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The benefits of respectful interactions: fluid alliancing and inter-occupational information sharing in primary care

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Abstract

Though inter-occupational interactions in health care have been the focus of increasing attention, we still know little about how such interactions shape information sharing in clinical settings. This is particularly true in primary care where research on teams and collaboration has been based on individual perceptions of work (using surveys and interviews) rather than observing the interactions that directly mediate the inter-occupational flow of information. To explore how interactions shape information sharing, we conducted a secondary analysis of ethnographic data from 27 primary care practices. Ease of information sharing among nurses and doctors is linked to the degree to which practices feature respectful interactions, with practices in the sample falling into one of three categories (those with low, uneven, and high degrees of respectful interactions). Those practices with the highest degree of respectful interactions demonstrate what we describe as fluid-alliancing: flexible interactions between individuals from different occupational groups in which bidirectional information sharing occurs for the benefit of patients and the efficacy of the practice community. We conclude by arguing that this process unlocks the strengths of all practice members, and that leadership should encourage respectful interactions to augment organisational efficacy and the ability of individual practice members to provide quality patient care.

Keywords: primary care, information sharing, respectful interactions, nurses and physicians, ethnography

Introduction

Over the past several decades models of primary care, both in Europe and more recently in the United States, have been developed to address the needs of patients with chronic illness, a category of conditions increasingly linked to international trends in morbidity and mortality (Schoen *et al.* 2009, Starfield and Shi 2004). The logic of these organisational models is based on the assumption that cooperation between occupational groups taps into a variety of perspectives, experiences, and skill sets which, when brought together, are best suited to completing the clinical tasks associated with managing continuity of care and chronic conditions (Stange *et al.* 2010, Starfield *et al.* 2005). Put another way, cooperation between occupational groups

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allows for the flow of information between different professionals, effectively harnessing the strengths of all involved for the benefit of the patient and the primary care organisation. Despite optimism around these models, challenges to inter-occupational cooperation that are endemic to health care continue to undermine their functionality, especially in the United States (Institute of Medicine 2001, Ruddy and Rhee 2005, Schoen et al. 2009). The 'collaboration' and 'teamwork' literatures have highlighted the hierarchical nature of medicine as one of the factors responsible for poor cooperation, arguing that hierarchy, though it has its uses (e.g. role setting in acute care situations), can encourage social patterns that stifle information sharing between personnel (Allen 1997, Edmondson 2004, Manser 2009). These literatures go on to propose respectful interactions between personnel as an effective antidote, highlighting such interactions as particularly sensible in primary care which is focused on addressing and managing a patient's long term healthcare needs (Lanham et al. 2009, Nancarrow et al. 2013, Rosenthal 2008). Despite the importance of these insights, the teamwork and collaboration literature has not effectively described how exactly the tenor of social interactions between occupational groups mediate cooperation and its dividend, information sharing. In order to provide guidance to primary care practices that are looking to transition towards more cooperative models of management, research on primary care must produce clear and compelling images of how variation in respectful interactions and information sharing are linked.

In both their methods and their conceptual frameworks, many of the studies in the teamwork and collaboration literature point to the importance of respectful interactions without providing compelling enough portraits of how it is that interaction patterns block or unlock information sharing and cooperation (D'Amour et al. 2005, 2008, Hoffmann et al. 2013, Hülsheger et al. 2009, O'Malley et al. 2014, West and Wallace 1991, Xyrichis and Lowton 2008). Our goal in this article is to address some of the weaknesses of previous studies of inter-occupational cooperation in primary care by drawing on ethnographic data in 27 primary care practices (PCPs) to analyse how information sharing is mediated by patterns of interaction. This is a theory driven article in which we construct a typology of interaction patterns from observations of nurses and physicians in the context of practice meetings and everyday work routines. We limit our analysis to physicians and nurses because they account for more direct patient interaction and information collection than other occupational groups in primary care. While previous studies have used survey data to understand people's perceptions of 'collaboration' and 'teamwork', relatively little is known about how actual interactions shape information sharing in PCPs. The observational data that is the basis of this article begins to address these gaps, for it is in the details of everyday interactions that the dynamics that either impede or facilitate information sharing are most discernable.

