discussions, either collaborative description or collaborative action planning) did so following some expression of uncertainty. Expressions of uncertainty come in many interactional forms, and in fact most questions or requests for information are not explicitly designed as questions (Hayano, 2013). For instance, in the case of Beatrice Herschen presented in the introductory chapter of this study, PCC1 exclaims, “And I’m wondering if she’s the one they found yesterday, I don’t have that sheet.” In this short extract, we can see an

expression of uncertainty (“I’m wondering”) embedded in her account of this patient’s situation, as well as an explanation that excuses her lack of knowledge (“I don’t have that sheet”), a move that displays her awareness that she is interactionally accountable to the team to know this information. It is after PCC1’s expression of uncertainty that the other team members start to fill in the blanks; they have understood her utterance as an implicit request for information, or as an invitation to participate in collectively making sense of the situation. Other expressions of uncertainty include, for example, the PCC noticing a discrepancy between what is written in the nursing notes and what someone else had told her about the patient before rounds. Others were easily identifiable as direct questions, such as we see in the excerpt analyzed in Chapter 7, where the question of the patient’s weight prompted extended collective sensemaking.

I went through my structured observation sheets looking at patient case reviews that were longer than simple updates. I noticed in these instances that almost invariably, during the introduction of the patient’s case, someone (usually the PCC) expressed some sort of uncertainty, whether it was a direct request for information in a recognizable question format or whether it remained more implicit, and that other team members subsequently displayed their interpretation of these expressions as requests to participate by trying to reduce or resolve the uncertainty in some way. As I discuss in Chapter 8 where I compare the differences in practice between the Intake and the Intervention teams, this expression of uncertainty triggers collective sensemaking on teams who appropriate the task of sketching the patient’s situation as a collective one.

I also looked at what interactants put forward as justifications for action, that is, what they “packaged” or positioned as matters of concern that should count in their action planning (such as test results, alcoholism, family’s ability to care for the patient at home, etc.). I examined how documents were put forward in discussions, for example as coorientation aids, implicitly through the rustling of pages at transition points between case reviews or explicitly when someone asked for identifying information (see Chapter 7’s discussion of hierarchy). Documents also served as organizational mediators, such as when a speaker might reference what someone else had written, either as a source of discrepancy or confirmation of a point being discussed. These fine-grained details, which are only available in recordings of some kind, allow us to see how documents are material stabilizers of interprofessional practice.

One of the benefits of transcribed recordings is that the researcher's interpretations can be compared and contrasted to those of other researchers trained in this tradition, similar to the practice in grounded theory of having several researchers code the same material or cross-check each other's coding. Indeed, I took advantage of my proximity to the Montreal researchers who work in this tradition and presented extracts of my data on several occasions at data analysis sessions at the Groupe LOG of the Université de Montréal. Some of the researchers there were familiar with the clinical context, having done studies in children's hospitals and with the humanitarian organization Doctors without Borders, while others were not, but collectively, they certainly put me on several fruitful "pistes de réflexion."

Content analysis

Doing in-depth interaction analysis on several cases allowed me to empirically demonstrate certain phenomena in rounds. However, given the size of my data set, I needed another way to illustrate patterns in interactions to be able to compare and contrast among and across the teams. Using the precepts of CA (examining the actions), I coded for a variety of variables that were present in most case reviews.⁷⁰

For instance, Chapter 7 examines what happens to the design of talk when doctors are present at rounds. To look at this, I coded case reviews for who made different authoring moves, such as transitions between case reviews (openings and closings, essentially controlling the conversational floor), the selection of the next case to discuss (sequence of reviews), the provision of patient identifiers (details such as name, bed number, etc., which helps establish the object of co-orientation, or the X), and the production of overviews (which circumscribes what is salient and to which profession in each case). This provided insight into how authority is interactionally enacted, and shows how allied health were relegated, more often than not, to the position of listening audience for the case reviews that doctors attend.

⁷⁰ Some might find the inclusion of numeric data in a study using ethnographic methods to be puzzling, even problematic, given that ethnography's focus is traditionally understood to be a group's culture and the ways in which they make meaning. However, there is nothing that precludes numeric descriptions of patterns in team practice, what Bernard (2006) calls quantitative analysis of qualitative data, especially when the practice in question is one of meaning-making. I do however wish to be very clear that I am making no claims about statistical significance; my sample sizes are far too small. Rather, I provide these numeric descriptions as a way of visualizing patterns in practice that I observed, and, importantly, as food for future thought.

Chapter 8 considers how practice is stabilized or not across rotating leaders, comparing the practices of the Intake and the Intervention teams, the former of which was thought by Integrate representatives to be a “dream” team and the latter a “babysitting nightmare,” based on the proclivities of particular team members, especially in leadership roles. An examination of the teams’ actual communicative (and thus collective) practices allows us to avoid individual, psychological explanations based on reported attitudes and the like. This chapter suggests that we evaluate team sensemaking (their collective knowing-in-practice) by the richness of their discussions, in terms of the number and identity of contributors to each patient case review (multivocality), the expression of uncertainty or ambiguity and their treatment in subsequent turns of talk (collective heedfulness), and the number of concerns they mobilize in their talk (i.e., the matters of concern, discernable in the fine-grained details). So, for instance, a patient case review could be broken up into sequences addressing the expression of uncertainty, where one person would ask a question or notice a discrepancy, and subsequent turns of talk would be devoted to answering the question and resolving the uncertainty. Within any of these sequences, several matters of concern might be mobilized in order to figure out what mattered most, especially in complex cases.

Stability was understood as continuity in sensemaking: How did the patient’s story evolve in the context of rotating leadership? Were details discussed one day transported to the next, and if so, by what means?

5.2.4. Summary

In summary, then, the research project that is the basis of this dissertation has been an evolving exploration of communication practices and interprofessionality. It is informed by an ethnographic methodology and an epistemological position of subtle realism, as equally as it is informed by the theoretical positions in the previous chapter. This study used a variety of ethnographic methods for data collection and analysis, including fieldnotes from ethnographic observations, structured observations, and audio recordings as well as coding, interaction analysis, and content analysis. Its goal is to empirically illustrate and perhaps explain variations in collective sensemaking on acute care teams as they do the practice of the patient case review.

That is the back story. Now, on to juicier details.

6. Heedful Interrelating and Articulation Work

Collective intelligence emerges when a group of people work together effectively. Collective intelligence can be additive (each adds his or her part which together form the whole) or it can be synergetic, where the whole is greater than the sum of its parts. (Johnson-Lenz & Johnson-Lenz, 1980)

People can't be careful unless they take account of others and unless others do the same. Being careful is a social rather than a solitary act. To act with care, people have to envision their contributions in the context of requirements for joint action. [...] Care is not cultivated apart from action. It is expressed in action and through action. (Mcphee, Myers, & Trethewey, 2006, p. 373)

Some other eyes will look around, and find the things I've never found.
Malvina Reynolds

In much of the literature on interprofessional collaboration and teamwork, there is a desire to characterize just what it is that sets apart the interprofessional team performance, a characterization made difficult by the amorphous and ephemeral nature of the difference. Sometimes, as outlined previously in the literature review, this characterization is couched terminologically, distinguishing between *multidisciplinary* and *interdisciplinary* teamwork, and focuses on the degree of team integration (Klein, 1990; McCallin, 2001; Moran, 2002; Poole & Real, 2003). The former describes fragmented groups of individuals who assess and treat patients independently and share their information while maintaining division of professional knowledge (Bokhour, 2006, p. 360). In contrast, with the terms *interdisciplinary* and *interprofessional*, significant focus is placed on the integrative, bridging character of the *inter* (Bennington, 1999). Interprofessional or interdisciplinary teamwork, some say, implies a crossing of boundaries, and a sharing of mental models or cognitive processes such as problem solving and goal definition (e.g., Boreham, 2007; Courtenay et al., 2013; Faraj & Xiao, 2006; McCallin, 2004).

Others such as Drinka and Clark (2000) point to models that emphasize team evolution to explain the difference in teamwork, typically based on some version of Tuckman's (1965) stages of group development (forming, storming, norming, performing). They underscore the conditions necessary for interprofessional team performance as often ephemeral and unevenly distributed among members whose membership seniority is variable. One indicator of team performance, in their view, is the handling of conflict, thought to be indicative of a team's developmental stage; for a team to embrace conflict as constructive requires significant trust and participative safety (Jones & Jones, 2011; San Martín-Rodríguez, Beaulieu, D'Amour, & Ferrada-Videla, 2005). Another is how the team approaches what Drinka and Clark call "wicked problems," (see above) and whether the team can identify the type of problem a patient faces as well as the least number of relevant scopes of practice needed to address it.

Some, such as Opie, express their interest in this question as an issue of effectiveness (see also Lemieux-Charles & McGuire, 2006):

An effective team is one that attends to and works with the different knowledges of clients and their situations available to it through discipline-specific accounts and accounts of clients and families (which may also differ from each other). The work of the team requires engagement with such differences (rather than their eliding) to ensure, as clients' circumstances evolve, the continued elaboration and revision of team goals and care plans. The ongoing development of effective work will focus primarily on evaluations of teams' processes of knowledge production and creation. (Opie, 2000, p. 51)

This suggests that for team performance, a practical, ongoing reflexivity is necessary on the part of individual team members, an attuning to the potential polyphony in these collective accounts. As Opie puts it, a team member presents their account of the client and "takes active cognizance of how that account is open to modification, challenge, and extension from other discipline-specific perspectives" (p. 145). However, it remains to be seen what that engagement, that active cognizance, looks like in interaction. This is the

central focus of the present chapter.⁷¹ Opie herself recognized that what makes a team effective has to do with subtle team behaviours, and acknowledged that her informants indicated no consensus on what constituted effective team practices (2000, p. 116).⁷²

Whether we focus on integration, evolution, or effectiveness, what makes the interprofessional performance hard to pin down is perhaps its collective aspect. In this vein, some recent literature frames interprofessional performance as a question of collective competence (Boreham, 2007, 2010; Lingard, 2013), sometimes focusing on the team as an activity system (Engeström, Engeström, & Kerosuo, 2003; Engeström, Engeström, et al., 1999; Varpio et al., 2008), and is often grounded in research that accords with a practice approach. At the heart of a concern for interprofessionality as collective competence is a desire to understand its ephemeral yet collective quality. Indeed, this preoccupied me in my study as I tried to understand and define in my own terms what constituted the characterizing differences within and across the teams in my fieldwork. What made the “dream teams” great and why was the Intervention team a “babysitting nightmare”?

This chapter is grounded in organization studies literature that argues that what is at stake is the quality of attention brought to bear in interactions during the accomplishment of patient case reviews. I build on Chapter 3’s description of Weick and Roberts’ (1993) notion of collective mind and their CRS model (contribute-represent-subordinate) (see also Fauré & Arnaud, 2012) as well as Cooren’s (2004b) developmental extension of it from a processual, communicative perspective as collective *mind*ing. These are interwoven with a consideration of Strauss’s ideas about articulation work and care trajectories (Corbin & Strauss, 1993; Strauss et al., 1985; Strauss, 1988, 1993). To put it in the terms that Weick and Strauss might use,

⁷¹ Opie suggests knowledge spirals, or discussions that loop back on one another, a format of discussion that was indeed possible on the teams that she studied in disability, elderly, and psychiatric care services. These teams met weekly or bi-monthly to discuss patient loads between 3 to 18 patients. In contrast, the acute care teams in my study met *daily* to discuss twice as many or more patients than Opie’s teams’ upper limit. The form of my teams’ discussions was necessarily different, and time pressures excluded frequent looping back, although it did sometimes occur. And yet they often managed to collectively define—polyphonically—the patient’s situation, so the format of discussion cannot be our only explanans.

⁷² Drinka and Clark (2000) concur, claiming that health care organizations have difficulty measuring the effectiveness of interprofessional teamwork.

interprofessional teams can be more or less collectively *heedful* of their contributions and representations in their interactions.

After a brief theoretical grounding, I point out one major difference across the teams in my study that I link to this question of heed: the overview (or introduction) to the patient case discussion. A mundane example of an overview is offered to illustrate several points related to heedful representations, articulation work, and the patient care trajectory. This begins to build my case that heedful interprofessional performance in the patient case review relies on a narrative emplotment of the patient's case for collective sensemaking work. This is then contrasted with a second empirical example, the impoverished case briefing, where I explore questions of accountability, gatekeeping, participative safety, pragmatic salience, and the handling of uncertainty. Finally, a third empirical example is offered to demonstrate what these subtle team behaviours look like in interaction through six case reviews of the same patient across the three teams in my study. The concluding discussion summarizes the points made and suggests that heedful collective minding be considered an indicator of interprofessional team performance.

6.1. Theoretical grounding

For Weick and Roberts, collective mind emerges in the interrelations between actors: "To connect is to mind" (1993, p. 374), and connecting can be more or less heedful. This is encapsulated in their proposed CRS model:

Collective mind is conceptualized as a pattern of heedful interrelations of actions in a social system. Actors in the system construct their actions (contributions), understanding that the system consists of connected actions by themselves and others (representation), and interrelate their actions within the system (subordination). Ongoing variation in the heed with which individual contributions, representations, and subordinations are interrelated influences comprehension of unfolding events and the incidence of errors. As heedful interrelating and mindful comprehension increase, organizational errors decrease. (Weick & Roberts, 1993, p. 357)

For them, collective mind "exists potentially as a kind of capacity in an ongoing activity stream and emerges in the style with which activities are interrelated" (p. 365); collective intelligence can be considered a "disposition to heed" (p. 361). Collective dispositions

are expressed in the three types of actions (contributing, representing, and subordinating). Cooren (2004b, 2006a) shows that we can in turn locate these interrelations and these dispositions in communicative practice, where individuals are seen to subordinate their interactional contributions to the representations of collective efforts made present in the interaction.

As he points out, the strength of the CRS model, (especially as he develops it) lies in its emphasis on how the distributed nature of collective mind is made manifest in local interactions (Cooren, 2004b). He contends:

The interaction reveals patterns of behavior that display a form of collective intelligence. By this, I mean that the interaction allows people to build a solution collectively through mobilizing situations and events from past experiences and connecting them up with what is at stake in the discussion. It is this phenomenon that is precisely one of the aspects of the development of collective minding. (Cooren, 2006a, p. 336)

To ground this in the empirical and analytical context of my study, we cannot necessarily see in the situation of team rounds how individual team members might subsequently articulate (Corbin & Strauss, 1993; Strauss, 1988) their contributions to care downstream but we can observe how previous and anticipated contributions are *represented* in rounds discussions, a phenomenon Cooren calls translocalization or scaling up (2004b; Taylor & Van Every, 2000). In the interaction context, we can further see how interlocutors collectively orient to a situation that they talk into being, and how they subordinate their subsequent interactional contributions to that situation. By empirically exploring the link between heedfulness in interactions and collective mind (or collective competence or interprofessional performance), we can begin to suggest explanations to two important questions implied in the interprofessional practice literature: (a) How is communication consequential (Sigman, 1995) to interprofessional

practice, and (b) what is the nature of the interprofessional performance?⁷³ To begin, let's turn to empirical considerations, starting with one of the most recurrent patterns in my data: The overview to the case presentation.

6.2. The importance of introductions: The design of overviews

Patient case reviews always begin with some sort of opener, usually the patient's name or bed number or both. Patient case reviews typically followed the bed numbers written on the face sheets of the team members.⁷⁴ Much of the time, an overview is offered for the listening team members to orient them to the particulars of the case that are salient matters of concern (Latour, 2008) at the current point in care. These overviews set the scene for the listening team members, who follow along in their own notes. Often, as we saw in the example of Beatrice Herschen (Chapters 1 and 5) and "something in her neck," uncertainty or ambiguity is signalled in the introduction that sparks an extended episode in sensemaking. Other times, the overview remains a briefing, but this does not mean that collective sensemaking work is not taking place. In this section, I use a mundane empirical example to show how these overviews can relate to the heedful performance of the team, whether that performance is observable in the sensemaking work done in rounds (it is not in this first example) or must be inferred as taking place downstream.

⁷³ If one were inspired, as many linguists are, by Chomsky's (1965) distinction between linguistic competence and linguistic performance, one might extend this thinking to apply to assessment in interprofessional education: Can one infer a student's IP competence from his or her IP performance in teamwork? Although Chomsky's arguments are outside the scope of this project, one can begin to see that this might be an area to which the current research might be applied, although perhaps not by maintaining his distinction between performance and competence. Rather, I would insist that both IP competence and performance can only be assessed collectively, in interaction, as my analyses aim to demonstrate, which would throw a curve ball at the necessity to evaluate *individual* performances and competencies.

⁷⁴ It is worth mentioning that rounds discussion was organized around these lists, and occasionally, by the physician or medical resident who dropped in to rounds, rather than, say, the severity or complexity of the cases.

6.2.1. Heedfulness and the importance of introductions: An illustrating example

The following 20-second briefing from the Intake team was chosen because it was representatively typical, rather mundane, and yet relatively complete in terms of its circumscribing function, as we shall soon see. In this overview, which was taken from the morning rounds of the Intake team on a very busy day when the patient load was near 50 patients (about 15 more than usual), the PCC offers a briefing that defines the situation for this patient presenting with a routine, acute medical problem. At the table that morning were the usual players: two PCCs (charge nurses), two PTs, one OT, one SW, one GAP (geriatric assessment program nurse), a CCD (home care coordinator), and a SLP (speech language pathologist).

Intake-10-01-05.14 (16:53-17:13)

1 PCC1: ((Reading, voices in background still chuckling over comment made
2 during previous case review)) Um, 218 is Wendy Matson. A 57-year-old
3 who's, came in with acute renal failure, lives with her husband, has
4 asthma, hypertension and a urethral stricture. Her potassium was 8.1
5 when she came in. It's now down to 6.6. She's gettin' Kay-e-exalate (.)
6 and she's for a renal ultrasound, in and out-s, IV, and she's independent.

6.2.2. Information transmission

Firstly, and simply, we can see that the overview is a means by which salient patient information is transmitted to the team members present, what Lingard and colleagues call *information work* (Lingard et al., 2007). The flow of information goes from the rounds facilitator (on this team generally the PCC,⁷⁵ who relies on his or her notes and memory) to the listening team members who follow along with their own notes. In this example, we learn the patient's room number, name, age, and what she presented with at Admission. We also learn her home living situation, that she suffers from asthma and hypertension, as well as her potassium levels. We learn that she is receiving something called Kayexelate, that she will have a renal ultrasound, that she has an intravenous line, and that she is independent. We hear that something is "in and out"

⁷⁵ At some rounds meetings, an Integrate representative, the UC, would open and close each discussion. Sometimes the UC provided a fairly extensive introduction to the patient, which the PCC would often elaborate, but sometimes the UC simply called out the next patient's name. In the above case, the UC was absent from the meeting.

(line 5).

6.2.3. *Circumscription of problem at hand and registers of knowing*

Secondly and importantly, the overview is a mechanism by which salience is set (and sometimes consequently negotiated or contested): The overview frames, defines, and circumscribes what is of concern with regard to diagnostic and treatment planning, providing a primary focus, usually the current problem or diagnosis, bolstered by subsidiary particulars (Tsoukas, 2000), such as a brief medical or mental health history. In the above example, we learn that the current diagnosis is what the patient “came in with” (lines 1-2): acute renal failure with possibly related urethral stricture,⁷⁶ for which she is receiving the drug Kayexelate and will undergo a renal ultrasound for further diagnostic precision.

In the interprofessional practice literature, framing is sometimes understood as the invocation of existing shared mental models or cognitive schemas; accordingly, it is thought that once these are in place, interprofessional collaboration will unfold more seamlessly (e.g., Gum, Prideaux, Sweet, & Greenhill, 2012; Leonard, 2004). However, Brummans, Putnam, and Gray (2008) write from a collective sensemaking view that we ought to focus less on the existence of shared frames and more on the communicative process of foregrounding:

From this perspective, framing refers to using a particular “repertoire” of categories and labels to bracket and interpret ongoing experience and inform action. In other words, it refers to the *communicative process* through which people foreground and background certain aspects of experience and apply a set of categories and labels to develop “coherent stor[ies] of what is going on” and make decisions about “what should be done given [those] unfolding stor[ies]” (Weick, 1999, p. 40). Thus a framing repertoire does not refer to a set of cognitive knowledge schemas or structures of expectation (frames), existing prior to framing, but to a pattern of highlighting similar aspects of experience to give a coherent account of what is going on that is continuously shaped and reshaped in interactions. (p. 28, emphasis added)

⁷⁶ This is a narrowing of the urethra, which causes pain and difficulty urinating, and sometimes causes the complete inability to urinate, which constitutes a medical emergency. Urethral stricture is often related to urinary tract infections, a complication of which can be renal trouble.

Their view is not inconsistent with the notion of shared schemas, but adds the nuance that the meanings signified by schemas are always under (shared) construction, and that framing is “an inherent part of people’s ongoing everyday sensemaking” (p. 27). Thus, how framing gets done is just as important as the frames themselves. This is one argument I make in this chapter: *The framing or establishment of salience can be done more or less heedfully*. Moreover, what is important is not necessarily consensus on the meanings represented by the framing (i.e., the degree to which they are shared), but rather how well the framing functions as an aid in coordinating team members’ interactional contributions (Cooren, 2004b) and the subsequent articulation of their own care work. The framing enacted in this example signals particular domains of expertise,⁷⁷ which Drinka and Clark (2000) might say amounts to indicating which professions ought to be implicated.

Much of the information is given in a highly codified format, and Hobbs (2007) refers to these codes as professional speech registers that reflect specific ways of analyzing and approaching problems. In other words, this codification invokes particular ways of knowing that offer and delimit interpretive resources, and excludes others. In this sense, the briefing or overview is an occurrence of sensegiving (Cornelissen et al., 2012). It indicates to other team members what merits attention, who is implicated, how to interpret the information given, and what if any subsequent actions are needed. In the present example, information given about the acuteness and improvement of the patient’s renal failure is codified in numeric potassium levels.⁷⁸ The patient’s earlier potassium level of 8.1 indicated severe, potentially life-threatening hyperkalemia, but it has since dropped to 6.6, still high but indicating moderate hyperkalemia. This numeric information frames the problem as a medical one, positioning it within reductionist and

⁷⁷ Boland and Tenkasi (1996) might refer to this as *perspective-making* in that particular communities of knowing (their term) are interpellated or summoned through the way that knowledge is framed.

⁷⁸ The kidneys eliminate potassium from the body, and when they are in failure, potassium levels elevate, which is called hyperkalemia. Severe hyperkalemia can be fatal.

specialized ways of knowing that interpellate⁷⁹ or speak to the experienced nurses around the table, who fill the team roles of PCC, GAP (geriatric assessment program representative), and CCD (home care coordinator). They might additionally know that Kayexelate is a drug used to manage blood potassium levels. Although the other team members, such as the physiotherapist, occupational therapist, social worker, or speech language pathologist, might share this knowledge, they are not professionally interpellated by this codified information and as such are effectively excluded from expertise-salience. In other words, the problem is not necessarily a matter of concern for them.

In addition, some information is meaningful to team members because it invokes categories (Suchman, 1994) and classifications, which are resources for knowing, again circumscribing the professional domains implicated and the actions to take, just as they imply professional identities (Silverman, 1998). Take, for example, the patient's age. For this team, the age of a patient is a standard piece of information given because a large portion of the Intake unit's patients is elderly. In this particular case, the patient's relatively young age of 57 excludes the GAP representative from the jurisdictions concerned because the problem is not a *geriatric* one. Other classifying information includes "lives with her husband" (line 3): Information about the patient's living situation is often an indication of whether or not there is someone at home who can help care for the patient post-discharge and consequently what kind of home care services are needed. A similar example is the word "independent" in line 5 at the end of the briefing, which refers to the patient's functional status. By saying, "She is independent," the PCC indicates that the patient can mobilize independently and that physiotherapy and

⁷⁹ I use the term *interpellate* in its French sense (*interpeller*), which is difficult to translate exactly, but has been equated to hailing or summoning (Cooren, n.d.-a). Basically, it is the notion that we respond in certain ways to certain situations because of how we identify ourselves in those situations (or how those situations define us). Cooren tells us that this is taken from Althusser (1970) to emphasize that the situation always precedes the individual and in some way defines him or her. However, I would like to be clear that I do not mean to say by this that individuals or collectives respond mechanistically or without choice to said interpellation (i.e., they are not cultural "dopes," Garfinkel, 1967). Instead and more in line with Sacks' work on membership category analysis (Silverman, 1998), I mean to say that having and enacting a certain identity imposes the *obligation* to recognize and respond in certain ways in certain situations. One may always choose to ignore this obligation, but then may face social sanction for not performing one's identity role adequately. Furthermore, situational identities and obligations may be multiple in a given context (e.g., the PCC must act as team leader, as representative for the ward, as representative for the organization, for the treating doctors, and as a nurse), and there is always a degree of negotiation between these identity demands.

occupational therapy need not get involved.⁸⁰ Moreover, we can note that the provision of this categorical information simultaneously addresses the Integrate project's scripted domains of concern in the goal-focused questions (Chapter 4).

6.2.4. Narrative emplotment: Situating the patient's case

The overview also incorporates time and place, the details of which are often consequential for indicating care needs and calling for scopes of care expertise, a practice that Vasquez refers to as organizational timing and spacing (Vasquez, 2009, see also Cooren, Fox, Robichaud, & Talih, 2005). For example, the patient's bed number is given, geographically situating the patient within the ward, which in itself offers information about the level of care needs (e.g., she is not in the trauma unit, but in general acute intake care). Similarly, we can notice how the temporal aspect of the patient's case is referenced by the *change* in the patient's status (decreasing potassium levels and anticipated diagnostic tests). This relates to a key characteristic of all patient case reviews, from briefings to extended discussions, which is that they attend temporally and jurisdictionally to the *patient care trajectory*, a borrowed and modified version of the *illness trajectory* term coined by Anselm Strauss and colleagues (Strauss et al., 1985). Strauss et al. emphasized the word *trajectory* "to refer not only to the physiological unfolding of a patient's disease but to *the total organization of work done over that course, plus the impact on those involved with that work and its organization*" (p. 8, emphasis added).⁸¹ From this, then, a few more points about the patient care trajectory and sensemaking are needed.

⁸⁰ However, if the patient's functional status had been poorer, information about her chronic conditions—asthma and hypertension—might have been relevant to the PT's work of mobilizing the patient and potentially to the OT's cognitive assessment, depending on the severity of blood oxygen desaturation that can be associated with asthma.

⁸¹ The adjectival term *patient care* emphasizes what is pragmatically of concern to the teams I observed: the *care needs* of the patient and the attendant *actions* that aim to bring about a change in the patient's condition. In contrast, *illness trajectory* focuses in part on the evolution of a *disease* or medical condition. As such, Strauss et al.'s term imparts a medical connotation, which does not encompass all kinds of care needs, such as functional needs. However, all care needs may fall under the patient care trajectory.

Patient care trajectory as shared resource

Bound up in the notion of the patient care trajectory is the recognition that there is an implicit and shared understanding among practitioners that the patient's situation is just that: *situated* in time and space, and they work to comprehend or make sense of it according to whose professional domain is implicated and when. Weick et al. (see also Blatt, Christianson, Sutcliffe, & Rosenthal, 2006; 2005) explain that this sensemaking work involves asking the questions, "What is the story?" and "Now what?". Indeed, future situational contingencies are continually anticipated (Strauss, 1988, 1993), and past actions and events are made available to interpret the current situation, thus casting actions into a *narrative framework* of sorts for retrospective and reflexive sensemaking (Robichaud et al., 2004). Put otherwise, team members rely on the notion of the patient care trajectory to situate and frame their understanding of the current problem as well as to articulate their own contributions to care vis-à-vis the collective stream of action (Corbin & Strauss, 1993). Indeed, this is a general feature of hospital work, which Lacoste calls "*un permanent travail de coordination*" (Lacoste, 2001b), underscoring the ongoing, continual task of articulation work and contingency anticipation. For the teams in my study, most actions and representations of actions were ultimately oriented to moving the patient "downstream" on the anticipated care trajectory as quickly as possible, which is typical for acute care settings. They therefore attend to information insofar as it points out changes in status, or "differences that make a difference" (Bateson, 1972, p. 272).

This orientation to movement, change, and difference denotes sensemaking that is based in narrative:

To the extent that its object is the representation of human action and interaction. [...] narrative is language's natural provision for making sense of both individual experience and social interaction. It establishes the objects and events to which people's attention is directed, and it provides a complex set of identities and roles that individual actors may enact, (Robichaud et al., 2004, p. 619)

As a narrative framework, the patient care trajectory lays out a set of major moves or developments that are expected to unfold as well as a way of interpreting past events, in addition to inscribing role potentialities that team members then enact: The patient presents at hospital with certain symptoms, diagnostic work is done, treatment interventions are carried out, assessment occurs, and then preparations for discharge

take place. Actors use this anticipated arc to emplot (see Mattingly, 1998a), define, understand, and hopefully resolve the problem at hand.

Returning to the earlier example and the discussion of codified information, we can situate the patient on this trajectory by appealing to the codified information. We can understand that the patient's acute medical condition is improving if (a) we know how to interpret the change in potassium levels (a difference that makes a difference to our understanding of the patient's current medical status and of the direction in which we anticipate it to evolve) and (b) if we know that the drug Kayexelate is used to treat renal failure, that is, if the medical treatment she has been receiving at the hospital—a past action—is implicitly framed as being responsible for this improvement. Furthermore, the mention of the patient's intravenous line is another indication that the patient is still requiring acute care and not likely for discharge at the moment, which serves to situate her at a particular point on the patient care trajectory (i.e., the investigative and treatment stage of medical intervention).

From this we can see, in the pragmatic vein, that information is given purposively; it is action-oriented towards certain desired ends or goals, such as efficiently moving the patient downstream on the care trajectory. Other team members understand this purposiveness, and are attuned to the information offered as a resource for knowing who should take what action and when. As discussed earlier, classifications help in defining the patient's situation and what to do about it. In this example, the functional status "independent" essentially classifies the patient as being among the group of patients who have low needs for functional intervention, a classification which, with regard to PT and OT action, means that none needs to be taken. Had the patient been classified as a "heavy, two-assist," the physiotherapists on the team would know they would need to enlist the help of someone else, perhaps a nurse or another PT, to help mobilize the patient. Similarly, if the patient were classified as a "total care, ceiling lift," this would have implications for the discharge planners, especially CCD, regarding the institutions in the community that would accept to care for the patient post-discharge. The point is that team members attend to and interpret information given with eye to future actions, which they implicitly make sense of through the narrative framework of the patient care trajectory.

Patient care trajectory as boundary object

The patient care trajectory also serves as an implicit boundary object (Star & Greisemer, 1989; Star, 2010) between the representatives of the different professions involved and, as such, serves as a tool for interprofessional teamwork. Boundary objects represent ways of knowing, around which sensemaking can take place; they “do not convey unambiguous meaning, but have a symbolic adequacy that enables conversation without forcing shared meaning” (Boland & Tenkasi, 1996, p. 362), such as, for instance, maps, labels, idealized images, spreadsheets, and diagrams. The patient care trajectory links the different team members because the contributions of each can be represented and understood somewhere on the trajectory. For example, the team members whose professional jurisdictions were excluded by the codified information (potassium levels) about the patient’s renal failure (i.e., SW, OT, PT, and SLP) can still generally understand this information as falling under medical jurisdiction and as being part of the diagnostic and medical intervention stage of the patient’s care trajectory. From this, we can see that the notion of the patient care trajectory offers sufficient interpretive flexibility for them to be able to get an “adequate gist” of the coded information for it to be meaningful for their work, even if it does not speak to them professionally. In this way, we can also see that the patient care trajectory represents overall the organizational objective of getting the patient “through the system.”

Because different scopes of practice are understood as being appropriate at different points on the patient care trajectory, it is an essential tool and organizing resource for articulation work. When a patient is understood to be at the “medically stable” point of his or her trajectory, this can mean for the doctors that the acute medical episode requiring their close involvement has come to a close and it is now time for other professions, such as physiotherapy and occupational therapy, to take centre stage and complete their assessments before making functional recommendations for discharge. In fact, discharge is typically the point on the trajectory at which the hospitalist, PT, and OT sign off, with the former prescribing medication and signing requisition orders for any medical or functional service needs in the community post-discharge. For the home care coordinator (CCD), however, this is where the story begins, and she must pay close attention to the end of the acute care episode (the part

of the trajectory that takes place in the hospital) and anticipate future service needs.⁸² For the person who is the patient, of course, the patient care trajectory likely began before hospitalization, perhaps even before a visit to his family doctor, with a personal realization that something “didn’t feel quite right,” at which time he set in motion the actions that instigated the care to figure out and treat whatever was causing that feeling, and in doing so, subsequently defined himself as a patient. The overall point I am trying to make, and that Strauss and colleagues rightly pointed out long ago, is that the notion of the patient care trajectory is a resource on which all the implicated human actors rely in some fashion to articulate their efforts with those of others and to make sense of the current situation.

Inscribing the patient care trajectory into rounds discussions

In order to be available as a common resource for all team members attending rounds, the trajectory must be made present or presentified (Benoit-Barne & Cooren, 2009) in case discussions, at least implicitly. Indeed, making the trajectory present seemed to be an underlying goal of the Integrate program. We might recall that Integrate aimed to focus team thinking on matters of efficiency and patient flow so that unnecessary delays could be detected and acted upon. One way Integrate tried to do this was by circumscribing what should be covered in patient case reviews by mandating a set of goal-focused questions that were to be addressed. At the risk of being repetitive, these were: What are the patient’s medical status and goal? What are the patient’s functional status and goal? What are the concerns, including psychosocial factors, that need to be considered with regard to the patient’s discharge needs? (Fraser Health, 2008). This set of scripted questions was supposed to structure the team’s thinking (Fraser Health, 2008), shaping how knowing together unfolded interactionally by laying out the necessary components for consideration, in much the same way that Berg (1996) describes the patient record structuring the interaction episode in a consultation between physician and patient.

As mentioned in Chapters 3 and 4, the document that Integrate’s representatives needed to fill in for each patient during rounds seemed to have given structure to the

⁸² In this way, we can see that the patient care trajectory extends beyond the hospital, and can even serve as an inter-organizational boundary object (c.f., Czarniawska, 2004, on the notion of action nets), such as between the hospital and the community care network.

practice of patient case reviews. This was to the extent that the domains of concern were typically covered by the “independent teams” and when they were not, the UC would often reorient discussion to these domains of concern by asking, for example, “And how about his function? Getting around okay?” So, although not always materially instantiated in a document like the patient record, Integrate’s scripted set of questions nonetheless had the capacity to structure interaction in rounds and to influence what was made to count and what kind of knowing together took place, *when they were enacted by the team*.⁸³

This raises the point of the scripted questions being both a resource for action (Giddens, 1984) as well as a prescription for action (pun mostly intended), where organizationally desired end goals are written into the script. In this case, the goals were to “recover capacity from within,” which is to say, to help eliminate unnecessary delays and redundancies and increase organizational efficiency overall.⁸⁴ The scripted questions were not always considered in every case, nor were all points on the patient care trajectory, but this did not necessarily impede knowing together or collective sensemaking. Just as we can infer something about an entire story by hearing a narrative detail,⁸⁵ team members understood the information given in a briefing by orienting to how it related to the overall trajectory. In other words, the narrative basis of this kind of knowing or sensemaking means that we still orient to the whole while focusing on the particular, because the whole is always implicitly referenced. This is key

⁸³ Indeed, when enacted, this Integrate script of questions spoke for or ventriloquized (Cooren, 2012) the organization by prescribing the “ideal” patient case review: It orients to (i.e., makes count) questions of patient flow and efficiency by emphasizing the patient care trajectory, which it does by accentuating change (the difference between status and goal). Furthermore, by presentifying medical, functional, and discharge concerns, it also made present (and thus made count) the professions associated with each domain of concern on the patient care trajectory. In this way, we might also say that Integrate’s scripted questions were a means of encouraging interprofessional practice and integrated ways of thinking.

⁸⁴ As Vasquez and colleagues (Vasquez et al., 2009; Vasquez, 2009) point out, the script is an example of Pickering’s (1995) notion of the dance of agency, wherein a material device (here, a scripted set of questions written down in training documents that outline how to do the practice of patient case reviews) may or may not perform as intended. In this instance, however, the resistance came from the human actors who enacted it with more or less fidelity to original intentions (Rice et al., 2010; Whyte et al., 2009).

⁸⁵ Narrative structuralist Algirdas Greimas (Greimas, Perron, & Collins, 1987; Greimas, 1970) explains that we understand particular narratives as a function of the general structures or programs of action present in all narratives. Also known as the hermeneutic circle.

to knowing together in interprofessional practice because it requires an understanding of how the different professional pieces fit together in the whole of the care trajectory.⁸⁶

6.3. Returning to the question of heed

The way that the pieces can be fit together on the whole of the patient care trajectory depends largely on how the various parts are represented, which is what Weick and Roberts' (1993) CRS model aimed to capture: Individuals contribute their actions to ongoing streams of action based on their representations of the system or collective in which they must contribute; they subordinate their contributions to these representations. These representations of ongoing streams of action translocalize (Cooren, 2004b)—literally bring to the here and now of the interactional setting—the “portions of the organization” (p. 533) that are concerned with the problem at hand, adding layers of complexity to the representation of the situation under construction. Articulation work is entirely dependent on this process because appropriate and effective contributions to care are most possible when the ongoing streams of action (i.e., the combined efforts of the collective) are represented as completely and as saliently as necessary—or to use Weick's term, heedfully.

Heed, according to Weick, is a disposition to action; it is a quality of attention brought to bear in interaction, and, as the CRS model explains, heedful interrelating breaks down when “individuals represent others in the system in less detail” (Cooren, 2004, p. 536). In the above example, even if we cannot observe how team members reacted or articulated their care efforts downstream, we can nonetheless discern that collective efforts were heedfully represented in the PCC's overview. We can see that the collective is made present though implicit reference to the patient care trajectory, and that various parts of the collective, which is to say the salient professionals, are interpellated or addressed via the codified information given. To better illustrate the point

⁸⁶ Incidentally, on the Short-stay GIM team, it was interesting to observe the lack of familiarity the physicians (MDs and CTUs) had of the different allied health roles. They often conflated the scopes of practice of occupational therapy and physiotherapy, much to the OT's frustration. This team's OT once repeatedly exclaimed in indignation, “I don't do stairs!” to the CTU who was recommending the “PT-OT” assess a patient's function before discharge. One can only wonder what inefficiencies result from this lack of familiarity.

that heed—and not the devil, in this case—is in attention to detail, let’s take a look at a very different example: the impoverished case briefing.

6.3.1. *The impoverished case briefing*

Consider how the following patient case briefings stand in stark contrast to the one analyzed above. In this example, briefings—in fact, the briefest of briefings—are given for six patients in 32 seconds. The excerpt was taken from the middle of the Intervention team rounds on a day that was rather atypical because there was no Integrate representative (UC) present. Also exceptional for this day was that 32 patient cases were covered in a mere 23 minutes, which was incredibly pithy, even for this team for whom the average duration of rounds was close to 29 minutes (remember that Intake rounds averaged 35 minutes, and Short-Stay GIM nearly 50 minutes). Few details and little time are given to situate each patient on his or her trajectory, although, given that they are in the Intervention unit, we already know approximately where they are on the trajectory (i.e., before or after the intervention), and it is possible that less is needed to situate them. However, I would draw attention to how the patients’ situations are framed, how information is represented, and how problems are defined. Representations of what is known and what actions are currently ongoing or anticipated are very impoverished compared to the previous example.

Present at the meeting were the PCC, PHARMA, PT, and DIET, all of whom had attended rounds the previous day. Absent were SW and CCD, which was not in itself remarkable. Three of the patients mentioned had been discussed the previous day, but for the remaining three cases, there was not sufficient identifying information given to know if they had been on the ward the previous day. Information about the first patient mentioned here was fired off on the heels of the previous case review without pause or other signal that a new case was being discussed.

Intervention-10-01-19.13-16 (16:41-17:13)

1 PCC: ((pages flipping)) Poor Mr. Gold’s [Patient 1] continued to vomit and had
2 to have an NG in. ((sound of pages flipping as listening team members
3 work to follow along)) Mr. Dooka’s [Patient 2] waiting for surgery. Mrs.
4 Childer [Patient 3] looks like she’s going to have gall bladder disease, her
5 liver func-, liver function tests are elevated. (.5) Tucker, [Patient 4] well,
6 (0.5) slow but sure. ((sound of page flipping))

1 PT: She's up walking without us (.) so that's good.
2 PCC: Mr. Nichollson, [Patient 5] we got on board for Thursday. ((sound of
3 pages flipping)) You guys do any (1.0) teaching? with colostomy? No.
4 DIET: [No.
5 PCC: [There's nothing special.
6 DIET: No. There's not, well, the answer[-((pages still flipping))
7 PCC: [Mr. Nolan [Patient 6] is doing very, very
8 well, and he actually might get outta here tomorrow

6.3.2. *Interpreting the information given: Does it effectively situate the patients?*

In this fast-paced excerpt, minimal work is done by the PCC to situate and identify the patients for the other listening team members (explored in more detail in Chapter 7), and we can infer that they are searching for the patients in their own notes by the frequent sound of flipping pages (lines 1, 2, 6, and 12). No bed numbers are given for any of the patients, who are listed only by last name and honorific title (e.g., Mr. and Mrs.). No information is given to recount the beginnings of the patients' stories or current care trajectories, such as "She's a transfer from Red Hawk Valley Hospital," or even how they came to be on the ward, such as "an off-service patient" (i.e., a non-intervention patient placed in the ward because there was an empty bed available). We might presume that the team members present at this meeting already know about the patients mentioned here, because they were all present at the previous day's rounds. However, as pointed out earlier, only three of the six patients mentioned match up with my fieldnotes and audio recording from the previous day, meaning that either they were new patients on the day of the excerpt or they were not identified in sufficiently similar detail from one day to the next to be certain.⁸⁷

Despite the paucity of detail given in these briefings, we can nonetheless see that the narrating PCC does attend to *change* in the patients' situations. However, this in itself is insufficient to locate each patient on his or her care trajectory, to implicate the other team members' professional domains, or to indicate to them (and perhaps also for

⁸⁷ I did not have access to the disciplinary notes or patient chart information that the team members did, and it is conceivable that they were able to quickly locate the patients in question, especially if rounds proceeded in ascending or descending order of bed numbers. However, as no bed numbers or other indications were given, I can only speculate.

them to “figure out”) what if any subsequent actions are necessary. In the terms of Weick and Roberts’ (1993) C-R-S model, the PCC does not *subordinate* his or her interactional contributions (i.e., how s/he represents of the patients’ situation and what actions are needed) to any representation of the collective involved (e.g., the team, the ward, the group of nurses, the hospital); his or her representation of the collective is just as impoverished as that of the patients’ cases.

For example, the case of the first patient, “Poor Mr. Gold” (line 1), is described as a change (i.e., treatment intervention) that was necessitated by the status quo: His continued vomiting required that a nasogastric (NG) feeding tube be inserted, presumably to ensure adequate nutritional intake. However, we do not know from the information given what is expected to happen next. Excessive vomiting is a matter of concern to the dietician but also to the pharmacist as certain medications might contribute to vomiting or help to control it, but the PCC does not invite them to contribute or seem to address their professional domains; they are not observably interpellated; s/he has not subordinated his or her contribution to the interaction (i.e., representations of the situation) to a shared notion of the collective and the portions that might be implicated.

Similarly, the second patient, Mr. Dooka, is described as “waiting for surgery” (line 2), which *might* be code to refer to a point on the patient’s trajectory where the team members present need not get involved, but similar cases in other rounds for this team do not substantiate this interpretation. From the information given here, we do not know if there are matters of concern for PT, DIET, or PHARM. Indeed, it is possible that this patient needs to be mobilized before surgery, that he requires a special diet or nothing by mouth (i.e., NPO) before surgery, or that he has medication issues, but we have no way of knowing from the PCC’s briefing because these professional domains are not interpellated in any observable way. Likewise, we do not know the anticipated date of surgery or even what kind of surgery is expected (e.g., knee surgery would implicate physiotherapy; gastric surgery, nutrition), so the information given is vague at best.

“Waiting for surgery” does not seem to interpellate anyone, and the PCC is not observably mindful of the representatives of the collective sitting around the table, and, as such, could be considered heedless of the requirements of interprofessional practice. (Recall the variant of the A-B-X triad from the theory chapter.) The PCC does not check

in with team members in any noticeable way to verify that the read of the situation offered is accurate (as remedy to this, Hutchins and Klausen, 1998, might suggest fostering representational redundancy). In this way, we could say that the “system” or “collective” is again represented in an impoverished fashion.

The PCC provides more specific and detailed information for the third patient, Mrs. Childer (i.e., elevated liver function tests, line 3) and then predicts that this patient will develop gall bladder disease. In this briefing, at least, the problem is circumscribed as a medical one and is situated within an anticipated *illness* trajectory, but again, no explicit indication is given of future actions to be taken. The situation of Patient 4 (Tucker) is presented even more nebulously as an improvement of sorts: “slow but sure” (line 6). The PT seems to attend to the dearth of detail provided by the PCC, and interjects her own professional appraisal of the patient’s classification as functionally independent (“She’s up walking without us,” line 7) and her evaluation that this is “good,” which supports and aligns with PCC’s statement, thereby could be seen as an attempt to interactionally establish a collective, at the very least. (The PT’s contribution fleshes out somewhat the impoverished representation produced by the PCC such that we know that physiotherapy need not be involved, but apart from this, we do not know what else merits attention or who else around the table ought to be implicated, or how to interpret the information given.) However, the PCC does not acknowledge the PT’s contribution or alignment⁸⁸, and instead barrels along with the next patient’s case.

Mr. Nichollson (Patient 5) is described as “on board for Thursday” (line 8), which ostensibly provides at least a temporal placement of the anticipated intervention for the patient. It is only from the PCC’s subsequent request for information from DIET that we can ascertain that the surgery is likely a new colostomy. The PCC asks DIET, “You guys do any (.) teaching (.) with colostomy?” (line 9). Although we are limited by the data capture of audio recording from being certain, we can presume that DIET shakes her head, which PCC voices as “No” (line 9). DIET repeats and thus confirms this interpretation (line 10), and tries to elaborate her response in line 12, but PCC interrupts and speaks over her (line 13), ploughing on once again with the next patient’s case review.

⁸⁸ See the Glossary at the beginning of this work

While this interruption is not necessarily unusual practice, it does (a) show who is in charge and who authorizes themselves to speak, and (b) position DIET as the one to whom questions can be posed but perhaps not the other way around.

Mr. Nolan (Patient 6) is described as “doing very, very well, and he might actually get outta here tomorrow” (lines 13-14), which clearly places him near the point of discharge on his care trajectory, but again, we don’t know if any teaching or home care arrangements will be necessary (in fairness, the home care coordinator, or CCD, was absent that day).

Because heterogeneous knowledge is not activated (the PCC barely seems to reference the nursing notes) and made present in the interactional setting, it is not made available to everyone at rounds, and the result is that heedful interrelating cannot occur, and collective sensemaking is most likely impaired. The effects of this heedlessness and impairment are not necessarily felt here in this meeting, but might well be felt downstream⁸⁹ through inefficiencies such as redundancies, or even in an adverse event such as a pharmaceutical mix-up, although this is admittedly speculative on my part. However, what is certain is that the PCC is not observably mindful of the matters of concern that animate the professional representatives around the table—s/he does not subordinate his/her interactional contributions to a representation of the collective—and we would be hard pressed to see an interprofessional performance in these overviews. Strung together, these six cases stood out as being among the most impoverished case reviews of the thousands I observed and of the 1,000 or so that I recorded. In fact, I knew even while observing this particular rounds that figuring out what was missing was key to understanding what made the “good” ones work.

Audience and accountability

This raises the important question of audience and accountability: For whom were these rounds being held? To whom were the team members—especially the PCC—accountable for their performance in rounds? It is worth repeating that the UC was absent from rounds on this day, and in fact at the beginning of the meeting, the

⁸⁹ What is sometimes referred to as latent error (Alvarez & Coiera, 2006). Rowland (2011) offers an interesting take on a related notion, critical communication incidents, in her application of the coordinated management of meaning model (Cronen, 1995).

PCC announced that they were doing “unofficial” rounds that day “because there’s no boss” (i.e., UC).⁹⁰ At a later point in the meeting, the PCC said, almost as an admonishment that they were spending too much time discussing, “This is supposed to be speed rounds today, people!” The point is that the PCC went through the motions of doing rounds, so to speak, without giving the listening team members the information that would help them in their own efforts, and the PCC certainly did not observably attend to the information they spontaneously offered.

If accounts are designed for their intended audience and construct their audience in their telling, then in this instance, it would seem that the PCC designed her talk for an overhearing but not necessarily a participating audience (e.g., Heritage, 1985), at least not when it came to authoring the patient’s story. Certainly, the paucity of detail in accounts, as well as the off-hand “speed rounds” and “boss” comments, can only lead us to conclude that the UC and by extension, the Integrate project, were positioned as the intended audience to whom performance was accountable. It appears that the patient case reviews were not being performed for the purposes of collective sensemaking work of the team members gathered around the table, but were instead what Lewin and Reeves (2011) referred to pejoratively as ritualistic in nature,⁹¹ a burdensome chore to check off one’s organizational to-do list and viewed—at least by this PCC—as pointless vis-à-vis the daily work of the ward.

Gatekeeping role of rounds facilitator

The sensemaking and sensegiving work performed in overviews on the Intervention team varied greatly by the PCC serving on a given day. This variation suggests the importance of the gatekeeping role of the rounds facilitator (explored in greater detail in Chapter 7), which in this case was usually a hybrid of the UC and the PCC along with their respective documentary supports. The fact that there was no recurrent pattern in overviews across PCCs suggests a less stability on this team in the practice of doing the interprofessional patient case review that than on the other two teams.

⁹⁰ The PCC then glanced over at me and said, “Oh, you’re the girl doing the study,” as if I represented Integrate in some way.

⁹¹ I reconsider this position on ritual in the final chapter.

Participative safety and speaking up

Relatedly, the question of trust on teams can be seen as dependent to some extent on the gatekeeping facilitator function. In line 7 of the second excerpt, we saw the PT speak up to provide additional detail about Patient 4 (Tucker) from the professional perspective of physiotherapy. Performing or enacting one's profession in an interprofessional context imposes an obligation to speak up when one's professional scope of practice is germanely implicated, especially in instances of uncertainty, ambiguity, or equivocality. In this case, the PCC's performance, or failure to provide sufficient detail, was the cause of uncertainty. This identity-obligation (interpellation) is at the very heart of interprofessional sensemaking work on teams, as is the need to share information that may be pertinent to other scopes of practice, which requires a basic awareness of other professions' scopes of practice and matters of concern in order to judge salience. Speaking up makes relevant information available to everyone, and serves to bring forward particular facets of a given problem, enriching rather than impoverishing collective sensemaking. This requires that teams work to encourage relevant contributions from all members. As mentioned previously, the term *participative safety* refers to a work climate that team members perceive as supportive and non-threatening (West, 1994, cited in Jones & Jones, 2011), where they feel free to contribute or question without fear of recrimination.

One mundane way of interactionally encouraging such contributions is for the gatekeeping facilitator to simply acknowledge their receipt (Beach, 1993; Sacks, Schegloff, & Jefferson, 1974), to give subtle cues that demonstrate appreciation and openness and thus help create a climate of participative safety. These subtle cues can be as simple as saying "thanks" or they can be more complex, such as topically incorporating into the next turn of talk elements of the other person's contribution, which establishes and confirms the relevance of the contribution as well as the performance of that other person in her professional capacity.

While this observation appears quite commonsensical, these subtle indicators can make or break what is interprofessional in the patient case review, and in this sense the person controlling the conversational floor can be considered a *gatekeeper of interprofessional potentiality*. In this instance, however, the PCC does not in any fashion acknowledge the PT's contribution.

Pragmatic salience of organizational matters of concern

Certainly, nurturing this interprofessional potentiality requires that heterogeneous representations of knowledge and of professional contributions to care (Opie's "and + and"), as well as collective sensemaking work, are considered valuable and are seen to have pragmatic salience to the work at hand. For this team, it seems interdisciplinary rounds were not viewed in this way. In fact, one UC informed me that the manager for the Intervention team didn't "believe in rounds."⁹²

With regard to the patient care trajectory, we can think of the collective sensemaking net being cast relatively widely or narrowly, depending on the focus of a given team's mandate. As we shall see in the final empirical example of this chapter, on the Intake team, a birds' eye view was needed of the anticipated care trajectory and the "total organization of work done over that course, plus the impact on those involved with that work and its organization" (Strauss et al., 1985, p. 8) because this team determined where the patient would go next in the organization. The same wide-net approach can be ascertained on the Short-stay GIM team, whose work focused largely on discharge planning, so more of the Integrate-prescribed domains of concern (medical, socio-functional, discharge) were matters of concern for those teams.

In contrast, the Intervention team seemed to have a more myopic focus, a tunnel vision that homed in on a specific point on the care trajectory: the period before, during,

⁹² This lack of support for the Integrate initiative's interdisciplinary rounds echoes findings of the SCRIPT (structuring communication relationships for interprofessional teamwork) intervention study that saw a lack of uptake of the communication protocol it tried to implement (Office of Interprofessional Education, 2008). In that study, lack of uptake was explained by lack of physician engagement and by the stressed and hectic work environment. The SCRIPT communication protocol required practitioners who were interacting outside of formal contexts such as meetings to formally introduce themselves by their name and role, to state the issue or patient-related matter to be discussed, and to solicit interprofessional feedback, a variation of the SBAR technique (e.g., Boaro et al., 2010; Kaiser Permanente of Colorado, 2011; Leonard, 2004). My own reading on the lack of uptake in that case is that the communication protocol in fact turned an informal interaction into a formal one precisely by imposing a tight script, and that the organizational benefit offered by *informal* interactions in this kind of setting likely outweighed the precision offered by the structured communication protocol.

and after the Intervention,⁹³ a period that is characterized by acute medical concerns, sometimes but not always to the exclusion of psychosocial considerations. With regard to the organizational matter of concern that preoccupied Integrate, namely patient flow and organizational efficiency, these were of concern to the Intervention team insofar as they affected the “slate,”⁹⁴ that is, the schedule for access to the space and equipment related to the interventions performed there. This team was less observably affected by the patient-load pressures upstream in the organizational flow of action than was the Short-stay GIM team, and Weick might refer to this arrangement as loose coupling (Orton & Weick, 1990; Weick, 1976); there was less overlap in organizational matters of concern between these other teams and the Intervention team. It would appear, then, that the practice of doing interprofessional rounds—à la Integrate—was less firmly established in the culture of the Intervention team. Indeed, on Intervention, less time was typically devoted to discussing where patients came from and where they were anticipated to go afterward, unless their story offered some entertainment factor, such as someone who injured themselves falling down drunk at a wake, or, for example, one who perforated their bowels by inserting a vase in their rectum which then broke (i.e., the “vase-ectomy” story),⁹⁵ or unless they were “off-service” patients, whose presence was cause for grumbling because they were “taking up a bed” that “ought to belong” to a patient needing an Intervention.

⁹³ Similar to Greimas’s notion of nested programs of narrative action (Greimas, 1970), we can think of mini trajectories within the overall patient case trajectory, such as the intervention itself, which unfolds in a certain, usually predictable way. Recovery from the intervention is also anticipated to unfold in a standard way, as is demonstrated by references such as, “So he’s day 5,” or by intervention care pathways. At best, PCC here situates the patient within the trajectories that pertain uniquely to the intervention ward, ignoring the broader picture (i.e., the total patient care trajectory) that has organizational relevance.

⁹⁴ The “slate” refers to the list of upcoming interventions, and (incidentally) “protecting the slate” refers to the practice of managing discharges so that the beds on the Intervention ward are not available for “off-service” (i.e., non-intervention) patients. Although outside the scope of this study, protecting the slate is an example of conflicting organizational tensions (Matte, 2012), where the goal of overall organizational efficiency and rapid patient flow butts up against local unit practices of “hoarding” beds so that the surgeons get their “quota” of time in the intervention rooms (Personal communication with an Integrate informant).

⁹⁵ Some Intervention PCCs were more prone than others to recounting such stories, and it was typically the PCCs who were least likely to cover Integrate prescribed domains of concern in their overviews. This kind of story was also frequently recounted at the Intake team’s rounds, spiced with black humour and told with relish, but the narratives were typically also pertinent to the patient’s care.

Perhaps because of this bracketed focus on acute medical intervention concerns, PCCs tended to talk about patients in more objectified and reductionist framing, for instance by their vital signs, medications, drains, and catheters. Indeed, the presence and removal of these tubes tended to be the markers of differences that made a difference (Bateson, 1972) on this team, and it is perhaps unsurprising then that psychosocial concerns were less preoccupying, even though they were (and are) oftentimes vitally important to discharge planning.

6.4. Viewing the Integrate teams through the lens of heed: A diachronic case

Until now, I have pointed out the ways in which the overview to case reviews serves to frame and orient listening team members to the salient matters at hand. I showed—through two examples, one heedful and one impoverished—how this framing could affect collective sensemaking by heedfully or heedlessly emplotting the patient's situation on a care trajectory, where heed was a function of subordinating one's interactional contributions to the representation(s) of the collective, and hence circumscribing and defining the necessary scopes of practice. In these overviews, the devil was in the lack of details.

But up until now, we have seen very little interaction in these examples, and, after all, the CRS model refers to heedful *interrelating*. One final empirical hurrah for the chapter will complete this picture of interprofessional performance as dependent on heedful representations: the case of Andrew Sells⁹⁶. He was the only patient in my study to have been treated and discussed by all three teams for which I have recordings. His case offers empirical examples of interprofessional performance as heedful interrelating, or collective minding. In the analyses of the 6 case reviews to be presented, I address several issues that I argue are important to heedful interprofessional performance in the practice of the patient case review: the representation of collective efforts; the intended audience of accounts; the narrative emplotment of the patient's case; indicators of participative safety; attention to uncertainty, ambiguity, and the non-routine; and the

⁹⁶ Again, to protect their privacy, I have given pseudonyms to all patients, participants, and other employees, and have also modified other identifying details.

matters of concern that seem to animate each team (Cooren, 2012). Analysis of these case reviews will be relatively brief, but they will serve to both give a flavour of the differences across teams and to support the arguments made thus far.

6.5. Diachronic case: Across the three teams

Andrew Sells' case was not particularly unusual, other than the fact that he was legally blind. He presented at the hospital following the Christmas holidays, a time when overcrowding is a typical concern. We first hear about him at the Intake team's rounds on a day when they were more than a dozen patients over capacity.

Intake-01/05/2010.35 (31:56—32:43)

(Tuesday) Present at this rounds were the Intake team's usual cast of players: two PCCs in the rotation, two PTs, a CCD, a GAP (geriatric assessment team), a SW, an OT, and an SLP (speech language pathologist). There was no UC (Integrate representative) present.

- 1 PCC1: And in ACR, there's another, ((reading, simultaneous sound of other
2 people's pages flipping)) Andrew Sells, he's a 59-year-old male with
3 diverticulitis under Dr. Green. He uses a white cane, he's for I-IV
4 antibiotics, blood work, and a percutaneous drainage of his sigmoid.
5 When, I don't know. (1.0) And ((scanning notes)) I think that's all of
6 tho::se.
7 (1.5)
8 OT: So, he uses the white cane, so is he blind? Or partially blind?
9 PCC1: I don't know. That's [(inaudible)]
10 SW: [He just likes it as an accessory.
11 ((laughter))
12 PCC1: Yeah! It matches my clothes.
13 OT: ((inaudible))
14 PCC1: I don't know because nobody knew because-
15 OT: It's so busy.
16 PCC1: There's just so many people, you can't (.) keep track.
17 SW: Just a little bit.
18 OT: That's fine.

Targeted analysis

In this discussion, we can see that the overview was comprehensive and that the PCC1 activated the knowledge stored in the nursing notes by reading it off. The patient was identified by name, age, and attending doctor, along with an acute medical diagnosis of diverticulitis. His functional status is referenced by the mention of a white cane (line 3). Narrative emplotment is accomplished by representing the anticipated actions (IV antibiotics, blood work and drainage of an abscess, lines 3-4), and reference to a prospective geographic destination for the patient is made through the mention of Dr. Green, an Intervention doctor. PCC1's inability to more specifically emplot is recognized and the care trajectory more explicitly referenced ("When, I don't know," line 5). All of these actions work to circumscribe the patient's situation in sufficient detail to define the problem as a medical one that does not necessarily interpellate the professionals gathered at the table. However, one detail of the case is anomalous, and the listening OT picks up on this right away: the mention of the patient's white cane. In the remainder of the case, we see an example of collective minding around this detail.

The OT is heedful of the mention of the white cane, likely because it is both rather rare and because he feels professionally interpellated by how blindness affects the patient's ability to perform the activities of daily life (ADLs), which is squarely within his professional jurisdiction. In other words, given his professional identity, it is appropriate for him to ask about this. Although PCC1 is unable to knowledgeably answer his request ("I don't know," line 8), she acknowledges her accountability to provide an answer by offering an explanation ("because nobody knew because," line 13). (PCCs are expected to be knowledgeable about the major details of each patient's case, and a patient's blindness is a major functional detail.) Not only does this move display her understanding that the team present at rounds is the audience to whom she is accountable, the indefinite pronoun "nobody" and past tense verb "knew" re-present in the here and now a past organizational situation—a "there and then" and a "they" or "us"—that justifies her current difficulty and references a collective. OT completes her explanation in line 14, saying "It's so busy." In so doing, he co-constructs with PCC a representation of the unusual situation facing Intake. PCC, SW, and OT then all (topically) subordinate their next turns of talk to this jointly envisaged situation. PCC1 adds detail to further excuse her lack of knowledgeability ("There's just so many people, you can't (.) keep track," line 16), a representation that SW supports by ironically

quipping “Just a little bit” (line 17). Although she is not necessarily concerned professionally by the question of blindness, though this brief comment, SW demonstrates that the situation of the *team* is a matter of concern of which she is mindful. OT excuses PCC’s lack of knowledgeability (“That’s fine,” line 18), and closes the collective sensemaking sequence.

Here, we can clearly see indicators of participative safety: OT doesn’t hesitate to ask a question that is salient to his own work, and SW doesn’t refrain from making a dark-humoured crack (“He just likes it as an accessory,” line 9), which PCC1 elaborates (“It matches my clothes,” line 11). By pointing out a ridiculous interpretation of the presence of the white cane, SW and PCC1 together implicitly align with the interpretation that “white cane” means “blindness.” Indeed, the patient’s functional abilities (specifically, blindness) is one of the matters of concern we can see raised, as is cognitive overload caused by the ward’s overcrowding (“there’s so many people, you can’t (.) keep track,” line 15). All in all, we can see that this case review is collectively accomplished with significant detail and emplotment provided, and that attention is paid to uncertainty in the representation of portions of the patient’s situation. Let’s compare this to what happens when this patient’s case is next reviewed.

Intervention-01/06/10.31 (22:18—22:25)—PCC-J

The next day, a Wednesday, we find the patient discussed at the Intervention team’s rounds. Present at the meeting are the usual UC, one of the three usual PCCs (PCC-J), the usual PT, a replacement DIET, and the usual SW.

19 PCC: Okay, and then Sells’s supposed to be going for a dr-, a drainage, a perc.
20 drainage of a large abscess, apparently.

Targeted analysis

In this briefing, the patient is identified only by last name, and is narratively emplotted according to the more myopically focused care trajectory of Intervention: going for a drainage, specifically a “perc” drainage of a large abscess. Uncertainty is marked by the adverb “apparently” (line 20), which indicates that the PCC-(J) is reading from her notes and that she positions herself as the animator, but not the author or principal of the knowledge claim (Clayman, 1992). The PCC also mitigates the information she provides by using the conditional “supposed to be” (line 19), which implicitly references the contingent nature of trajectory planning. In fact, for this PCC in

particular, there was a recurring pattern of her expressing uncertainty or scepticism with regard to the information held in the nursing notes (this is discussed in more detail in Chapter 8).

Note that there is no mention of the patient's blindness. While this information might not necessarily be a matter of concern for the care efforts of the team members present, it is unusual enough to merit some comment, especially given it has significant import on the patient's mobilization within the ward and in his life in general, and for these reasons, I would argue that it is remarkable that it has been dropped from the patient's narrative at this point. Moreover, we know that this is the first time that this team has heard of this patient, as he was on the Intake ward the day before, and yet *no orienting overview is given to the listening team members*, which means the PCC does not attend to the people around the table as the ones concerned. Indeed, she has not referenced any actor, collective or not, who will be involved in the actions described, and this can be seen as a lack of subordination, to take up the terms of the C-R-S model.

Instead, we can see that the PCC here attends only to the immediate future actions in the patient's care that relate to the medical component of the anticipated intervention, ignoring the broader portions of the organization that have treated or will treat the patient, indicating loose coupling with these other portions (Orton & Weick, 1990; Weick, 1976). In this sense, we might say that the overview produced by the PCC was heedless, at least in term of Integrate's goals.

Intervention-01/08/10.23 (17:35—17:52)—PCC-M

(Two days later, Friday) The PCC (M) at this Intervention team rounds is different from the excerpt two days prior, and is also one of the three primary PCCs on rotation for the team. Other team members present include the usual UC, the usual PT, a new PHARM, the replacement DIET again, the usual SW, and the usual CCD.

21 PCC: (reading) 14-4, Sells is on Q6H signs. Clear fluids. IV. Having some loose
22 stools. Doctor, um, he was supposed to have perc. drainage, but they
23 can't access it, so. Guess they'll have to try something else.

Targeted analysis

This time, Andrew Sells is identified by bed number and last name. The information given is entirely in a medical-nursing register, and objectifies the patient as a

body to be monitored: How often to monitor (“Q6H”),⁹⁷ what is going in (clear fluids and IV), and what is coming out (loose stools). This PCC was the only one I ever observed to mention patients’ vital signs, and she did so in almost every overview. One could argue that this code is primarily nursing speak because no other professionals around the table conceptualized their professional interventions through the frequency by which vitals need to be taken. Although a minor detail, we can see a certain mindlessness on the part of the PCC regarding the other professions’ scopes of practice and ways of knowing: This information is largely irrelevant for them. In other words, there is no attempt by this PCC to subordinate her interactional contribution to their professional concerns.

In fact, this PCC tended to read the nursing notes without parsing the information stored therein for relevance. For some details, such as the patient’s dietary information (“clear fluids”, line 21), there was an overlap in professional salience between nursing and diet. The descriptor “clear fluids” also emplotted the patient’s current status on the *intervention* care trajectory, as it indicates that the patient’s bowels are being allowed to rest, usually a sign that the patient is about to have an intervention or has just had one (or that the medical problem has to do with the gastric tract, and so serves to circumscribe the type of problem).

Indeed, the patient’s case is emplotted according to the matters of concern for Intervention: We are at a point that is after an unsuccessful intervention, and we learn that PCC-J was right two days earlier when she predicted the case might not go according to plan (“supposed to be,” line 18, “apparently,” line 19). On this day, we learn that the drainage was not possible because “they” can’t access it. The collective is thus presentified and translocalized in the PCC’s use of this pronoun, and likewise she does prospective sensemaking that attributes agency to this “they” (“Guess they’ll have to try something else,” line 23), whom we may presume is the Intervention team led by the doctor she mentions in line 22 before repairing. Relatedly, it is interesting to note that this attribution of agency to an absent “they” positions both herself and the team as a

⁹⁷ “Q6H signs” (line 21) is code for how often a patient’s vital signs (blood pressure, pulse, temperature) need to be taken, and it can be a sign of the acuity of a patient’s situation (less medically stable patients are often monitored more frequently). Indeed, this kind of code is indicative of an objectified approach to the patient, whose body is seen as a text to be read but whose lived experience is not considered.

listening audience who is not necessarily implicated in the actions described, a form of disaffiliation and disengagement (this question is considered in more detail in Chapter 7). In terms of participative safety, we do not have any clear indicators because no one else speaks. Finally, we can also notice that the patient's blindness is still not considered worthy of mention.

Intervention-01/12/10.30 (23:17—23:50)—PCC-M

(Four days later, Tuesday) Present at this meeting were the usual UC, the PCC present in the previous rounds, the usual PT, the same PHARM, SW, and CCD as previously, and an additional PT.

- 24 PCC: And Sells. ((reading)) Q4H uh, APS(?). On clear fluids ((whispering in the
25 background)). Has a colostomy. Is (1.0) active for some flatus. He's a
26 one-person stand-by, he has an IV and a foley. ((speaking softly to
27 herself)) Did he get that foley (.) over the weekend? ((flips pages)) Not
28 yet. Um. ((1.5, to the others)) And he needs to be pushed a little bit.
29 ((stops reading))
- 30 CCD: So, he's still going to be ((inaudible, sound of pages flipping))
- 31 PCC: Huh? Do you have homecare for him?
- 32 CCC: He's still going to ((inaudible))
- 33 PCC: I know but you need that.
- 34 CCD: Oh, no, no. I have it.
- 35 PCC: You have it? Oh! (1.5) Kay.

Targeted analysis

We know that the PCC (M) at this rounds was the same as at the previous rounds I observed four days earlier through her pattern of mentioning the patient's vital signs. Here, she reads the nursing notes haltingly, with frequent pauses, and even poses a question to herself, which she answers regarding the timing of the patient's foley insertion (lines 27-28), which might signify that she had not yet read the notes that morning, which was not necessarily unusual, but perhaps somewhat inefficient as it meant that she was making sense of the patients' situations as she went through them, just as the listening team members were. It also meant, in terms of audience and authoring, that she positioned herself as the animator of the notes (Clayman, 1992) while they remained a de-authored text (Cooren, 2004a) of sorts.

In this case, the PCC treats the notes as what Browning (1992) calls a list: “the order of the already written text that need only be read for its implications and toward which the reader properly adopts a passive attitude, as a ‘consumer’ of the meaning a text reveals” (Ashley, 1989, p. 263, cited in Browning, 1992, p. 282). Browning compares lists to stories, which “are communications in which author and author-ity coincide in the organization” (p. 283). Grosjean and Lacoste (1998) similarly point out that the interplay between *l’oral et l’écrit* (the oral and the written) is a key part of collaborative nursing work, where written texts such as nursing notes are frequently questioned and interpreted during collaborative moments, so that collective understandings are built interactively, conversationally, through this interplay. In the context of my study, this implied that a certain interpretive work was often necessary on the part of the PCC, who might switch between reading and commenting registers during overviews, which we do not see here, other than when the PCC asks herself a question. I will come back to this point when analyzing the Short-stay GIM team discussion below.

The patient’s medical situation is considered more acute this time, as indicated in the vital signs “code” (“Q4H,” line 24), and he is still on clear fluids. Once again, he is described in mostly objectified fashion, in terms of the bodily functions relevant to the medical intervention and the tubes bringing fluids in and out of his body (“active for some flatus,” line 25, indicates that his bowels are starting to move again after surgery; “IV and a foley,” line 26). This locates the current situation as post-intervention on this team’s typical trajectory, and it shows that immediate medical interventions are the matters of concern at this point.

We also see mention of the patient’s functional status for the first time on this team (“He’s a one-person stand-by,” lines 25-26) as well as an implicit and somewhat vague functional goal (“And he needs to be pushed a little bit,” line 28).⁹⁸ Because the PCC reads the notes as a list and does not do much interpretive work, the declaration that he “needs to be pushed a little bit” seems both authorless and audience-less, and I would argue this could be seen to be a heedless representation on the part of the PCC: The collective is represented in poor detail, and the players responsible for making

⁹⁸ There was an almost macho attitude expressed on this team about getting patients to mobilize post-intervention; I once heard a PCC declare to the PT about a patient whom the PCC thought was less than compliant: “I need him to be dragged around the ward!”).

contributions (i.e., for pushing him) are not clearly specified (both nurses and PTs mobilize patients). Similarly, there is again no mention of the patient's blindness, which is very relevant to the task of mobilizing a patient; this omission could be considered a breakdown in representations that could lead to error or inefficiency in subsequent contributions to care. (However, it is also possible that his blindness was discussed at length on one of the two intervening days, Friday and Monday, when rounds were held but which I did not attend.)

We learn that Sells now has a colostomy (line 25), a far cry from the originally planned abscess drainage, and this settles the contingency about which PCC-M speculated at the previous rounds ("Guess they'll have to try something else," line 23). This information is not presented as a change in situation; as we will see later, the colostomy was put in place three days prior (i.e., the patient is now "Day 3" post-intervention), so it may not be newsworthy at this point, but again given the patient's blindness, the new colostomy is highly relevant to both mobilization efforts and discharge planning.

On this front, the PCC does not project into the future (prospective sensemaking) about the patient's care needs, but the CCD seems to do this as she speaks up in line 29, asking if the patient will continue to be something (inaudible in the recording). Given the CCD's role as home care coordinator, we can presume that she is anticipating discharge and his home care needs, which is in fact the PCC's interpretation ("Huh? Do you have homecare for him?" line 30), although she does not answer the CCD's question. CCD seems to repeat the question as a statement in line 31 ("He's still going to (inaudible)"), and PCC indicates that CCD's statement does not provide information that is new to her ("I know," line 32) and points out the CCD's needs, presumably the requisition form the CCD needs to set home care in motion. CCD then repairs, correcting PCC's interpretation ("Oh, no, no. I have it," line 33), and PCC accepts the repair as the new information ("Oh!"), but does not seem to attend to CCD's original question, although given the portions of inaudibility in the recording, we can only speculate about this. In any case, the CCD does not repair further and the discussion turns to the next patient's case.

Intervention-01/13/10.28 (25:34—26:25)—PCC-M

(Next day, Wednesday) Present at the meeting were the usual players: the usual UC, the same PCC, PT, PHARM, SW and CCD as the three previous meetings analyzed.

- 35 PCC: Penderson, uh::: No, Sells. Sells. ((reading)) So he's on, he still has his
36 epidural, and we're trying to wean him off of that. He's a one-person
37 assist, just because he's legally blind. He's on clear fluids, he has a foley
38 that we'll get rid of when we get that (0.5) epidural out. ((reading)) Has an
39 IV:: Uh, has an ostomy. No activity. And uh::
- 40 (2.5)
- 41 PCC: SCDs(?).
- 42 PHARM: Yeah. Is on Day 8 for Cipro and Day 5 for Nitro.
- 43 (2.0)
- 44 PCC: Day 5 for what? Nitro. ((writing)) (2.0) And uh, Lene says, uh, is working
45 with her, with him on his ostomy and he's doing gr, great, she said.

Targeted analysis

If heed is in attention to detail in one's representations, this time, the PCC's overview is more heedful. She emplots the patient's status on the Intervention care trajectory by explaining that they are trying to wean him off his epidural (lines 35-36), which is a sign that Intervention care might be coming to a close. Furthermore, the PCC moves from positioning herself as the animator of the nursing notes to the principal and author of utterances.⁹⁹ Hence, we see that this time the PCC includes herself as part of the collective she represents through her use of the pronoun "we" (lines 36, 38), and given the actions she describes (weaning off of an epidural, getting rid of it), we can understand that she is speaking on behalf of the nursing team, who in turn may be acting on the orders of the surgical or medical physicians.¹⁰⁰ Through this pronoun use, we can see that she is no longer only reading the notes, but is also interpreting and contextualizing them, and, even if this move is relatively minor and subtle, it indicates for the first time that at least she, as a representative of this collective, is implicated by the actions represented.

⁹⁹ Clayman (1992) explains that the author is the originator of the utterance and the principal is the actor whose viewpoint is expressed through the utterance.

¹⁰⁰ Benoit-Barné and Cooren (2009) call this a referencing a "chain of agencies."

There is no mention of the patient's vital signs, which for this PCC probably means that the patient is considered less acute and perhaps ready to be transferred to another ward or discharged, although she does not predict or in any way mention this. Instead, she emplots more locally, anticipating the ward-level activities on the Intervention trajectory (weaning off the epidural and getting rid of the catheter). The patient is still receiving clear fluids, the ostomy is mentioned but there is "no activity" (line 39), which again emplots locally and indicates that the patient's bowels are not yet fully functioning.

Speaking of function, the patient's blindness is mentioned for the first time on this team, but only as a qualifier of his functional classification as a "one-person assist" (lines 36-37). So, we see again that the matters of concern presented as salient here have to do with the patient as a more less passive body to be plugged and unplugged from tubes, mobilized, monitored, and fed. In this vein, the patient's new colostomy is not viewed from the perspective of the patient's lived experience, but as an entity in itself whose activity is the subject of surveillance. (Foucault, 1980; 1989, would have a hey day with this team.)

The patient's IV is still in place. Up until now, we don't know what the IV has been administering, but we can deduce from PHARM's contribution in line 42 ("Day 8 for Cipro and Day 5 for Nitro")¹⁰¹ that he is receiving IV antibiotics. Furthermore, PHARM's contribution tacitly fills in details of a more broadly conceived representation of the patient's care trajectory that has thus far been absent in this team's case reviews for him: Sells was admitted 8 days prior and was put on Cipro at that time for the sigmoid abscess; the colostomy surgery took place 5 days prior, and he has been on Nitro as well since then. This coded information sharing also indicates an overlap in scopes of practice between nursing and pharmacy, and the PCC attends to PHARM's contribution as literally noteworthy as she pauses to write them in down in her own notes. In this exchange again we can find an example of collective minding: PHARM is attentive to the picture being painted by the PCC and fleshes it out with more specific detail, and she incorporates this detail into the "official" story of the nursing notes, which will in turn

¹⁰¹ Ciprofloxacin is a common broad spectrum antibiotic; Nitrofurantoin is an antibiotic often used when there is a concern about antibiotic resistance. (Sells would need IV antibiotics after an invasive procedure like a colostomy placement, but we also know that he had a large abscess, which would also require massive doses of antibiotics to prevent sepsis.)

transport it to another organizational space-time (Cooren, 2004a; Vasquez, 2009). In Weick and Roberts' (1993) terms, they both subordinate their contributions to the collective being jointly constructed and described.

The PCC closes the case review by mentioning that someone named Lene is working with the patient on his colostomy, so we might presume that Lene is part of the Intervention nursing team or, more likely, a representative of the ET (for "education team," who taught patients strategies for adapting to new circumstances, such as living with a colostomy). It is unclear, however, if the other team members present are familiar with this person. The PCC reports that Lene thinks that Sells is "doing great" with the colostomy training (line 45), an assessment that we might find suspect given his blindness and given that his bowels are still not active (line 39), a suspicion that bears out, as we'll see next.

Short-stay GIM-01/18/10.26 (27:37—29:22)

(Five days later, Monday) Andrew Sells has left the Intervention ward and has landed in the care of the Short-stay GIM team. As we will see, the flavour of this team's rounds is significantly different from the previous four discussions on the Intervention team. Almost everyone present in this discussion was a regular player, and this included the PCC who was present from Monday to Thursday every week, a PT, an OT, a DIET, and a CCD. Less regular players included PHARM, SW and BN (bedside nurse).

- 46 PCC: Anyway, 26-1 is Andrew Sells.
47 CCD: ((continues comment from previous case review))
48 PCC: ((reading)) 59-year-old male who came in with abdo pain and ended up
49 with a laparotomy and drainage of pelvic abscess, and now has a
50 colostomy.
51 DIET: Oh, no!
52 PCC: ((reading)) He's legally blind, has been so since birth. ((stops reading)) I
53 don't know ((gasping)), call me crazy, but how does a blind person do a
54 colostomy? So, obviously, ((reading)) "difficult with teaching." ((stops
55 reading)) You think? [Anyway.
56 CCD: [When did he have his lap? What date?
57 PCC: The f.:, 9th?
58 CCD: Okay.
59 PCC: Now, he has significant home care at home already.

60 CCD: 16 hour[s-
61 PCC: [Yeah
62 CCD: But I'm not [sure-
63 PCC: [Two hours twice a week.
64 CCD: Thank you.
65 PCC: You're welcome. And they, that entails, um, (1.0, reading) obviously
66 personal care but also higher-end (.) kind of house maintenance because
67 he's blind, so I'm, I'm not too sure if, [you know, probably (.) due to his
68 blindness.
69 CCD: [Okay.
70 PCC: Um ((reading)) colostomy is now working, ((stops reading)) I guess it
71 might not have been.
72 ((simultaneous talk in background))
73 BN: ((thick accent)) Stool is kind of loose. Like so, that's why, basically, I'm
74 just emptying it. If it is formed? He's getting the one piece thing? Yeah?
75 And then for, for him, she said, "Oh," the ET nurse, "should go home with
76 different thing." I was like, Wha- what I doing here? ((small laugh)) So I
77 didn't even help him emptying the other, the liquid thing? ((laugh)),
78 (difficult to understand) Even if is not blind, probably cannot see it!
79 PCC: Yeah, that's gonna be a mess, yeah.
80 BN: So I, I'm just emptying and then today, I will wait for the ET nurse to see=
81 PCC: =See where we're at.
82 BN: Yeah. So.
83 PCC: Okay. [Um-
84 CCD: [Do we know if he lives with somebody?
85 PCC: It says ((reading)) "Smallville, independently. Smallville, alone."
86 BN: He have a dog. ((inaudible))
87 CCD: A guide dog?
88 BN: Yeah.
89 CCD: Is the dog here?
90 ((BN answers by shaking head))
91 CCD: Aw.
92 DIET: [(to PT) Nice little colostomy teaching. ((laughs))
93 PCC: [Is he here?
94 PT: ((laughs))
95 PCC: Is the guide dog here?
96 BN: No. No.

97 CCD: ((laughing)) He's [got a cane, that's it.
98 DIET: [Those dogs are small, but not that small. ((laughs))
99 BN: Does have a kind of curve.
100 PCC: Yeah.
101 BN: Tiny waist, is like, "I walk a lot!" ((laughs))
102 PCC: Yeah?
103 ((laughter))
104 PCC: Cute!

Targeted analysis

Because this excerpt and the following one are so much lengthier than the previous ones, and for the sake of maintaining reader interest, I will refrain from an in-depth interaction analysis of the entire case review. Instead, my comments will be focused on what makes this team performance different from the others we saw in this case, especially from the Intervention team's. Right off the start, we can note that the PCC gives a brief but comprehensive overview of the patient's care trajectory *from admittance* with abdominal pain *to the current situation* of a colostomy (lines 48-50), an overview that thus translocalizes (Cooren, 2004b) to the current discussion the previous contributions to care by other portions of the organization.

Also notable is the expression of sympathy by DIET ("Oh no!" line 51), a remark that takes note of the patient's unfortunate outcome and perhaps also marks its atypicality. This is echoed in the PCC's next turn of talk (lines 52-55) where she interprets what is written in the nursing notes: She contextualizes the patient's blindness with the most specificity so far ("legally blind," "since birth") and then makes sense of this information by anticipating that the new condition will be difficult for the patient's self-care ("call me crazy, but how does a blind person do a colostomy?"), and then almost mocks the classification in the notes that the patient is "difficult with teaching" ("obviously," "You think?"). Despite the ironic tone, her movement between reading and interpreting the notes demonstrates a thoughtful attention to bridging the organizational definition of the patient in the written text and her presumption of the patient's lived reality, which some would argue is a sign of patient centredness (Laine & Davidoff, 1996; Stewart et al., 2003), and which until now has not been observable in the case reviews of Andrew Sells.