In the results we organise each of the 27 practices in our sample into three categories of interaction patterns (low degree of respectful interactions [LR, n = 5], uneven degree of respectful interactions [UR, n = 17], high degree of respectful interactions [HR, n = 5]) according to how often interactions among and between nurses and physicians can be characterised as respectful. We then explore how distinctions in the degree to which respectful interactions are present in a given practice shape the quality of information sharing among and between these occupational groups. Extending theoretical insight into the link between respectful interactions and information sharing, we argue that practices that feature interactions which are most often respectful (HRs) have broad evidence of *fluid-alliancing* or flexible interactions between individuals from different occupational groups in which bidirectional information sharing occurs for the benefit of patients and the efficacy of the practice community. We have developed the concept fluid-alliancing instead of using established concepts such as communication because unlike communication, which potentially describes a large variety of interactions, fluid-alliancing connotes interactions between occupational groups that are not

constrained by hierarchy or familiarity and prioritise the shared goals of patient care and practice efficacy. The background section reviews the teamwork and collaboration literatures as well as the PCP literature in order to demonstrate that they do not adequately analyse how everyday interactions between practice personnel shape information sharing. In the discussion we describe how respectful interactions influence information sharing and we look at how interactional patterns modelled by leadership either promote rigidity and hinder information sharing or support fluid-alliancing and the sharing of information among and between occupational groups.

Background

Despite recognition of the increasing importance of inter-occupational communication in the organisation of medicine, one of the challenges facing modern health care is that the processes that support information sharing remain vague and poorly understood (D'Amour et al. 2005, Starr 1982). Though the collaboration and teamwork literatures highlight information sharing between occupational groups as central to tailoring primary care to the needs of patients with chronic illness, the theoretical scaffolds these articles employ often do more to obfuscate the links between interaction patterns and information sharing than they do to clarify them. Both literatures tend to employ a variety of sub-concepts (e.g. shared/team goals, mutual acquaintanceship, connectivity, information exchange, decision making) as constitutive parts of teamwork and collaboration which, in the aggregate, work against clear explanations of how patterns of interaction are central to cooperation between occupational groups (D'Amour et al. 2008, Nancarrow et al. 2013). A scan of the sub-concepts listed above shows that many are associated with information sharing (e.g. connectivity, shared goals, and acquaintanceship all happen through sharing information), and begs the question of why information sharing which is less abstract and often central to what people actually do when working together – is not made the conceptual centrepiece of studies of how occupational groups cooperate in primary care. Indeed, taken from this point of view, the clarity of 'teamwork' and 'collaboration' themselves can be called into question, as they also distract from the basic phenomena that are at the heart of people working together. Drawing on studies in sociology, management, and health care policy, we argue that interactions and information sharing, as opposed to the concepts reviewed above, are best suited to analysing how the social dynamics of health care (and workplace) settings shape relations among and between occupational groups (Bechky 2006, Eliasoph and Lichterman 2003, Institute of Medicine 1999, Leonard et al. 2004, Nembhard 2009, Nolan 2013, Timmermans 2013).