This patient centredness is likely a function of this team's typical preoccupations, which revolve primarily around discharge planning. Discharge planning marks a point on the patient's care trajectory where the sensemaking net is again cast more widely to take into account how the patient will manage after leaving the hospital, and they must necessarily try to view things from what they imagine to be the patient's perspective. (We might expect that they could be even more patient-centred by mobilizing the patient's voice—reporting his own words—in these case reviews, something they did do in other cases.) In this discussion, we can discern two broad and related matters of concern: (a) the patient's discharge needs, in terms of home care services (lines 56-69) and existing in-home supports (lines 84-98) and (b) his in-hospital colostomy care and teaching for self-care (lines 70-83).

We can also note that, in terms of participatory safety and gatekeeping of the conversational floor, many team members other than the PCC make comments, ask questions, and offer unsolicited information as they attend to care planning efforts and expressions of uncertainty, ambiguity, or equivocality. In this way, we see that authoring the patient's story is a team effort accomplished through heedful interrelating. For instance, it is the CCD who opens discussion twice for one of these matters of concern (lines 56 and 84). In the first instance, the CCD asks for the date of the intervention (line 56), which the PCC finds in her notes and reports, and CCD marks reception of this information, closing the question-answer adjacency pair (lines 56-58). However, the PCC also attends to the professional identity of the asker (i.e., as home care coordinator) and provides information about ongoing home care for the patient, which displays her understanding that the CCD's question was designed to emplot the patient's current situation to help predict when and how much home care might need to be re-activated.

Indeed, the PCC and the CCD coproduce an account of the patient's home care situation by offering the pieces of information held by each, and the result is a progressively more finely detailed account: "Significant home care already" in line 59 becomes "16 hours" in line 60. Furthermore, the PCC pays attention to the CCD's expression of uncertainty ("But I'm not sure-," line 62) and offers even more specific information ("Two hours twice a week," line 63). This heedful collective representation of the patient's situation continues in lines 65-68, where the PCC specifies what has been included in home care services so that they can start to figure out what will need to be

built in, and the sequence closes when the CCD acknowledges receipt of this information (“Okay,” line 69). Implicit in this jointly produced account is the knowledge that a patient can “max out” in the number of hours of home care service for which he is eligible, and they are mindful that, given his blindness and his new colostomy, he is going to have even greater needs for assistance.

After the CCD acknowledges receipt, the PCC then turns to the next matter of concern: the functioning of the colostomy. She reads in her notes that it is now working, and interprets this to speculatively deduce that previously it had been problematic (lines 70-71), again moving between reading the written and conversationally interpreting it (Grosjean & Lacoste, 1998; Taylor, 1999). The BN heedfully picks up on this speculation and fills in more specific details of the story from her personal experience with the patient, explaining that loose stool had made changing the colostomy appliance difficult (line 73-74), and she seems to anticipate that if this aspect changed (“If it is formed?” line 74), the care providers and the patient would have less difficulty. The story she recounts about a discrepancy between what she understood (that the patient would have an ostomy appliance with only one piece to manipulate) and what the colostomy training nurse (ET) said (“should go home with a different thing,” lines 75-76) is likely an account for her lack of helping the patient (“So I didn’t even help him emptying the other, the liquid thing,” lines 76-77). In producing this account, she acknowledges that her performance as a BN is answerable to her charge nurse, the PCC. PCC affiliates with this account from the BN’s perspective (“Yeah, that’s gonna be a mess, yeah,” line 79), and the BN explains her anticipated actions (i.e., she won’t do any teaching but will take care of the appliance herself, line 80). In this accounting practice, we can see that this is the only team for which a direct chain of command exists between team members present, a detail that references a nursing collective within the larger collective.

Then the BN and the PCC coproduce an utterance that plans their next actions and acknowledges the contingent nature of this planning (“I will wait for the ET nurse to see=” “=see where we’re at,” lines 80-81). Once again, we see collective minding at work here not only in the local coproduction of the utterance, but also in the joint effort to plot out anticipated contributions to care that bring to the interaction both the absent ET nurse and the contingent future situation, and they simultaneously commit to subordinating their actions to this anticipated future. It is also interesting to note that the PCC uses the inclusive pronoun “we” in line 81 to complete the utterance, which

reaffirms the nursing collective enacted through the BN's account, and again underscores the collective aspect of their subordination to the plan.

The PCC closes this topic and moves to open the next ("Okay. Um," line 83), which the CCD interprets as a transition relevance place (Hayashi, 2013) to return to the previous matter of concern, the patient's discharge needs, specifically his living situation and in-house supports, asking, "Do we know if he lives with somebody?" (line 84). The PCC mobilizes her notes to answer that the patient lives independently and alone in Smallville. The BN adds the information that the patient has a dog, and a discussion ensues that produces another collectively authored account that concludes that his guide dog is not at the hospital, although his cane is (lines 86-98). This sequence closes with DIET's joke about the dog ("Those dogs are small but not that small," line 98). Finally, the BN shares that something has a curve (perhaps the cane?) and comments that the patient is fit ("tiny waist") and that he says he "walks a lot!" (line 101). Laughter ensues and the PCC sanctions this contribution and closes the review by saying "Cute!" (line 104).

In sum, we can see in this case review not only that the team members present are the intended audience for whom the PCC produces the overview and other contributions, but perhaps more importantly that they are also *co-authors* of the account that is produced. Through their contributions, they demonstrate that they feel professionally interpellated by the matters of concern discussed. The CCD initiated authoring moves by posing questions that defined the discharge planning matters of concern, and we could say that the hybrid of the PCC and the notes set the other concern. Furthermore, subsequent collective sensemaking for each matter of concern was sparked by some expressed recognition of ambiguity or uncertainty (e.g., the CCD did not pose her questions rhetorically but as information requests to reduce uncertainty). These all point to mindful co-orientation to one another's performance in collectively narrating the patient's situation. As Cooren (2004b) points out, cognition in this case was both shared (they relied on shared knowledge such as the potential for the patient to "max out" on home care supports), and distributed (different team members held different pieces of information that filled in the account). In the collective authoring, collective mind emerged.

One final point: It is important to take into account the kind of sensemaking work they were accomplishing here. They were not just collectively describing the patient's situation; they were orienting to this emerging description as it pertained to their own care efforts, which is to say, they were planning how to articulate their own efforts, and this was especially observable in the exchange between the PCC and the BN. I bring up this point because it illustrates Peirce's pragmatic maxim "that our theories and concepts must be linked to experience, expectations, or consequences" (Misak, 2013, p. 29). Perhaps the Short-stay GIM team is more attentive and heedful because their sensemaking work in rounds had more pragmatic salience to their work than did that of the Intervention team: In terms of agency, they had more at stake, and they were beginning to lay the foundation for a discharge plan.

6.6. Discussion and partial conclusion

I began this chapter by asking what distinguishes the interprofessional team performance, and I suggested that we look for an answer in the collective aspect of its performance. I located this aspect in communicative practice, specifically the practice of the interprofessional patient case review. I relied on Weick and Roberts' (1993) ideas about collective mind, their CRS model, and Cooren's development of it from a processual, interactionist point of view (Cooren, 2004b). However, my own process of analytic reflection began not from this model, but from the desire to explain the empirical. I wanted to characterize in my own terms the differences between and across the teams that I observed that would avoid the "rotten apple" explanations my informants offered.¹⁰² I framed this difference, in this chapter, as a question of heed. "Collective minding, defined as a collective disposition to act with heed, varies according to the level of heedfulness displayed in the interrelating" (Cooren, 2004b, p. 526). Thus, the "dream teams" of Intake and Short-stay GIM exhibited more heedful collective minding than did the Intervention team.

¹⁰² They described the "nightmare" team's poor performance as a lack of being able to independently do rounds, and blamed this on a handful of individuals who "spoiled the barrel," as the saying goes.

I showed that this heedfulness was particularly observable in their representations of the contributions to patient care by other portions of the organization, especially with regard to the professional salience these representations had for the team members present at rounds. This empirically illustrated what I referred to in Chapter 3 as interprofessional co-orientation:

$A \rightarrow Xf(A)$

$A \rightarrow Xf(B)$

$A \rightarrow Xf(C)$

...etc.,

where A, B, and C stand for professional representatives, and X is the situation at hand. I also suggested that, by being mindful of which aspects of the patient's case to foreground, the leader of rounds has a key gatekeeping role for interprofessional potentiality, precisely through the framing-interpellation dynamic of problem setting in the overviews to patient case reviews. This study then provides an empirical example of how and why this gatekeeping is consequential, at the interactional level, to interprofessional practice and collective sensemaking, contributing to the extant literature on leadership and IP (e.g., Lingard et al., 2012; S. Long, 1996; Pethybridge, 2004; Sievers & Wolf, 2006).

I linked heedful interrelating (collective minding) and sensemaking to articulation work through the practice of narratively emplotting the patient's situation on the care trajectory, a practice that inherently represents (presentifies) other portions and other space-times of the organization (translocalizes) in the here and now, to which individual team members ostensibly subordinate (articulate) their subsequent contributions to care. "The force of [the CRS] model is based precisely on its capacity to illustrate the phenomenon of collective minding throughout sequences of actions not limited to the same spatiotemporal dimensions" (Cooren, 2004b, p. 534). One of the main differences between the three teams in my study was how broadly or locally they emplotted the patient's case on this care trajectory: Did their definition of the case bring other portions of the organization to the interactional setting or did their focus tend to remain more myopic and local? As we saw, both Intake and Short-stay GIM tended to emplot broadly, while Intervention emplotted vaguely and locally.

I suggested that the practice of emplotting broadly or narrowly had to do with the matters of concern that animated each team. As such, the broader organizational goal of fostering interprofessional practice in rounds to promote efficient patient flow (i.e., Integrate's *raison d'être*) was not pragmatically salient to the Intervention team; put otherwise, Intervention saw itself as loosely coupled from the rest of the organization, that is, linked to other teams' efforts, but able to operate independently from them without significant consequence (Orton & Weick, 1990).

Certainly, a team's perception of its coupling to the rest of the organization is discernable in its representations and the matters of concern animating its internal interactions; it is through communicative practice that the collective is instantiated, talking to and about itself (Taylor & Van Every, 1993, 2000; Taylor, 2009). If this perception of loose coupling is inaccurate, this is when errors are most likely to occur. In the excerpts examined here, the Intervention PCC's neglecting to mention Sells' blindness in the context of a new colostomy was evidence of careless interrelating: The Intervention CCD (home care coordinator) would necessarily need to communicate with her equivalent on the next treating team on the care trajectory (i.e., her work at least was more tightly coupled with other teams'), and would definitely need to relay such an important piece of functional information as blindness for discharge planning. Indeed, even though I did not have access to the Integrate program's tracking efforts, I did hear anecdotally from the systems analyst that this team had a high rate of "discharge and readmit," which means they tended to discharge patients too early or without adequate planning and these patients would end up back in Emergency days or even hours later, and this is a clear marker of inefficiency and ineffectiveness.

This returns us to the question of effectiveness raised at the beginning of the chapter. Effectiveness is often conceptualized as doing the right thing at the right time and for the right reasons (Opie, 2000), and is typically examined through a systems theory lens of input-process-output (Kozlowski & Ilgen, 2006; Lemieux-Charles & McGuire, 2006). "The assumption is that effective teamwork leads to higher-quality decision making and medical intervention and, in turn, better patient outcomes" (Buljac-Samardzic et al., 2010, p. 184). From this perspective, communication is listed as one among many processes necessary for team effectiveness, which essentially black-boxes how it works. By mobilizing the CRS model from Cooren's processual perspective, I

have aimed to unpack it from this *boîte noire* and show its constitutive role in interprofessional performance, one way of understanding collective competence.

7. Authority, Hierarchy, and Sensemaking: Power

In an article provocatively titled “We Decide, You Carry It Out,” Cheryl Cott (1997) used social network analysis to examine the effect of interprofessional teamwork on the stratification of the nursing profession. She examined whether or not it had changed the distribution of power on teams from the traditional top-down organizational hierarchy in the hospital with medicine at its apex to a more egalitarian distribution. She analyzed team members’ reports of their interactions with other team members around a range of variables, including problem-solving and decision-making and found that those with higher status within the hierarchy are involved in making decisions and solving problems; those with less are chiefly involved in interactions around tasks of execution. Her findings suggest teamwork resulted in power being shared with higher status nurses (i.e., team leaders and charge nurses), but that it had not changed for lower ranking nurses.

Cott (1997) is not alone in associating occupational power with decision making and goal setting, nor in seeing interprofessional collaboration as a potential catalyst of change (see Lingard et al., 2012; Nugus, Greenfield, Travaglia, Westbrook, & Braithwaite, 2010). Her inquiry can be situated in a “polarized debate about power on teams between the critical perspective that sees collaboration as an opportunity for the re-distribution of occupational power, and the functionalist perspective that argues for better coordination of health care teams” (Nugus et al., 2010, p. 898). This desire for redistribution comes in part from resistance to the traditionally dominant position held by medicine in health care. Medical dominance has been explained as *competitive power* (Nugus et al., 2010), indicating a zero-sum game where one profession such as medicine aims to subordinate, limit, or exclude the scopes of practice of other professions (Willis, 1983, cited in D. Long et al., 2006), whether at the institutional level such as accreditation boards and insuring bodies, at the organizational level where hierarchies are defined, or at the more micro level of everyday practices. In contrast, power sharing—or what Nugus et al. (2010) call *collaborative power*—is associated with

collective decision making and goal setting, or negotiation across professional boundaries (e.g., Degeling & Maxwell, 2004; Nugus et al., 2010; Reeves et al., 2009).

Long and colleagues coined the term *clinical democracy* to denote nonhierarchical modes of collaborating that involve inclusive communication and collective ownership of goals and decision making (D. Long et al., 2006), which has also been referred to as collaborative leadership (Lingard et al., 2012). Proponents are not necessarily uniquely concerned with a re-division of the “power-pie,” but may also link interprofessional collaboration with such concerns as patient safety and outcomes, patient centred care, and organizational efficiency. However Long et al. and others also deplore the significant institutional and organizational barriers to achieving and sustaining clinical democracy or collaborative leadership, especially when teams are located within “traditional health care and medico-legal systems, where it is assumed that physicians sit at the top of the hierarchy” (Lingard, et al., 2012), both in terms of responsibility and accountability related to decision making (D. Long et al., 2006).

Much of the research in this area takes as its analytical starting point the notion that clinical democracy is discernable in multi-vocality in decision making, and accordingly it tends to examine communication patterns and dynamics. One comparative measure of vocality sometimes used is “talk time,” which is the frequency of turns and the length of overall contributions to interactions in interprofessional situations by particular professional representatives. Almost unfailingly, medicine is found to dominate in these studies (D. Long et al., 2006; Nugus et al., 2010). This is true even when medical representatives self-identify as fostering both interprofessional collaboration and a flatter clinical hierarchy in interactions and decision making (Lingard et al., 2012; D. Long et al., 2006). Directionality of talk is also considered revelatory: Reeves et al. (2009) found that communication and interaction on interprofessional GIM teams was typically one-way, terse, and didactic between physicians and other clinicians (i.e., nurses, allied health, and community health). Medical dominance varies across interactional contexts, being more prevalent in formal interaction contexts such as rounds and less so in informal corridor or backstage talk (D. Long et al., 2006)

Clearly, the issue of occupational power figures prominently here. Despite Nugus et al.’s (2010) attempt to provide a more nuanced consideration of power through their distinction of competitive from collaborative power, the notion of power itself might in fact

be somewhat problematic. Certainly, some authors claim that the term *power* has become so laden with significance, even overused, in the social science literature that it has ceased to be meaningful other than signaling the ideological “brand” of the author (Taylor, 2008, 2011). So I shall be specific about the brand used here: A practice lens sees power as relational (Østerlund & Carlile, 2005); not as something that one only possesses but also something that one exerts in situated contexts in relation to others (Latour, 1986). An individual’s “power”—how he or she may legitimately act and make others act—depends on his or her position and identity in a given situation, and stands in relation to the identities and positions of other individuals present or made present. What’s more, *the situation itself will dictate to some extent the relative importance of the various identities.*

From this view, power dynamics are always at play in any organizational situation. As Taylor (2011) explains, we can understand an organizational situation as one that pertains to *organizing*—the goal-oriented mutual activity of individuals who come together with some level of harmony of purpose—as well as to *organization*, an entity on whose behalf the individuals speak. (Clearly, interprofessional rounds counts as an organizational situation in terms of both goal-oriented mutual activity and the various divisions or departments each team member represents.) Individuals’ relation to each other on behalf of the organization always involves the negotiation of what Taylor calls *precedence*:

No society, human or otherwise, can function in the absence of precedence because every practical activity is transactional in that it implies complementarity of role, indispensable to coherence of purpose, which in turn assumes that someone leads and someone follows for *the duration of that activity*. There may well emerge, and this is not untypical of groups, forms of reciprocity that serve to distribute precedence on a more or less equitable basis, over a full range of activities, but the balance is delicate. (p. 1281, emphasis in original)

Following Taylor and having specified the practice “brand’s” take on power, I propose that we drop altogether the term *power*, while retaining the notion of precedence, and instead consider two related and perhaps more useful concepts, *hierarchy* and *authority*, and that we explore what such a consideration might tell us about the interprofessional practice of sensemaking in the apparently ubiquitous context of medical dominance.

The analytical act of associating vocality by profession with talk time and directionality can give us a quantitative snapshot of organizational hierarchy in practice precisely because we rely on professional labels to identify what we are counting. The argument goes that if, in an interprofessional collaboration, a range of professional representatives gain air time with regular frequency, we can perceive multivocality and, by extension, can presume some measure of clinical democracy. If, on the other hand, medical professionals do most of the talking, we could say that medical dominance prevails. This quantitative snapshot is helpful for discerning certain patterns in communication practices, and is a useful way of utilizing large data sets. However, an interest in multivocality, talk time, and directionality of talk does not tell us, for instance, for whom talk is designed, which is to say the intended audience. It also doesn't necessarily show us how access to "talk time" is subtly negotiated. Likewise, it can't show us *what gets done* through the communication. It cannot offer a rich explanation or demonstration of how *authority is enacted* in practice. Fine-grained interaction analysis can, both through quantitative measures and conversation analysis techniques. It can help unpack what, for instance, unidirectionality looks like and, more importantly, can suggest the potential consequences for collective sensemaking. Furthermore, hierarchy can show up in unexpected ways when we begin to look at accounting practices, in other words how people collectively make sense of things through their accounts.

To take up the second term I propose we use, authority has to do with goal setting and decision making, which is to say with problem definition. Broadly speaking, authority has to do with *authoring*. As has been pointed out several times, both *author* and *authority* share the same Latin root *auctor*, which denotes originator, cultivator, or founder (Benoit-Barne & Cooren, 2009; Cooren, 2010; Faure, Brummans, Giroux, & Taylor, 2010; Taylor & Van Every, n.d., 2000). It follows then that making a knowledge claim—an interactional move that aims to render a particular understanding of the patient's situation—is an act of writing the patient's story: It is an accounting practice. We might recall the questions posed in Chapter 3: Who is allowed to define the problem? Allowed by whom? In whose terms can the problem be defined? In biomedical, objectivist terms? (c.f., Mackintosh & Sandall, 2010) In lifeworld terms? (e.g., Mishler, 1984) Or a blend of multiple perspectives? (Barry et al., 2001) Who speaks for the patient? (Stewart et al., 2003) Are some professions able to make knowledge claims in distinctly different ways than are others on the team? Indeed, how knowledge claims are

performed, negotiated, contested, and taken up can reveal both how authority is performed and its possible effects on collective sensemaking.

Hierarchy and authority, forms of organizational precedence, were certainly enacted in each and every team rounds in my study, whether or not a medical professional was present. However, some situations lend themselves more readily to this analysis simply because the effects of authority and hierarchy are easier to observe. Indeed, they are perhaps no more visible than when a doctor walks into rounds, which is precisely the situation in the Short-stay GIM Team's rounds, and it is this team that will serve as exemplar for the analyses presented here. In the pages that follow, I present this team in greater detail than was provided in Chapter 4. It was the only team (for which I have recordings) that saw doctors come to rounds, and also the only one that modified the format of its rounds. Because it was a team that was reflexive about its practice (e.g., they tried to optimize their rounds) and that embraced interprofessional collaboration, it offers a more nuanced picture of issues of medical dominance, hierarchy, and authority.

The analysis proceeds in two steps. The first half traces a topological map of their practice of doing the patient case discussion, in particular the variables that changed when they changed the format of their rounds. This will serve both as ethnographic footing and as quantitative snapshot to discern communication patterns in collective sensemaking. Not only does this demonstrate Orlikowski's (2002) claim that when our practice changes, our knowing changes, it starts to paint a picture of what is at stake, at the interactional level, with regard to authority and medical dominance. Then, in the second half and following Nicolini's (2010) suggested method of studying organizational phenomena, I "zoom in" to closely analyze an instance of practice, a patient case review for which a physician (MD) was present, to illustrate in finer detail the more general observations of the first half. Finally, I conclude with a discussion of what might be gleaned about collective sensemaking from such analysis.

7.1. Ethnographic notes: A word about the Short-stay GIM Team

The Short-stay GIM team was unique of the teams I studied in several regards. First, its PCC leadership had the most stability and consistency in terms of rotation and daily presence, with the same person serving as PCC from Monday to Thursday, and another person always serving as PCC from Friday to Sunday (rounds were not held on weekends). The team also had a long history of doing interprofessional rounds before the Integrate project was put in place. Both of these factors meant that team members knew each other fairly well and were practiced at conducting rounds together, having had occasion to build trust (Connaughton, Williams, & Linvill, 2009; Pethybridge, 2004; San Martín-Rodríguez et al., 2005), all of which lent a stability to their practice. We might recall that this team was so practiced at conducting interprofessional rounds that they were described by the Integrate project representatives as an independent “dream team,” and early on in the pilot project, Integrate ceased sending a Utilization Clinician to their rounds.

Secondly, the Short-stay GIM Team experimented with the format of their rounds near the end of my fieldwork, and one of the changes they made was to include in rounds discussions the bedside nurses (BNs) as well as hospitalists (MDs) and medical residents (CTUs, for Clinical Teaching Unit). As such, the Short-stay GIM Team offers a unique window into how authority, hierarchy, and precedence are enacted in the practice of the patient case review.

Prior to the change, rounds unfolded in a fashion similar to other teams’ rounds. Team members met around a large table in a secluded conference room with ample seating for all, and included the PCC, allied health (PT, OT, DIET, PHARM, SW), and community health (CCD). The PCC almost always led the discussion and maintained lax control of the conversational floor, opening up and closing down each patient case discussion by calling out patient identifiers. She would give a brief but comprehensive overview of each patient’s situation similar to the one in the “heedful” example presented in the previous chapter. Team members were asked for or offered up relevant information. Occasionally, an MD would pop into rounds to discuss the one or two patients in his or her care, but for the most part, the discussants were limited to the “core” team described above.

All team members attended to the flow of discussion by following along on their own patient lists, which were organized by bed number. Accordingly, during the overviews, patients were identified by name and bed number, which allowed for a certain representational redundancy (Hutchins & Klausen, 1998) that helped everyone co-orient to the same patient. Although the PCC maintained loose control of the conversational floor, discussions on this team flowed freely, and all team members seemed to jump in, interrupt, and contribute at will. Most case reviews that involved extended sensemaking centered on discharge concerns, marking discharge as a significant shared domain of concern for this team.

7.1.1. *Changes in the general organization of practice*

The team was part of a broader hospital-level initiative to optimize communication tools. Another ward was working on standardizing and sharing Kardexes (a specific nursing tool that abbreviates the patient chart information salient to the current day), while this team changed the format and location of its rounds in order to have access to information in “real time,” which meant including bedside nurses (BNs) and doctors (MDs and CTUs). The team’s charge nurse explained the rationale for the change this way:

You get what’s happening right now. I read the charts daily, in the morning, but it’s still very physician-focused, and a lot of the physicians, by the time I read the charts in the morning, they haven’t yet been in, so the information I’m reading is almost 24 hours old, it’s from the day before. So having the nurses collaborate on rounds now gives us an idea of how the patients are actually doing this minute. Which a lot of times doctors don’t know, so that’s always helpful.
(PCC-K Short-stay GIM Team)

Being more inclusive was hoped to increase the effectiveness of rounds. When she described the change in rounds to the interprofessional team, she explained that they hoped the patient “flow would happen quicker”: The team would have the latest information about the patients from the doctors (MDs and CTUs) and the bedside nurses (BNs), and plans could be made with the most accurate information to get the patient moving down their care trajectory more efficiently. Indeed, organizational patient flow was a strong driver of this change.

Certainly, from the PCC's explanations, we get the sense that the information provided by the BNs was positioned as holding more weight than what was contained in the patient charts and the PCC's daily notes, and as being more relevant than what the MDs knew. This meant BNs were considered to be privileged voices for authoring updates in the patient's story (more on this later). In fact, I overheard this PCC refer to the new format of rounds as "nursing rounds," whereas before she had referred to the "interdisciplinary team rounds." As we shall see, the new format of rounds shifted interactional roles such that allied health became primarily listening audience members while BNs were respondents to the questions posed by the PCC and MDs and CTUs.

This real-time information came at the expense of comfort, as the location of rounds moved from the conference room to the nursing station, the very hub of the ward's activities. After a two-week trial, the nursing station proved too chaotic for audible discussion, and the team decamped to a cramped computer room off of the nursing station. The five or six allied health team members, who had previously constituted the "core" interprofessional team, would squish into this room, perching on desktops, leaning against the wall, or sitting in the three available chairs, while the PCC stood at the doorway with her nursing notes in hand, which she dubbed "the bible on this unit." The wall separating the computer room from the nursing station held a large window that allowed the PCC to keep track of people's comings and goings around the nursing station while rounds proceeded. She would summon the relevant Bedside Nurse (BN) to rounds as the team's discussion progressed to the patients in that nurses' care. Senior medical residents,¹⁰³ or CTUs, were supposed to attend the first half hour of rounds, and the hospitalists, or MDs, were slotted for the second half hour of rounds, although this was a loose arrangement.

Attendance and interruption of workflow

As mentioned earlier, the PCC stood in the doorway to summon the bedside nurses under her charge to the rounds discussion. Her attention was thus divided between the context of the discussion and the activity around the nursing station. More importantly, the bedside nurses had to gather around the nursing station, suspending

¹⁰³ Only the senior medical residents on the CTU teams reported to rounds, thus serving as representatives or spokespersons for that team during the interprofessional team rounds.

their usual daily activities, including their break time, as they waited to be called to rounds (see D. Long et al., 2006 for an interesting discussion of “waiting hierarchies”). This organization of affairs indicates that rounds took precedence over general nursing work (and especially over “Coffee,” as their break time was called and which was customarily scheduled during this time), although if a patient was in need of immediate attention, the bedside nurse would be excused to attend to that patient (I never witnessed this occur).¹⁰⁴ What’s more, the bedside nurses could be doubly summoned: Sometimes patients were discussed twice, and the bedside nurse had to come back in to talk about the same patient because the doctor had arrived, marking a double interruption in the BN’s daily work flow.

In contrast, although MDs were slotted for the second half-hour of rounds, they seemed in fact to be free to drop in when it suited them, and some did not attend rounds at all. In fact, only two of the hospitalists that I observed attending rounds prior to the change were observed in attendance post-change, and even then, they did not attend rounds with regular frequency. With the CTUs, the situation was not much different. At the beginning of the trial period, they were mandated by management to attend, but stopped coming when their senior attending hospitalist did not specifically require it of them, which was the source of some grumbling on the part of the PCCs. As we will see in the following quantitative snapshot, even though their attendance was infrequent, their presence changed the team’s practice of the patient case review.

7.1.2. Quantitative snapshot

Overall, I transcribed and coded 170 patient case reviews for the Short-stay GIM team both before and after their change in rounds, 31 cases before and 139 cases after the change. I had just started gathering audio recordings when this team announced the change in its rounds format and location, and so I have only one recorded meeting before the change, but given the four months I had already spent following this team’s rounds, I can say with assurance that the recorded one is representative of general patterns prior to the change. In this pre-change meeting, an MD was present for 5 of the cases. After the change, I attended rounds for a couple of weeks without recording or

¹⁰⁴ Interestingly, a similar issue is the subject of Cooren’s (2010) discussion of authority negotiation in his fieldwork with *Médecins sans frontières* in the Democratic Republic of Congo.

doing structured observations because there was too much background noise at the nursing station to record, and frankly too many people coming and going to ascertain who was and wasn't part of rounds. Once the team moved its rounds to the cramped computer room, I resumed recordings and structured observations again. Of the 139 recorded and transcribed cases post-change, a BN was almost always present, an MD was present in 14 cases, and a CTU was present in 14 others (an MD and CTU were co-present for one).

The following quantitative snapshot offers us insight into how the change in rounds format might have affected collective sensemaking in the accomplishment of the patient case review. As we will see, the variables that changed have to do with co-orientation and intended audience, the conversational floor, and the type of sensemaking work that was accomplished. These considerations show us something about organizational precedence and hierarchy. Although I qualify these analyses as quantitative, I am not claiming that my analysis is statistically significant—with only handful of recorded meetings for this team, my sample size is far too small—nor can we necessarily generalize from these patterns, although they do resonate with what other studies have found and, as such, the points made below can serve as food for further thought as they offer analysis of more fine-grained detail of communication dynamics than many other studies.

Length of discussion

A notable variation was the average length of patient case reviews, as Table 7.1 illustrates.

Table 7.1 *Average lengths of patient case reviews in seconds*

Total average length	82
Total average before	71
Total average after	84
MD average (total)	121
MD average (before)	139
MD average (after)	114
CTU average	96
Team average (total)	73

Team average (before)	58
Team average (after)	77

Overall, after the change, case reviews averaged 13 seconds longer, an increase of 18%. While this might be explained by the fact that people were now coming and going on a regular basis throughout rounds—for instance, the PCC often had to summon the BN to discussion—it doesn't explain the difference entirely. This is clear when we look at the increased length when physicians were present, MDs and CTUs. When MDs were present, patient discussions were nearly 65% longer than when it was the team with no physician present (139 seconds on average with MDs present, and 73 seconds when they were not).¹⁰⁵ The team also spent more time on discussions when CTUs were present, an average of 96 seconds, or 30% longer. While we cannot see from these counts why discussions tended to be longer, if we accept that more time spent signals a certain granting of importance (authority or precedence), then physician presence seems to ascribe *a priori* a level of importance to the case being discussed.

Co-orientation aids

When the format of rounds changed for this team, there were significant changes to co-orientation aids (the clues and cues that allow A and B to establish what X is all about), starting with how patient case reviews unfolded sequentially throughout rounds. (In the following chapter, I will point out how material artifacts and routines stabilized practice and served as aids in co-orientation.)

Sequence of discussion

Usually, the sequence of cases discussed followed the bed numbers listed on every team member's daily patient list sheets. However, this typical pattern was disrupted with the change in rounds format because when a physician (MD or CTU) came through the door, the PCC would reorient discussion to talk about the patient or patients in that doctor's care, which sometimes posed a co-orientation challenge for the listening team members. Hence, with CTUs and MDs dropping in over the course of

¹⁰⁵ These are adjusted for repeat discussions of the same patient.

rounds, the discussion often jumped around considerably, with much page flipping as allied and community health team members tried to locate the relevant patient in their notes. On several occasions, these team members would signal their disorientation by quietly asking one another which bed number or patient was being discussed. One person, the community health care coordinator (CCD) who was a seasoned nurse, sometimes interrupted to request the bed number from the PCC. This had happened prior to the change—both the reorientation to the physician’s patients and the signals of orientation confusion—but it did not tend to happen nearly as often.

In addition to this, patients were often discussed more than once. Sometimes a case had already been discussed by the team before the physician stopped by and then the team would discuss this patient again; other times, after the physician had left, the team would return to discuss a patient again as they went down their list of patients, to clarify or question what the physician had said. In other cases, a CTU might return to rounds after having discussed the patients in their care to clarify information or answer questions raised. And sometimes, the BN would not arrive in time to discuss their patients as the team went down their patient lists, and the PCC would give the BN a quick update and ask for any concerns. All in all, there were 12 cases of multiple discussions of the same patient post change.

Identifiers

As discussed earlier, identifiers are given at the beginning of the patient case review to help listening team members co-orient to the same patient as they follow along in their own notes, thus offering representational redundancy (Hutchins & Klausen, 1998) that helps heedful performance. Typically, these were the patient’s bed number, name, and age (a triple identifier), although often the bed number and name were given (double identifier), and sometimes only the bed number or only the name (single identifier). Identifiers were particularly important in the new format of rounds, given the frequent interruptions of discussion flow when MDs, CTUs or even BNs entered the room, as well as the resultant multiple discussions of the same patient. See Figure 7.1 below.

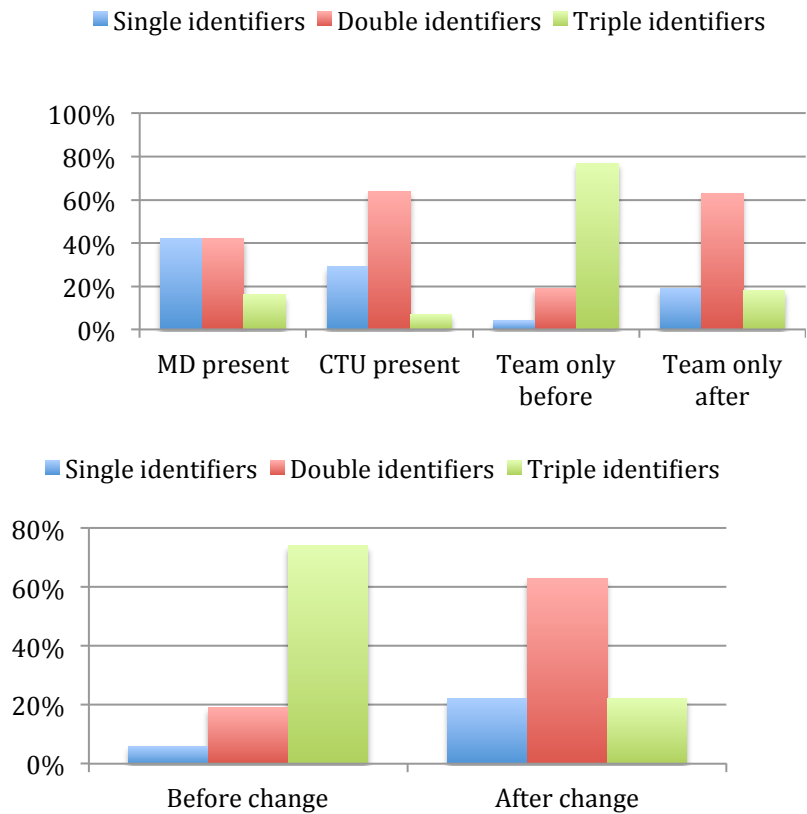


Figure 7.1. Identifiers before and after change in rounds

Y axis indicates percentage of total patient case reviews for each category.

Prior to the change, 75% of patient case reviews began with a triple identifier of the patient’s name, bed number, and age (see Figure 7.1). After the change, this dropped to only 15% overall, and double identifiers went from 19% of the total to 63% overall. More interestingly, single identifiers, such as “Mr. Jones” or “216-3,” which represented only 6% of the cases before the change, jumped to 22% after the change. This is an important increase considering how much page flipping the listening team members had to do to orient to the patient being discussed when a physician (MD or CTU) walked into rounds. Indeed, as we can see in Figure 7.2, the presence of a physician correlated with fewer identifiers being offered at the beginning of discussions: Single identifiers were offered 42% of the time when an MD was present, and 29% of the time when a CTU was (adjusted for double discussions).

Figure 7.2. Identifiers when MD present

Y axis indicates percentage of total patient case reviews for each category.

Another interesting observation is that even when physicians were absent, fewer identifiers were used after the change on average (the two right hand columns of Figure 7.2). Prior to the change, single identifiers occurred only 4% of the time, with most case discussions (77%) seeing triple identifiers as part of a recurring pattern of overviews. After the change, single identifiers accounted for 18% of the cases overall, even when a physician was not present. With the new “nursing rounds,” the PCC would often kick off a case review by asking the BN, “Any comments on Swinton?” or “How is 524-2 doing today?” In other words, by working to include the BN in discussions, sometimes she (perhaps inadvertently) pre-empted not only the representational redundancy that fosters heedful coorientation, but also the usual introductory grounding narrative script that circumscribed the patient’s situation for the listening team members.

Overviews

As Weick and colleagues tell us, sensemaking starts with bracketing and noticing certain elements from an ongoing stream of events (Weick et al., 2005), a practice that Goffman (1974) referred to as framing, and which reduces equivocality of interpretation. As we saw in Chapter 6, overviews are important moments where the PCC or other discussion facilitator foregrounds (i.e., notices and brackets) the salient details of a patient’s case and thus focuses team attention on those. Overviews provide initial answers to the questions “What is going on?” and “What now?” (Blatt et al., 2006; Weick et al., 2005). As we saw above, a partial casualty of the change in rounds format was the comprehensive information at the beginning of each case discussion that helped listening team members to orient.

Prior to the change, nearly all patient case reviews started with a fairly *comprehensive* overview that included: some background situating information such as what the patient “came in with,” diagnosis, length of stay, medical history, family dynamics and living situation; an overview of the current status such as treatments received and so on; and some anticipated action, often mentioned as “the plan.” Sometimes these overviews were even more *extensive*, and included other narrative elements to flesh out the human side of the story, whether in terms of the patient’s

lifeworld or the staff's experience in caring for the patient. Sometimes, however, only very *brief* information was given in the overview, where only one or two details were offered with no background information, such as “waiting for chest X-ray” or “home today.” In some cases, as mentioned above, no overview at all was given beyond the patient identifier(s).

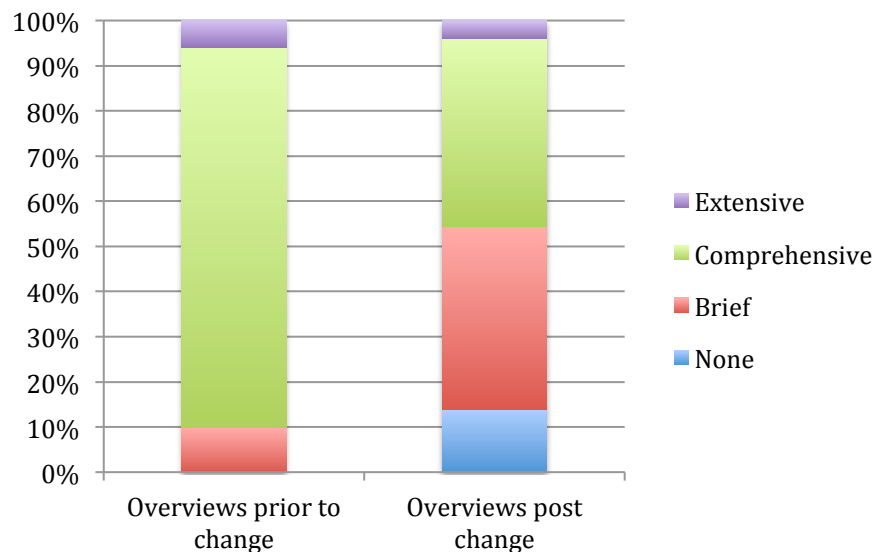


Figure 7.3. Overviews before and after change in rounds format

Y axis indicates percentage of total patient case reviews for each category.

As we can see in Figure 7.3, nearly all the overviews prior to the change (84%) were comprehensive, whereas after the change, less than half were (42%). Extensive overviews remained relatively rare, but brief overviews went from a small proportion (6%) to more than a third (41%) of all case discussions. Most importantly, whereas all cases prior to the change had some kind of overview, after the change, 14% had no overview at all. Combined, the cases with a brief or no overview account for more than half of all cases, and this increase indicates an impoverishment of the sense given to listening team members.

Insofar as the overview circumscribes the patient's situation or story-so-far (Massey, 2005, cited in Vasquez, 2009) and is thus also designed to help the listening team members make sense of the case, we can say that those team members are positioned as the intended or target audience. In other words, *their sensemaking* is what

is at stake in the interaction. When those overviews are dropped or impoverished, the patient case review is less designed for this purpose and something else is at stake; perhaps more importantly, it raises the question of intended audience. Who were these patient case reviews intended for? We might recall from Chapter 3 Lazega’s (1992) insistence that actors attend to their sources of accountability. They produce their accounts—and the overview is an account of sorts composed of knowledge claims about the patient—based on their intended audience, and in so doing, construct and position their audience. When overviews and identifiers are dropped or impoverished, the listening team members¹⁰⁶ are no longer positioned as the ones to whom the producer of the account (i.e., the PCC giving an overview) is accountable. This marks a subtle but fundamental shift in precedence, that is in “who and what counts here.” We could then try to tease out whether physician presence makes a difference to who is designated as intended audience through these overviews, by looking at correlations between impoverished overviews and physician presence.

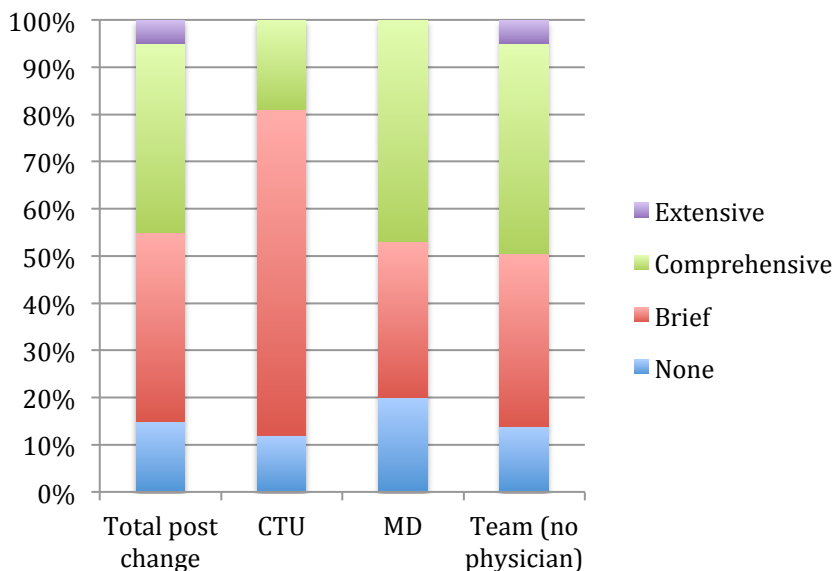


Figure 7.4. Overviews by physician presence or absence, post-change

Y axis indicates percentage of total patient case reviews for each category.

¹⁰⁶ By this, I mean what was previously referred to as the “core” team of allied and community health members.

As we can see in Figure 7.4, the number of cases with no overview or a brief overview (red and blue combined) was fairly stable when an MD was present (53%)¹⁰⁷ compared to when only the team was present (51%). This indicates that MD presence alone doesn't explain the reorientation in design of overviews; it isn't just when the doctor enters the room that the listening team is no longer positioned as the ones whose sensemaking counts; it happens even when there's no physician present. However, when we look at the data when a CTU was present, we see that a striking 81% of case reviews had impoverished or no overviews. I will return to this point in the section on conversational floor and production of overviews.

Sensemaking work accomplished

An additional way of considering the different stakes when a physician is present or absent has to do with the kind of work that is being accomplished. Sensemaking is geared to reducing equivocality so as to move action forward. As Weick et al. (2005) put it, it aims to answer two questions: What is the story? and Now what? As mentioned in Chapter 5, patient case reviews (including their overviews) generally fell into three different types: briefing, collaborative definition, and collaborative action planning. A *briefing* was where an update was given to the team, usually by the PCC. The sense was made for them, the story told to them, so to speak; an example of unidirectional talk. In other cases, we saw greater multivocality, where more speakers contributed to the discussion, and this discussion was focused to differing degrees on answering the first question (i.e., what is the story?) or on answering both (i.e., what is the story? and now what?).

With the former, which I categorize as *collaborative definition*, team members contributed narrative accounts and information to help determine, interpret, describe and define what the current situation was for a given patient, such as “I got her up to the commode yesterday as a stand-by assist, so functionally, I'd say she's relatively independent” or “I clarified the order, and it's a second perc drain they're putting in.” When discussion was *also* focused on “now what?”—which is categorized below as *collaborative action planning*—team discussion addressed the actions that team members needed, wanted, or planned to take, such as the PCC saying, “OT, can you do

¹⁰⁷ All case reviews with an MD present prior to the change (n=5) had comprehensive overviews.

the cognitive assessment today so we can clear for discharge?” or the CTU, “I’d like to keep her for just one more day to see how she does. Is that okay?” Often, collaborative action planning centred on discharge planning.

We can ask two questions of the data (Figure 7.5): Was the work accomplished in the new format of rounds of a different type than was previously done, regardless of physician presence? In other words, did the focus on “real time” information correlate with a change in focus? Secondly, was there a difference in focus when physicians attended?

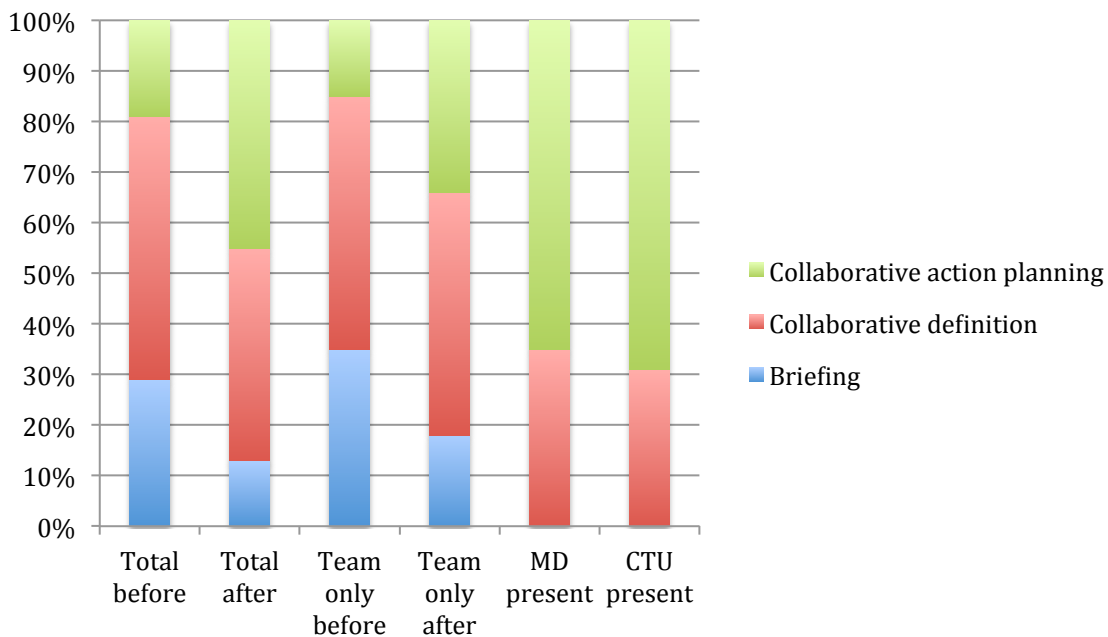


Figure 7.5. Type of sensemaking work accomplished in case review

Y axis indicates percentage of total patient case reviews for each category.

From the two left-hand columns of Figure 7.5, we can see that overall, briefings became less frequent with the change in rounds, going from 29% before to 12% after. Thus, we can see that there is slightly greater multivocality (recall that briefings involved one speaker, usually the PCC, giving an update to the team). Also evident is that collaborative definition of the problem figured prominently throughout: 52% overall before and 42% overall after; 50% team only before and 48% team only after; 35% MD; and 31% CTU. However, we can also see that the new rounds format was *more focused overall on “What now”* (green): Before the change only 19% of cases were

collaboratively focused on action planning, whereas afterwards, 46% were. From this, we can infer that the kind of sensemaking work being done in rounds had in fact changed somewhat.

What is more striking is that when a physician was present (MD or CTU), case reviews were much more focused on collaborative action planning (65% MD and 69% CTU) than on collaborative description. What's more, none of the cases where a physician was present were briefings. It wasn't just that stories were getting told, retold and refined—a collaborative account of the patient's story in the hospital—but also that *action was being moved forward*, which is another way to say that the focus was on decision making. This tells us something about authority, and, indeed, these results are unsurprising; physicians have greater authority to make decisions in the acute hospital context. Given the fact of institutionally entrenched medical dominance (Bourgeault & Mulvale, 2006), they are more able to *author* changes to the patient's story through their capacity to issue orders, admit and discharge patients, and so on. (Indeed, this authority was felt even when physicians were physically absent as they were made present, invoked, or ventriloquized as ghost presences, Benoit-Barne & Cooren, 2009, by team members).

Thus from this perspective, when physicians were present, rounds could go from being a somewhat ritualistic organizational performance (Lewin & Reeves, 2011) of accounting practices (i.e., rendering accounts to determine “what's going on?”) to performances of organizational action planning that got the patient moving forward on their trajectory. What's ironic, of course, is that although this satisfied the organizational concern for greater efficiency, which was the *raison d'être* of the Integrate program, physicians' attendance seemed optional. In other words, they were not accountable to the team or to Integrate.

To summarize the variables discussed so far, the change in rounds format saw an overall increase in length of patient case reviews, but especially when a physician was present. Co-orientation aids were used less frequently and in less fine detail (identifiers and overviews) across the board, and sensemaking work was more focused on action planning generally but especially when a physician was present. These changes led me to question the intended audience of rounds discussion, and I proposed that the allied and community health team members were positioned as a passive

audience to whom discussion was less accountable. Instead, the presence of physicians and bedside nurses took precedence over the former's sensemaking practices. Let's turn now to another indicator of precedence: the conversational floor and who may access it.

Conversational floor and authority

In the 1990s and early 2000s, when interprofessional care scholars were more interested in differentiating interdisciplinary practice from multidisciplinary practice, one of the variables upon which they focused was sequence in discussions (Drinka & Clark, 2000). Multidisciplinary patient case reviews, so the argument went, would see each disciplinary or professional representatives report in turn on their work with the patient, whereas interdisciplinary rounds would not see such a sequentiality, but rather would be issue- or problem-focused, with each salient profession interpellated by the topic at hand as the case review unfolded. If we apply to this distinction a conversation analysis (CA) framework, which is supremely concerned with sequence design, we see that access to the conversational floor is more sequentially and linearly regimented in multidisciplinary teamwork, which was thought by IP scholars to preclude the coveted "and + and" synthesis described by Opie (2000).

I bring this up, however, because CA also tells us that with institutional talk (Drew & Heritage, 1992; Heritage, 2005), access to the conversational floor is normative of the relations enacted in situated conversation. For instance, courtroom talk is identifiable largely by who may speak when and to whom about what (Drew & Heritage, 1992; Kompter, 2013). In other words, the situation of the courtroom is as much defined by the relationships and identities of the speakers who talk it into being as they, in various ways, are constrained and enabled by the situation they intersubjectively maintain. At stake is control of the conversational floor, because holding the conversational floor is an opportunity to author the topic at hand and, as such, can be considered an indicator of authority. Opie was definitely on to this if the title of her article "*Team as Author*" is any indication (Opie, 1997a).

In the previous section, I traced a topology of case reviews and mapped out some characteristics of patient case reviews before and after the change in rounds, with and without medical presence. I suggested that we could see the enactment of organizational precedence and authority in the correlation between longer case reviews

when physicians were present and in the positioning of allied and community health team members as passive audience through the impoverishment of orienting details given. Here, I map out key indicators of control of the conversational floor, especially gatekeeping and the production of framing accounts (i.e., overviews). Given the contingent nature of care and the ongoing evolution of each patient’s situation, case reviews varied greatly and a fine-grained conversation analysis of each would be too cumbersome and lengthy here (I will zoom in later), so I restrict this part of the quantitative snapshot to the recurrent and observable features of all, namely the ways they are initiated.

Gatekeeping

Calling out the identifier of the next patient was the way in which the previous discussion was closed and the next one initiated, a practice that I referred to earlier as “gatekeeping,” meaning that it controls the flow of discussion, or what is often referred to as openings and closings (Schegloff & Sacks, 1973; Schegloff, 1968).

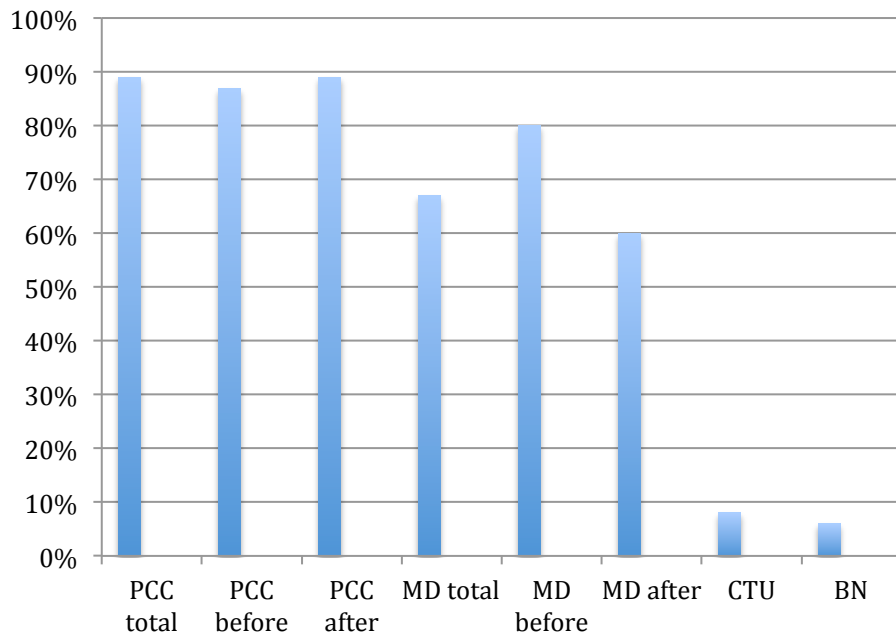


Figure 7.6. Gatekeeping: Calling out the patient identifier

Y axis indicates percentage of total patient case reviews for each category.

As we can see from Figure 7.6, PCC control of opening and closing case reviews remained quite constant (89% overall, n=170; 87% before, n=31; and 89% after, n=139). Overall, when MDs were present in rounds (MD total, n=20), gatekeeping was shared between PCCs and MDs: Two thirds of the time (67%), MDs called out the identifier, and in the remainder of the time, the PCC performed this action (33%). MDs did this task 80% of the time before the change (n=5), which dropped to 60% of the time afterwards (n=10; although MDs were present for 15 cases post-change, in 5 cases they arrived late to the discussion). However, when CTUs were present, the situation was quite different: The PCC retained gatekeeping control 92% of the time (CTU called out identifiers 8% of the time). This was in line with the frequency with which BNs called out identifiers when no physician was present (6%). We can also note that in no instance does another member of the team (allied or community health) call out identifiers to initiate a patient case review.¹⁰⁸ This tells us that PCC was firmly positioned as facilitator of the meeting, as the author of openings, except when an MD was present, in which case the PCC sometimes relinquished this gatekeeping control, often through an invitation to the MD to contribute, such as “Who’ve you got?” or “Do you want to jump in here?” In other words, access to the conversational floor to initiate a patient case review was tightly controlled by the PCC and/or the MD, which I argue is a marker of authority in terms of authoring.

Production of overviews

Earlier we saw the importance of overviews for orienting the listening team members by their circumscription of the salient matters of concern that set the course for subsequent discussion and provide a framework for interpretation. Here, we examine the authorship of these overviews. As instances of authoring an initial framing of the patient’s story, their production tells us something about authority. In Figure 7.7 below, we can see who tended to author these overviews.

¹⁰⁸ With regard to multiple discussions of the same patient, only one discussion was retained and the others were folded into it in my counts; hence, another team member sometimes called out a patient’s name to *return* to a patient who had already been discussed, but these were discarded here.

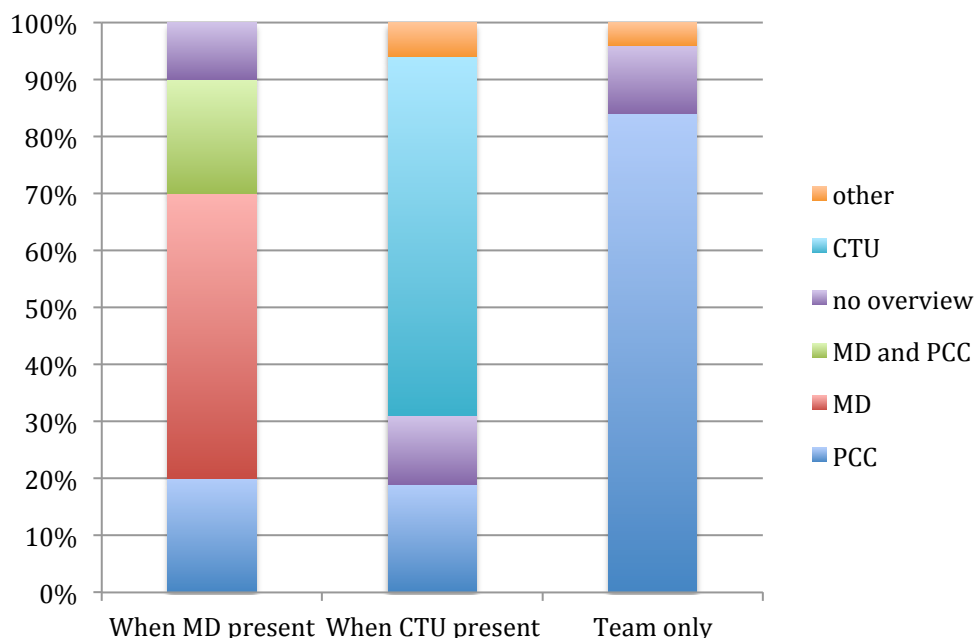


Figure 7.7. Authoring of overviews after change by physician presence

Y axis indicates percentage of total patient case reviews after change in rounds format for each category.

As mentioned above, an MD was present for 15 case reviews after the change; however, in 5 of those cases, the MD either arrived late to the discussion (i.e., after the overview had been done) or was spotted walking by rounds and was called in to the discussion by the PCC after the case review was already underway. Of the 10 cases where an MD was present for the overview, we can see that he or she was involved in authoring overviews 70% of the time (50% MD only and 20% co-authored with PCC), the PCC alone authored 20% of the cases, and in 10%, there was no overview. When we compare these figures to when a CTU was present (n=16), we notice a similar pattern: The CTU produced an overview 63% of the time, the PCC 19% of the time, Other (DIET) 6% of the time, and no overview was offered in 12% of the cases. When no physician is present (n=102), the PCC produces overviews the majority of the time (84%), while 12% of reviews go with no overview and in 4% of cases, someone other than the PCC produces the overview.

Despite this very small sample size, we can still clearly see authority being enacted through the production of these framing accounts. The authority to circumscribe

the situation at hand through the overview is ceded to medical presence more often than not when they are in attendance, and when they are not, it is held by the PCC who is authorized, at least on paper by the Integrate project, to speak for medicine. This situation would likely be slightly different in a sub-acute ward where the medical piece of the equation is already stabilized and thus in some ways black-boxed.¹⁰⁹ To nuance the issue of medical dominance, we can see that it is enacted through the authorship of framing accounts but also that it is entwined with the organizational goals at particular points on a patient's trajectory, which is to say its expression depends on the dictates of the situation.

Snapshot summary

To summarize the quantitative portrait offered here, we saw that medical dominance understood as *precedence* could be discerned through the longer length of case reviews when physicians were present as well as in the sequence of cases discussed and whose ongoing work could be interrupted (that of BNs and other team members when a physician came to rounds). We saw an overall drop in the coorientation aids offered to listening team members after the change in rounds, including patient identifiers and the information-richness of case overviews, which suggested that the audience for whom rounds was designed had changed, nudging the allied and community health team members out of the circle of precedence as physicians and bedside nurses took their place. We also looked at the kind of sensemaking work accomplished and saw that after the change in rounds, talk was more focused on collaborative action planning and less on sensegiving (i.e., briefings) than it had previously been. We saw that authority could be viewed in terms of authorship and authoring through control of the conversational floor both through gatekeeping and the production of case overviews that framed and directed subsequent sensemaking.

What's missing from this portrait is an examination of what comes after all of those overviews: Who gets to make what claims about the patient? How does negotiation take place in terms of deciding what ought to get done. Although it's possible to code for who speaks, who requests and provides information, and whose utterances

¹⁰⁹ One of the requirements for a patient to be classified for sub-acute status was that the medical situation was no longer acute and therefore more stable and predictable.

work to define the patient's situation, how does one code for the very wide range variables a given speaker can invoke in their reasoning? The ways they can invoke them? Indeed, given the contingent character of case discussions, it's hard to paint a quantitative picture that compares how decisions get made across cases. Instead, I propose to zoom in (Nicolini, 2010; Taylor, 2011) and present one case that is examined in much finer detail and that I think is representative of some patterns of authority enactment for this team. The transcribed case below portrays the collective process of authoring the patient's situation during a case discussion when an MD is present.

7.2. Interaction analysis: MD presence in rounds

Here we find the case of Mr. Bolshi, a man with heart failure and related water retention but whose functional mobilization is relatively fine. Although the case review is quite long, I chose to reproduce it in its entirety because we see a progression of reasoning throughout and because it offers an excellent example of how authority functions situationally when the MD is present (also, the case reviews where the MDs were present just tended to be longer). The excerpt is taken from a Tuesday in early January, a few weeks after the change in rounds was initiated and after the team moved to the cramped computer room. The ward was overcrowded, as was most of the hospital, in the context of a post-holiday, H1N1 spike in admissions, but this was not an observable concern for the team on this day.

2010-01-06.2: 1:28 – 6:12 “He’s 10 pounds heavier than 5 days ago”

The sequence opens when the MD enters the room near the nursing station where rounds are held.

- 1 MD: Do you guys go room by room?
2 PCC: We're, well, it's supposed to be CTU from 10 to 10:30 [and then
3 hospitalist from 10:30 to 11
4 MD: [Oh, I see. Okay.
5 PCC: But, because it was a trial for two weeks, CTU now all of a sudden
6 decided to stop coming, although we've said, "No, it, you have to keep
7 coming?" So I'm dealing with (.) those higher beings. But if you want to
8 [chat right now, I have no problem with that.
9 MD: [Well, I have Mr. Bolshi, I don't know if you, are you his bedside [nurse?

10 PCC: [Bolshi?
11 Marcos ((BN)) is. Yeah.
12 MD: So any comments on [him?
13 BN: ((heavy accent)) [That's nice. ((to someone outside))
14 PCC: That's okay Marcos, we'll get it after.
15 (1.5)
16 MD: Anyway, (.) go ahead.
17 PCC: Any comments on him?
18 MD: From a nursing point of view.
19 PCC: On Mr. Bolshi in 14-2.
20 BN: Uh::, not really. (1.0) [Except oedema's still ga-
21 PCC: [Did we weigh him this morning?
22 BN: Eh, yeah. (2.0) He::'s now:::
23 (1.0)
24 PCC: How much does he weigh today.
25 BN: (1.0) He::'s no::w.
26 (3.0) ((pages flipping))
27 BN: 73.4 and it's, I think it's (1.0) couple kilos down from the last one, so.
28 PCC: Yeah, he's still [not less than 70, [though and you're trying to get less than
29 [70.
30 BN: [So. [No.
31 MD: So 73.4?
32 BN: Yeah.
33 MD: That's the highest weight I've (.) heard of, so.
34 PCC: Yeah=
35 BN: =And, and his legs are (.) still huge.
36 MD: So do [we know if he's, what was the last measurement?
37 PCC: [So not going in-
38 BN: I don't know.
39 MD: You don't know.
40 BN: It's not in the, e::r, I can, I can go through [the notes.
41 DIET: [It's not on the yellow bar? Like
42 a yellow [form in the bar?
43 MD: [Right, so, uh,
44 BN: [It's not in the (inaudible).
45 DIET: Should be in the Yellow, there's a place for weight.

46 MD: Anyway. Yeah. ((clears throat))

47 PCC: 'Kay, so his weight's [obviously still not less.

48 MD: [So, so, sounds like it's still high. Um, ((clears
49 throat)), and uh, 'cause it was um sixty::nine at one point there.

50 PCC: Yeah, 69, and then he went 71, [72 ((Sound of pages rustling, PCC is
51 reading))

52 BN: [72.

53 PCC: 72, 73 point [4.

54 MD: [73, so, he's getting worse not better.

55 BN: [Yeah. That's right.

56 PCC: [And you said today he was what? (0.5) That's you?

57 BN: Yeah=

58 MD: =That's his today's, yeah. Alright. ((clears throat)) So, and uh is there a
59 standard methodology for weighing them, like, with shoes, without shoes,
60 uh?

61 CCD: Before breakfast, [after breakfast?

62 BN: [Without shoes, the only point, I mean, we can make
63 sure that we weigh him before breakfast, but it's pretty steady so, and I
64 [guess e::verybody weighed before breakfast.

65 MD: [No, no, okay. No, no, fair enough. Good. Fine. So anyway, and how
66 about his ambulation? I saw him after he=

67 BN: =Uh, fine.

68 DIET: I saw him [yesterday morning-

69 PT: [He's up and walking.

70 MD: [He's walking around pretty good?

71 BN: Yup. Yup. No problem, he now [(inaudible)

72 MD: [Okay, did he sleep? [He tells me every
73 night he sits up in a chair because he can't sleep.

74 BN: [N::o.

75 Yes, that's what happened last night as well.

76 MD: Okay. Alright. So, um, but he's very happy with the oxygen. He likes [that.

77 BN: [Yes.

78 PCC: He likes it?

79 BN: Yeah.

80 PCC: Good. Well I'm glad (inaudible).

81 BN: He's keeping it at hundred percent. He walking without, like oxygen, he
82 dropped to [97.

83 MD: [His blood pressures a::re?
84 BN: 90 something over::=
85 MD: =And he's not light-headed in any way?
86 BN: No. No. No. I asked somebody.
87 MD: Okay. Well, um, [I think
88 BN: [It was 90 to 91 over 57-
89 MD: So, he, and the sense I got talking to him is that he, he still would prefer
90 to go home in the short term. Sounds like his functional status is (.) pretty
91 reasonable? (.) I'm gonna have a look and see. So, sometimes these
92 weights are quite um (.) misleading? I mean, it's hard to imagine he's ten
93 pounds heavier than he was 5 days ago?
94 PCC: Uh-hum.
95 OT: [That's a lot.
96 MD: [It sure doesn't look that way. That's a lot of water to put on in five days.
97 PCC: Uh-hum.
98 MD: So I'll have a look. But assuming that his water level is ok[ay? And
99 BN: [Um=
100 MD: his bloodwork is okay, and he's functioning the way he's functioning?
101 BN: Functionally, he's okay.
102 MD: Is there that much of a gap between (0.5) his best function at home and
103 what he's doing? I'm not sure.
104 OT: ((tentatively)) Is he, like, independent living environment?
105 PCC: He was living alone in Barnstown.
106 MD: Okay. [So.
107 CCD: [And no services.
108 OT: Do you want to think about (.) assisted living before he thinks about [long
109 term care?
110 MD: [Well,
111 exactly, yeah, I mean I think it's a very, it's a very poorly thought out kind
112 of process, right? for him.
113 OT: Okay. Okay.
114 MD: But, from our point of view, I mean from what you see nursing-wise, and
115 otherwise, it sounds like he's, even now, with his less than ideally
116 managed what you might say heart failure, he's coping relatively well.
117 PCC: Uh-hmm.
118 BN: Uh, he needs [help too-
119 MD: [Except for his night time too, his sleep.

120 BN: His (inaudible) you know, those kind of things. [He cannot do it by himself,
121 so.

122 PCC: [(inaudible)]

123 MD: Okay, and one would think, I mean, don't get me wrong, [I mean it sounds
124 like

125 PCC: [(inaudible)]

126 MD: If he's gained 10 pounds of water in a week? that he should be able to
127 lose 5 or 6 pounds just the same.

128 PCC: Yes!

129 MD: With aggressive therapy. So yes, switch him to IV diuretics today.

130 PCC: 'kay.

131 MD: So you would think, you know, that [today
132 BN: [He was on IV (.) yesterday.

133 MD: Just one dose.

134 BN: Yeah, okay.

135 MD: So, by, you'd think that, you know, you'd be able to, to get four pounds of
136 water of off him in 48 hours.

137 PCC: Uh-hmm.

138 MD: Doing that, maybe by Friday morning, he'd be.

139 PCC: Yes. [Yes.

140 MD: [You know, at his weight.

141 PCC: Okay.

142 MD: Okay. ((clears throat))

143 DIET: His (electro)'lytes today seemed-

144 MD: Reasonable. Okay, good. Alright. Anyway that's him.

145 PCC: (tries to talk)

146 MD: So it sounds like it's more medical than anything else at the moment,
147 right? ((clears throat)) Okay.

148 PCC: Um, and [then=

149 MD: [But you might want to talk to him about his sort of openness to
150 returning home? [Until the medical statu-[situation stabilizes.

151 OT: [Sure

152 PCC: [Uh-hmm.

153 OT: Yeah. Okay.

154 MD: I think that's worthwhile, having that conversation.

155 PCC: Okay, [and=

156 MD: [And the other guy is Mr. Marsden.
157 PCC: Yes.

Interaction analysis

Comparison to quantitative snapshot

Let's begin with a brief consideration of the variables in the quantitative snapshot and how they play out in this excerpt. This case review was atypically long at 4:44 minutes (recall the average for this team was 1:28 minutes), which I argued earlier was a sign of precedence and that we saw was more frequent with physician presence. The sequence of case reviews is addressed when the MD implicitly references the change in rounds at the beginning of the excerpt ("Do you guys go room by room?" line 1). In lieu of a direct response to this question (i.e., "Yes, we do go room by room"), the PCC orients to his identity as a representative of medicine and explains how the new format of rounds is supposed to work with regard to medical presence, and then she grants him permission to speak "out of turn" ("But if you want to chat right now, I have no problem with that," lines 7-8).

No interpretation-framing overview is given to the listening team members, other than the patient's name as identifier, provided by the MD as he circumscribes his jurisdiction ("I have Mr. Bolshi," line 9). The MD appropriates the place in the discussion where the overview would typically appear by directly inviting the BN for comments (line 12). The patient's bed number is eventually given in line 19 as a prompt to BN to produce a report, and a label for the patient's diagnosis is finally given in line 116 ("what you might say heart failure.")

Most of the sensemaking work is geared to producing a collaborative definition of the patient's medical and functional status until line 91, when the MD mentions an action he will take ("I'm gonna have a look and see"). After this point, the team discusses discharge concerns and the MD starts building a contingent discharge plan to which further collaborative description is geared, so we see the pattern of collaborative action planning (What's going on? + What now?) in medical presence play out here.

The PCC shares gatekeeping control of the floor with the MD at the beginning, and then seems to cede it completely as the MD poses a series of questions that set

matters of concern (this will be discussed in depth below). She tries to regain control and close down this case review and open the next one in line 148 (“Um, and then=), which she fails to do and which the MD in fact completes in line 156 (“And the other guy is Mr. Marsden”). She explicitly accepts his agenda-setting move (i.e., his closing and opening) by saying “Yes” in line 157.

Overall, then, we can see the markers of authority and precedence in this excerpt. Let’s turn now to an exploration of authoring.

Sensemaking and authoring

The collective sensemaking in Mr. Bolshi’s case articulates around the definition of several matters of concern that are raised and discussed as a plan emerges for moving towards discharge. The MD leads the interaction, and half of the review is focused on making sense of the ambiguity around whether *the patient’s weight* is increasing or decreasing, which constitutes the first matter of concern (lines 21-65, 92-98). The MD requests the last measurement to try to establish an answer (line 36), and when the BN is unable to produce an answer, the “notes” are invoked as holding this information (line 40-45) and the notes do in fact help the PCC and BN co-produce an answer (lines 50-54) that establishes that the measurements are increasing. The MD then pursues a line of questioning that delves deeper into the possible explanations of the ambiguity, starting with the nursing practice of measurement (“with shoes or, without shoes,” before breakfast, after breakfast,” lines 58-65) and moving to a suggestion that the weight figures aren’t representative of reality (“misleading,” “hard to imagine,” and “it doesn’t look that way,” lines 91-97).

Related to the patient’s weight is the concern about *oedema*, which is raised by the BN (“Except oedema’s still ga-,” lines 20; “his legs are (.) still huge,” line 35). This concern is not explicitly taken up after BN initially invokes it (lines 20-21), but the MD seems to implicitly orient to it when he asks for the last weight measurement (lines 35-36). The MD ties the two matters of concern together in his speculative interpretation of the information (the weights are misleading and that the patient probably did not put on 10 pounds of water in 5 days, lines 92-98) and builds on this reasoning to come up with an intervention plan regarding these matters of concern (lines 123-142), issuing an order to switch the patient to IV diuretics to reduce the oedema and the weight (line 129).

Another uncertainty is signalled in lines 102-103, which triggered sensemaking work related to a different matter of concern, the patient's functional capacity, first raised by the MD (ambulation, lines 65-72; functional status, 90-91). Having ascertained from the BN, DIET and PT (lines 67-71) that the patient is walking fine, he again seeks finer grained information about function by asking about the patient's distance from his functional baseline ("gap," line 102). This implicitly invokes another recurrent matter of concern, *the patient's preferences for discharge* (home in the short term, lines 89-90; assisted living, lines 108-113; coping, lines 116-122; action plan, lines 149-155), which the MD first brings up when he speaks for the patient (lines 89-90). The OT orients to this line of questioning about functional gap and to the MD's lack of knowledge by seeking information about the patient's living environment prior to hospital admittance (line 104), which the PCC and CCD provide ("living alone in Barnstow," line 105; "no services," line 107), both of which indicate a level of relative functional independence as baseline. OT then suggests an action plan for the MD ("Do you want to think about (.) assisted living before he thinks about long term care?" lines 108-109), which does not seem to reference statements in previous turns of talk (after all, Mr. Bolshi's function doesn't seem to be an issue), and the MD seems to orient to the question of authoring, pointing to the patient's lack of processing the issues around this question and brings up again the team's observations ("from *our* point of view," line 114) and evaluation that "he's coping relatively well" (line 116). He does not, however, dismiss her suggestion, but instead implicitly assigns an action to the OT to carry out ("you might want to talk to him about his sort of openness to returning home?" lines 149-150), and underscores the worth of that action (line 154).

Other matters of concern were brought up and put to rest relatively quickly, so to speak, including the patient's difficulty *sleeping* (lines 72-75, 119) and the patient's *blood pressure* (lines 83-88). Overall, then, we can see that the Integrate's domains to be addressed in each patient case review (medical, functional, discharge) were in fact discussed in this case review. Authority is discernable in the case review through acts of authoring, to which our discussion turns next.

Setting matters of concern

One of the main ways that reviews were authored was through the setting of matters of concern, which sets the agenda for subsequent discussion. As mentioned

elsewhere, case overviews typically set the stage for this through their framing function, but as we saw there was no overview in this case. Instead, there was a pattern of matters of concern being set through questions. Hayano (2013) writes, "Questions are a powerful tool to control interaction: they pressure recipients for a response, impose presuppositions, agendas and preferences, and implement various initiating actions, including some that are potentially face threatening" (p. 395-396). Identities are performed in question design; what is at stake are "interactants' shared understandings regarding who is expected to have information"¹¹⁰ as well as who is understood to be authorized to request it.

In the case of Mr. Bolshi, it is primarily the MD's but also the PCC's questions that control the interaction by setting the matters of concern on which team discussion focuses. The MD initially invites the BN to author concerns with his broad question in line 12, "Any comments on him?" which he later narrows, "From a nursing point of view" (line 18), thereby qualifying the knowledge claims that the BN is to authorized make. It also effectively silences the non-nursing team members and establishes that what counts at this point is the nursing perspective. The PCC co-authors this line of questioning by repeating the MD's initial question (line 17), demonstrating her pattern of sharing control of the conversational floor with medicine.

The BN responds hesitantly and tries to establish oedema as a concern (line 20), but is interrupted by the PCC who asks a question that sets the patient's weight as a matter of concern ("Did we weigh him this morning?" line 21), and subsequent discussion orients to this matter of concern until line 65, when the MD authors a new matter of concern. However, the BN does try again to raise the issue of oedema in line 35 ("And, and his legs are (.) still huge"), but this topic is not taken up. Instead, subsequent discussion focuses on specifying in finer detail the issue of the patient's weight, led by the MD's questions. In line 36, the MD shifts topics from the BN's statement about the patient's legs by uttering, "So" (see Bolden, 2009), and asks what the last weight measurement was. He again introduces a new sub-topic in this way in

¹¹⁰ This "plays a crucial role in making declarative statements recognizable as questions" (Hayano, 2013, p. 397). Hayano's point is that rising intonation (which is indicated in CA transcription conventions through the use of a question mark) is not a reliable indicator of questions (Stivers, 2010). Rather, "it is recipient-tilted epistemic asymmetry that contributes to hearing an utterance as a question" (Hayano, 2013, p. 397).

lines 58-59 (“So, and uh is there a standard methodology for weighing them, like, with shoes, without shoes, uh?”), and this time, CCD co-authors his line of questioning (“Before breakfast, after breakfast?” line 61). The BN orients to both in his response.

The patient’s function is raised as a matter of concern by the MD in lines 65-66 (“So anyway, and how about his ambulation?”), and begins a sequence of questions and declarations that the MD utters as a sort of checklist seemingly for his own reasoning process: The question, “Did he sleep?” in line 72, mobilizes a concern raised by the patient himself; the declarative statement “he’s very happy with the oxygen” (line 76) again ventriloquizes the patient and implicitly sets as a concern desaturation, a common complication of heart failure; the questions about the patient’s blood pressure (lines 83 and 85), another matter of concern, are geared to fill in the details of the portrait he is building about the severity of the heart failure; and the interpretation of his conversation with the patient about his preferences (“the sense I got talking to him is that he, he still would prefer to go home in the short term,” lines 89-90) introduces the matter of discharge options.

The MD’s reasoning becomes in explicit in this turn, and he returns to the anomaly of the patient’s weight to begin to build his argument for a discharge plan. He poses his last question somewhat rhetorically and answers it in lines 102-3 (“Is there that much of a gap between (0.5) his best function at home and what he’s doing? I’m not sure”), which, as we saw, sets as a concern the issue of functional status versus baseline. OT displays her understanding that she is the response-eligible recipient (Hayashi, 2013; Lerner, 2003) of this question, and designs her answer as a question about the patient’s living environment, an answer that offers clues to the MD’s question. In other words, she is engaging in a finer-grained distinction that performs and displays her professional representation of occupational therapy.

Her question displays her understanding that the MD is the author of the discharge plan, and that the patient, on whose behalf the MD authorizes himself to speak, is also an agent in the planning process. We can see this through her use of pronouns in line 108: “Do *you* want to think about (.) assisted living before *he* thinks about long term care?” (emphasis added). What is also noticeable is that she suggests giving precedence to the MD’s thinking process and his right to author a decision over Mr. Bolshi’s, a move that underscores the MD’s position of authority in this situation. In

response, it is clear that the MD accepts her second attribution of the planning process to the patient (“...it’s a very poorly thought out kind of process, right? for him,” lines 11-112), but deflects her attribution of authorship to him by invoking the collective point of view (“our,” line 114) that the patient’s function is acceptable. Later, he implicitly attributes authorship and accountability of the matter of concern to her by assigning her the task of “having a conversation with [the patient]” (lines 149-155). This move in the negotiation of attribution goes uncontested by the OT, who accepts her assignment (lines 151, 153).

The MD’s use of inclusive language belies the fact that most matters of concern were in fact set or directed by him. And, despite his careful footing¹¹¹ that casts the plan as stemming from the point of view of the team, he does in fact author it through the orders he issues (“switch him to IV diuretics today,” line 129; assigning task to OT, lines 149-154). Indeed, although we can also notice that the shape of the discussion does indeed loop around, returning to previously considered matters of concern in what Opie would call a knowledge spiral (Opie, 2000, borrowing from Deleuze and Guattari, 1987) and thus suggests that the case review is performed in an interprofessional fashion, the fact remains that the MD is positioned as the presiding authority in the case review. Let’s turn now to the question of how knowledge claims are collectively produced.

Negotiating knowledge claims

We might recall what Kuhn and Jackson (2008) and Lazega (1992) told us about knowledge claims. They say that knowledge claims are tied to the definition of the situation, and are bound up in the epistemic community where authority relations are built through the negotiation of identities. Knowledge claims show how knowledge is produced interactively and indicate how its producers relate to one another (through appropriateness judgments). For our purposes, earlier I distinguished between the

¹¹¹ Footing is a term coined by Goffman to express “the alignment we take up to ourselves and the others present as expressed in the way we manage the production or reception of an utterance. A change in our footing is another way of talking about a change in our frame for events” (Goffman, 1981, p. 128). As Clayman (1992) explains: “The ‘animator’ is the person who presently utters a sequence of words. The one who originated the beliefs and sentiments, and perhaps also composed the words through which they are expressed, is the ‘author.’ Finally, the ‘principal’ is the person whose viewpoint or position is currently being expressed in and through the utterance” (p. 165). The MD positions himself as the animator of the team’s viewpoint, or the team as author and principal.

situation of rounds (context or setting) and the patient's situation that the interaction was geared to describing, defining, and circumscribing. The former influenced how the latter took place. We have already established how knowledge claims were interactively produced: The MD, in large part, issued questions to which other speakers understood themselves as obligated or accountable for producing responses. These responses were, in turn, evaluated.

The performance of these triplets (information request, response, interpretation/evaluation)—which echoes what Weick (1979) might refer to as double interacts, conversation analysts might call adjacency pairs (Sacks & Schegloff, 1979), and organizational communication scholars have suggested calling organizational schema (Cooren & Fairhurst, 2003)—constitutes the negotiation of the knowledge claims that build the latter situation. We saw in the previous section how authority was enacted through information requests (questions), which were posed primarily by the MD but also by the PCC and OT. By his posing questions and the others providing answers, the MD's authority as medical representative was collectively enacted. Here, we consider how the interpretation and evaluation of those answers is negotiated, and how this amounts to authoring what counts in the patient's story.

We will take one example to explore this: the concern of the patient's weight, as it is the most negotiated matter of concern and becomes a collectively accomplished knowledge claim (lines 21-58, 89-98, 123-140). The triplet opens with the PCC's questions about the patient's weight (lines 21, line 24). Initially, she uses the pronoun *we* ("Did we weigh him this morning?"), a constitutive tactic that establishes an inclusive identity (Jian et al., 2008; Putnam, Stohl, & Baker, 2011; Taylor, 2008), although whether it refers to the team at large or to the nursing team is unclear. BN displays his understanding that he is the selected recipient (Hayano, 2013) by producing an answer, but produces his account slowly, with hesitation and epistemic hedging (e.g., "73.4 and it's, *I think* it's (1.0) couple kilos down from the last one, so," line 27, emphasis added). The latter part of his response constitutes an interpretation of the numeric answer that serves as an evaluation of the patient's situation, namely a positive change, and improvement.

At this point, the negotiation—and in fact, a sanction¹¹² of sorts—begins. The PCC rejects his construal of the situation as improving, pointing out that the patient is “still not less than 70, though” (line 28) and personalizes the issue by reminding the BN that “you’re trying to get less than 70” (lines 28-29). Through her pronoun use, the PCC attributes to the BN the goal of reducing the patient’s weight; it is as though she is reminding him of his forgotten mandate, and in this sense, her utterance is a subtle sanction of his interpretation and, by extension, of his role performance as bedside nurse. Bedside nurses are expected to know their patients well enough to know if the patient’s overall status is improving or deteriorating, they are supposed to be able to interpret and evaluate the data available to them to make such reports (i.e., to knowledgeably “activate” heterogeneous or fragmented knowledges, Bruni, Gherardi, & Parolin, 2007), and their role in these new rounds is to report on this knowledge. As we saw from the PCC’s explanation in the Ethnographic notes (section 7.1), the BN’s account is considered as holding more weight than almost anyone else’s because it offers the coveted “real-time information.”