Another issue with the collaboration/teamwork literature is that it operationalises working together, a process that unfolds through interaction, using methods, specifically surveys and interviews, that more directly measure individual perceptions. One of the issues that the teamwork and collaboration literature has faced is that using surveys and interviews creates barriers in analytically representing how its explanatory variables are linked with inter-occupational information sharing (D'Amour et al. 2008, Dieleman et al. 2004, Hoffmann et al. 2013). For example, in a study by Poulton and West (1999) 528 members of 68 primary health care teams throughout the UK completed surveys to determine team effectiveness. One of the findings showed an association between the degree to which an individual agrees with their team's objectives and their rating of the team's overall effectiveness. An assumption could be made that if a person shares the objectives of the team and gives a higher rating of overall effectiveness, then they would be motivated to share information and participate in team processes (Poulton and West 1999). But this was not supported by the results. A 'team participation' measure, which asked specifically about ease of information sharing, showed that ratings of team effectiveness were not associated with comfort to communicate. This despite the finding

that personnel rated 'strategies for communication' as a top ten requirement for an effective team. Even if the teamwork/collaboration literatures have recognised the importance of information sharing and used surveys and interviews to understand people's perceptions of their work environments, they have not explored clearly enough how occupational interactions in healthcare settings shape information sharing (D'Amour et al. 2005, Nancarrow et al. 2013, West and Poulton 1997). To explore the link between interactions and information sharing, data documenting actual interactions as they unfold is required.

Research efforts by Crabtree and colleagues begun in the 1990s addressed some of the weaknesses of the teamwork/collaboration literature and were innovative in highlighting respect as an interactional modifier of information sharing (Crabtree et al. 2009, Miller et al. 1998). Over the last couple decades, a number of mixed-methods studies were conducted that included observational data to explore how occupational boundaries interfere with information flow in PCPs (Crabtree et al. 1998, 2010, Miller et al. 2010). Though a variety of barriers were identified, an issue that the studies underscored was the lack of engagement on the part of some physicians in the professional community of the practice (Hroscikoski et al. 2006). For example, in some cases, the practice leaders did not participate in group-initiated improvements which was noteworthy given their symbolic and instrumental influence on the practice community. This issue was addressed by Crabtree et al. (2008) when they described some practices functioning like 'dual organisations' in which physicians isolate themselves from the nurses and staff in a way that can, 'inhibit communication and severely limit collaborative teamwork' (Crabtree et al. 2008: 21). Drawing on concepts from complexity science and organisational theory, they argued that such behaviour represents the absence of respectful interactions and in so doing link respectful interactions with information sharing (Jordan et al. 2009, Lanham *et al.* 2009).

Though the link between information sharing and respectful interactions described by Crabtree and associates opened the door to conceptually clear and interactionally grounded analyses, the researchers did not capitalise on the observational data from which their insights were drawn to ground their conceptual arguments in actual interactions and instead focused on individual perspectives in ways similar to the collaboration/teamwork literature (Crabtree et al. 2009, Nutting et al. 2009). Summing up a 2009 National Demonstration Project (NDP) to test an intervention focused on previously identified problematic practice processes, the authors stated in their summation of the study that:

Most primary care physicians work on a cognitive model that emphasizes their autonomy in commanding a staff to support their work of advising and treating individual patients within private, face-to-face encounters. New ways of thinking about primary care will need to emphasize working within more collaborative teams. (Nutting et al. 2009: 441)

Despite the progressivity of these insights and recommendations, the statement also represents some of the weaknesses of the work. As opposed to making use of the rich and multifaceted relational data that was collected to explore how social dynamics suggest new ways of thinking about primary care, the studies redirect attention back to the way that individual thought processes - in this case, those of physicians - are related to work with members of other professional groups. The studies also employ euphemisms for obstructive behaviours (e.g. 'dual organisation') that fail to directly address how interactional patterns create barriers to information sharing. 'Dual organisation', for example, suggests a physical structure, but simply represents the refusal of the personnel of one occupational group to interact in a respectful manner with those of another (Crabtree et al. 2008). Though the authors made important strides in highlighting the theoretical importance of respectful interactions as a process that unlocks information sharing, by employing conceptual euphemisms and focusing on individual perspectives the work of Crabtree and associates exhibits some of the same drawbacks as the collaboration/teamwork literature on which they sought to improve.