The BN agrees with her statement that the patient is not at his goal weight when he utters “No” (line 30). After requesting and receiving confirmation of the numeric figure, the MD aligns with the PCC’s rejection of the BN’s evaluation and frames the weight information as “the highest I’ve (.) heard of” (line 33), and the PCC supports this move (“Yeah,” line 34). Interestingly, the BN aligns his next utterance with the PCC’s and MD’s inference that the patient’s weight is high by returning to the matter of concern he tried initially to establish in line 20, oedema: “And, and his legs are (.) still huge” (line 35). This move is likely geared at saving face by displaying knowledgeability in his role performance; however this topic is again not explicitly taken up.

The contestation of the BN’s knowledge claim continues with the MD’s probing question (“So do we know if he’s, what was the last measurement,” line 36). Through the affiliative pronoun *we*, the MD works interactionally to create a collective that allows the BN to save face, while the latter part of this question explicitly tests the BN’s evaluative claim, seeking to establish a numerical basis for determining the direction of the change

¹¹² I use this word in its disciplinary sense.

in weight.¹¹³ (Simultaneously, the PCC tries to pronounce her own evaluation—“So not going in”—and in so doing, ostensibly tries to close the topic, but her utterance is not heard, line 37.) The BN understands that he is the intended recipient of the MD’s probing question, but is unable to produce the preferred response (Lee, 2013), instead responding, “I don’t know” (line 38).

The MD then becomes more explicit, personalizing his critique of the BN’s role performance by rephrasing the prior turn, “*You* don’t know” (line 39, italics added), emphasizing that it is the BN who lacks knowledge here. BN tries to account for this lack of knowledge and his inadequate role performance by starting to claim the weight information is not where it should be in the documents, but then repairs and offers to look for it (line 40), seemingly to rectify his error. By doing so, he indicates that he has understood his accountability to their increasingly explicit critique, and demonstrates that he knows how his role should be played (i.e., he knows where to find the information; his omission is not born of procedural ignorance).

At this point, DIET seems to get on board with the critique of the BN by pointedly asking if the information was not in a particular area of the chart notes (i.e., the “yellow form in the (inaudible),” lines 41-42). It is a negatively formed polar question whose preferred response would be “No,” which the BN produces in line 44 (“It’s not in the (inaudible)”), and DIET follows this up with what might be considered an attempt to teach him where he can find the missing information as well as a further scolding for his role competence because he ought to know where to find the information (lines 41-45).

In line 43 (“Right. So, uh,”), the MD tries to move the discussion on from this role sanctioning by prefacing a topical shift (Beach, 1993; Bolden, 2009; West & Garcia, 1988), which he finishes in line 46 (“Anyway. Yeah”). The PCC builds on this shift and produces her own evaluation that strongly contradicts the BN’s response in line 27 (“Kay, so his weight’s *obviously* not still less,” emphasis added). MD marks his own evaluation with “so, so” (line 89) and softens PCC’s assessment by hedging a bit with his own (“*sounds like* it’s still high,” line 89-90, emphasis added), and strengthens the force of his evaluation by giving a point of reference (“it was um sixty::-nine at one point there,”

¹¹³ For an interesting discussion of the epistemic representation performed by numbers in interactional accounting practices—*les chiffres*—please see the work of organizational communication scholar Bertrand Fauré (e.g., Fauré & Arnaud, 2012; Faure et al., 2010).

lines 87-88). This turn can be understood as an answer to this probing question from line 36.

The PCC takes up this point of reference and seems to do the work that the BN offered to do (and which it is tacitly understood he should have done), which is to rely on the nursing notes to trace the progression of numeric measurements. By giving voice to these documents, she activates the information held therein in a knowledgeable performance. This performance is co-produced by the BN, after which the MD utters the final evaluation of the change in the patient's situation in terms of weight: "He's getting worse not better" (line 54). The BN agrees with this assessment, saying, "Yeah. That's right" (line 55). The PCC again personalizes the issue by attributing authorship of the claim about "today's weight" to the BN: "That's you?" (line 56). After the BN confirms this, the MD seems to try to depersonalize the issue by orienting to the temporal aspect of the PCC's question ("That's his today's yeah," line 58) and then closes the sequence with an "Alright" (line 58) and starts the next sub-topic.

Hence we can see in this sequence that the knowledge claim triplet is collaboratively accomplished through not insignificant negotiation that relies on an invocation of numeric data and material documents. We also saw how identities were invoked and hierarchy was enacted through a subtle sanction, and how authority to evaluate knowledge claims relied not solely on the professional status (i.e., a place in the organizational hierarchy) of those issuing the sanction, but also on the quality of the professional role performance of each. This kind of nuanced understanding of how "power" works in interprofessional collaboration is not possible when we consider solely such things as talk time and directionality of talk.

Conclusion of the weight issue: Coming to a decision

Before turning to this chapter's discussion, let's just briefly see how the weight issue becomes an action plan. Once the issue of BN's knowledge claim is settled and it is collaboratively established that weight is increasing, the MD shifts to a related sub-topic through which he depersonalizes the issue, framing his question as one about standard methodology for measurement ("with or without shoes," lines 98-99), which is to say, a question about the ward's nursing practice in general. The CCD (who is an experienced nurse) builds on this by inquiring about another variable ("before or after breakfast," line 100). This line of questioning tacitly raises the hypothesis that the weight

measurements might not accurately portray reality, resulting from a possible problem with how weighing is done. The BN refutes this explanation (“it’s pretty steady,” line 64), seemingly understanding that he is being positioned as responsible for accounting for nursing practice (which is ironic, given that it is the PCC who has most authority to speak for the ward’s nurses). Given the BN’s somewhat defensive tone, it seems he interprets the question as face threatening, and accordingly, the MD backs off from this interpretation in his acknowledgment of the BN’s answer: “No, no, okay. No, no, fair enough. Good. Fine” (line 65).

The episode of negotiation over the knowledge claim is then suspended as the MD introduces the next matter of concern, the patient’s function (lines 65-66). Until now, the sensemaking work has focused on description, on collaboratively defining the status of the patient’s situation. When the topic is revisited, it begins an episode in collective action planning, starting with the MD’s work to create a résumé of the matters of concern, starting in line 89. Here he depersonalizes completely the ambiguity over the patient’s weights, attributing agency to the weights themselves: “So, sometime these weights are quite um (.) misleading? I mean, it’s hard to imagine he’s ten pounds heavier than he was 5 days ago” (lines 91-93). The PCC and the OT affiliate (Steensig, 2013) with his stance (lines 94-95), and he continues, “It sure doesn’t look that way. That’s a lot of water to put on in five days” (lines 96-97) (a reality claim that in fact directly contradicts the point that the BN has been trying to make about oedema), and the PCC again affiliates with his statement (line 97).

In the next turn, the MD explicitly begins action planning regarding this matter of concern, committing himself to “have a look,” and then projecting a narrative future (Engeström et al., 2003) based on a contingent presumption that takes precedence over the misleading weights (precedence is indicated through the use of “but”): “But assuming that his water level is okay?” (line 98). This line of reasoning is resumed again in line 123, and the speculative nature of its performance is indicated by the MD’s epistemic hedging and distal footing through such phrases as “one would think,” “don’t get me wrong,” and “it sounds like” (lines 123-124). He floats the inductive hypothesis that “if he’s gained 10 pounds of water in a week” then “he should be able to be able to lose five or six pounds just the same” with “aggressive therapy” (lines 126-127, 129) and the PCC enthusiastically affiliates with this reasoning (“Yes!” line 128). The MD then switches to an action planning register and issues an intervention order: “So yes, switch him to IV

diuretics today” (line 129), and the PCC accepts the assignment. The MD returns to hypothesizing mode in line 131, when the BN interrupts to point out that this intervention wouldn’t be a change: “He was on IV (.) yesterday” (line 132), but the MD explains that the previous administration of IV diuretics was “just one dose” (line 133), which the BN accepts. The MD finishes his speculative hypothesis in lines 135 to 140 that the planned intervention will result in the patient reaching his target weight by Friday morning.

Once again, we see that in much the same way that the MD set the matters of concern through questions, he assumes authority to author an action plan, which is his institutional and organizational responsibility.

7.3. Discussion and partial conclusion: Hierarchy of accounts

At the outset of this chapter, I suggested that we examine the issue of power and medical dominance through questions of authority, hierarchy, and precedence. We saw in the quantitative snapshot that they were enacted by such things as length of case reviews, control of the conversational floor or gatekeeping, and the construction of intended audience through orienting overviews. It was also suggested that one effect of authority was that the nature of the sensemaking work tended more towards collaborative action planning when medical representatives were present. In the interaction analyses where collective sensemaking articulated around different matters of concern, the question of authority was explored through how these matters of concern were set, and by whom. We looked at how the collective accomplishment of a knowledge claim involved significant negotiation and was reliant on situated identities that implied related role performance accountabilities. We also saw how collaborative action planning depended on the MD’s declarative authority to issue orders for medical interventions, an authority completely vested in his (organizational and institutional) identity as a hospitalist.

I chose this excerpt not only because it was representative of this team’s functioning, but also because the MD concerned was, by all participant accounts, very pro-collaboration and interactively worked to flatten the hierarchy, much like what Long et al. (2006) and Lingard et al. (2012) observed with collaboration-friendly physicians in

their studies. And we saw evidence of medical dominance through these various markers of authority. However, what this examination also shows is that we don't necessarily need to leave the terra firma of interaction (Ashcraft et al., 2009) and look to so-called structural factors to explain the persistence of medical dominance in interprofessional collaboration; those "structures" are presentified and enacted interactionally in the sensemaking work of the team, woven into the very accounting practices involved in doing the interprofessional patient case review.

Indeed, Strauss and colleague's (Strauss, Schatzman, Ehrlich, Bucher, & Sabshin, 1963) well known notion of the hospital as *negotiated order* makes this point. They argued that what is structural about a hospital's ward can only be apprehended by observing day-to-day interactions. As Iedema et al. explain, "Strauss and colleagues noted that the relationship between rules and activities was in fact far from stable by being subject to constant negotiation" (Iedema, Jorm, Braithwaite, Travaglia, & Lum, 2006, p. 1202). Communication scholars Lammers, Barbour, and Duggan (2003) echo this:

A distinguishing feature of hospitals...is its dual hierarchy: physicians are organized in one hierarchical staff, and other hospital personnel—including nurses and other departments and staff—are organized in a second chain of command. (...) This implies "multiple subordinates" and a negotiated order. (pp. 327-328)¹¹⁴

This negotiation has to do with establishing what counts: While the different members of a treatment team or ward might share the overall goal of "moving the patient down their care trajectory and ensuring that they are better off after discharge than before," what this precisely means, how it can be discerned and interpreted, can be very contested, depending on one's profession and location in the process of care.

Such negotiation was visible in the details of the interaction analysed here. At stake was the bedside nurse's role performance—or perhaps, dys-performance—as a hybrid actor with the nursing or chart notes (Latour, 1988; Meunier & Vasquez, 2008). The BN was expected to give voice to the notes, literally making them speak in the interaction in his interpretation of the facts, which BN failed to do with fidelity. This

¹¹⁴ In fact, physicians are paid consultants to the hospital whereas other health professionals are full-time employees of the hospital and very often subject to union concerns.

hybridity was underscored when others stepped in to do the work for him. PCC reads from the notes to produce the tracing of increasing weight measurements, and DIET indicates where in a certain shared document the BN ought to be able to find the weight. From PCC's and DIET's perspective, these facts can speak for themselves if they are skilfully activated. It is the reductionist and precise language of numbers, the numeric information held in the documentary supports, that is granted greater validity than the BN's account of oedema and swollen legs, although both are side effects of heart failure and would explain the water weight gain. However, whereas the PCC reads the numeric data in the documents as facts, the MD orients to them semiotically, reading them as signs of previous practice (i.e., as indexical signs produced by causal relations). He questions their epistemic representativeness and decides to "take a look," and makes a plan despite the increase in the numeric measurements and despite the BN's firsthand account of huge legs and oedema.

This suggests a certain hierarchy of accounts¹¹⁵ is at play, emerging through their collaborative sensemaking work. The physician's firsthand opinion has precedence over the nurse-and-the-notes, which in turn has precedence over the bedside nurse's firsthand observation. Traces of this precedence were found in the quantitative snapshot as well, and it is through this enacted and emergent hierarchy of accounts that we can find evidence of medical dominance in this collaborative interprofessional practice.

¹¹⁵ My thanks to James R. Taylor for pointing this out at a data analysis session of a different excerpt at the Groupe Log Laboratory of the Université de Montréal.

8. Stabilizing Practice: Material and Routine Considerations

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."

(S. Gordon et al., 2012, p. location 1130, emphasis in original)

Medicine is a science of uncertainty and an art of probability.

William Osler

Uncertainty is inherent to clinical work, and not just to its medical components. Health care practitioners of all stripes have to wade through contingencies on a daily basis, and the waiting game is a normal part of work, even a marker of hierarchical rank (D. Long et al., 2006). Contingencies can run the gamut from organizational scheduling factors to ambiguous patient classification boundaries to unanticipated illness trajectories. If specialists don't see a patient when they are scheduled to, the other members of the interprofessional team cannot reclassify the patient to the pathway they had planned. When physicians argue over the meaning of test results, the nursing team and others have to wait for them to hash it out. A team can labour over a discharge plan that comes to nothing because a patient's congestive heart failure ends up requiring daily tweaks to medications, which is considered medically unstable by the community care facility but stable by the acute care facility. These are all examples with which the teams in my study contended during my observations. Ambiguity was a recurrent theme in my coding process; expressions of uncertainty were frequently a trigger for case overviews to become extended sensemaking episodes, and this was, in fact, the analytical impetus for choosing organizational sensemaking as a conceptual framework for my data.

In this chapter, I explore what may have lent a measure of stability to practice in the context of this endemic uncertainty and ambiguity. Specifically, I compare the cases of the Intake and Intervention teams, exploring why Intake had greater stability in its collective practice of doing rounds, in spite of greater instability in its membership. The Intake team's duo of charge nurses rotated on a daily basis, such that there was never the same pair facilitating rounds two days in a row. In contrast, the Intervention team had a charge nurse rotation that averaged three- to five-day stints, and as such the Intervention charge nurses had more time to become familiar with the patients whose cases they introduced in rounds. To add to this disparity, the patient flow on Intervention was slower than that on Intake, meaning that there was less patient turnover.¹¹⁶ Put together, the sensemaking burden for the rounds-facilitating charge nurses was likely greater on the Intake team than it was on the Intervention team, but Intake managed to reliably accomplish rounds in a consistent fashion across the rotating leadership, day in and day out, as opposed to the Intervention team whose length of rounds varied according to who was facilitating, as did the quantity and character of detail in their discussions (we saw examples of this in Chapter 6 on heedfulness). Put simply, a driving question throughout the analysis process was what seemed to stabilize practice on the Intake team that seemed to be somewhat absent on the Intervention team.

The answers offered by my informants to this question leaned towards the individual and the psychological: For instance, Intake attracted a certain kind of “go-getter” personality, or it was one or two “rotten apples that spoiled the barrel” on Intervention. There is likely merit to both of these explanations (I certainly knew early on who the rotten apples were), but they do not get at what was *collective* about their practice, nor do they account for sociomaterial considerations. That is what I aim to do here. In the following sections, I first describe in finer detail the “who, what, when and where” aspects of their practices by looking at measurable aspects of their practice, such as the number of contributors to discussion, what kinds of case reviews were being accomplished, reliance on documents, topical and temporal focus of discussions, and so forth. This description paints a portrait of the similarities and differences between the teams' practices. In the second part of the chapter, I consider potential answers to the

¹¹⁶ I calculated this by looking at diachronic cases, i.e., patients that appeared in rounds discussion more than one day in a row. There were more of these on Intervention, meaning that the beds opened up less frequently.

how and why questions about differences in the ways they accomplished rounds, using an interaction analysis approach once again. This discussion concludes with the suggestion that at the heart of the difference between the teams was the stability of their collective sensemaking processes.

8.1. Describing (in)stability

The online Merriam-Webster dictionary defines the noun *stability* as:

“the quality, state, or degree of being stable: as (a) the strength to stand or endure: firmness; (b) the property of a body that causes it when disturbed from a condition of equilibrium or steady motion to develop forces or moments that restore the original condition; (c) resistance to chemical change or to physical disintegration (<http://www.merriam-webster.com/dictionary/stability>, accessed 05-30-2014).

So for our purposes, if we are thinking of stability as a quality of how something is accomplished in the context of uncertainty and ambiguity, stability has to do with (a) the robustness of practice, including (b) its ability to withstand certain shocks, and (c) a resilience in the face of changing composition. For fun, we might also consult online the Free Dictionary, where we would read that stability also has to do with reliability and dependability (<http://www.thefreedictionary.com/stability>, accessed 05-30-2014). How would we then go about identifying stable practice, and also threats to and stabilizers of such practice?

We could start by translating the above definitions to come up with the premise that robust practice is recurrent over time despite shocks to the composition of its components, whether these components are action sequences or practitioners or something else. This was precisely what I held in mind when comparing the Intake team to the Intervention team: How did the Intake team manage to have a more stable practice of conducting rounds and of doing the patient case review despite its daily rotation in leadership? More specifically, what were the compensating factors?

The team and group literature would point to the teams' histories of working together (Drinka & Clark, 2000; Tuckman, 1965), both in terms of developing a transactive memory system (i.e., knowing who knows what and how to access it, e.g.,

Palazzolo, Serb, She, Su, & Contractor, 2006; Tan, Adzhahar, Lim, Chan, & Lim, 2014; Wegner, 1984) and in terms of developing trust and participative safety (Jones & Jones, 2011). This was certainly a factor for these two teams: The Intake team had several years of experience holding rounds together whereas the Intervention team only started holding rounds when the Integrate project was rolled out, and even then there was some resistance to Integrate's mandate. But how did this history play out in practice, particularly in communicative practice? Did this translate into observable and recurrent patterns of talk? For instance, did the Intake team have a more stable action routine in performing the patient case review than did the Intervention team? (In Chapter 7 on authority, we see how the action routine was destabilized by a change in rounds locale and composition of participants.) How were patient stories continued over time; when the charge nurse rotated, who or what transported traces of sensemaking from one day to the next? Did similar issues or matters of concern arise or evolve across discussions?

On the flip side, what were the markers of instability? Of unreliability? While I was not granted access to the hospital's records of adverse events and medical errors, I did hear anecdotally from the Integrate representatives—who statistically tracked patient flow—that the Intervention team had been red-flagged for higher rates of discharge and readmittance. This describes a situation where a patient is discharged from a ward only to end up days or even hours later back in Emergency, and it can suggest problematic discharge planning. With this in mind, we can ask about the temporal and topical foci of their sensemaking: Did the Intervention team tend to focus on discharge planning in its patient case reviews?

How similarly or differently were the sociomaterial supports invoked across the teams? I highlighted in Chapter 4 that the Intervention team's leaders inconsistently performed overviews to patient cases across the rotating leaders. In particular, there was one charge nurse on Intervention who frequently expressed epistemic uncertainty and even frustration when it came to reading and interpreting her nursing notes, and another who lurched through the overviews to patient case discussions, seemingly trying to make sense of them herself for the first time in rounds, while a third seemed to produce overviews without consulting her notes much at all. This contrasted significantly with the practice of the Intake and the Short-stay GIM teams, where the charge nurses moved frequently and easily between reading and interpreting registers when producing the overviews to case discussions.

A final set of questions has to do with the interprofessionality of their practice. If multivocality and many contributors to the conversational floor are indicators of collective and interprofessional sensemaking as well as of participative safety, can we look at the stability of authoring practices, in terms of who provides information, who requests information, and who raises uncertainty?

8.2. Who, what, where, and when details: Describing practice across the teams

In order to begin exploring answers to these questions, I conducted an in-depth examination of a cut of the data from each team: A one-week sample from each on a week in which I attended and recorded rounds four out of the five possible days for each team, on Monday, Tuesday, Wednesday, and Friday. Table 8.1 shows the attendance of the team members over the course of these four days, to give a sense of the relative presence and absence of the different professional roles, as well as the rotation of representatives.

Table 8.1 Professional presence over the 4 days

Team member	Intake		Intervention	
	Attendance over the 4 days	No. of representatives (rotation)	Attendance over the 4 days	No. of representatives (rotation)
PCC	100%	3	100%	3
Secondary PCC	100%	2	—	—
CCD	25%	1	50%	1
DIET	—	—	100%	1
GAP	75%	1	—	—
OT	100%	2	—	—
PHARM	—	—	100%	1
PT	100%	1	75%	1
PT2	100%	2	—	—
SLP	75%	1	—	—
SW	100%	1	75%	2
UC	50%	1	100%	1

We can see that the professional role that saw the most rotation within its representatives for both teams was the PCC role, and that it had constant representation (100%).¹¹⁷ On Intake, there was rotation in occupational therapy and physiotherapy: A replacement OT filled in for the regular OT, who was on vacation at the beginning of the week, and there was also a fill-in PT2 on one day. On Intervention, we can see that while SW was represented three out of the four days, there was one person filling the role on Monday, Tuesday and Wednesday, and a different person on the Friday. The least represented role on both teams was CCD, whom we can recall is implicated in discharge planning for services at home and in the community.

From this four-day sample, I focused on the diachronic stories, that is, patients whose cases were discussed on more than one day, and analyzed 15 such cases from each team (for Intake there were 22 possible diachronic patient stories and for Intervention, 26, see Table 8.2). For Intake, these 15 patients represented 39 case reviews, with an average of 2.6 reviews per patient, and 30 pages of single-spaced transcriptions. On Intervention, the 15 patients represented 49 case reviews, or 3.3 reviews per patient, and only 20 pages of single-spaced transcription. We can see in these numbers greater patient flow on Intake (fewer diachronic cases with shorter lengths of stay) but also lengthier and perhaps richer discussions of each patient.

Table 8.2 Overview of the sample cases

	Intake	Intervention
Number of patients	15	15
Number of case reviews total	37	49
Average reviews per patient	2.5	3.3
Average number of PCCs present per case	4	2.4
Average number of PCCs reporting per case	2.2	2.4
Number of transcribed pages	30	20

¹¹⁷ Intake did not have a dietician or a pharmacist, and Intervention did not have a second PCC or PT, a GAP representative, or a speech language pathologist, and this is indicated with the em dash in these boxes.

We can also see a roughly equivalent rotation of reporting PCCs on both teams. On Intake, there were on average 2.2 PCCs reporting for the 15 patient cases, and a total of 4.3 different PCCs present throughout these case discussions (5 different PCCs in various combinations were present that week). On Intervention, where there was only one PCC present at each meeting, there was an average of 2.4 different PCCs over the 15 cases. This was an uncharacteristically high rate of PCC turnover on Intervention for this week, but this does allow us to compare apples to apples.

8.2.1. The kinds of work being done

I then looked at the kind of sensemaking work being done. In Chapters 5 and 7, I describe three broad types of case reviews: (a) briefings (collaborative or not), which I explain as an instance of unidirectional sensegiving,¹¹⁸ (b) collaborative definitions of the situation, and (c) collaborative action planning. These categories resonate with Weick et al.'s description of organizational sensemaking as addressing the questions of "What's happening?" (describing and defining the situation) and "Now what?" or action planning (Blatt et al., 2006; Weick et al., 2005).

These types were also apparent in this data sample. We can recall that a case review was counted as a briefing if no discussion ensued after the overview, in other words, if it was relatively univocally produced (at least in terms of human actors). Sometimes, other team members would add a detail to this overview, and these were

¹¹⁸ Gail Fairhurst (respondent's comments at the ICA 2014 session on Materiality in Organizational Communication and personal communication) has taken issue with the distinction between sensegiving and sensemaking (Cornelissen et al., 2012; Gioia & Chittipeddi, 1991), arguing that the former privileges cognitive explanations, whereas the latter incorporates communication and collective phenomena. While I do not disagree with Fairhurst's portrayal of these concepts' usages, my point here is based on *what is observable* with regard to authorship: Collective sensemaking is much more apparent in case reviews that go beyond a briefing, where more people are contributing, and thus authoring the patient's story that day. However, this is not to say that there is not sensemaking, both collective and individual, occurring during briefings (the PCC herself can be making sense of the notes as she reads them, just as the listening team members can be actively engaged in making sense of what she or he says, jotting down notes, etc.). Nor do I mean to say that a briefing necessarily implies a single author (although it can, as we will see), because the charge nurse rarely authors briefings without activating her notes. My point with briefings is that they are not observably *interprofessional*, and they appear to be unidirectional. They also did not tend to explicitly address uncertainty.

counted as collaborative briefings. When there was more discussion, typically when some kind of uncertainty was raised and taken up by others, and more turns of talk with greater multivocality, these case reviews were counted as either collaborative definition of the situation or—if explicit action planning was mentioned—as collaborative action planning. (On one occasion, the charge nurse planned action for herself, so this was counted as non-collaborative action planning.) The breakdown by team is given in Figure 8.1.

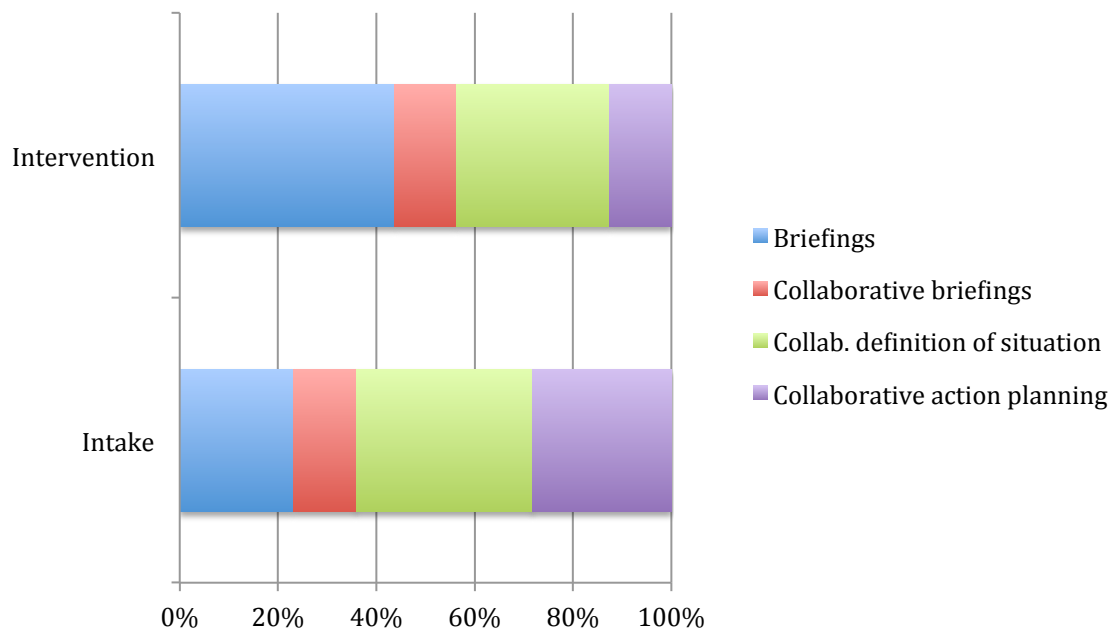


Figure 8.1. Type of case review by team

The x axis represents the percentage for each type of case from the total count of case reviews considered (n=37 on Intake, n=49 on Intervention).

From this figure, we can see that 55% of case reviews on the Intervention team of this sample were briefings (blue and red bars)—relatively univocal instances of sensegiving that did not typically address expressed uncertainty. In contrast, only 35% of cases on Intake remained briefings, whereas nearly two-thirds were collaboratively produced and addressed uncertainty (green and purple bars). Furthermore, more than a quarter of case reviews on Intake (28%) were focused on collaborative action planning (purple) whereas only 12% from Intervention were. This tells us that the practice of doing the patient case review was qualitatively different on the two teams, and demonstrated more interprofessionality—understood as multivocality—on Intake.

8.2.2. *Multivocality*

This difference in multivocality can be considered in various ways, especially from the perspective of authorship. We can examine who provides information and also who requests it,¹¹⁹ which is how I coded the case reviews, with a total of 120 provisions of information on Intake and 88 on Intervention. Overt information requests were somewhat less frequent (n=33 on Intake and n=27 on Intervention). I then coded for who authored these contributions (provisions and requests of information, see Table 8.3).

Table 8.3 *Who provided and requested information*

Team member	Intake		Intervention	
	Provides (n=120)	Requests (n=33)	Provides (n=88)	Requests (n=27)
PCC	26%	41%	22%	30%
PCC-notes	22%	-	44%	-
Non-reporting PCC	5%	12%	-	-
UC	1%	12%	8%	33%
PT1	17%	6%	7%	0%
PT2	8%	3%	-	-
SW	8%	15%	3%	7%
SLP	1%	0%	-	-
DIET	-	-	14%	15%
CCD	2%	0%	0%	4%
GAP	7%	12%	-	-
OT	3%	0%	-	-
PHARM	-	-	2%	11%
Combined non-PCC authoring	52%	41%	34%	70%*
Average number of information providers per review	3.2		1.8	

¹¹⁹ Although questions are traditionally understood as serving as simple requests for information, conversation analyst Tanya Stivers (2010) points out that this is rarely their main function in interaction, where they often perform key roles in the co-construction of the discussion, including initiating repair, making a suggestion or an offer, or requesting someone else to act. (In Chapter 7 on authority, we see how questions served as agenda-setting mechanisms, which is to say, a way of raising and pursuing given matters of concern.)

	Intake	Intervention
Average number of requests per review	0.87	0.55

*Including UC requests, but excluding UC prompts (i.e., calling out next patient's name).

Interpreting these numbers, we can see that there was indeed greater multivocality on the Intake team: On average, there were 3.2 contributors to the story being sketched for each patient, compared to 1.8 on the Intervention team. We already saw this in the categorization of the patient case reviews in Figure 8.1, but here we can see the breakdown by contributor, and we can see that the non-gatekeeping contributors (i.e., non-PCC team members, including the non-reporting PCC on Intake) accounted for 52% of information-providing talk on Intake compared to 34% on the Intervention team (and this drops to 26% on Intervention when we remove the contributions of the UC, who was not an official team member, not shown in table). However, this difference is remarkably reversed with regard to information requests, where non-PCC members authored 70% of information requests (and other questions). This indicates that on Intervention, the PCCs did not position the listening team members as providers of answers, or as co-authors in sensemaking.

Furthermore, when we remove the UC's contributions from this equation, this drops to 18%, and clearly shows the dominant role played by the UC in setting the agenda. Indeed, this relates to the teams' independent performance of the Integrate script (we can recall that this was one of Integrate's criteria for deeming a team as a "dream team" or as struggling), and we can note that the UC plays a much bigger role in agenda-setting through questions on Intervention (33%) than on Intake (12%),¹²⁰ and gives us some clue that on Intervention reports were largely designed to be accountable to the UC.

Finally, we can note that I coded separately for the PCC speaking alone and for the hybrid agent of the PCC-notes. On both teams, the PCC remained the primary

¹²⁰ This excluded the gatekeeping prompts that the UC would often play on this team (i.e., calling out the name of the next patient to discuss and thus controlling the conversational floor), which could be considered as information requests, and when they are included, the UC is then responsible for 68% of all information requests in this sample.

author of the patient case reviews both in terms of providing information (26% Intake; 22% Intervention) and in terms of setting the agenda through questions (41% Intake, 30% Intervention), but as mentioned earlier, the PCCs often switched between reading and interpreting registers, especially on the Intake team. Typically, when I coded for “PCC-notes,” the PCC was obviously reading from the notes, such as by saying, “It says here” or “they say,” where she would explicitly be giving voice to the notes. Other times, it was obvious from long pauses in the production of the overview that the PCC was scanning or reading the notes to herself before giving them voice aloud to the team, and the latter tended to occur more frequently on Intervention. Coding for this hybrid actor shows us that *the documents in fact play a greater authoring role on Intervention on average* (PCC-notes provides information 44% of the time on Intervention compared to 22% on Intake). This is probably because, in this sample, the “lurching” PCC on Intervention facilitated rounds for two of the four days. This PCC tended to cede authorship almost entirely to the notes, positioning herself neither as author or principal of the utterances, but merely as their animator (Clayman, 1992)—it is they who were speaking through her. (I return to this question later.)

We can also see differences in terms of professional scopes of practice: The most frequent non-PCC contributor on Intake was physiotherapy (25% when we combine PT1 and PT2), followed by SW and GAP at 8% each. In terms of requesting information, on Intake, SW (15%) and GAP (12%) were the most active after the PCCs. This would indicate that the matters of concern that evoked the most discussion on this team had to do with functional concerns and discharge planning concerning psychosocial issues, placement in the community, certification of (in)competence, and so on. The very fact that there were two physiotherapists on this team indicates that functional assessments were a large part of this team’s work. In contrast, on Intervention, DIET was the most frequent non-PCC information provider, but coming in only at 14%. Other than the PCC, DIET (15%) and PHARM (11%) were the most frequent requesters of information after the PCC, of the official team members, and they were primarily preoccupied with medical concerns, which indeed dominated topicality of discussions for this team.

8.2.3. Sensemaking: Topical themes and location on the trajectory

I also coded talk for temporality, for where on the trajectory discussion topics tended to cluster and around which themes (see Table 8.4). For instance, on Intake, one PCC uttered, “I don't know if he's delirious,” marking her uncertainty about the patient’s cognitive status and implicitly inviting others to help resolve this uncertainty (which they did). This was coded in the thematic code “Cognition” and the trajectory code “Status.” The rationale for this coding was to examine which were the predominant matters of concern for each team (as displayed in the expression and uptake of uncertainty about matters of concern) and where on the trajectory the team members tended to focus their attention. (Recall that Intervention had been red-flagged by the Integrate tracking program for higher rates of discharge and readmission.)

Table 8.4 Expressions of uncertainty: Frequency and themes

	Intake		Intervention	
Frequency count of expressions of uncertainty	n=80		n=60	
Percentage of case reviews with uncertainty expressed	82%		67%	
Average no. of expressions of uncertainty per case, for cases where uncertainty is mentioned	2.5		1.8	
Uncertainty by theme				
Cognition	7	9%	0	-
Diet	0	-	8	13%
Discharge	19	23%	9	15%
Documents	8	10%	0	-
Function	7	9%	3	5%
General treatment	3	4%	5	8%
Medical	6	7%	20	33%
Other	6	7%	10	16%
Social	9	11%	0	-
Surgical	0	-	5	8%
Team stuff	3	4%	0	-

Trajectory talk (where to send the patient next within the hospital)	11	14%	0	-
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Overall, we can see that there was greater expression (and also discussion) of uncertainty or ambiguity overall on Intake than on Intervention, where on the former, 82% of all cases involved some expression of uncertainty, compared to 67% on the latter. In addition, we can see that there was a greater density of expression of uncertainty on Intake, with an average of 2.5 expressions per case where uncertainty was voiced, compared to 1.8 per such case on Intervention.

The themes reflect the general mandates of the two different teams. The Intake team, which was an important “hub” in the hospital for overall patient flow, was largely preoccupied with where to send the patient next, evident in the themes “Discharge” and “Trajectory talk,” which, combined, account for 37% of discussion to resolve uncertainty. In contrast, there is no “Trajectory talk” on Intervention, and only 15% of talk was focused on “Discharge” concerns, possibly reflecting this team’s more myopic focus on ward-level issues. Indeed, “Medical” and “Surgical” concerns predominated on Intervention, combined at 41%. Interestingly, there were no instances of the category “Social” on Intervention, despite the fact that there was a social worker present 3 out of the 4 days. This could be partly due to the fact that the SW on Intervention tended to talk more about discharge concerns, whereas on Intake, the SW (and the rest of the team) spent more time making sense of what had brought the patient to the hospital and what the situation was like at home (i.e., sensemaking focused upstream on the trajectory). The absence of instances of discussion about the patients’ cognition on Intervention can be explained by the professional absence of OT and GAP, both of whom conduct cognitive assessments for delirious and demented patients, which was not a matter of concern on Intervention. Similarly, we can notice that there is no talk about diet on Intake, where this was not a matter of concern as it was on Intervention, whose primary preoccupations were inputs and outputs—“tubes in and tubes out” and

the patients' body mechanics rather than the patient's lived world (Mishler, 1984, 1997).

When we focus on the temporality of concerns, which we might think of as the location on the care trajectory where these concerns were emplotted in talk, we get the following portrait (see Figure 8.2).

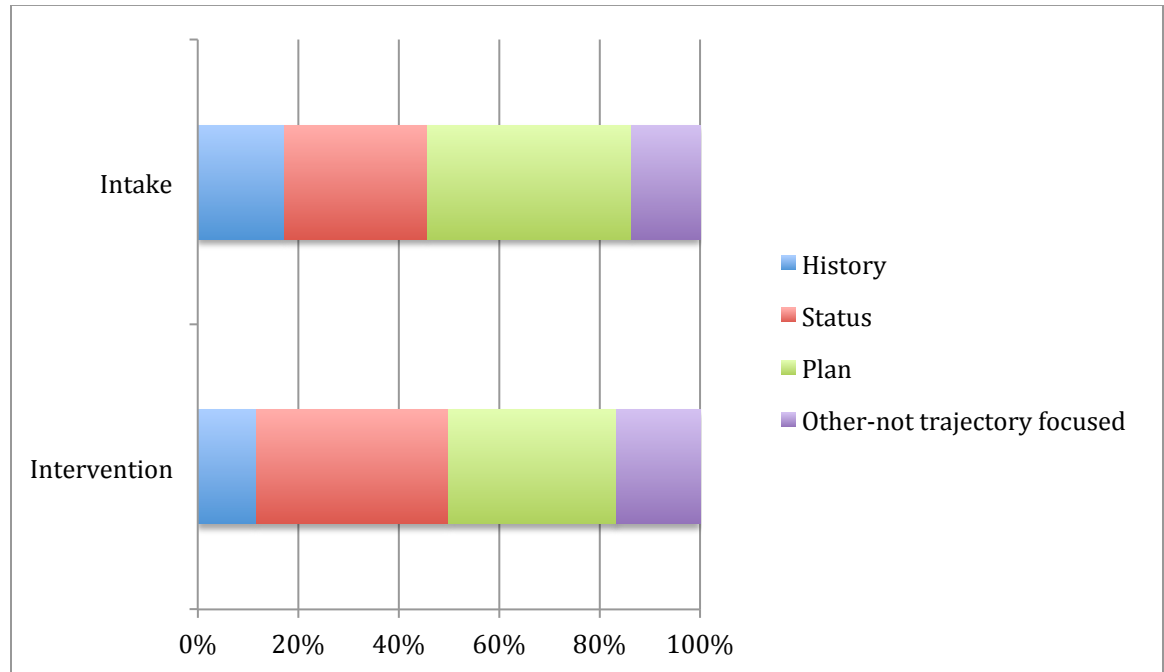


Figure 8.2. Preoccupation by location on patient care trajectory

The x axis represents the percentages of total case reviews coded for each team, broken down by temporal focus category.

Here, we can see that Intake was in fact somewhat more focused on action planning—the “What now?” question in Weick et al.’s, 2005, explanation of sensemaking—with 41% of uncertainty discussion centering on this topic (green part of bar), compared to only 33% on Intervention. The Intake team also tended more often to try to make sense of what had happened upstream (history, blue area: 17% compared to 11% on Intervention). In contrast, Intervention spent most of its time (38%) trying to figure out the current status of the patient’s situation, (compared to 28% on Intake; red

area of bars), which again echoes my suggestion that this team was more myopically focused on its own segment of the overall trajectory, whereas the Intake team tended to emplot the patient more broadly on the care trajectory. Finally, on each team, roughly the same percentage of discussion to resolve uncertainty was not related to trajectory concerns (14% on Intake, 16% on Intervention; purple area of bar), such as illegible writing in the notes, organizational jurisdiction (“I don’t know why he came back to us”), or questions about practice (e.g., “How do you do diet if she’s still pouring out her ileostomy?”).

8.2.4. The agency of documents

In the section on Multivocality, I discussed having coded for a hybrid actor of nurse-and-notes, which has to do with the agency of sociomaterial supports. I confess that I approached this question from the constructivist perspective—which is perhaps becoming cliché—that views the social as inherently stabilized by the material (e.g., Cooren, 2004a, 2006b; Grosjean & Lacoste, 1998, 1999; Latour, 1988, 1992, 1994). With this in mind, I coded for how documents were used or invoked, especially the nursing notes, and what role they seemed to play in the unfolding of case reviews, and this is presented in Table 8.5. Documents were coded as a co-author of the overview when the PCC would observably invoke them in the overview that s/he produced, whether explicitly (e.g., “It says here”) or implicitly (e.g., “Morrison. U::m (2.5) was supposed to have a three-views yesterday. (2.0) Diet is sips only. (4.0) And looks like his catheter is still in”). Through the long pauses or even the rustling of pages, we can infer that the PCC was reading.

Table 8.5 The role of documents

Role of documents	Intake (n=28)	Intervention (n=35)
Co-author of overview	51%	53%
Author of overview	-	2%
Source of uncertainty	21%	29%
Organizational mediator (assignor of task)	8%	2%

Role of documents	Intake (n=28)	Intervention (n=35)
Resolves uncertainty	3%	2%
Other documents invoked	13%	2%
% of cases with observable documentary agency	72%	71%

On both teams, the nursing notes were an observable actor (i.e., they made a difference to how the case review unfolded). On Intake, this observably occurred in 28 cases, or 72% of the time. On Intervention, this was so for 35 cases, or 71% of the time. On both teams, of these cases, documents were invoked or relied on in authoring the overview (51% on Intake; 53% on Intervention). We can note a slight difference in the documents as a source of uncertainty on the Intervention team (29%) compared to Intake (21%).