This article will draw on the concept of respectful interactions to explore how interactional patterns shape information sharing (Dillon 1992, Jordan *et al.* 2009). Respectful interactions are characterised by honesty, self-confidence, and appreciation of others (Lanham *et al.* 2009). They are powerful because they make people comfortable with sharing information. Though not all information will end up being relevant, environments that support information sharing benefit from access to diverse knowledge, perspectives, and skills which, together, can address workplace challenges (Schein 2010, Weick and Roberts 1993). The degree to which working environments feature respectful interactions will be directly related to how easily people share information.

Methods

This article features a secondary analysis of data from a National Institute of Health funded project which was designed to improve adherence to multiple chronic illness guidelines. The first phase of the project included the collection of ethnographic data from PCPs in Pennsylvania and New Jersey. Practice types included community based PCPs owned and run by physicians as well as university and hospital owned practices. Our focus on nurse-physician interactions led us to select for our secondary analysis PCPs (27 out of the original 61) with at least one registered nurse, leaving out some practices that employed medical assistants and licensed practical nurses who were not board certified. Initial ethnographic data was collected by field researchers who spent 5 to 6 days for half a day each over a period of three weeks in each practice. The data was collected during practice meetings, patient encounters, and in lunchrooms and waiting rooms. The data included observational field-notes, key informant interviews, and depth interviews that focused on the daily activities of PCP personnel and their interactions with patients and one another. Interviews were composed of questions that emerged from previous observations and were conducted in a private room within the practice. The research was approved by the Institutional Review Board from the first listed author's institution at the time of the study. Observations were scheduled to coincide with varying practice conditions (e.g. weekday vs. weekend). The data presented includes practice based participant observation and interviews that were conducted by field researchers (the first listed author being one of these) as well as data collected during the research team's analysis meetings. Although the field researchers went on to conduct an intervention practice improvement programme in each practice, our analysis is based on the data collected prior to the intervention.

During data collection field researchers met weekly with a team of investigators to share stories that may not have been captured in field notes, to set goals to guide further data collection and to select interviewees representative of each occupational group. The physician group included the practice owner(s), physicians employed by the practice, and medical residents. Nurses included licensed practical nurses (1 year post high school with a practical nurse's license), and licensed registered nurses who are board certified as registered nurses and received either their Diploma (2 year-hospital based), Associates (2 year -community college), or Baccalaureate (4 year college) degrees. To maintain the confidentiality of participants, some descriptions and quotations are conflations of things two or three people did or said. Moreover, quotations are edited to make them easier to read while at the same time preserving both the sense and meaning of original comments (Luhrmann 2000).

In the results, the 27 practices whose interactions we analysed are placed into a three-part typology based upon empirical evidence that supports the conceptual distinctions we draw. LR practices featured interactions that were hostile, lacked respect, and resulted in extreme self-protection that inhibited information sharing. At the other end of the continuum were HR practices where respectful interactions facilitated information sharing across the practice. UR practices, by far the largest group, displayed interactions that were pleasant, but respect and information sharing were most common for individuals who met certain criteria: those within the same professional group or those across professions who were familiar to one another. Therefore, even though UR settings were significantly less dysfunctional than LR settings, the ways in which prior relationships and status took president over other concerns significantly undermined information sharing. Indeed, it may be argued that issues of UR practices are more insidious because they are more subtle than the explicit hostility of LR practices and thus harder to spot.

Work on this article began with the first listed author placing practices into three categories organised around the degree to which the quality of relationships among and between doctors and nurses accorded with the definition of 'fluid-alliances'. (DiCicco-Bloom et al. 2007, Krippendorff 2012) She then engaged a colleague with qualitative research expertise (see acknowledgements) to randomly select 12 practice data sets, who, after reviewing the data, agreed with the categorical decisions made by the first listed author for 10 of the practices (the two then came to consensus about the last two). Then the two authors did a thorough review of the sociology and management literature in order to better understand the social dynamics represented in the results. After multiple drafts, they formed consensus around respectful interactions and information sharing as the most fundamental factors representing the strengths and weaknesses of different practices. Additionally, they changed the term fluid-alliances to fluidalliancing in order to reflect the emergent focus on interactions as opposed to relationships and induced the argument that leadership was an important issue mediating social interactions. Together these concepts were deemed best suited to understanding what set HR practices apart. We realise that the relationship between respectful interactions and information sharing may be bi-directional, however, due to space and data limitations, we structure our results around the assumption that interactions shape information sharing.