Overall, however, I was surprised by how similar these percentages were across the teams; in my memos, I had noted frequent expression of epistemic doubt by one of the PCCs on Intervention regarding what was written in her notes (in fact, it was this observation that spurred me to look at this question of documents' agency), however she was not on-duty during the week from which this sample came, so it is possible that my sample is less representative of the Intervention team than it might be in terms of the documents as a source of uncertainty and of agency. Another explanation lies in the fact that these percentages don't show patterns across time. For instance, while the notes could be considered a co-author of 53% of case reviews (i.e., the PCC is observably reading from them), the aggregate data does not show that one of the three main PCCs on Intervention (the mnemonic marvel) almost never observably read from her notes other than to see which patient was next, whereas another read almost exclusively (and with little interpretation from the nursing jargon to more heterogeneously framed concerns), and the latter in fact accounts for one instance where she attributed so much agency to them (Cooren, 2006b) that she was effectively effaced from the presentation of information and I felt obliged to create an analytic category for instances where the notes were presented as the sole author. I will return to this consideration in the second part of this chapter where we compare a diachronic case from each team.

8.2.5. Story-porters, the richness of talk, and narrative continuity

This brings me to a related issue, regarding diachronicity and who or what were the “porters” of the patient’s evolving story and of the traces of sensemaking work from one day to the next. In this regard, I rely on the French translation of the word *spokesperson*—“*porte-parole*”—which literally means “speech carriers”; they can speak for or on behalf of some other agent or actor who is not present (Cooren, 2010). Story-porters, from this conceptualization, serve as organizational memory and speak on behalf of the team’s sensemaking work from a previous rounds. I was interested in “story-porters” as compensators or stabilizers for the frequent rotation of the charge nurses: If the charge nurses were frequently changing, it figures that there would be some “memory loss” of previous sensemaking and, alternatively, that other players could fill in the gaps, standing in for the unstable membership.

In order to examine this, I had to code for the matters of concern that were raised in patient case discussions. These can be understood as what seemed to animate discussion (Cooren, 2010). In other words, these would be the points that interlocutors made and, in so doing, presented them as worth talking about. Sometimes matters of concern remained more general, such as figuring out whether or not the patient’s “ETOH” status (alcoholism) was a current or past problem, and other times they were intricately entwined in a complex issue such as whether and how to deem the patient incompetent so as to be able to move forward with discharge planning. Because the topics of these matters of concern ranged so widely, I focus here again on frequency counts, that is, on how many matters were raised per case review as an indicator of the richness and complexity of discussion, and on how often matters of concern were carried over from one rounds to the next.

One limitation to this approach is, of course, that the patients’ stories were in continual development, and what mattered on Monday might be irrelevant on Wednesday, and my data analysis could only consider what I captured at the rounds meetings I attended; if something took place outside of rounds that other team members were all aware of, or on a day when I was absent, there might not be reason to bring it up in rounds and I would never be the wiser. A further limitation is that we can lose the processual focus if we only look at frequencies. Nonetheless, I was curious to see if

there were any patterns in how plans evolved over rotating charge nurses, especially in complex cases.

In terms of frequency by case (see Table 8.6), Intake averaged 3.5 matters of concern per case whereas Intervention averaged 2.1, which could indicate greater complexity in the cases examined by Intake, (i.e., that more fine-grained issues were discussed and we might say that the discussions were more knowledgeable), or that the issues pertinent in the patient’s treatment at that point on the care trajectory interpellated the Intake team members more than the Intervention team, which is to say that Intake might have felt there was more that was worth discussing. In any case, we can take from this that the discussions on Intake were richer than on Intervention, and these results echo the simple page count of transcriptions for the 15 patients considered on each team (30 pages on Intake for 39 patient case reviews compared to 20 pages on Intervention for 49 case reviews).

I then looked at what, if any, pieces were carried over from one day to the next, and by which actors. For Intake, there were 24 possible case reviews for which previously discussed story elements could be revisited (total cases for Intake, n=39; there were 15 patients, and the first case review for each was discarded), and of these 24, story elements from the previous discussion(s) were carried over 100% of the time. For Intervention, there were 34 possible diachronic case reviews (n=49, 15 patients, and the first case review for each was discarded), and story elements were carried over in 85% of these. (This does not and cannot account for story elements that may have been carried over from the Thursday discussion to the Friday discussion because I did not attend rounds on the Thursday.)

Table 8.6 *Diachronic case reviews and story porters*

	Intake	Intervention
Total possible diachronic case reviews	24	34
Actual diachronic case reviews	100%	85%
Average diachronic matters of concern per case	1.6	0.8
PCC	29%	12%
PCC-notes	26%	32%

	Intake	Intervention
PCC and PCC-notes combined	55%	44%
Non-reporting PCC notes	0%	n/a
UC	0%	24%
UC-notes	0%	2%
DIET	0%	20%
SW	21%	2%
PT	24%	2%
PHARM	n/a	5%
CCD	0%	0%
GAP	8%	n/a
PT2	16%	n/a
OT	0%	n/a
Non-reporting PCC story-porting*	68%	56%

*Sometimes, a story element was carried by more than one team member, for instance, the PCC and the SW might recall together an evolving matter of concern, and these were counted twice, once in each category.

With regard to story-porting stabilizing practice across rotating PCCs, we can see that the PCCs on Intake carried story elements 29% of the time compared to Intervention's relatively meagre 12%, and this despite the relatively higher sensemaking burden they faced with their greater patient turnover. Given that the rates of PCC rotation were relatively equal across the teams this week, this difference in story porting is even more revealing. It tells us that the PCCs on Intake were managing to speak more knowledgeably about the patient cases they were presenting, independent from how they were reading from their notes. (Again, video data would have likely allowed a more detailed portrayal of this difference, but we must work with the data we have.) This suggests more communication between charge nurses outside of the rounds setting on Intake than on Intervention. This gap closes somewhat when we add in the hybrid action of the PCC reliance on notes, where the PCC and the PCC-notes carry the story elements (55% for Intake and 44% for Intervention).

What is just as interesting is that, on Intake, the story elements were carried more often by non-reporting PCC team members, 68% of the time, compared to 56% of

the time on Intervention. More specifically, we can see that SW (21%) and PT1 + PT2 (40%) played a significant role in story-porting on Intake, whereas DIET (20%) was the only official team member on Intervention who carried story elements forward. This means that on Intake, members other than the reporting PCC served as a memory-aid in two-thirds of the story-porting incidents, and probably also means that they helped in large part to stabilize the practice of story-remembering across rotating PCCs. Equally significant is the role played by the UC (not an official team member) on Intervention, who story-ported 24% of the time. This authoring and remembering role played by the UC illustrates what my Integrate informants told me: The Intervention team needed “babysitting.”

Indeed, while Integrate needed to “mind” this team—literally and figuratively—this is only obliquely evident through the frequency count data I have presented thus far. As useful as it is in painting a picture of a larger data set in broad strokes, this more quantitative approach gives us little detail about the day-to-day practice of these two teams, and it is to this that I would like to now turn. Accordingly, the second part of this chapter focuses on a single diachronic patient case from each team to glean a more multifaceted appreciation of the practice differences between the two, and how we can perceive more stability in the practice of Intake’s patient case reviews than was evident on the Intervention team.

8.3. How and potentially why: Interpreting the teams’ sensemaking practices

In this second half of this chapter, I present the cases of Mr. Baker on Intake and Mr. Boyd on Intervention. Both patients represented complex cases, where the team members present at rounds had limited agency in moving the situation forward in a particular direction. However, on Intake, team members continually strive to make sense of the patient’s current situation, especially attending to what precisely is problematic about the case. In contrast, on Intervention, the team seems less engaged with the patient’s situation and subsequently work less often to collectively come up with collaborative definitions of the situation and interpretations of what this might mean for action planning.

8.3.1. *Intake and the case of incompetent Mr. Baker*

Monday, 2009-12-14.27 (PCC-1): 23:11—25:49—Collaborative action planning

Present: UC, PCC-1, PCC-2, PT1, PT2, SW, GAP, CCD, OT-a, SLP

- 1 PCC-1: And 112 is Ernest Baker. And=
2 UC: =I can't believe he's still here.
3 PCC-1: Yup. He's still here.
4 PCC-2: **He's here again, maybe?**
5 PT1: Hmm. Yes.
6 PCC-2: Like, he was here, like two weeks ago.
7 PCC-1: He's still homeless. He's still [incompetent.
8 PCC-2: [He was at Falcon Manor¹²¹=
9 PT1: [He left.
10 PCC-2: =and then he left
11 AMA¹²² from Falcon Manor, and they've, the police brought him in with
12 \$2000 cash in his [pocket.
13 PT1: [Yeah.
14 PCC-1: **But I don't get how you can-**
15 PT1: And then I think he went again, and came again.
16 SW: Yeah, [he did.
17 PCC-1: [But-
18 PCC-2: [And he went downstairs and took off again.
19 PT1: Oh.
20 PCC-1: **But if he's been, if he's been deemed incompetent, how can he leave**
21 **AMA?**
22 SW: [He can't.
23 PCC-2: [I guess maybe now he's pinked.
24 SW: (inaudible)
25 PT1: He wasn't deemed incompetent the first two times.
26 PCC-1: Okay.

¹²¹ A community-based rehabilitation centre.

¹²² Going "AMA" means leaving against medical advice. Patients who are certified (i.e., "pinked" or "pinked times two," which is a short-term classification of the patient as non-compliant and unable to make appropriate decisions for themselves, or officially certified as incompetent) cannot leave AMA.

27 SW: That was the problem.

28 PCC-1: Oh, okay.

29 SW: We were waiting for the incompetent (inaudible)

30 PCC-1: Okay, so Dr. Potter¹²³ deemed incompetent.

31 UC: Yes.

32 PCC-1: So=

33 PT1: =This time

34 PCC-1: from now onwards, he's as long as he comes into health care, he's (.)
35 [incompetent?

36 PCC-2: [Please don't let him leave, otherwise it's so much paperwork. Code
37 yellow.

38 UC: ((laughs))

39 SW: So!

40 ((simultaneous talking))

41 SW: **So, just to clarify, the plan for him is long term care, correct?**

42 CCD: That's what I've heard.

43 PCC-1: Yes.

44 SW: Okay, s[o

45 PCC-1: [Placement, yes.

46 SW: **So what does Social Work need to do: (.) to get that process**
47 **rolling?** I'm looking at you (CCD) because the (yellow?) card needs to
48 get done.

49 CCD: I have no idea. [I'll ask David (CCD team lead)

50 GAP: [If he's incompetent, from Dr. Potter, then you need the
51 second letter from a psychiatrist? [And he's

52 CCD: [But he's just incompetent of person,
53 right?¹²⁴ I don't think they've deemed him incompetent of finance yet?

54 SW: Well, finance-

55 CCD: Well, at least Potter's report that I read.

56 GAP: I think incompetent of person probably trumps (.) incompetent of
57 [finances? (.)

58 SW: [Yeah.

¹²³ The geriatrician.

¹²⁴ In conversation analysis, the placement of a question mark at the end of an utterance indicates rising intonation, which might signal a question, but might also be an epistemic hedge (face-saving technique for the listener).

59 GAP: But I don't know, that may be a technicality? In terms of your paper work?
60 But I know for [sure we need the psychiatrist.

61 PCC-2: [I wonder if he's still on the account thing? 'Cause he was
62 so kind of out of it when he came in with his \$2000 cash in twenty dollar
63 bills. We're standing there counting all this money. I just wonder when he
64 left AMA if he left his money in...

65 SW: I can check into that 'cause Social Work will work on the financial
66 department? of it? But I guess if he's financial, I double check the
67 incompetence of financials and the, but if, if I refer him to Saint Peters
68 Society¹²⁵ or something and they accept him, then that part's done.

69 CCD: Yeah, that could be, yeah.

70 SW: Okay?

71 CCD: Yeah.

72 PT1: I can't imagine you can't be incompetent of finance=
73 SW: =If you can't make decisions, yeah.

74 GAP: But, but Heather (CCD) may be right, you know. There may be a
75 technicality that we need to do both.

76 ((simultaneous talking))

77 PT1: It's always the technicality stuff.

78 GAP: Yeah.

79 CCD: 'Cause we need someone who's going to say, okay we're going to pay
80 the bill.

81 SW: Right, which Saint Peters'll do.

82 GAP: Which goes down in our ridiculous bucket, but it [could be true.

83 SW: [But whatever.

84 PCC-1: (inaudible)

85 (pages flipping)

86 GAP: Wow.

87 CCD: Yeah.

88 PCC-1: I know. Poor guy.

¹²⁵ A social and human service organization in the community.

Targeted analysis

This excerpt can be split into three sensemaking sequences, each focused on a different general matter of concern, and each triggered and sustained by expressions of uncertainty (indicated in bold). The first two sequences focus on making sense of what has happened upstream on the patient care trajectory, defining how the patient arrived at the current situation and thus answering the question, “What’s going on?” (Weick et al., 2005). The third sequence looks prospectively forward at future contingencies as the team members interpret what the current situation means for future action, which is to say they tackle the question, “Now what?”. We can note in each sequence how the team members align their contributions to co-construct, explore, craft, and collectively author elements of the story that aim to address if not resolve the expressed uncertainty.

The first sequence runs from lines 2–20. PCC-1 opens the case review with patient identifiers and is interrupted by UC in line 2 who raises an important matter of concern: the patient’s *length of stay*. PCC-1 confirms UC’s description (“still here,” line 3), and in line 4, PCC-2 triggers the first sensemaking sequence with the first expression of uncertainty, which she does by repairing PCC-1’s previous utterance with a refined interpretation (“He’s here again, maybe?”). The next several lines see PCC-2 and PT1 each offering details that collaboratively construct the patient’s history: He was discharged to a rehabilitation centre in the community, from which he left, and then was readmitted again when the police brought him back into hospital, and then possibly left and was readmitted again.

PCC-1 tries to complete her interrupted overview by describing the patient as “still homeless” and “still incompetent” (line 7), and she returns to this description when she repeatedly tries to raise another uncertainty (lines 15, 18, 21): “If he’s been deemed incompetent, how can he leave AMA?” (line 21), which marks a situational discrepancy and triggers the second sensemaking sequence. Again, we see multiple contributors to the construction of a resolution (lines 23-39): SW, PCC-1, PCC-2, PT1, and UC all supply information or alignment that confirms that Baker could not have left AMA because he had not yet been deemed incompetent the first two times he had come into hospital. PCC-2 speculates that he is now pinked (line 24), and SW and PT1 specify that

the problem was that Baker had not previously been deemed incompetent (“That was the problem,” line 28). PCC-1 interprets this to mean that the geriatrician has now deemed the patient incompetent, which UC confirms and PT1 refines, specifying that it pertains to this admission (line 34). PCC-1 then prospectively interprets that this means they will no longer have the problem of the patient leaving AMA in the future, designing her contribution as a request for confirmation, which goes unanswered. PCC-2 does, however, interpret what it means when he leaves AMA (“so much paperwork. Code yellow,” lines 37-38).

The third sensemaking sequence takes up this prospective narration, as SW turns the conversation to the “Now what?” question, initiated in line 40 and completed in line 42: “So, just to clarify, the plan for him is long term care, correct?” CCD and PCC-1 align with this interpretation by confirming it, and in lines 47-48, SW asks a probing follow-up question that focuses explicitly on action planning (“what does Social Work need to do: (.) to get that process rolling?”). The remainder of the case review is spent exploring conflicting answers to this question, particularly the contingencies for moving action forward. First is the question of procedure, which GAP explains (it requires getting a secondary MD’s assessment of incompetence, lines 50-51), to which CCD objects, interrupting to distinguish between sub-classifications of incompetence (lines 52-53). SW seems to prepare to disagree (“Well, finance-,” line 54), and CCD mitigates her prior statement by invoking the geriatrician’s report to distance herself from this epistemic claim (line 55). GAP attempts to align their contributions by suggesting a hierarchy of classifications to make sense of CCD’s objection without causing CCD to lose face (lines 56-57), and is supported by SW’s alignment (line 58). GAP then mitigates her utterance by epistemically marking doubt and attributing the technicality to CCD’s scope of practice (“But I don’t know, that may be a technicality? In terms of your paperwork?” line 59) while simultaneously insisting on her own expertise in the process of deeming a patient incompetent (line 60). What is interesting in this portion of the sequence is how the different knowledge claims are woven together to make a coherent whole, validating each contributor’s perspective, the “and + and” to which Opie (1997b, 2000) referred.

A sub-sequence of prospective detective work then builds on the first part when PCC-1 asks, beginning in line 61, if the patient is still “on the account thing,” implicitly suggesting that this information would reveal something about his status as financially competent or not. SW takes this up and offers to act on the suggestion, appropriating it

as part of her professional domain (“because Social Work will work on the financial department? of it?” lines 65-66), and then proposes an action plan to take care of the financial part of the discharge plan (lines 66-68). CCD aligns with this plan and SW double-checks for agreement (lines 69-71). Discussion then returns to the question of sub-classifications of competence, and CCD explicitly defines the contingency for discharge planning and the reason why the “technicality” matters: “Cause we need someone who’s going to say, okay we’re going to pay the bill,” lines 70-80). GAP remarks on the absurdity of the sub-classifications (“ridiculous bucket,” line 82) and SW rhetorically throws up their hands in the face of this absurdity (“But whatever,” line 83), with which GAP, CCD, and PCC-1 align through echoing utterances, and the case closes with PCC-1 expressing concern for the patient in this ridiculous situation (“Poor guy,” line 88).

Tuesday, 2009-12-15.31 (PCC-3): 28:15—31:08—Collaborative definition of the situation

Present: PCC-2, PCC-3 (was absent from previous rounds, but has the responsibility of presenting the case), PT1, PT2, SW, GAP, OT-a, SLP

- 89 PCC-3: **Mr. Baker:: How long’s he been here no::w?**
- 90 SW: He left and came back, so that’ll:: (1.5) rrr::almost a week. (.) I know, I
91 know. ((short laugh))
- 92 (1.5)
- 93 PCC-3: Yeah. He needs to get up to the 5th floor where they can lock the door and
94 he doesn’t need a sitter! ((sniffs loudly))
- 95 (1.5)
- 96 PCC-2: Well, that’s right, they do have those (.) doors.
- 97 PT1: Yeah. (.) With the beepers.
- 98 PT2: Yeah.
- 99 PCC-2: He needs to go up there.
- 100 PT1: He needs to be on the 5th floor with a beeper.
- 101 SW: **But the competency issue still is an issue?** Um, because Dr. Potter
102 has deemed him incompetent of person, but Dr. Temple (psychiatrist)
103 yesterday wrote in the chart, “Does not feel that that is appropriate
104 because it’s a- acute (.) confusion.” So, look, I don’t, this discharge plan is
105 gonna get all mucky.
- 106 PT1: So he needs to go to the 5th [floor.

107 SW: [Yeah. So, I know, 'cause I'm like, I want to
108 get the finances started because CCD won't touch until the finances are
109 taken care of.

110 PCC-3: [Yeah.
111 **[But what does that mean?**

112 SW: That was me.

113 PCC-3: Needs to be declared un-?

114 SW: Incompetent of person and finance before discharge planning because
115 we, either he is competent or he's not competent, 'cause we're kind of on
116 the fence, because Dr. Potter said, "Incompetent of person." Dr. Temple
117 wrote in the chart yesterday, "Acute delirium" 'cause, 'cause you need
118 that secondary signing to get him incompetent.

119 PT1: [So he'll sit here.

120 GAP: [Yeah, yeah.

121 SW: So, CC(D) will just say, "Well, we're not touching it till this is dealt with?"
122 And he'll sit here for months.

123 GAP: Yeah. That's true.

124 PCC-3: Yeah.

125 SW: **So.**

126 PT1: So he needs to be on the 5th floor where he can have the beeper, [and the
127 door, and get.

128 SW: [have
129 the beeper

130 PT1: And get up and walk around and do his thing=
131 SW: =Yeah.

132 PT1: And hopefully clear. And be reassessed.

133 SW: Exactly. Becau[se I feel=
134 GAP: [And Dr. Ingram come see him.

135 SW: And Dr. Ingram come see him. I mean, I don't want anybody to be
136 [incompetent (claps hands x 3 for emphasis) we can't move this along
137 and he can't have a place to go.

138 PT1: [Just to be fair to the patient.

139 GAP: Uh-[hum.

140 PT1: [But that'll give him-
141 PCC-3: **[Does he have any relatives this guy? Like has he got anybody?**

142 SW: N-, he has, he has a long history of IV drug use, but he's been clean on
143 methadone, but he's got like some weird=
144 PCC-2: =I told you came in with like \$2000 [cash. I don't know

145 SW: [Yeah, he's got lots of cash on him,
146 **but nobody can figure out where the source of income is, or if he's**
147 **just keeping all his pension money**, so we [like we gotta-

148 PCC-3: [Yeah, 'cause he had two
149 grand on him last night when he came [in.

150 SW: [Yeah, so.

151 PCC-2: Yeah, in twenty dollar bills.

152 SW: Yeah, we gotta figure it out.

153 PCC-3: Wow.

154 SW: Though.

155 PT1: So the 5th floor.

156 SW: Fifth floor would be definitely appropriate, but that's what's going to hold
157 up discharge. Just saying. (laughs)

158 PCC-3: (sighing) Anyway. Yeah.

159 PT1: 'Cause then he can get up and move around freely?

160 SW: Yeah, and not feel so restricted. And yeehee woohoo.

161 PCC-3: Well, you have to watch him, I'm sorry, and that's why we have to get a
162 sitter for him.

163 PT1: Yeah, we do [down here, but up there-

164 PCC-3: [Don't need him running [away again, right?

165 PT1: [But he'll be up there with the
166 beeper and the doors.

167 PT2: **What do they do? Put a transmitter on him?**

168 PT1: Yeah. Yeah.

169 PT2: So that when he gets close to the doors, they lock.

170 PT1: He, it beeps.

171 SW: Like a long-term [care facility.

172 PT1: [And it locks. Yeah.

173 PCC-3: Oh. Goo[d. (inaudible)

174 PT1: [But that way he has freedom of movement and a better
175 opportunity to clear his delirium.

176 ((simultaneous talk))

177 SW: **Didn't he go AMA off the 5th, though, last time?**

178 PT1: Maybe.

179 SW: Whatever. Okay. Just saying. Alright, moving on.

180 PT1: We could talk to Josie about it.

181 PCC-2: He's kinda smart. Too.

182 SW: Well, yeah, I don't think he's like totally out to lunch, I think he's just (.) a
183 bit off.
184 PCC-3: And not, and yeah, you're right. (Next patient).

Targeted analysis

In this case review, the team collaboratively comes up with a plan for moving action forward, for which they weigh the pros and cons. The team's discussion moves back and forth between explorations of Weick et al.'s (2005) dual questions of organizational sensemaking ("What's going on?" and "Now what?") over the course of this case review, as the team collaboratively refines their shared definition of the problem (i.e., what makes the patient's situation problematic, lines 101-124; 141-154; 176-178; 181-184), and as they weigh the different options for an action plan (lines 93-100; 125-140; 155-175; 180), although a definite decision is not taken. The collective sensemaking is again driven by expressions of uncertainty (indicated in bold) that direct the team's attention alternately to defining the situation and to figuring out what they ought to do.

Once again, this review begins with an invocation of the patient's length of stay as a salient matter of concern, this time expressed as a situation-defining question ("How long's he been here now" line 89). SW works to resolve this uncertainty by offering precise details, implicitly acknowledging the problematic nature of this length of stay. PCC-3 aligns with SW's contribution and launches directly into a proposed action plan ("Now what: Send the patient to the 5th floor"), a solution that would solve the related problem of the risk the patient will leave AMA and the subsequent drain on their resources (they must assign a sitter to prevent him from leaving, lines 93-94). This solution is collaboratively affirmed and elaborated by PCC-2, PT1, PT2 (lines 96-100), who confirm that the doors and the beeper would be appropriate.

SW objects to this line of reasoning by pointing out, in the form of an assertive question (Stivers, 2010), that the real problem ("what's going on?") is the question of the patient's competency, and she then offers an account that transports the story elements collectively authored during Monday's rounds (the competency issue) and develops the story to point out a situational contingency that is a barrier to moving action forward: The secondary doctor disagrees with the incompetence classification. SW interprets the

consequences for their work (“this discharge plan is gonna get all mucky,” lines 104-105). PT1 pushes their proposed solution again (line 106), and SW carries another element of the prior day’s story to give a more detailed explanation of the barrier (i.e., she can’t start working on the financial aspect, lines 107-108). PCC-3 requests interpretation and clarification (line 111), and SW completes her story-porting work by recounting the sub-classification conundrum, the consequences of which PT1 explains (“he’ll sit here,” line 119), GAP confirms, and SW takes up and elaborates. Here again, we see alignment and co-construction of the account.

Then, in line 125, SW pronounces, “So,” which PT1 seems to take up as prompt for action planning, as she returns to their proposed solution again, which turns the team’s sensemaking back again to action planning (lines 125-140). In this sequence, PT1, SW, and GAP collectively weigh what this situation offers (the opportunity for the patient to move freely, to clear his delirium; fairness to the patient; a way for the team to “move this along” and find a place for the patient).

PCC-3 takes up SW’s mention of finding a place for the patient and returns discussion to a definition of the situation by asking if the patient’s family or friends might be able to help (line 141), triggering the next sequence in sensemaking (lines 141-154). After SW offers an implicit answer to PCC-3’s question (IV-drug use might have alienated friends and family), SW, PCC-2 and PCC-3 collectively underscore the anomalies in the patient’s financial situation, and concludes with SW assigning them the task of “figuring it out” (line 152).

At this point, PT1 chimes in for the third time with their proposed plan of sending Mr. Baker to the 5th floor. SW aligns with this proposal as “appropriate,” but evaluates it as less than ideal as it is “what’s going to hold up discharge” and then seems to excuse herself for being a thorn in their side (“Just saying,” lines 157). From here until line 175, they return to collaboratively considering the strengths and weaknesses of this option, as well as the specifics of how the 5th floor works for patients at risk of leaving against medical advice. Once again, SW raises an objection, asking if Mr. Baker had not previously left from this floor, which PT1 considers, brainstorming potential solutions, but SW attends to the need to move discussion forward (“Alright, moving on,” line 179), and in line 184, PCC-3 does move on to the next patient.

Wednesday, 2009-12-16.28 (PCC-1): 24:43—25:23—Collaborative definition of the situation

Present: UC, PCC-1, PCC-4, PT1, PT2, GAP, SW, OT-a

185 PCC-1: And uh Mr. Baker. He's, Tucker (MD) left notes, so I, when was I here?
186 Not yesterday, but the day before, I left that note about he has to be
187 incompetent of person and of finance. So I left it in the front of the chart,
188 uh, yesterday, I think Dr. Fine was supposed to talk to Dr. Temple,
189 because when Dr. Temple decertified him, that's kind of in contradiction
190 to what Dr. Potter said?

191 GAP: Uh-hum.

192 PCC-1: So we'll see what Dr. Fine has to say today. So he's still here for now.

193 GAP: He's a 5th floor dude.

194 PCC-1: Yeah.

195 GAP: Or Path.

196 PCC-1: And um.

197 PT2: Ooh. Yeah.

198 GAP: Path Unit!

199 PT2: I like that word. (laughs)

200 GAP: Yes! Or placement. I like that word a lot.

201 PT2: (laughs)

202 PCC-1: (next patient's name).

Targeted analysis

In this case review, we see that PCC-1 is back on rotation and reporting on Mr. Baker's case. (We can also note that the secondary charge nurse, PCC-4, was not present the two previous days.) PCC-1 carries forward story elements from Monday's discussion, providing an update in the first-person singular of the actions she took ("I left a note about he has to be incompetent of person and finance," lines 186-187) and adding a new twist: a favourite hospitalist, Dr. Fine, has been enlisted to intervene with the psychiatrist who disagreed with the geriatrician's assessment. We do not however see any mention of the previous day's action planning work to justify sending the patient to the 5th floor. GAP aligns with PCC-1's reporting to the team, which positions them as the listening audience (line 191). We can also note that PCC-1 designs her report to be a briefing; no uncertainty is expressed or signalled. Instead, she reports on the situation

and interprets for the team what this means for their own action planning and for the patient, namely waiting to see (line 192).

GAP tacitly story-ports the previous day's planning by declaring that "he's a 5th floor dude" (line 193), which PCC-1 affirms through her alignment in line 194. GAP and PT2 carry on for a short bit in this vein, exploring new options of where the patient could be sent ("Path Unit," lines 195, 198, or "placement" in the community, line 200) and express their preference for these options. However, PCC-1 does not pick up this line of talk, and instead moves the discussion on to the next patient's review. It is interesting that SW remains silent in this review; it is the first time she has done so and it is possibly because PCC-1 has depicted what, for SW, are the salient aspects of the situation, as well as her implicit preference for action planning (i.e., keeping the patient on the Intake ward until the classification conundrum gets sorted out).

Friday, 2009-12-18.11 (PCC-5) 13:03—14:11—Collaborative definition of the situation

Present: PCC-3, PCC-5, PT1, PT2, SW, OT-b, SLP

203 PCC-5: One eleven, Baker. Let's just move on.
204 PCC-3: Whatever.
205 SW: Move on.
206 PCC-3: Next!
207 PCC-5: Sorry. Yeah. He's been here for such a long time, he just needs to be
208 placed in a closed unit.
209 SW: **No, well, see that's the problem though.**
210 PCC-5: No?
211 SW: There's competency...
212 PCC-3: Issues.
213 SW: It, it, the competency=
214 PCC-5: **=But I thought he was written down as inco[m]petent last time.**
215 SW: [Yes, Dr. Potter did, but, I
216 PCC-5: [Yeah.
217 SW: But you need a secondary for a certificate? Um, Dr. Temple found that it
218 was, f-, f-, feels that it was, that it's an acute episode? OT saw again and
219 feels that it may be an acute episode, so, so they've kind of got to battle it
220 out. We were thinking maybe Dr. Potter to reassess, so the discharge
221 plan is kind of basically on halt till this gets dealt with.

222 PCC-3: And that's been going on all week.
223 SW: Yeah.
224 PCC-3: I was up there Tuesday and we had that issue.
225 SW: Yeah.
226 PCC-5: You're kidding me.
227 SW: Well, uh=
228 PCC-5: =No, that's okay. Don't answer that.
229 SW: (sighing) Okay, yeah.
230 PCC-5: Couldn't Potter just photocopy his thing twice?
231 ((lots of laughter))
232 PCC-5: Sorry.
233 SW: I don't know how ethical that is, but sure!
234 ((laughter continues))
235 PCC-5: I won't say anything!
236 OT: Could you just strike, strike that from the recording?
237 ((laughter))
238 PCC-5: I promised myself I'd be really good. Notice? No swearing?
239 ((laughter))
240 SW: Betty the PCC said! Yeah.
241 PCC-5: There's loopholes! ((laughter)) Next patient's name.

Targeted analysis

This case review is essentially a collaborative report by different team members to the reporting PCC, and demonstrates how the story is stabilized over time through their contributions. PCC-5 opens the discussion almost by dismissing it ("Let's just move on," line 203), which underscores their collective frustration with the situation. This expression is echoed by the affiliative utterances of SW and PCC-3 in lines 204-206. PCC-5 apologizes, perhaps for seeming not to care, and justifies her transgression by invoking the patient's length of stay and the general plan that was developed on Tuesday. (It is possible this was discussed during Thursday's rounds.) In so doing, we can see she is also story-porting some matters of concern that animated previous days' sensemaking work. In line 209, SW and PCC-3 co-produce an objection to this portrayal

by initiating a repair,¹²⁶ once again specifying what exactly is problematic about the patient's situation: "there's competency" "Issues" (lines 211-212).

This triggers another expression of uncertainty and an implicit request for confirmation, when PCC-5 exclaims that she "thought he was written down as incompetent last time" (line 214). SW and PCC-3 then collaboratively complete the repair and their explanation of the situation, which serves to transport sensemaking work from Monday and Tuesday ("you need a secondary for a certificate," line 218). SW also adds an additional development in the story: OT has reassessed the patient and agrees with the psychiatrist. She reframes their position as waiting until "they...battle it out" (line 220) and recounts a new action plan: "We were thinking maybe Dr. Potter to reassess" (line 221), which might be story-porting from Thursday's rounds. She then reiterates what PCC-1 said on Wednesday, which is that the discharge planning is on hold (lines 221-222). PCC-3 aligns with this portrayal, adding that this frustrating situation is not new (line 223) and adds the weight of his personal experience "on Tuesday" (line 225), both of which are supported by SW. PCC-5 marks her incredulity with this situation (line 27) and retracts before making the ridiculous proposal that the geriatrician "photocopy his thing twice" (line 231). This proposal offers a dose of black humour to ease the mood of frustration while simultaneously marking their obligation to move action forward and their inability to do so. The remainder of the review is spent in metacommentary about the inappropriateness of the remark, and continues the vein of black humour.

Partial discussion

I never found out what eventually happened with Mr. Baker. When I returned to the field two weeks later, he was no longer on their ward. What is clear, however, is how solidly the story evolves over the course of the week. The team maintains the richness and complexity of their sensemaking (and accordingly, of their representations of the evolving situation) across the rotating PCCs as they add layers and details over time. Throughout the process, they orient to the problematic situation as being a shared one, and they collaboratively work to find ways to move action forward, even though they have little agency over the underlying issue of assessing competency. We can note how

¹²⁶ A repair can be considered an implicitly designed question (Stivers, 2010), and in this instance, to reference a tacit uncertainty.

the team accomplishes collaborative and collective action through their frequent work to align their contributions with prior utterances, despite differences of opinion, for instance in the exchange between GAP, SW, and CCD on Monday.

Also evident is that the action routine—which I understand here as routine introductions or overviews to the cases—varies across the rotating PCCs (perhaps because the team is already familiar with this patient). On Monday, PCC-1 doesn't get to complete her overview because more knowledgeable team members jump in; on Tuesday, PCC-3 truncates it by raising a matter of concern and directly focusing team attention on length of stay; and on Friday, PCC-5 expresses the desire to skip this case altogether. Only on Wednesday does PCC-1 produce a relatively complete overview, and we can see that it is designed as a briefing, and relatively little collective discussion ensues. Obviously, given how long Mr. Baker has been there, and his status as a “frequent flyer,” the players around the table are all familiar with the case and do not need to be provided with an overview. What remains stable, however, are their collective sensemaking processes: They consistently attend to expressions of uncertainty, and I will take this up again in the discussion of this chapter.

The PCCs frequently express uncertainty, which the listening team members take up as invitations to help resolve, but this expression of uncertainty is not limited to the PCCs. Other team members, especially the SW, also frequently set the topical agenda by expressing uncertainty, marking objections, and initiating repairs. Indeed, we can recall what Emmanuel Schegloff (1991) says about repairs: They are the mechanism by which we establish intersubjectivity in interaction, and it is through fluid, open access to the conversational floor that repairs to shared representations are made possible, and how the full potential of interprofessional practice—as a collective sensemaking endeavour—is realized. Let's take a look now at the stability of practice on the Intervention team.

8.3.2. *Intervention and the case of paraplegic Mr. Boyd*

Monday, 2009-12-14.11 (PCC-B): 11:24 –13:18 –Collaborative definition of the situation

Present: UC, PCC-A, DIET, PHARM, SW, CCD

1 PCC-A: Mr. Boyd is a off-service. A back-door admission¹²⁷ of Dr. Ikito, said, “Oh,
2 come in to Emergency and we’ll get you a bed, and we’ll get you an MRI
3 and we’ll do your surgery.” He’s a nasty, miserable man. And I want him
4 off my ward. (1.) He’s rude [to-

5 CCD: **[What’s cauda equina syndrome?**

6 PCC-A: I-I-It’s, the nerves, at the (.) tailbone there (.) are compressed by a tumour
7 or something’s going on in there. Basically he’s a paraplegic and
8 incontinent and he’s complaining that he’s in a geriatric ward in a room
9 with a bunch of women that smell like pee even though he’s incontinent of
10 urine, so maybe he’s. Nasty thing. 4-North will never have a bed for him,
11 he’ll be here forever ‘cause Ikito. ((sighs)) Mean. I almost kicked him off
12 the ward yesterday.

13 UC: **Do you, does he have an OR¹²⁸ date yet?**

14 PCC-A: No. He’s a back-door [admission!

15 PT: [Apparently he is independent and he’s getting
16 himself out [for smokes.

17 PCC-A: [Yeah. Dr. Ikito said, “You come into the Emergency Saturday,
18 we’ll get you a bed.” He got an MRI yesterday, which was a miracle, but
19 because an outpatient cancelled, they they put him [in,

20 PT: [So.

21 PCC-A: “And we’ll get your surgery done and everything will be well.” But he does
22 not understand why he’s in s-, so I want him to go to 4-North in a trach
23 room¹²⁹ where people cough all over him. Miserable person.
24 (3.0)

25 PCC-A: He’s got the, the lights off, and he’s blaring the stereo, and. (0.5) (to SW)
26 **Did you really want to have a talk with him?**

27 SW: ((short laugh)) I can try! (0.5) I’ve got him on my list, [but.

28 DIET: ((quiet laugh))

29 PCC-A: [Um-

30 SW: I’m not going to be able to change his at[titude.

31 PCC-A: [I know. I’m talking to Dr. Ikito
32 and I’m going to say, “You’ve got to talk with him and tell him that if he,
33 you take him to your ward or you tell him to be polite to staff and patients
34 or he can leave.”

35 SW: Uh-hmm.

36 PT: I’m just going to step out to connect with the rehab assistant. I’ll be back.

¹²⁷ A backdoor admission is a patient who has been admitted to hospital through a doctor’s admitting privileges, as opposed to through the triage process in Emergency.

¹²⁸ Operating room.

¹²⁹ Trach room = a room with patients with tracheotomies.

37 PCC-A: Okay Lacey (PT). ((Calls out name of next patient))

Targeted analysis

In this patient case review, there is no agreement by the team members about the situation they are constructing, but instead an underlying tension persists throughout the entire sequence. We can see that PCC-A designs the overview and subsequent contributions as a “troubles telling” episode (Jefferson, 1988), but this positioning is resisted and rejected in the other contributors’ turns of talk as they co-orient to Integrate’s goal-oriented questions (medical status and goal, functional status and goal, discharge concerns), and to constructing a portrait of the patient that is pertinent to their roles and is thus actionable.

PCC-A begins by emphasizing the non-routine nature of Mr. Boyd’s admission and then switches to a negative moral evaluation of the patient’s character (“nasty, miserable man,” line 3). Notable is the use of possessive pronouns (“my ward,” line 4), which attributes ownership of the ward to the PCC and personalizes the issue. However, this rant is interrupted by CCD who, presumably reading in her own notes on the patient, inquires about Boyd’s medical diagnosis (“What’s cauda equine syndrome?” line 6). This information request serves as a learning moment (this particular CCD is not trained as a nurse as most CCDs are) but also resists PCC-A’s construal of the interaction as a backstage arena for blowing off steam. CCD’s contribution refocuses talk on their presumed task at hand, at least as the Integrate project conceives it: defining the salient issues of the patient’s situation and discussing the next actions in care.

PCC-A answers CCD’s question in lines 6-7 and then promptly returns to the story of complaint, mentioning the patient’s functional capacity (“paraplegic and incontinent,” lines 7-8) and focusing on the patient’s own complaints, concluding that he’s a “nasty thing” who will be stuck on the ward, sighing heavily before concluding that “I almost kicked him off the ward yesterday” (lines 7-12), again personalizing the trouble. Conversation analyst Gail Jefferson (1984) explains that the preferred next turn to a troubles-telling utterance would be affiliative, which is to say it would attend to the emotive content of PCC-A’s utterance. However, in line 13, UC echoes and aligns with CCD’s implicit rejection of the troubles talk by requesting information that refocuses attention on Integrate’s matters of concern: movement on the care trajectory (“Do you, does he have an O.R. date yet?”). PCC-A provides the information and again insists on

the non-routine nature of the case. PT1 then interrupts and displays that she understands UC's question as a request to refocus on the script by offering information from her professional scope of practice: "Apparently he is independent and he's getting himself out for smokes" (line 15). She epistemically distances herself from this knowledge claim ("apparently") and implicitly positions herself as not having seen the patient personally, and, given his functionally independent status, explains that the patient's situation does not interpellate her professional involvement.

PCC-A begins by aligning with this utterance ("Yeah," line 16), but then continues with the complaining account of how the admission procedure was circumvented, and then escalates to actually wishing discomfort upon the patient ("I want him to go...to a trach room where people cough all over him," lines 21-22). None of the listening team members respond to this utterance, whose very expression demonstrates the opposite of a patient-centred, *caring attitude*, but perhaps expresses personal frustration. Their silence in the three-second gap constitutes unspoken disaffiliation, and so PCC-A presses on with more evidence in making the case, recounting the patient's aberrant behaviour (i.e., "lights off" and "blaring the stereo", lines 22-23).

PCC-A then switches tactics and explicitly attempts to solicit help from SW by requesting disconfirmation ("Did you really want to have a talk with him?" line 23). It is unclear if this expression of uncertainty was intended as an attempt to assign to SW the task of seeing the patient, or as attempt to dissuade her from doing so. At any rate, SW appears to have interpreted it as an attempted assignment, and she reluctantly commits to trying, but tacitly resists PCC-A's right to assign this task to her by invoking the patient's name on her list as a justification for accepting the assignment. In line 30, SW also dispossesses herself of the ability to make a difference (Bencherki & Cooren, 2011) when she says, "I'm not going to be able to change his attitude," and thus dissociates herself from the collective (or at least the alliance) that PCC-A is apparently trying to build.

PCC-A accepts this position ("I know," line 31), and then produces a plan in which PCC-A is self-positioned as the sole actor to resolve this trouble ("I'm talking to Dr. Ikito" and "I'm going to say," lines 31-32) by serving the admitting doctor with an ultimatum. SW aligns but does not affiliate with this, noncommittally responding, "Uh-

hmm” (line 35). PT interjects to excuse herself from rounds, which PCC-A accepts, and discussion moves on to the next patient.