Results

Low degree of respectful interactions (LR) (5 practices) Practice meetings where different occupational groups come together are infrequent in LR practices. When they do occur they are characterised by uni-directional updates, an absent leadership, and little opportunity for bidirectional information sharing. Outside of meetings, physician interactions were strained. Physicians mostly avoid one another and sometimes react to tensions by punishing nurses. Nurses supported and assisted each other. However, when critical issues arose, they did not have the confidence to correct one another, choosing instead to avoid of the risk of alienating a fellow nurse.

Practice-wide meetings Practice-wide meetings were uncommon but when they did occur inter-occupational communication was not fostered. One practice had meetings that were limited to physicians, and thus provided no opportunity for information sharing between nurses and physicians. In a practice where nurses attended meetings, physicians were not always present. In that practice the office manager led the meetings using an agenda created by the lead physician. The absence of the physicians sent a powerful message about the limited

importance of the nurse's insights and concerns. Additionally, their absence prevented physicians from role modelling behaviours that would reinforce respectful interactions and information sharing. At another practice, physicians were absent when the nurse manager said that the practice would be adopting an electronic medical record (EMR) selected by the practice leader. The manager asked for feedback but none was forthcoming. A nurse whispered to the field worker as she left the meeting, 'I wish I could quit ... they won't teach [us how to use the system], they'll just yell at us if we make a mistake'. These comments demonstrate how organisational changes are introduced without efforts to include people in the process.

Physician-physician interactions In one LR practice, hostility was displayed between physicians who were described by both nurses and doctors as, 'not speaking to one another'. In another, two physicians were observed competing for a nurse who was 'struggling' to meet their needs. When the nurse was delayed taking the vital signs of one physician's patient because she was helping the other physician's patient to the restroom she was publically reprimanded for 'favouring' the first physician. The physician practice leader later confirmed that these behaviours were disturbing, but thought it best for the physicians to work out their conflicts among themselves. In this case the physicians displayed disrespect towards each other and their nurse colleague, and the practice leader failed to address the behaviour.

Nurse-nurse interactions Lack of respect between physicians often evoked fear and self-protective behaviour among nurses as evidenced by the superficial and rigid displays of positivity that often characterised nurse-nurse interactions. For example, though several LR nursing staff were observed helping each other with tasks, passive aggressive and self-protective behaviours were relatively common. In one practice, Nurse Rand, a registered nurse and long-time employee of the practice, was on her break when Nurse Simon took a phone call from her daughter. Rand offered to walk a patient back to an encounter room so Simon could talk to her daughter. At that moment a front office staff said, 'She is going to start cursing [at her daughter] and the patients will hear it'. Rand responded, 'If I say something [to Simon] she will [get angry at me] ... things are bad enough'. In this instance, Rand's behaviour was initially generous. She left her break to care for a patient so that Simon could speak with her daughter. However, the gesture was also characterised by fear of possible conflict with Simon in an already troubled environment. Nurse Rand's need for solidarity in the context of an already combative environment inhibited her from sharing information regarding the effect that Nurse Simon's behaviour had on patients.

The degree to which respectful interactions were missing in LR practices extends to more serious clinical issues. Nursing staff from several LRs had issues with one another, but rather than strive for resolution nurses often opted to keep their concerns to themselves. For example, in one practice Nurse Jacobs complained that Nurse Roberts took blood pressures incorrectly, but didn't want to discuss the issue with her. Jacobs explained, 'When [one of the other nurses] is here we work well together', but when she worked with Roberts she would furtively correct the mistakes 'so the patients are okay' and then added 'don't share this [conversation] with anyone'. Nurse-nurse interactions in LRs often evidenced such self-protectionism, and this impeded constructive feedback and corrective mechanisms to improve care.

Nurse-physician interactions Instances in which physicians were not respectful to nurses were observed and reported. In one practice a senior nurse explained that one physician frequently 'lost his temper' in response to her reports. She stated, 'he gets annoyed ... slamming the doors ... it's very stressful'. In another practice, a nurse expressed fear of being alone in a room with a physician colleague. And yet, depth interviews with the offending physicians suggested that they viewed their behaviour towards nurses as appropriate. Despite evidence to the contrary, a few even described an 'open door' policy for nurses and staff who wished to share information with them. Physicians in these practices were unaware or dishonest about the degree to which they did not engage in respectful interactions, and nurses did not have the self-confidence to speak up. LRs demonstrate how social environments that feature a low degree of respectful interactions undermine information sharing among and between occupational groups.

Uneven degree of respectful interactions (UR) (17 practices) Though practice-wide meetings in which physicians are in attendance are frequent in URs, bi-directional information sharing tends to be limited to communication between doctors. During everyday work routines, interactions between members of the same occupational group are respectful. However, interactions between nurses and physicians do not always feature respect and thus undermine bi-directional information sharing.

Practice-wide meetings Although less strained and better attended than those of LRs, UR practice meetings are characterised by top down information sharing. Meetings in URs were usually conducted by the practice leader with input from physicians or the office manager. Data from several URs describe scenarios in which physicians provided information and engaged in most of the conversation. Nurses and staff asked occasional questions, but their input was not encouraged. For example, in one particular meeting a nurse shared a concern about a new EMR system. The physician leader did not respond. Then another physician shared a similar concern at which point the practice leader engaged the physician by questioning him while the practice members looked on. By not acknowledging the nurse's query, the physician leader engaged in an interaction that was not respectful. By acknowledging a physician who asked a similar question, priority was given to occupational status as opposed to the concerns of clinical care.

Physician-physician interactions In URs with more than one physician, positive interactions were observed and directly reported. One lead physician shared his enthusiasm, 'I like working with [the other physicians], we meet regularly to make decisions and we have our own [practice] projects'. In another UR, the practice leader described the task of selecting an EMR with another physician: 'We both have our areas of expertise and [we] do our research and ... make decisions together'. In a third practice, a physician agreed to see a patient for the practice leader. The covering physician was later heard making a suggestion about a medication change that she thought would benefit the practice leader's patient in earshot of the staff and the field researcher. They were described as friendly and comfortable during their conversation. In URs, physicians value each other's contributions and are open to information sharing.

Nurse-nurse interactions Interactions between nurses also display the positive attributes of URs. In one practice, a nurse manager asked a new nurse graduate to demonstrate the use of an innovative safety syringe with which she had experience. In another practice, a nurse known for her expertise and comfort with computer software was observed kindly correcting another nurse who was unable to check a patient's renewal prescription through the EMR. Two nurse onlookers asked for further clarification and confided that they still struggled with the task despite having had it demonstrated to them.

Nurse-physician interactions Though nurse-physician interactions appeared relatively positive, physicians did not always behave in ways that suggested they appreciated the insights of © 2016 Foundation for the Sociology of Health & Illness

nurses. For example, one nurse who had knowledge of various EMR systems was excluded from the selection process. Even though she overheard the office manager mention her extensive knowledge to other physicians, no one asked for her advice: 'I know what would [help] the people in this practice, especially the billing staff and nurses ... but [the physicians] haven't asked me'.