Tuesday, 2009-12-15.2 (PCC-B): 1:03 – 1:43 – Collaborative briefing

Present: UC, PCC-B, PT, DIET, PHARM

- 38 UC: Then, Boyd.
39 PCC-B: Boyd is uh (reading) Q6H vital signs, independent to wheelchair. (stops
40 reading) Uh:::. (3.0) **Can't read this writing.**
41 PT: [Going for an epidural (.)
42 PCC-B: [Maybe “epidural.”
43 PT: Injection.
44 PCC-B: And then will go home. (1.0) Tomorrow.

Targeted analysis

This patient case review is a collaborative briefing, where UC prompts PCC-B for a report, PCC-B relies on her notes to produce it, and is aided by PT, who seems to have more knowledge about the patient than PCC-B. In this instance, the source of uncertainty is the nursing notes, and when PCC-B remarks that she is unable to read the writing, PT comes to her aid in reporting on the treatment plan for the patient (an epidural injection, presumably for pain management). SW is absent on this day, so we do not find out if she did manage to speak with the patient or not. The only story element to be carried forward from yesterday's discussion is the PT's mention of the patient's functional independence. There is no mention of PCC-A's casting of the patient as troublesome. Instead, Mr. Boyd is presented in very abstracted terms (“Q6H vital signs,” line 33). In other words, the representation of the patient's situation is simplified. There is no mention of what brought him to the hospital, what his underlying problem is, and what the long-term solution might be. It is not even evident from this short extract that this information might be relevant, as we shall see on Friday it is.

Wednesday, 2009-12-16.6 (PCC-B): 5:43 – 5:56 – Briefing

Present: UC, PCC-B, PT, PHARM, DIET, SW, CCD

- 45 UC: Boyd.
46 PCC-B: He's is (reading) he is independent. Um. With wheelchair, general diet,
47 has weakness in both his legs, and we're just waiting for his epidural.

Targeted analysis

This case review is a very terse briefing, prompted again by UC, which positions the Integrate program and the UC as its representative as the intended audience for rounds. PCC-B is again reporting on the patient, again relying on the nursing notes to produce her report. A simplified overview of the situation is again presented that focuses largely on functional aspects, but again, there is no mention of any underlying medical problem (recall the mysterious compression of his nerves at the tailbone, the reason he was admitted through the back door to the hospital). Elements that were story-ported from Monday's and Tuesday's rounds are the patient's functional independence and the planned medical intervention (the epidural injection), which is invoked as what is holding up discharge. SW is present on this day, but does not report on any conversation with the patient, and from her silence, we might conclude that she has effectively avoided any responsibility for intervening.

Friday, 2009-12-18.6 (PCC-C): 9:06 – 10:23—Collaborative action planning

Present: UC, PCC-C, DIET, PHARM, SW (Replacement)

- 48 UC: Boyd.
- 49 PCC-C: Boyd. Oh, this fellow (.) was given (.) **was ordered a medication**, we
50 were talking about that earlier, **and he said he couldn't take it because**
51 (.) it made him wingy. And gabapentin makes him wingy. So. He's
52 supposed to be speaking with Dr. Ikito again. And has been advised, I
53 think Meira (PCC-B) said yesterday, "**You know, you really need a**
54 **second opinion. (.) Maybe go elsewhere.**"
- 55 PHARM: Okay, what w[as he-
- 56 PCC-C: [Cause we're not helping him.
- 57 PHARM: **What was he refusing?**
- 58 PCC-C: Um, gabapentin-, not gabapentin, um.
- 59 PHARM: Pregabalin?
- 60 PCC-C: Yeah, pregab[alin.
- 61 PHARM: [Okay.
- 62 PCC-C: Thank you. (4.0) Um, cause he's taken it before and he says it makes him
63 wingy.
- 64 PHARM: Okay.

65 PCC-C: Was his words.

66 PHARM: There are probably other options [for him.

67 PCC-C: [That would be nice.

68 PHARM: I can have a chat with him.

69 PCC-C: That would be really nice. [Because he's at his wit's end.

70 PHARM: [Okay. ((consoling tone))

71 PCC-C: He's [in tears.

72 PHARM: [Yeah.

73 PCC-C: He was crying yesterd[ay.

74 PHARM: [Oh!

75 PCC-C: He's got four kids at home and this has been going on for almost a year.

76 PHARM: Yeah.

77 PCC-C: So, can you imagine?

78 PHARM: Yeah.

79 DIET: **Is he going to go for surgery? Or are they just sort of?**

80 PCC-C: Well, no. No. I don't know about any surgical option. (2.0). Um. I'll be
81 saying, "I don't know" a lot.

82 DIET: That's okay.

83 PCC-C: Yeah, I just (.) saw him yesterday because I had, my assignment was
84 right beside him?

85 PHARM: Yeah.

86 UC: (calls out next patient's name).

Targeted analysis

This case review is the first time that team discussion of Boyd occurs from a patient-centred perspective. It is worth noting that PCC-3 was not a usual member of the rotation of PCCs, but was instead a bedside nurse filling in for the day. (Earlier in this rounds, she explicitly asked for direction from UC on how to fulfill the role, and UC responded that she should give a "brief medical update.") In her overview, PCC-3 gives an account of a problem: Boyd knew from previous experience that a pain medication they were giving him made him "wingy" (line 51). This is the first time that the patient's own knowledgeability about his health concerns are represented and thus validated, but she then recounts that the action plan for addressing this problem is for the patient to

speak again with his admitting physician, which essentially dissociates everyone else from needing to get involved. In this overview, PCC-3 also marks a implied situational discrepancy: The patient has come to the hospital for care, but one of the caregivers (PCC-B in fact) suggested to him that he “get a second opinion. Maybe go elsewhere” because “we’re not doing anything for him” (lines 53-54, 56). (Ironically, none of this portrait was apparent in PCC-B’s representation of the situation during Tuesday’s or Wednesday’s rounds, although it may have been brought up on the Thursday, which I did not attend.)

PHARM interrupts this last line to make an information request that follows up on the medication problem (lines 55, 57), which is within her professional scope of practice. This information request triggers a collective sensemaking sequence: PHARM and PCC-C then collaboratively establish a repair that the medication was in fact different from the one PCC-C initially mentioned (lines 57-61), and PHARM then speaks as a pharmacy representative to say that there are other treatment options for the patient (line 66), which seems to attend to the situational discrepancy (a form of uncertainty) raised by PCC-C in the overview. PHARM then offers to intervene (line 68), and this marks the first time all week that I observed another professional during rounds take up the patient’s situation as a shared problem.

PCC-C gratefully accepts PHARM’s offer, reiterating her patient-centred perspective that Boyd is “at his wit’s end” (line 69). This portrayal is collaboratively produced through to line 78, with PHARM making affiliative utterances that align with the portrait that PCC-C paints of Mr. Boyd as suffering and worthy of compassion. PCC-C offers as “evidence” an account of the patient’s behaviour on the ward (“he’s in tears,” line 71, “he was crying yesterday,” line 73). This account is in stark contrast with the “evidence” that was produced by PCC-A on Monday, who underscored the patient’s non-compliant attitude and portrayed his suffering as his being a “miserable” and “nasty” man. Here, we glean insight into why he might be miserable: He is responsible for four children at home and has been dealing with mysterious and debilitating pain for over a year, which has without doubt interrupted his life in many ways. PCC-C explicitly invites the listening team members to empathize: “So can you imagine?” (line 77).

DIET then turns conversation to the “Now what?” question, asking, “Is he going for surgery? Or are they just sort of?” (line 79), and this in fact transports a story element told by PCC-A on Monday, namely that the patient came in the back door for surgery. In response, PCC-C proclaims her ignorance of this plan, explaining that she doesn’t “know about any surgical option” (line 80). She then positions herself as lacking knowledge (“I’ll be saying ‘I don’t know’ a lot,” lines 80-81), likely emphasizing her unfamiliarity with the PCC role. She also gives an account for why she was able to report on the patient: Her bedside nurse assignment the previous day was next to Mr. Boyd’s bed.

Partial discussion

This last comment is very revealing. It illustrates the lack of information sharing between charge nurses on this ward; I suspect that there was not a solidly established and consisted employed way of recording and sharing information amongst the nurses rotating through the PCC role. I further suspect that this lack destabilized the team’s collective sensemaking practice during rounds; certainly the nursing notes were invoked or relied upon very differently across the rotating PCCs, as I have discussed elsewhere. As for the perceived utility of interprofessional rounds themselves, we can tell from how the UC maintains a gatekeeping role throughout the case discussions (i.e., opening up and closing down case reviews), as well as from the UC’s overall dominant role in requesting information, that Integrate (and UC as its spokesperson) continued to be positioned as the audience to which PCC reports were accountable. This further demonstrates not only that the team needed “babysitting,” but that this ward had not appropriated for itself interprofessional rounds as a useful communication tool; it had not woven rounds into its web of communicative practices, and perhaps even that it was not terribly mindful or reflexive about developing this web.

The exception to this dynamic was when PCC-A was on rotation, in which case UC almost always ceded control of the conversational floor, a move that acknowledged PCC-A’s leadership role (PCC-A was the longest standing PCC on the ward), and also avoided conflict, even if this meant that the reports produced by PCC-A did not necessarily follow the script mandated by Integrate. Once again, this demonstrates a certain instability in their practice across the rotating PCCs.

This instability is evident in the changing nature of the discussions across the PCCs in this case alone, where the case review is first framed unsuccessfully as troubles talk, then in the next two case reviews is represented in very simplified form, and then in the final review is presented from the perspective of a patient-centred bedside nurse. We can see just in the lengths of the discussions that, compared to Intake, Intervention team's talk was much less rich, much less focused on the complexities of the case. There was little of the alignment and co-construction that we saw with the Intake team's discussions, save for the Friday review of Boyd's case. Overall, the story-porting was less frequent and less reliable, which meant the representations of the patient's case were far more simplified, especially on Tuesday and Wednesday. The team members did not seem to orient to the patient's situation as a shared problem for them to solve or at least address.

Had the team been more collectively focused on his situation, had they taken collective ownership of it, they might have brainstormed more actively earlier on for what they *could* do to alleviate his situation. Because PCC-A presented Boyd's case as a miserable, inconsiderate, and non-compliant patient on Monday, while trying to enlist SW's help, the team as a whole missed the opportunity to expand their thinking and more heterogeneously frame the problem as multifaceted. This requisite variety (Weick et al., 2005) was absent in PCC-A's representation, and perhaps consequently, team members spent more time resisting the troubles talk and, for instance, CCD did not offer to see what home care services were already in place and SW did not get involved to see what might be done to help out the family.

I would argue that much of the responsibility for this failure lies with the PCCs; their role as gatekeepers of interprofessional potentiality and of the conversational floor is probably heightened on teams with a shorter history of collaborating together. Indeed, here we saw precisely how variable the case reviews were according to who was the reporting PCC. If collective sensemaking work tends to follow the expression of uncertainty, and when the PCC represents the cases in overly simplified fashion, there is less occasion for uncertainty to be detected, expressed, and taken up.

8.4. Discussion

I began this chapter by considering the inherence of uncertainty to clinical work, and opened with the following quote:

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." (S. Gordon et al., 2012, p. location 1130, emphasis in original)

Indeed, alleviating uncertainty and overcoming hierarchical boundaries that can silence subordinates are the rationales behind initiatives to structure communication in health care practice, such as SBAR (e.g., Boaro et al., 2010; Kaiser Permanente of Colorado, 2011; Leonard, 2004; Mackintosh & Sandall, 2010) and SCRIPT (Office of Interprofessional Education, 2008; Reeves et al., 2007; Zwarenstein et al., 2007).¹³⁰ Others, such as Lingard's work on operating room checklists (Lingard et al., 2005, 2006; Whyte et al., 2007), are based on work on distributed cognition in the aviation industry. They aim to induce team talk into predictable patterns, as Gordon et al. (2012) describe above. However, in my study, the patterning of talk itself was not the root cause of stable practice; PCC-B on Intervention consistently and routinely produced the same kind of (idiosyncratic) case overview, including nursing-specific information such as vital signs that was not necessarily pertinent to other team members. Nor was its absence necessarily the root cause of instability; there was little routine evident in the overviews produced by PCCs on Intake, but the collective sensemaking work they produced was consistently knowledgeable.

Rather, as Weick et al. (2005) suggest, we ought to tease apart cognitive processes (their term) from action routines. What stabilized collective authoring practices across the rotating PCCs on Intake was collective mindfulness or heedfulness, especially an orientation and a sensitivity to expressions of uncertainty. Intake collectively paid close attention to the representations of the patient' situation as they

¹³⁰ Weick's (1995) basic assertion is that organization and organizing exist in society to reduce equivocality.

evolved over time, and they were able to carry previous representations forward in a collective and collaborative way, standing in for PCC stability. In addition, the PCCs on this team relied on other team members as co-authors.

What's more, they co-oriented not only to the task of authoring together, but they owned, or appropriated to themselves, *as a collective* the problems they were representing. This collective was rarely explicitly mentioned other than in first-person plural pronouns, but could be otherwise discerned in their co-orientation to problems. This is one way that a CCO perspective (remember the communicative constitution of organization?) can inform the interprofessional team literature. Teams, like other forms of organization, exist in and through communicative practice, and as Bencherki and Cooren (2011) point out, it is through the processes of attribution and appropriation that they take form.¹³¹ It is possible that one reason Intake's practice was so stable is that they routinely focused on problems as shared, as belonging to them all, so that when one member in their composition changed, this shared focus sustained sensemaking practice. Indeed, in the IP team literature, high functioning teams are often reported—and often self-report, for much of this literature is based on interview data—as sharing the same goals. What we have been able to see here is how this sharedness unfolds interactionally, how it manifests as shared *focus*, as *co-orientation*, and furthermore, we can better appreciate how this can only happen in communicative action, understood broadly.

Let's now return to Weick et al.'s (2005) proposition that reliability is to be found in stable sensemaking routines rather than stable action routines. The tricky part is that the action routines in patient case reviews and the shared cognitive processes are both produced communicatively and are both located in interaction. Even the very use of the term *cognitive* is somewhat problematic as it tends to emphasize individual knowing at the analytic expense of what is collective about practice.¹³² Hence, gleaning from the pages of analysis offered here, I propose a site for looking at team practice, stable or

¹³¹ Specifically, Bencherki and Cooren (2011) look at how organizations are given (or take) the status of agentic actors through the processes of attribution and appropriation/exappropriation inherent to the act of speaking for or representing the organization. I am taking the liberty here to play somewhat with their idea.

¹³² Indeed, from my limited reading on transactive memory systems, this individual understanding of cognition certainly tends to apply.

otherwise, where we can observe that elusive collective aspect: Namely, responses to expressions of uncertainty. They were indeed the trigger for collective sensemaking sequences, as we saw in the second half of this chapter. (I will add flesh to this suggestion in the concluding chapter by elaborating a model of interprofessional sensemaking in patient case reviews.)

If we can locate interprofessional team practice in responses to uncertainty, it follows that there must be a broader web of communicative practices that is attuned to detecting anomalies, a web embedded in the environment that extends beyond the context of rounds. This web includes the sociomaterial supports like nursing notes, Kardexes, patient charts, computer systems, and so on. And by extension, this extended web is also where interprofessional practice—understood as collective sensemaking—can be located. Its importance was felt through its absence on the Intervention team. We saw how PCC-B's almost exclusive reliance on her nursing notes in producing report resulted in relatively shallow and simplified representations of the situation, perhaps because insufficient information was to be found in the notes. Conversely, we also saw how PCC-A did not seem to rely at all on the notes in producing the troubles-telling invective on Monday's rounds. Indeed, interviews with the PCCs revealed differing attitudes about the usefulness of written documentation, with one PCC saying:

"Some of the girls write so much! But I don't tend to. I'll write down what I think is important, but I don't tend to get overly detailed about it."

This reported inconsistency suggests that the web of communicative practices on the ward was woven heedlessly, inconsistently, without reflexive nurturing. Indeed, with regard to communicating across professional boundaries, one PCC on the Intervention team said:

"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."

This reveals a culture on the Intervention team that was influenced by time pressures and by hierarchical power differences, and this may have affected communicative action. Subsequently, the expression of uncertainty seems to have been discouraged. If the expression of uncertainty was actively discouraged, and if documentation practices were

patchy, it is no surprise then that interprofessional sensemaking in rounds was disabled. The necessary detective work would not be able to pick up uncertainties, let alone carry them forward. This means that if we are aiming to structure communicative practices, as Integrate was doubtlessly trying to do, we must not only focus on the context of rounds, but also take into account the broader web of communicative practices, and importantly, to pay attention to those practices focused on detection. To paraphrase Weick et al. (2005), reliability emerges when you focus on stabilizing the sensemaking routines and allow for variation in the action routines.

9. Putting it all into Practice: Discussion and Conclusion

“Talk” is the glue that holds collaborative healthcare together. (Lingard, Garwood, Schryer, & Spafford, 2003, p. 605)

The overarching goal of this ethnographic study has been to theoretically and empirically demonstrate how communication is at the heart of interprofessional collaborative practice (ICP), and in so doing, to characterize the processual aspects of that practice. Responding to Reeves’ and others’ (Reeves & Hean, 2013; Reeves, 2010a, 2010b) call to problematize the underlying assumptions and premises of interprofessional scholarship, this study has sought to refine and expand the common understanding in the IP literature of communication as information transmission, arguing instead for a view of communication as social action, which sees ICP as shaped and constituted by communicative practices.

By taking seriously the term *practice* in ICP and looking through a practice lens (Orlikowski, 2000), this research project makes a theoretical contribution to IP scholarship by applying concepts from organization theory, in particular Weick’s notion of sensemaking (Weick et al., 2005; Weick, 1979, 1993, 1995), and from the Montreal School’s approach to organizational communication, discourse, and interaction (e.g., Brummans, 2006; Cooren et al., 2006; Cooren, 2000; Taylor et al., 1996; Taylor & Robichaud, 2004; Taylor & Van Every, 2000). Through this characterization of the collective aspect of ICP as shared sensemaking, I suggested the following definition, modified from Gilbert (2013): *Interprofessional collaborative practice is a process of communication for decision making that enables the separate and shared knowledge and skills of different care providers to synergistically influence care.*

The empirical example brought to life in this research was the patient case review and its collective accomplishment in interprofessional team rounds. The study relied on six months of ethnographic observations of three teams' daily rounds at an acute care teaching hospital in Western Canada. These observations led to an understanding of the patient case review as a shared sensemaking practice, which is to say the collective and communicative construction of understanding and meaning in the face of equivocality and uncertainty.

Before turning to a discussion of the contributions this study has to make to theory and practice, its limitations, and thoughts about future directions, I will provide a brief summary of the main points made across the chapters.

9.1. Taking stock

9.1.1. *Theoretical scaffolding*

A variety of theoretical perspectives were mobilized to create what I called a kaleidoscopic theoretical scaffolding. Opie's work (1997a, 2000) explained that the interprofessional collaborative practice of the patient case review consists of goal-oriented, discursive knowledge work. In order to consider the collective and synergistic aspects of this work, I adopted a practice lens (Orlikowski, 2000) and outlined an ethnomethodological and discursive orientation within a broader socio-material approach to constructivism (Nicolini, 2013). The question of knowledge was framed as knowing-in-practice (Orlikowski, 2002) to highlight how knowledge is always social, situated and enacted in practice. In other words, it is a resource for action. Knowledge, especially when considered as *organizational* knowledge, is heterogeneous (Heaton & Taylor, 2002), distributed or stretched across many actors (Hutchins & Klausen, 1998; Star, 1998), both human and nonhuman. This conceptualization is particularly important for ICP because the practice of doing the patient case review is where these heterogeneous knowledges or perspectives intersect and are enacted.

Indeed, it is in and through communication that that the various elements of the practice are ordered (Bruni et al., 2007), where they are put in relation to one another through routine and sometimes scripted ways of making sense of the patient's situation.

Communication is how and where identities, roles, perspectives and so on are incarnated, performed, and made relevant. Consequently, in this study, the metaphor of communication as message transmission was elaborated by a conception of communication as constitutive social action, to emphasize its organizing properties (Cooren, 2000) and its role in constituting organizational forms and phenomena.

One related perspective that was suggested as being particularly resonant for ICP is the notion of communication as co-orientation, where interactants orient both to each other and to the object at hand, where that object is understood to be “the practical world of joint activities” (Taylor & Robichaud, 2004, p. 401). Taylor and Van Every’s (2000) A-B-X triad of communicative co-orientation was modified to demonstrate what (in part) an interprofessional performance entails:

$$\begin{aligned} A \rightarrow Xf(A) \\ A \rightarrow Xf(B) \\ A \rightarrow Xf(C) \\ \dots \text{etc.}, \end{aligned}$$

where A, B, and C stand for professional representatives, and X is the topic at hand, and A takes into account what X means to (i.e., its function with regard to) different professional perspectives. These simplified equations illustrate how, in their interactions in team rounds, the various professionals on the team must demonstrate their understanding of the scopes of other practices, and they do so when they are figuring out (i.e., making sense of) the patient’s situation and what to do about it.

As they make sense of the patient’s situation, the team members can collectively author and thus define the salient points for consideration, what we can think of as problem setting (Kuhn & Jackson, 2008; Weick, 1995). This in turn highlights the teams’ continual task of reducing and refining uncertainty, which stems from the fundamental tension in the hospital context between recurrent ambiguity and the need to coordinate actions (e.g., Gentil, 2013; Strauss, 1993). The empirical example of Beatrice Herschen’s case review (“There’s something on her neck, I betcha”) showed how this sensemaking practice is collectively accomplished.

9.1.2. *The abbreviated data story*

The tension between uncertainty and the need to coordinate action emerged in my data analysis, most notably revealed in the importance of introductions to patient case reviews for subsequent collective sensemaking. Discussion to make sense of the patient's situation was most often triggered by the expression of uncertainty by the PCC or someone else during the introduction. More generally, the introductions themselves were sensemaking resources that framed and circumscribed the salient issues regarding each patient's case, what some refer to as sensegiving (Cornelissen et al., 2012; Gioia & Chittipeddi, 1991). These introductions narratively emplot the patient's current, past, and anticipated future on the patient care trajectory (Strauss, 1993), which is a guiding conceptual object to which all team members orient in order to understand the patient's situation and others' interventions as well as to articulate their own contributions to care.

The three teams in the study—Intake, Intervention, and Short-stay GIM—were selected for inclusion by representatives of what I've called the Integrate program. Integrate sought to increase organizational efficiency, in part by structuring talk during daily interdisciplinary team rounds around three broad categories or domains of concern: the patient's medical status and goal, his or her functional and social status and goal, and any concerns related to discharge, which implicitly made present (or presentified, in Montreal School terminology) the patient care trajectory. In this way, the Integrate program provided a template or script of goal-oriented questions intended to organize teams' collective thinking about the patient with regard to each domain, addressing the questions "What is going on?" and "Now what?" (Blatt et al., 2006; Weick et al., 2005) and in this way linking their sensemaking to action.

Chapter 4 described the three teams' communicative and sensemaking practices, comparing and contrasting similarities and differences, which in turn informed the analysis chapters. In a broad sense, one important difference across the teams was the scope of their focus with regard to the patient care trajectory (See Figure 9.1).

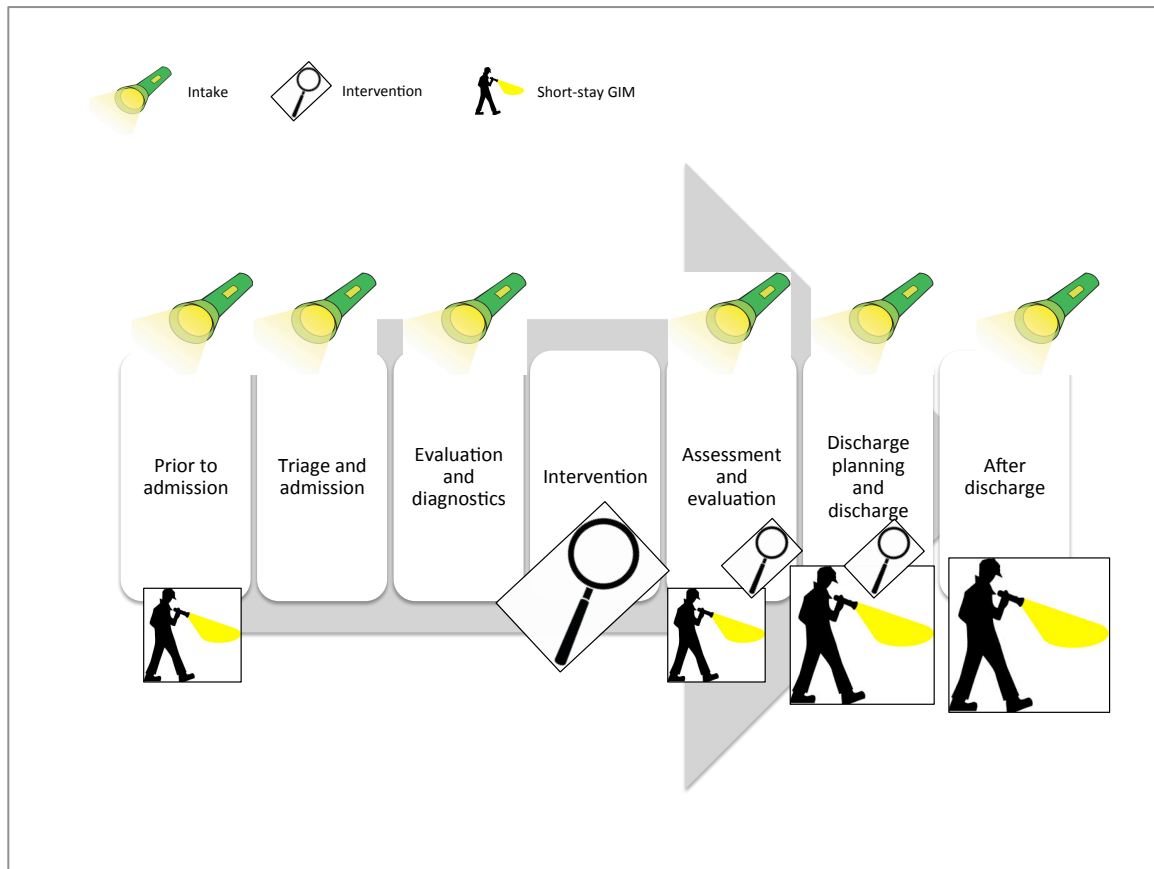


Figure 9.1. Patient care trajectory and team focus

The Intake team had perhaps the broadest view and maintained several foci: Its members looked upstream to figure out why the patient had presented at the hospital, defined the current situation by way of diagnostic tests carried out and so forth, and turned their gaze downstream to anticipate future contingencies, including where the patient might be sent next as well as considerations for eventual discharge. In this way, their sensemaking focus covered more parts of the organization as a whole than did that of the other teams. For instance, the Intervention team seemed myopically focused on the primarily medical aspects of the intervention, largely excluding upstream and downstream (i.e., off the Intervention ward) concerns in their sensemaking. Finally, the Short-stay GIM team was most focused on downstream considerations, and their focus most frequently extended beyond the immediate organizational context.

An exploration of the variations in the teams' communicative sensemaking practices and the format of their rounds ultimately developed into three general lines of

questioning that informed the three analysis chapters. The first is the question of thinking together or collective mind, discernable in displayed heedfulness: How mindful were the teams of the heterogeneous expertise represented by the different members of the team? Second, the question of power and medical dominance in collaborative practice was approached by reframing the question as one of authorship. Finally, considerations of entativity and process were interwoven in an examination of potential stabilizers of practice in the face of shifting team membership. I will succinctly provide a synopsis of the main findings for each.

Heedful interrelating

The modified A-B-X triad above represents Opie's (2000) claim that active cognizance of and engagement with difference are conditions for effective interprofessional care. I recast this notion of engagement in Weick's terminology as collective mindfulness, which is present in heedful interrelating (Weick & Roberts, 1993; Weick et al., 1999). Informed by Cooren's (2004b) elaboration of Weick and Roberts' C-R-S model, I characterized an interprofessional performance as one in which team members *subordinate* their *contributions* to the collective they jointly make present and *represent* in their talk during patient case reviews. In other words, they demonstrate their awareness of how all the different professional pieces fit together in the care trajectory, signalling their understanding of the salience of various aspects of the patient's situation to the different professionals around the table, and in so doing, they implicitly reference the larger organizational efforts needed in caring for this patient.

Two overviews to patient case reviews were analyzed—one heedful and one impoverished—to empirically illustrate the interactional mechanisms by which the teams collectively make sense of the patient's situation. This revealed the importance of introductions (also referred to as overviews) to case reviews as framing resources. Framing is a communicative practice that is consequential (Sigman, 1995) both to how sensemaking unfolds in the interactional setting of rounds, and also to the subsequent interventions that must be coordinated and articulated (Corbin & Strauss, 1993; Strauss, 1993).

It also revealed the important role of the facilitating PCC as a gatekeeper of interprofessional potentiality. We saw how framing can be done more or less heedfully

with regard to how heterogeneously it envisages and signals the relevant scopes of expertise. Indeed, given the framing-interpellation dynamic in problem setting that is accomplished during the overview, the PCC's role is primordial to collective sensemaking. This suggests that in IPE and IPC interventions and research, we ought to shift our attention away from the problem of shared frames and mental schemas and opt instead to focus on *framing practices* (Brummans et al., 2008).

Differences in framing, perspective, and collective attention across the three teams were explored in the diachronic example of the blind Mr. Sells who came in to the hospital with abdominal pain and ended up with a colostomy a week later. The first notable variation was their collective attention to uncertainty, ambiguity, and the non-routine. Only on Intake and Short-stay GIM was mention of his "white cane" and legal blindness taken up as worthy of discussion, despite the fact that his blindness was eventually a complicating factor in his care. Another variation was found in how collectively or not they authored the patient's situation in rounds discussions: Once again, on Intake and Short-stay GIM many team members made contributions to authoring the patient's story (Opie, 1997a), whereas on Intervention, discussion was much more limited, which was surprising given the complexity of his case (certainly, Short-Stay GIM seemed to think his case was rather wicked). Finally, this analysis revealed a difference in general perspective that influenced how the patient's situation was framed. On Intervention, a reductionist, biomedical perspective reigned ("tubes in and tubes out") whereas Short-stay GIM showed much more patient-centredness by reflecting on the reality of a blind person living with a colostomy. These variations reveal differences in collective minding (Cooren, 2004b), or what Weick would call dispositions to heed (Weick & Roberts, 1993).

Authority and power

Shifting gears, the analytical chapter on power examined the question of medical dominance in relation to the ideal of clinical democracy (Bourgeault & Mulvale, 2006; D. Long et al., 2006), reframing it as a question of authority, authorship, and problem-setting, where authority has to do with establishing "what counts." The notion of power was recast as precedence, following Taylor and Van Every (2000), and the example of the Short-Stay GIM team's modification of rounds was presented to examine how precedence plays out in collective sensemaking. What was found to be at stake at the

interactional level regarding authority and authorship had to do with the intended audience of team member accounts, the type of sensemaking work being accomplished, and access to the conversational floor.

When the Short-Stay GIM team changed the format and location of its rounds to include the bedside nurses (BN), hospitalists (MD), and senior medical residents (CTU), there was a shift in who was designed as the intended audience of accounts, particularly with regard to the PCC's accounts and the core team of allied health professionals. Through details such as the decrease in number and richness of orienting details in the case overviews, we saw that the core team made of largely allied health members were shifted to the position of overhearing audience, while the PCC and sometimes the MD and CTU were positioned as recipients of the BNs' accounts. As mentioned previously, this move nudged the other team members out of the circle of precedence (or what "counts most" in the interactional situation).

Precedence was also enacted through the sequence of case review presentations: When MDs and CTUs were not present, it was the cognitive artifact of the printed patient list (Grosjean & Lacoste, 1998) that organized discussion, but when doctors were present, this organization of talk was disrupted to cover the patients under the doctors' purview. This change in sequence also affected the other care work of the lower status BNs, who were sometimes doubly summoned to rounds to discuss the same patient twice. In fact, the presence of MDs and CTUs changed the situation of rounds to the point that the patient case reviews of "their" patients were of significantly longer average duration than those that were not, another trace of precedence.

In addition, we saw that the kind of work that got done was influenced by the presence of a medical representative. Put plainly, when doctors were present, sensemaking was focused not only on collectively describing what was going on (i.e., what the patient's story was to date), but also on collaboratively planning subsequent actions, which Weick et al. (2005) describe as answering the "Now what?" question. While this likely responded to Integrate's organizational mandate of moving action forward down the patients' care trajectories, the irony was that MDs were not accountable for their presence or performance at these team rounds, which signals how precedence interpenetrates the interactional and the organizational.

This enactment of hierarchy could also be viewed in terms of authorship and authoring through the PCC's control of the conversational floor, both through gatekeeping of openings and closings, *except* when an MD was present, and through the production of case overviews that framed and directed subsequent sensemaking. It was also evident in who managed to define the agenda and the patient's situation, largely through the use of questions.

Finally, a lengthy patient case review was presented and analyzed to examine how precedence and authority were enacted in the question of Mr. Bolshi's mysterious weight gain. In this extract, we saw the team negotiate to define the salient matters of concern, and authority was enacted through the use of questions and sanctions. This suggested a certain hierarchy of accounts was at play, emerging through their collaborative sensemaking work: The physician's firsthand opinion had precedence over the bedside nurse's firsthand observation, which in turn had precedence over the PCC-and-the-notes. Through this enacted and emergent hierarchy of accounts, we can find evidence of medical dominance in this collaborative interprofessional practice.

Overall, what this analysis demonstrated was that we don't need to leave the terra firma of interaction (Ashcraft et al., 2009) to find structural factors that explain the persistence of medical dominance; it is enacted and embodied and thus made present in the sensemaking work of the team.

Stability and stabilizers of practice

The chapter on the stabilizers of practice was ultimately concerned with the inherent tension in the hospital context between the pervasive presence of the unexpected and the organizational push for routinized procedures for communication and coordination (Gentil, 2013; S. Gordon et al., 2012). The implicit question asked was: How can collective sensemaking practice be supported in the face of continual change? The specific change examined was rotation in team membership, namely the facilitating charge nurses, or PCCs, and how teams compensated or not for this change. The cases of the Intake and Intervention teams were compared, both through a quantitative snapshot of the "who, what, when, and where" particulars of their sensemaking practices in rounds and through a processually focused examination of a diachronic, complex

case from each team that aimed at illuminating the “how and why” of (in)stability in their shared practice.

The snapshot revealed that the Intake team had more stable interprofessional practice than did Intervention, despite having more frequent rotation in PCCs and a faster patient turnover, both of which would imply a greater sensemaking burden on the ward’s PCCs. This portrait found that on Intake, there was more complex discussion, involving greater multivocality, higher frequency and uptake of expressions of uncertainty, and more topical richness, and perhaps subsequently, a greater focus on action planning. Comparatively, on Intervention, talk was produced with the UC (Integrate’s representative) as the intended audience rather than the listening team members, and as such, many of the other voices on the team remained largely silent.

There was more organizational memory apparent on Intake, through what I dubbed “story-porting,” which refers to the presentification (i.e., the making present in interaction) of traces from previous episodes of collective sensemaking. This higher frequency of story-porting echoed the greater multivocality on Intake, and suggested that there were more authors—including the nursing notes—to compensate for the rotating PCCs. Finally, the focus, temporally and topically, was broader on Intake with its gaze both upstream and downstream on the care trajectory, than on Intervention, which remained myopically focused on the intervention episode and medical/surgical matters of concern.

The examination of the two diachronic cases revealed processual differences that the quantitative snapshot could not account for. With the case of incompetent Mr. Baker on Intake, we saw the team maintain the richness and complexity of their sensemaking across the rotation of the PCCs, especially through their story-porting representations of the evolving situation. SW played a key role in raising the complexities of the problem that the team faced. More importantly, the ultimate definition of the problem(s) was collectively negotiated and accomplished.

In contrast, the case of paraplegic Mr. Boyd on Intervention was much less consistent in its focus and its accomplishment across the four days when he was discussed. In fact, on the first day, the situation of rounds itself became the subject of an implicit conflict: Was their main function to provide a space for troubles telling and

blowing off steam, or was primacy to be placed on information sharing and action planning? (This conflict also underscored differences in the perceived utility of rounds.) The treatment of Mr. Boyd varied greatly across the rotating PCCs, in the first place as a source of trouble, in the second as an abstracted body to be monitored, and in the third as a patient-as-person whose lifeworld experience was invoked to elicit compassion and cooperation from the other team members. This variety indicated another key difference across the two teams: the extent to which they appropriated the problems in patient care as *shared* problems.

Three key “lessons” can be gleaned from this analysis of stability that will provide a springboard for the potential contributions of this research project (and they are interwoven with the points made in the other two analysis chapters). First, Intake’s practice was not stabilized by the standardized action routines in rounds talk (which the Integrate script might have been attempting to achieve), but rather by the team’s consistent and collective attentiveness and vigilance to expressed uncertainty, although this attention may have been focused by Integrate’s script. The richness of this team’s discussions demonstrated an ongoing and knowledgeable mindfulness of each patient’s evolving situation, evident especially in their collective co-orientation to these changing details.

Second, while the political aim of clinical democracy might be a more equal division of the “power pie” across the professions, when clinical democracy is understood as multivocality and as free and fluid access to the conversational floor, we can see how it has the potential to make a difference to the continuity of patient care, or at least to the continuity of the story being constructed about the patient. Indeed, this is how the non-PCC, story-porting team members were able to stabilize practice and compensate for PCC rotation.

Thirdly, the communicative sensemaking practice of the patient case review in team rounds—what I qualified as interprofessional collaborative practice (ICP) in Chapter 2—is anchored and embedded within a wider web of communicative practices, which very importantly includes sociomaterial supports. This means that it is not enough to focus on a single IP intervention; consideration must also be given to upstream and

downstream practices, such as how PCCs share and record information amongst themselves.¹³³

I would like to turn now to a consideration of the potential contributions of this study. I begin with its contribution to theory and scholarship and then focus on how this research project might be “operationalized” or instrumentalized to enhance interprofessional practice and education.

9.2. Potential contributions

IP scholarship

Taking the pulse of the IP literature revealed a developing field that is seeking to establish its legitimacy, eager to theoretically problematize its assumptions, and especially keen to operationalize (i.e., quantify and test) these assumptions in order to demonstrate the effectiveness and impact of interprofessional collaborative practice. The present study makes a three-fold contribution to this field of scholarship.

First, it problematizes the notion of communication, importing theoretical perspectives from organizational communication to show communication’s constitutive properties as social action. Importantly, the study demonstrated what this perspective offers in terms of understanding how collective action and shared knowledgeable practice get accomplished. Indeed, communication serves as the site and surface (Taylor & Van Every, 2000) of the collective awareness, or interactive consciousness (Gustavsson, 2001, cited in Boreham, 2010), that allows for heedful interrelating and articulation work. This is at the heart of collective competence (Boreham, 2007; Lingard, 2013).

Secondly, this ethnography offers an empirical window that shines light onto “what actually happens in practice” (Buljac-Samardzic et al., 2010; Lemieux-Charles & McGuire, 2006), thereby answering the call for IP research that focuses on empirical

¹³³ D’Amour’s structural approach to interprofessional practice and education (D’Amour, Sicotte, & Lévy, 1999; D’Amour & Sicotte, 1997) suggests this, but does not consider communication as the means by which IP is accomplished.

observations of behavioural processes in ICP (Careau et al., 2014). This provides a counterbalance to the preponderance of studies that consider self-reported team member attitudes and perceptions through surveys and interviews (Valentine et al., 2013).

Furthermore, this ethnography's attention to the fine-grained details of interaction revealed dynamics of which the team members themselves were likely not explicitly aware, although they might still speak knowledgeably about their communication practices. Indeed, most of us already have ways of thinking and talking about our communication, and therefore we might find the conceptual nomenclature of conversation and discourse analysis to be stilted, cumbersome, or contrived. However, these approaches nonetheless provide us a meta-discourse about our discursive practices (Craig, 1999), and as such are valuable. For example, we saw how heedfulness and collective minding were accomplished through the actions of alignment and co-construction of utterances; when we are engaged in the act of speaking to one another, we don't usually pay explicit attention to these actions.

Thirdly, bringing the two prior aspects together, this study provides a specific location where we can look for and potentially evaluate interprofessional collaborative practice: the handling of uncertainty during interprofessional patient case reviews. This resonates with Drinka and Clark's (2000) assertion that an interdisciplinary team ought to be appraised based on how it treats wicked problems. To this end, I propose the following conceptual model of interprofessional sensemaking in patient case reviews (See Figure 9.2).

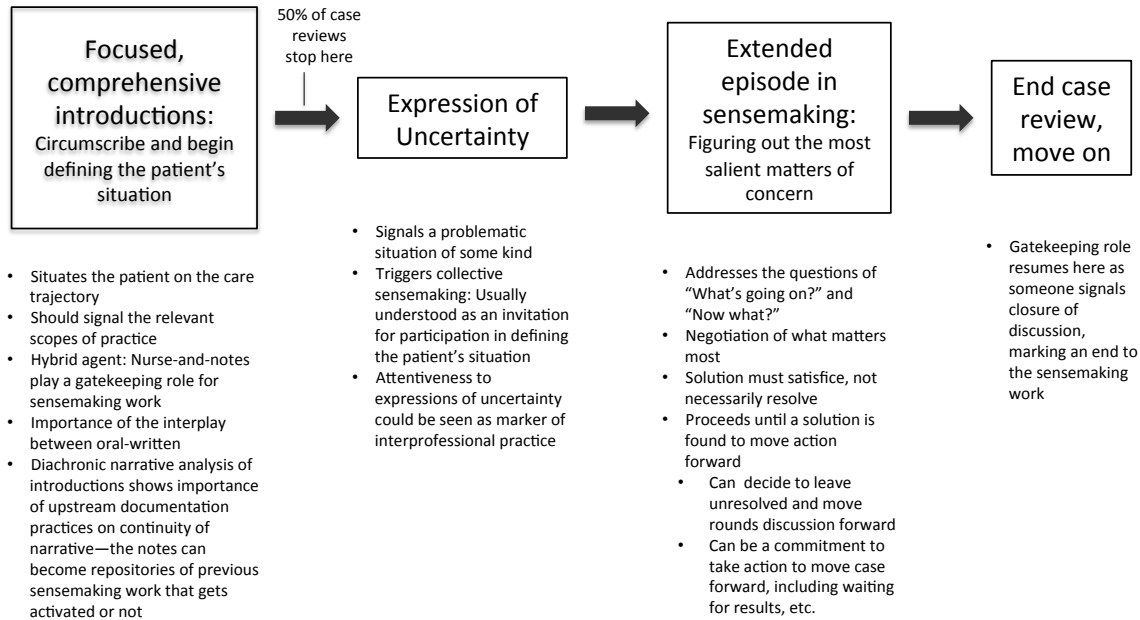


Figure 9.2. Model of interprofessional sensemaking in hospital rounds patient case reviews

This model gives an overview of the *process* by which patient case reviews typically unfold. It serves as a prototype into which most case reviews can fit, and as such offers a frame by which to explore variations of this practice (for instance, on the Short-stay GIM team, we saw how focused and comprehensive introductions became less comprehensive when MDs were present). It emphasizes how collective sensemaking is triggered by the expression of uncertainty. This could be the basis in future studies for creating typologies of interprofessional sensemaking for decisional purposes.

This model also underscores the importance of sociomaterial supports in this collective practice. As mentioned previously, the practice of the interprofessional patient case review is embedded and anchored in a broader web of communicative practices. This model provides a site for examining the intersections of the case review with other practices, such as the influence of upstream nursing documentary practices on the way that cases are introduced during rounds, and conversely how the sensemaking work accomplished therein gets transported to or re-documented for other contexts.

IP practice and pedagogy

The model can also sensitize researchers, managers, and practitioners to the importance of fostering participatory safety on teams (Jones & Jones, 2011) with regard to speaking up and raising questions in the face of uncertainty and ambiguity, thus adding to the inroads already made in health care by the application of models of crew resource management (e.g., S. Gordon et al., 2012; Leonard, 2004; Reeves, Kitto, & Masiello, 2013).

Indeed, rituals and routines can stabilize sensemaking, making them predictable, like a checklist (see Lingard et al., 2005), but this study shows that a double focus is needed (looking for what's expected and for what might be missed). This is in line with Gentil's (2013) recommendation that, in the context of the rationalization of medicine, health care organizations should focus on "proceduralizing" action (such as the Integrate script) to *fostering resilience* rather than only to *anticipating contingencies* (Christianson & Sutcliffe, 2008; Hollnagel, Journé, & Laroche, 2009). This change in focus, she claims, would support the communicative activity that is at the heart of risk management at the local level (Gentil, 2013, p. 66, my translation). In other words, the communicative "script" should aim to hone collective attentiveness to anomalies within the routine, rather than focus solely on a compliant performance of the script itself (Weick et al., 2005).

The model can also be applied as a pedagogical tool, both for current practitioners and for students in the health care professions. It draws our attention to several points that are important to practice, in addition to the aforementioned highlighting of expressions of uncertainty and of sociomaterial supports. First is the pivotal role of the gatekeeping and coordinating charge nurse (or PCC) to interprofessional potentiality. It is through the PCC's framing in introductions that listening team members can make sense of the patient's situation vis-à-vis the patient care trajectory and interpret whether and how the case "speaks to" them. Consequently, nurses who move into these roles could receive "framing training." This could entail coaching about how to interpret and parse the nursing notes for the listening team members as well as a review of the scopes of practice of the professional representatives on the team to reinforce the nurses' understanding of matters of salience to each. It could also include leadership communication techniques to foster participative

safety, such as the simple action of acknowledging receipt of information. This training could also highlight the function of expressions of uncertainty in case reviews, if only to foster reflective practice (Schön, 1983).

Secondly, because the model describes a collective *process*, it can be useful for teaching students in the health care professions *how to collaboratively accomplish* the patient case review. It visually points out the significance of speaking up and expressing uncertainty for collective problem solving, as well as the necessity of having a general understanding of other scopes of practice. It could be used as a framework for situational learning, where student teams are required to collaboratively enact the patient case review for a variety of scenarios. Indeed, the interprofessional patient case review could be singled out as a core skill or competency for health care practitioners.

Beyond this model, with regard to organizational change interventions such as the Integrate program, this ethnography suggests that intervention designers and evaluators consider the fit of the intervention's mandate with the perspective and preoccupation of the local context. Certainly, the lack of buy-in for Integrate rounds on the Intervention team was related to resistance at the managerial level, but this resistance had to do with the Intervention team's myopic focus on *ward-level* concerns. The Integrate program had *organizational* aims at boosting efficiency, but we saw in the analysis that the Intervention team tended to focus on immediate biomedical concerns, and consequently largely failed to project downstream to discharge concerns and ignored functional aspects outside the scope of the immediate timeframe (recall the blind patient with the colostomy). While further development along this line is outside the scope of this research project, there is likely much to be gleaned here from the organizational change literature.

One final consideration has to do with the institutional entrenchment of medical dominance. As others have pointed out, the hospital context is characterized by a dual hierarchy (management and medicine) or a "matrix of accountabilities" (Greenwell, 1995) wherein doctors are not necessarily employees of the hospital but rather serve as independent consultants who are not governed by the hospital organization. We saw this play out on the Short-stay GIM team's rounds, where MD presence actually focused team sensemaking on care action planning and as such probably aligned with

Integrate's goals of boosting organizational efficiency, but MD participation was voluntary rather than mandatory.

Certainly, given this dual hierarchy and the entrenchment of medical dominance, this study is unlikely to incite major changes, but it does point to some practical suggestions. First, regarding interventions such as Integrate, it would be wise to encourage MD involvement throughout the intervention process, from conception to planning to implementation and assessment. This could be one way to build bridges across the matrix, and start to change the culture within the organization. Secondly, more effort needs to be put into training medical residents in interprofessional collaborative practice. From their reluctant and sporadic participation, it was clear that the CTUs observed in this study only attended rounds when their senior supervisors required them to do so. Collaborative approaches to care need to be more firmly embedded throughout the socialization process of doctors, beginning early in their studies. Once again, this is outside the scope of the current study.

9.3. Limitations

Although I have laboured on this research study for many years, I freely acknowledge it has several limitations. The first was hinted at in the chapter on methodology. This work remains my interpretation, based on a somewhat idiosyncratic mix of theoretical perspectives and observations in the field, and another researcher would likely have written a very different story. As an interpretive work in the social constructionist ethnographic tradition, it thus fails to answer to the third aspiration discernable in the burgeoning field of IP research, namely operationalization, understood as quantification and hypothesis-testing. It likewise lacks in decontextualized generalizations that can be transported and tested elsewhere. However, I have worked to point out that there was still a valid contribution to be made, and the model presented above *can* be used and modified in other settings, especially for pedagogical purposes. Similarly, the processes of interprofessional sensemaking that I detail can likely be understood in a variety of practice contexts.

Returning to the question of hypotheses, it was admittedly never my aim to test a hypothesis, but rather to shed light on the communicative processes of interprofessional

practice. Furthermore, communication is notoriously difficult to test, once you step outside of a simple transmission model. In fact, Careau et al. (2014) write about the difficulty of scoring communication items in their development of a tool for assessing interprofessional collaboration:

It was hard for an observer who does not have intimate knowledge of the clinical unit's mandate and client's situation to judge these aspects. (...) Furthermore, communication is a multidimensional concept itself, which is not easy to assess with only a few items. (p. 15)

Their difficulty stems from the fact that communication is contextually dependent, both locally situated and locally produced. The division of my analytical chapters into quantitative snapshots and in-depth interaction analysis was how I tried to address this issue.

A different critique that could be levelled at this work has to do with its perspective, or rather its lack of critical perspective. Certainly the vein of discourse analysis in which it sits is minimally informed by the critical discourse analysis (CDA) work of Fairclough (1995, 1999), Foucault (1989; 1980), or Habermas (1987), or even critical organizational communication scholars such as Deetz and Mumby (1990). It remains more politically neutral in the tradition of ethnomethodology and conversation analysis, and some would argue that it thus prioritizes questions of "how" practice happens in certain ways instead of "why". However, I would retort that we must first understand *how* before we can tackle *why*, and future research could take up the model outlined here and apply a more critical lens. (Without doubt, a feminist lens would bring much to bear on the power relations at play given the predominance of women in the non-medical professions.)

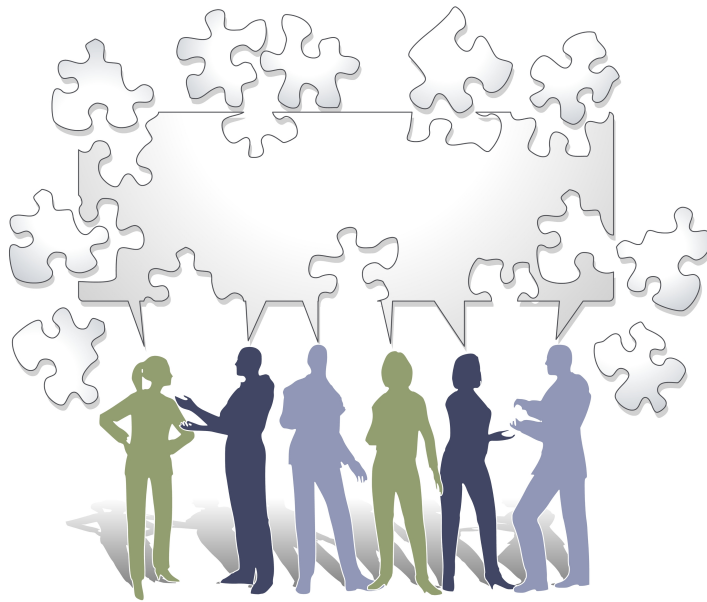
Another way to think of a study's limitations is to think of what one would have done differently, given the wisdom of hindsight. Personally, I would have liked to "follow the artifacts" more, as Latour (2005) would put it. I would have pushed for permission to see the nursing documents, and I would have tried for the richness of video data capture, which would have revealed such things as gaze and interaction with sociomaterial supports. These are lessons I will mobilize in the future, starting with my postdoctoral research project into nursing documentation practices. Nevertheless, no

data method or object of analysis can ever tell the full story, and the researcher's goal must be to tell the best story possible with the data collected, and that is what I have aimed to do.

9.4. Closing words

In lieu of conclusion—for I certainly hope this will not be the last word I have to say on this topic—and instead of reiterating the future directions discussed throughout this chapter, I would instead like close with a visual representation of my conception of interprofessional collaborative practice and a quote from Bakhtin (1984).

Truth is not born nor is it to be found inside the head of an individual person, it is born between people collectively searching for truth, in the process of their dialogic interaction" (p. 110)



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Appendices

Appendix A

Structured observations sample

Appendix B

Consent form



SUBJECT INFORMATION AND CONSENT FORM

Study of Communication on Interdisciplinary Health Care Teams

Principal Investigator: Kitty Corbett, PhD, MPH
Faculty of Health Sciences
Simon Fraser University
[REDACTED]

APPROVED
By FHA Research Ethics Board on August 31, 2009

Research Site(s): iCare teams at the Royal Columbian Hospital

(Optional) Co-Investigator(s): Stephanie Fox, PhD candidate
School of Communication
Simon Fraser University
[REDACTED]

INTRODUCTION

You are being invited to take part in this research study because of your membership on an interdisciplinary or interprofessional (sometimes called multidisciplinary) health care team(s). This study investigates the communication and interaction dynamics on interdisciplinary health care teams.

YOUR PARTICIPATION IS VOLUNTARY

Your participation is entirely voluntary, so it is up to you to decide whether or not to take part in this study. Before you decide, it is important for you to understand what the research involves. This consent form will tell you about the study, why the research is being done, what will happen to you during the study and the possible benefits, risks and discomforts.

If you wish to participate, you will be asked to sign this form. If you do decide to take part in this study, you are still free to withdraw at any time and without giving any reasons for your decision.

If you do not wish to participate, you do not have to provide any reason for your decision not to participate.

Your employer, the Royal Columbian Hospital of the Fraser Health Authority, and specifically, the management of the iCare team initiative, has granted permission for this study to be conducted.

Please take time to read the following information carefully and to discuss it with your family, colleagues, and friends before you decide.

WHO IS CONDUCTING THE STUDY?

This study is being conducted by Kitty Corbett, supervisor of co-investigator, Stephanie Fox, as part of Stephanie Fox's doctoral degree completion requirements. Stephanie Fox has received funding for her Ph.D. studies by the Social Sciences and Humanities Research Council of Canada (#767-2005-1910).

BACKGROUND

Good communication is often cited as a necessity for collaboration on interdisciplinary health care teams. Communication breakdowns or failures are also often listed as one of the main causes of medical error and adverse events. However, there have been very few observational studies to date on *the nature of*

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communication and interaction between members of interdisciplinary health care teams. Communication is often taken as a given, or as too complex for explanation, or simply as another one of the processes that make up teamwork. This study considers communication as central to any team's ability or inability to function.

WHAT IS THE PURPOSE OF THE STUDY?

The purpose of this study is to learn more about the communication and interaction dynamics on interdisciplinary health care teams, in particular, to identify, if possible, what helps and what hinders successful communication by examining patterns of talk. It is also intended to help better explain the experience of interdisciplinary collaboration for the members of teams.

WHO CAN PARTICIPATE IN THE STUDY?

Members of a health care team that integrates care providers with diverse disciplinary or professional training who work together as an identified unit or system in the same physical setting. The members of the team work collaboratively and interdependently to address complex problems that cannot be adequately addressed by one discipline alone or by multiple disciplines in sequence. The members must interact with each other, especially verbally, on a regular basis.

WHO SHOULD NOT PARTICIPATE IN THE STUDY?

Health care providers who do not work collaboratively on teams, or members of teams that are not in the same physical setting.

WHAT DOES THE STUDY INVOLVE?

This study is taking place in a hospital in the Greater Vancouver area (Royal Columbian Hospital). Up to 75 volunteer subjects will be enrolled for the study (depending on the teams that choose to participate).

Research-related procedures: The study involves a researcher directly observing team interactions during team meetings (or rounds) and also outside of rounds. Some of the rounds will be audio recorded. The study will also involve audio-recorded interviews with individual team members, on a voluntary basis, to discuss their experience of interdisciplinary work and team communication.

Overview of the Study

This study examines and aims to describe the communication and interaction dynamics of interdisciplinarity, disciplinarity, and teamwork on health care teams. The research intervention includes the following: ethnographic observations of team member communication and interaction during team meetings and other collaborative work; recorded ethnographic interviews with individual team members to discuss their thoughts, experiences, and concerns about interdisciplinary teamwork. Different teams will be observed to explore how, if at all, communication dynamics change with different disciplinary members present, as well as other factors such as team mandate, case load, and so on.

Study subjects will be recruited through their existing membership on one or more interdisciplinary teams. The overall duration of the observation and interview part of the study will be between 4 and 12 months. Subjects will be invited to participate in at least one interview with the co-investigator Stephanie Fox; more if they wish. Most interviews will range between 30 minutes to an hour. Interviews may be audio recorded and transcribed.

If You Decide to Join This Study: Specific Procedures

If you agree to take part in this study, the procedures and visits you can expect will include the following:

Before You Begin the Study:

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- Either the co-investigator or your team's site manager will ask that you read and sign this consent form. Your contact information will be gathered at this time.

During the Study:

- Observations: The presence of the researcher (co-investigator) at team meetings and other team member interactions over a period of several months (4-12 months) one or more days a week.
 - The information that will be gathered in these observations includes: communication and interaction patterns, team norms and values, barriers to and facilitators of communication and collaborative work, kind of language used and differences between disciplines and/or teams in the language used, and so on.
 - Some of these rounds will be audio recorded and transcribed, provided that team members give their consent.
- Interviews: One or more interviews with the researcher (co-investigator).
 - The information that will be discussed and gathered in interviews includes: your past experience of interdisciplinary teamwork, your opinions and thoughts about this kind of collaborative work, and also communication successes and failures related to this work.

Use and Management of the Data

- (a) The data gathered will be used for the completion of the co-investigator's Ph.D. dissertation research.
- (b) Only the principal investigator and the co-investigator will have access to uncoded data, including field and interview notes, and transcripts. The raw (uncoded and pseudonym-less) data will be retained for 5 years once the research is concluded, after which time it will be permanently destroyed.
- (c) To ensure subject confidentiality and non-identifiability, each subject will be assigned a pseudonym, a team code, and profession/discipline code. The pseudonym will not include the first or last 3 letters of the subject's name, and this is the name that will be used in all coded study documents. The team codes will not reflect the hospital or the administrative unit in which the team is housed (e.g., Team Orange). In addition, numeric codes will be assigned to professions/disciplines (e.g., physical therapy = 07).
- (d) Modes of observation: Observation of team interactions, communication, and meetings will be recorded in field notes. Some rounds and interviews will be audio recorded and transcribed, and pseudonyms, team and profession/discipline codes will be used in any portions of transcriptions that are presented publicly or published.
- (e) The data gathered and coded (i.e., with pseudonym, team code, and profession/discipline code) may also be used in publications other than the co-investigator's doctoral dissertation, such as in books, book chapters, journal articles, and conference presentations or proceedings.
- (f) Aside from pseudonyms and team and profession/discipline codes, all research documents will be stored in a locked box in the co-investigator's office.

After the Study Concludes

- The researcher will submit to the site manager a report of relevant findings, while also maintaining subject confidentiality.

WHAT ARE MY RESPONSIBILITIES?

It is your responsibility to inform the researcher if you find that her presence unreasonably interferes with your ability to do your job.

WHAT ARE THE POSSIBLE HARMS AND SIDE EFFECTS OF PARTICIPATING?

We foresee no physical, psychological, or emotional risks as a consequence of this study. The nature of the study entails ethnographic observations and interviews. You will be free to decline to participate or to drop out of the study at any point.

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WHAT ARE THE BENEFITS OF PARTICIPATING?

No one knows whether or not you will benefit from this study. There may or may not be direct benefits to you from taking part in this study. It is possible that participation in this study may lead you and your teammates to become more reflective about your communication and interactions, which might in turn lead to improved team performance and your improved satisfaction. We hope that the information learned from this study can be used in the future to benefit other health professionals working on interdisciplinary teams.

WHAT HAPPENS IF I DECIDE TO WITHDRAW MY CONSENT TO PARTICIPATE?

Your participation in this research is entirely voluntary. You may withdraw from this study at any time. If you decide to enter the study and to withdraw at any time in the future, your employment will not be affected.

The study investigators may decide to discontinue the study at any time, or withdraw you from the study at any time, if they feel that it is in your best interests.

If you choose to enter the study and then decide to withdraw at a later time, all data collected about you during your enrolment in the study will be retained for analysis. Audio recordings will be retained for 7 years, after which time they will be destroyed. If they are digital, they will be permanently deleted from the co-investigator's data base; if analog, the tapes will be magnetized to remove data before they are destroyed and discarded.

WHAT HAPPENS IF SOMETHING GOES WRONG?

Rights and Compensation

By signing this form, you do not give up any of your legal rights and you do not release the study investigator or other participating institutions from their legal and professional duties. There will be no costs to you for participation in this study.

CAN I BE ASKED TO LEAVE THE STUDY?

We foresee no reason why you would be asked to leave the study.

AFTER THE STUDY IS FINISHED

After the study is finished, your site manager will be given a report of relevant findings, which you may consult. Additionally, the findings will be published in the co-investigator's doctoral dissertation, which will be published and available in the Simon Fraser University library.

WHAT WILL THE STUDY COST ME?

It is not anticipated that you will incur any personal expenses as a result of participation in this study. If you do incur expenses for parking for participation in the interview(s), these expenses will be reimbursed up to \$10 (receipts are not required). You will not be paid for participating.

WILL MY TAKING PART IN THIS STUDY BE KEPT CONFIDENTIAL?

Your confidentiality will be respected. You will be assigned a unique study number (pseudonym, team code, and profession/discipline code) as a subject in this study. Only this will be used on any research-related information, including personal data and research data, collected about you during the course of this study, so that your identity (i.e., your name or any other information that could identify you) as a subject in this study will be kept confidential. Information that directly discloses your identity will remain only with the Principal Investigator and/or designate. The list that matches

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your name to the unique identifier that is used on your research-related information will not be released without your knowledge and consent unless required by law or regulation.

No information that discloses your identity will be released or published without your specific consent to the disclosure. However, research records identifying you may be inspected in the presence of the Investigator or co-investigator and the FH Research Ethics Board for the purpose of monitoring the research. These personnel are required to keep your identity and personal information confidential. However, no records which identify you by name will be allowed to leave the Investigators' offices.

WHO DO I CONTACT IF I HAVE QUESTIONS ABOUT THE STUDY DURING MY PARTICIPATION?

If you have any questions or desire further information about this study before or during participation, you can contact co-investigator Stephanie Fox at 778-886-4234.

WHO DO I CONTACT IF I HAVE ANY QUESTIONS OR CONCERNS ABOUT MY RIGHTS AS A SUBJECT DURING THE STUDY

If you have any concerns or complaints about your rights as a research subject and/or your experiences while participating in this study, please contact Dr. Marc Foulkes and/or Dr. Allan Belzberg, Fraser Health Research Ethics Board [REB] co-Chairs by calling [REDACTED]. You may discuss these rights with the co-chairmen of the Fraser Health REB.

You may also contact address any concerns or complaints to: Dr. Hal Weinberg, Director, Office of Research Ethics by email at [REDACTED].



SUBJECT INFORMATION AND CONSENT FORM

Study of Communication on Interdisciplinary Health Care Teams

Principal Investigator: Kitty Corbett, PhD, MPH
Faculty of Health Sciences
Simon Fraser University
[Redacted]

APPROVED
By FHA Research Ethics Board on August 31, 2009

(Optional) Co-Investigator(s): Stephanie Fox, PhD candidate
School of Communication
Simon Fraser University
[Redacted]

SUBJECT CONSENT TO PARTICIPATE

- I have read and understood the subject information and consent form and am consenting to participate in the study Communication on Interdisciplinary Health Care Teams.
- I have had sufficient time to consider the information provided and to ask for advice if necessary.
- I have had the opportunity to ask questions and have had satisfactory responses to my questions.
- I understand that all of the information collected will be kept confidential and that the result will only be used for scientific objectives.
- I understand that my participation in this study is voluntary and that I am completely free to refuse to participate or to withdraw from this study at any time.
- I understand that I am not waiving any of my legal rights as a result of signing this consent form. I understand that this consent form is not a contract.
- I have read this form and I freely consent to participate in this study.
- I have been told that I will receive a dated and signed copy of this form.

SIGNATURES

Printed name of subject: _____ Signature: _____ Date: _____

Printed name of witness: _____ Signature: _____ Date: _____

Printed name of principal investigator or designated representative _____ Signature: _____ Date: _____

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Appendix C

List of clinical and organizational terms

ADL	Activities of daily life
AL	Assisted Living
ALC	Alternate level of care.
AMA	Against medical advice
Aphasic	Unable to produce or comprehend language
Ativan	Drug, used here to control alcohol withdrawal symptoms; trademark for a benzodiazepine antianxiety agent
Barium	Can't do CT scan while in patient's body
BCAA	BC Cancer Agency
Bedline	BC Bedline, usually within 24 hours, a program that directs where a patient goes, the program determines where the patient goes.
BID	"Wound is BID"--change dressing twice a day (bi-daily)
Bony mets	Metastatic bone cancer
Bridging a patient	Changing a patient's treatment and the bridge is the transition to from the old to the new treatment.
CA	Cardiac arrest
CABG (pronounced <i>cabbage</i>)	Coronary artery bypass graft
CAD	Coronary artery disease
CAPD	Continuous ambulatory peritoneal dialysis
CC department	Client coordination department
CCD	Client care coordinator (community)--mostly SW, but also nurses
CCI	Chronic coronary insufficiency
CCU	Critical care unit
CD Positive ("he's on flagyl now")	C. Difficile positive (often a hospital acquired infection)
CDT Positive	Positive test result for the C. Difficile toxin produced by a bacteria in the stomach; the test is done via stool sample. Diarrhoea caused by C. Difficile after antibiotic use often occurs in people in the hospital. It also can occur in people who have not recently taken antibiotics.
Celestial discharge	Patient has died
Certified	Also known as pinked; assessed by psychiatry and deemed incompetent
Chest port	Portacath inserted in the chest
CHF	Chronic heart failure
Cholecystectomy	Removal of gall bladder
Cholestyramine	A bile acid sequestrant, which binds bile in the gastrointestinal tract to prevent its reabsorption.
CIWA score	Scale to see how an alcoholic is metabolizing alcohol
Clinical	Medical (with regard to UCs needing to have nursing or clinical training as opposed to allied health)
Code (full code)	Cardiac arrest; Full code = chest compression, medication, etc. "No holds barred treatment for cardiac arrest."
Code orange	Natural disaster

Code: Do Not ID (see also DNA)	Do not hang the patient's name outside door, or any other kind of identifier because it is a case of domestic violence or some other similar situation where there is the fear that someone will come to intentionally harm the patient.
Coffee ground emesis	Episode of vomiting that resembles coffee grounds. Usually from bleeding into the stomach.
Colitis	Inflammation of the colon
Coumadin	A trademark for the drug warfarin sodium
Creatinine	A chemical waste molecule that is generated from muscle metabolism.
CRF	Chronic renal failure
Critical Flow Report	The UCs can write up a critical flow report if they witness practice issues, such as protecting the slate, that impede patient flow (protecting beds for surgery goes against the hospital/organizational goal of increased efficiency). These reports are sent to the iCare manager, the Ward manager, and the Nurse Educator.
CT	(implies an isolation unit)
CTCT	A program in the city's downtown for homeless drug addicts, and it is suggested for a patient who is on IV antibiotics
CTU	Clinical teaching unit (residents)
CVA	Cerebrovascular accident (stroke)
CVC	Central venous catheter a central line in the neck or leg (femoral)
CVI	Chronic venous insufficiency is caused by higher-than-normal blood pressure within the leg veins. This may be due to blood clots or phlebitis (swelling and inflammation of the veins).
Cyclosporine (used to treat colitis)	An immunosuppressive drug obtained from certain soil fungi, used mainly to prevent the rejection of transplanted organs.
Cytotoxic	Toxic to cells
D-Dimer	A fragment produced during the degradation of a clot. The D here stands for domain. Dimer indicates two identical units, in this case two identical domains. D-dimer result from complete breakdown of the clot. Monoclonal antibody to the D-dimer fragment provide the basis for the main methods of detecting it. The presence of D-dimers in the blood is a reliable clue that clotting has begun. Sometimes written d-dimer or D-Dimer. Pronounced deemer.
Darkened a hospital's door	Typically a negative description of a patient; it refers to repatriation where a hospital doesn't want a patient back.
DC	Discontinued OR discharge
Dehiscence	opening up of wound (bursting open)
Discectomy	removal of herniated disc
Diverticulitis	Inflammation of a diverticulum, especially of the small pockets in the wall of the colon that fill with stagnant fecal material and become inflamed.
DNA	Do not acknowledge (i.e., don't put the patient's name or any other identifier outside the door or in plain view)
DNR	Do not resuscitate
DTs	Detox and withdrawal symptoms
DVA	Dilated vestibular aqueduct: a condition in which the diameter of the vestibular aqueduct increases. It is associated with several congenital and hereditary causes of hearing impairment including the Mondini dysplasia, branchiootorenal syndrome, Pendred syndrome, and X-linked nonsyndromic hearing impairment (DFN3).
DVTs	Deep vein thrombosis

Dysarthria	A motor speech disorder resulting from neurological injury, characterised by poor articulation (cf. aphasia: a disorder of the content of speech).
Dysphasia	A condition in which swallowing is painful or difficult
EAR	Eligibility assessment required; this is an assessment to see if a patient is eligible for placement outside the hospital, and a patient can't go to placement if he or she wants to go home.
Edema	Swelling or accumulation of fluid
EHS	Emergency health services (?)
EHU	Emergency holding unit, 12 acute care overflow beds for patients admitted to Emerg.
Elevated PSA	Elevated prostate-specific-antigen in the blood, possibly indicating prostate cancer.
Emesis (plus plus)	Vomiting (extreme)
Endo	Department of Endocrinology
ERA	Emergency room admissions
ERCP (as a verb done to a patient)	Procedure to take out gall stones
ESA	Cephalic vein clot
ESBL	Extended Spectrum Beta-Lactamase resistant...it is an antibiotic resistant organism
ET teaching	Refers to the nursing team that teaches patients how to take care of new ostomies, etc.
ETOH (history of ETOH)	Refers to ethanol, it is the legal term for alcohol (and sometimes refers to alcoholism)--the term started being used, according to David, because in legal cases against drunk drivers, the accused would be acquitted because technically alcohol has no odor, but ethanol does.
F/S issue	Family-social issue (i.e., something that pertains to SW)
Febrile	Feverish
Fistula	Abscess, abnormal connection between 2 organs, or between organ and skin; common in GI problems, diabetes, Crohn's disease.
Flagyl	Trademark for an antibiotic and antiprotozoal (metronidazole).
Foley	Drain (for a catheter)
FTT	Failure to thrive
GBS	Group B Strep (?)
GCS	Glasgow Coma Scale (?)
Going in/on the bottle	Drinking binge or alcoholism
Gone to the light	Patient has died and "gone to the light"
GPN	Gastroesophageal reflux disease
HCN	Health care number
Hematoma	An abnormal localized collection of blood in which the blood is usually clotted or partially clotted and is usually situated within an organ or a soft tissue space, such as within a muscle.
Hemoglobin	The oxygen-carrying pigment and predominant protein in the red blood cells.
Heparin	An anticoagulant (anti-clotting) medication. Heparin is useful in preventing thromboembolic complications (clots that travel from their site of origin through the blood stream to clog up another vessel). Heparin is also used in the early treatment of blood clots in the lungs (pulmonary embolisms).

Hipaque	Radiology test for upper GI tract
HLOC	Higher level of care (the patient needs something major done at RCH)
Holter	A monitor for recording heart activity that the patient wears around his or her neck like a holter, according to David
Home O2	Oxygen administered at home on a regular basis; usually for COPD patients
Hospitalist	Doctors/MDs who take on the patients in hospital who do not have a GP or whose GP does not have "jurisdiction" at RCH (Doug Klassen)
ID	Infectious diseases
IDDM	Insulin-dependent diabetes mellitus
Ileal conduit	A surgical procedure, where a small urine reservoir is created from a segment of a bowel and is placed just under the abdominal wall. The end of the ileum is brought out through an opening in the abdominal wall to drain the urine gathered in the reservoir. This opening is called a stoma. The patient wears a bag over the stoma to collect the urine. The bag adheres to the body (over the stoma) using an adhesive disk (wafer or flange).
Ileous	Bowel obstruction
Ileostomy	An opening into the ileum, part of the small intestine, from the outside of the body. An ileostomy provides a new path for waste material to leave the body after part of the intestine has been removed.
INR ("Our goal is do discharge depending on what his INRs are doing")	Blood coagulation test; Hematology, anticoagulant info: a comparative rating of a patient's prothrombin time (PT) ratio, used as a standard for monitoring the effects of warfarin. The INR indicates what the patient's PT ratio would have been if measured by using the primary World Health Organization International Reference reagent.
IP antibiotics (versus IV antibiotics)	Intraperitoneal antibiotics (usually for CAPD patients) where the antibiotics are mixed into dialysis fluid so that the drugs can get into the patient's digestive tract (gut), which doesn't happen with IV antibiotics.
IVIG	Immunoglobulin preparations used in intravenous infusion, containing primarily immunoglobulin G. They are used to treat a variety of diseases associated with decreased or abnormal immunoglobulin levels including pediatric AIDS, primary hypergammaglobulinemia, SCID, cytomegalovirus infections in transplant recipients, chronic lymphocytic leukemia, Kawasaki syndrome, infection in neonates, and idiopathic thrombocytopenic purpura.
J-tube	A feeding tube that goes into the patient's body just below the stomach
JGJ or G2	G tube goes into the patient's stomach--the prefix has to do with where on the patient's abdomen the tube is inserted.
Kyphoplasty	A procedure similar to vertebroplasty, but with the intent of expanding the collapsed vertebra. A surgical instrument is introduced into the spine with a balloon that is inflated to expand the bone. Once this instrument is withdrawn, the space created is then filled with the bone cement mixture. By creating space in this way, kyphoplasty procedures may correct deformity or restore body height.
Lap-chole	Laparoscopic cholecystectomy is the surgical removal of the gallbladder. It is the most common method for treating symptomatic gallstones
LLTO	Life limb threatened organ

LOC	Loss of consciousness; level of consciousness; level of care
Mar ("it says in the mar")	Medicine administration record (the nurses document when drugs are administered)
Medical management	No surgery, conservative approach.
Medicaid	A mechanical support lift that helps patients get to a standing position from a seated position (saw one in the corridor of 6-North)
Meditech	A hospital computer system where employees can print out a list of the day's (ward, etc.) patients
Medivac	A regional patient air transport program
Mets	Cancer
MI	Myocardial infarction: The term "myocardial infarction" focuses on the myocardium (the heart muscle) and the changes that occur in it due to the sudden deprivation of circulating blood. The main change is necrosis (death) of myocardial tissue. The word "infarction" comes from the Latin "infarcire" meaning "to plug up or cram." It refers to the clogging of the artery.
Mini-Snyder	Drain
MMSE	Mini mental status exam (a simple cognitive test)
MRCPT	MR Cholangiopancreatography, is a medical imaging technique that uses magnetic resonance imaging to visualise the biliary and pancreatic ducts in a non-invasive manne
MRP	Main responsible for decision
MRSA	Methicillin-resistant Staphylococcus aureus. The term is used to describe a number of strains of bacteria, Stayphylococcus aureus, that are resistant to a number of antibiotics, including methicillin.
Multiple myeloma	Cancer of the white blood cells
NG	Nasogastric--this is largely for feeding and administering drugs
NIDDM	Non-insulin-dependent diabetes mellituS
No code (at his request)	Do not resuscitate (DNR)
Nocturnal CPAP/VPAP	Measures breathing (troubles) during sleep (sleep apnea)
NPO	Latin for Nothing by mouth (has to do with feeding)
Off-service	The patient is on a unit that is not their service (e.g., an orthopedics patient who is on a general medicine ward because that is where a bed was available)
OPAT	Out-patient iv therapy
Osteomyelitis	Infection involving a bone or bone marrow
Oxymetry	A photodiagnostic method of monitoring arterial blood oxygen saturation (SaO2). Oximetry is commonly used to titrate levels of oxygen in hospitalized patients. It is used for monitoring the patient's oxygenation status during the perioperative period or any other time of heavy sedation, during mechanical ventilation, and in many clinical situations such as pulmonary rehabilitation programs and stress testing.
Paracentesis (ultrasound-guided)	The removal of fluid from a body cavity using a needle, trocar, cannula, or other hollow instrument.
Path	Path is basically somewhere to go to wait for social stuff to be figured out before ear marking the patient for a particular placement (e.g., sub-acute, residential). They have to be medically stable, and then you do the paper work in path and the patient doesn't take up an acute bed just for waiting for paperwork, etc.
PCA	Patient-controlled analgesia; or morphine pump. Usually, they try to discontinue this one day post-op.

PCC	Patient care coordinator
PED team	A team that liaises specifically between the acute care and long-term care nursing homes.
Penrose	Kind of post-surgical drain to drain wounds
Perforated viscus	Perforated bowel
PHN	Patient health number
PICC	Peripheral inserted central catheter, goes through the arm into the heart to administer drugs into the blood stream
Pigtail	A catheter with a tightly curled end and multiple side holes to reduce the impact of the injectant on the vessel wall or to remain in a chamber or space for drainage.
Pink (x 2, etc.)	Seen by psychiatry
Pinked (as a verb, "he was pinked")	Certified = psychiatry has assessed the patient and deemed him or her incompetent. Probably from a pink form. (However, according to Nicole in 3-South on 09/17/09, it means that caregivers have to alert the police if a pinked patient leaves the hospital.)
Pleural effusion	Pleural effusion is excess fluid that accumulates between the two pleural layers, the fluid-filled space that surrounds the lungs. Excessive amounts of such fluid can impair breathing by limiting the expansion of the lungs during ventilation.
PO ("switch him over to PO")	Something taken orally as opposed to intravenously
POA	Power of attorney
Portacath	A small catheter that is installed beneath the skin connecting the port to a vein. Under the skin, the port has a septum through which drugs can be injected and blood samples can be drawn many times, usually with less discomfort for the patient than a more typical "needle stick". Ports are used mostly to treat hematology and oncology patients, but recently ports have been adapted also for hemodialysis patients. The port is usually inserted in the upper chest, just below the clavicle or collar bone, leaving the patient's hands free.
Priority C	SW priority list
PRN	Medication that is to be taken as needed by the patient, from the Latin, "pro re nata."
Protecting the slate	Everyday, there is a surgical slate created for each round. Typically there is only one surgeon per slate (e.g., Dr. Granger will have 4 surgeries on Friday). Protecting the slate means managing discharges of surgical patients so that the empty beds are coordinated with the next day's surgical slate. Beds that are empty can be taken up by medical patients who may stay for a long time and then surgery loses the bed.
PWD application (SW term)	Finances
Pyelonephritis	Inflammation of the kidney as a result of bacterial infection (usually from UTI)
QD	Every day (quaque die), or once a day
QH	Every hour (quaque hora).
Q4H vital signs	Take the patient's vital signs every 4 hours.
QID	Four times daily (quater in die)
RAI (sounds like rye) assessments	Used for assessing the status of a patient for residential care (nursing home), including the needed level of care and eligibility for services; usually performed by CCD
Rebate by address	Send patient to another facility that is determined by the patient's home address (the catchment area of the other facility)

Repatriate/repate	Send patient to another facility based on the patient's home address and that facility's catchment area
RU	Renal Unit
Saline lock	An IV place holder for medical procedures
Seventh floor discharge	Patient has died (there is no 7th floor)
Short gut (he has a history of short gut)	A patient who has had several bowel resections (chunks of the small intestine have been removed, which makes it very hard for the patient to retain nutrients from diet, i.e., inefficient digestion)
Slate	Protecting the slate, see above
Sliding scale (with reference to meds)	Has to do with diabetes care
SOB (at times)	Short of breath; shortness of breath
Stoma	The opening for an ostomy (an alternatenative to the bladder or intestine for bodily wastes or fluids to drain)
Stridorous	Wheezing when breathing
T4	either the thoracic spine #4 vertabrae or a thyroid hormone
TEE	Transesophageal echocardiography (TEE), an endoscopic/ultrasound test that provides ultrasonic imaging of the heart from a retrocardiac vantage point, thus preventing the interposed subcutaneous tissue, bony thorax, and lungs from interfering with the ultrasound. It is performed to better visualize the mitral valve or atrial septum, to differentiate intracardiac from extracardiac masses and tumors, to diagnose thoracic aortic dissection, to detect valvular vegetation as seen with endocarditis, to determine cardiac sources of arterial embolism, to detect coronary artery disease, and to monitor high-risk patients for ischemia intraoperatively.
Thoracentesis	Removal of fluid in the pleura through a needle.
TIA	Transient ischemic attack or mini-stroke
TID	"Dressing is TID"--change dressing 3 times a day
TKVO	To keep vein open
TPA	Tissue plasminogen activator: a substance sometimes given to patients within three hours of a stroke to dissolve blood clots within the brain
TPN	Total parenteral nutrition (intravenous feed)
Triphasic CT	CT scan used to detect hepatic lesions, for example
TTE	Tran thoracic echocardiogram
TUPR (he's going for a TUPR)	Transurethral prostate resection
UTI	urinary tract infection
Valporic acid	Used to treat bipolar condition
Vanco	An antibiotic isolated from cultures of <i>Nocardia orientalis</i> , bactericidal against gram-positive organisms; available as the hydrochloride, especially against staphylococci resistant to methicillin
Vertebroplasty	A nonsurgical method for the repair of vertebral fractures and compression due to osteoporosis. (They put a balloon into the vertebra).
VRE	Vancomycin-resistant enterococci (VRE) is listed as a type of (or associated with) the following medical conditions in our database: Nosocomial infections; Drug-resistant infectious agents

Warfarin	An anticoagulant drug (brand names: Coumarin, Panwarfin, Sofarin) taken to prevent the blood from clotting and to treat blood clots and overly thick blood. Warfarin is also used to reduce the risk of clots causing strokes or heart attacks.
WBC	White blood cell count
WCB	Workers Compensation Board

Appendix D

Interview questions

Domain

How would you describe your domain? In terms of patient care, what kinds of things are you concerned with?

Collaboration

What are the kinds of things in your daily work that require the most collaboration with other professions?

How would you describe interprofessional collaboration?

What is it like when interprofessional collaboration works well?

When it doesn't work well?

What makes a difference?

Are there any challenges that are specific to interprofessional collaboration? (e.g., different professional languages, opportunities to contribute)

What kind of training have you received on how to collaborate across disciplines or professions?

Does collaborating with other professions require special communication skills? If so, can you describe them?

Are there areas where you think interprofessional collaboration or communication could be improved? Or, what is being done to improve it?

Teams

What is your role on the team?

What do you consider to be your team or teams?

How do the doctors fit into the team schema?

How do you know who should speak in rounds?

Work Processes

What are the main barriers to the patient care plan or pathway?

How are decisions made about patient care plans? Who makes them?

Are the teams accountable as units or teams? To whom? Is team performance tracked in any way?

Team Communication

How and when do you communicate with other team members?

How is the information discussed in the rounds communicated with others? Who?

Do the information and the conclusions you come to in rounds get shared with doctors?

Do the other team members understand the technical language that PCCs use? Do they need to?
Are there challenges to interprofessional communication? If so, can you describe them?

Documentation

How do you keep track of patients' needs?

What paperwork or documentation do you use?

Do you share your paperwork with anyone else?

How often do you consult or contribute to the patient chart/record?