When respectful interactions do occur between nurses and physicians, it is usually between those who already have a long-standing work relationship. This is exemplified by the following vignette. When Dr. Steward explained that he needed to leave work early, the lead physician Dr. Valencia volunteered to stay late and finish seeing Steward's patients. Dr. Valencia asked Nurse Porter, with whom she often worked, if she could stay and help and Porter willingly agreed. Later, Nurse Talbert (who was new to the practice) commented that Nurse Quinlan, who usually worked with Steward, might like to stay and work with Dr. Valencia because she had more experience with Steward's patients. However, Quinlan wouldn't volunteer because she wasn't comfortable asking to work with Valencia. When a researcher asked Mrs. Talbert why she didn't speak up for her colleague, she responded, 'Oh no ... [Dr. Valencia] might get angry'. Though the relationship between Porter and Valencia illustrates the increased quality of doctor-nurse interactions in URs, Valencia's decision to pick Porter as opposed to considering who was best suited for the job and Talbert's reticence to share her perspective on the matter demonstrate a deficit of appreciation on the one side and a lack of confidence and honesty on the other. Though occupational interactions in UR practices are a vast improvement to those in LRs, the degree to which respectful interactions between occupational groups tend to be limited to nurses and physicians who have already worked together show how more subtle social rigidities undermine information sharing.

High degree of respectful interactions (HR) (5 practices) Practice-wide meetings in HRs were usually attended by all practice members, and contributions were made and discussed by all. As with URs, physician-physician and nurse-nurse interactions were often respectful and featured a lot of information sharing. However, nurse-physician interactions in HRs were rarely characterised by top down information sharing. Nurse-physician interactions showed significant evidence of the kind of bi-directional information sharing that facilitates a collective view of work. Moreover, individuals were free to break out of more established personal or identity based relationships to work with those individuals who were best suited to the task at hand. In these ways, HRs featured interactions that we characterise as fluid-alliancing.

Practice-wide meetings Meetings in HRs provided members with an opportunity to share information and for the leadership to reward respect among practice members. During one meeting, a nurse raised her concerns about difficulties that had arisen with scheduling non-English speaking patients. The nurse and others suggested changes. A physician who usually worked different days than the nurse volunteered to meet with her to develop a plan and report back to the group. In response, the physician leader thanked the nurse for taking the initiative and then thanked the physician for helping out. Thus the nurse was assisted by a physician with whom she was unfamiliar because of shared interest and concern for the practice. This example of fluid-alliancing illustrates an environment in which respectful interactions are the norm, and in which everyone values patient care and practice performance above other concerns. Since physician-physician and nurse-nurse interactions in HRs are similar to those in URs, we will only review nurse-physician interactions.

Nurse-physician interactions In one practice a new physician stated, 'I feel comfortable asking questions of the nurses and anyone who works with us, everyone has something to offer'. In another practice a nurse commented that '[I] can ask the physicians [anything] ... I also get to tell them what I know'. In a third practice a nurse who had recently been hired recommended to all the physicians and nurses that the three nurse/physician dyads in the practice should change partners to encourage the sharing of clinical expertise. The change was instituted on an experimental basis. In a fourth practice, an EMR was met with dismay because many of the kinks had not been worked out. The company that sponsored the programme asked to meet with the physicians. In response a nurse new to the practice but with earlier experience with the programme in question suggested that the entire practice participate in the education event. After a brief discussion with the practice leader and a second nurse, the nurse agreed to present the idea at the practice meeting the next day. The second nurse asked if they should first inform the other two practice physicians. The practice leader said, 'I think they will appreciate the contribution and they can share their thoughts at the meeting'. This demonstrates how HRs encourage all members to make suggestions with the knowledge that they will be judged on merit rather than on status or familiarity with practice leaders. In other words, the degree to which the social dynamics of HR practices are characterised by respectful interactions creates the opportunity for fluid-alliancing to occur for the benefit of patient care and the efficacy of the practice community.

Discussion

In this article we establish a three-part typology of interaction patterns in 27 PCPs. As opposed to relying on individual perceptions data like the teamwork/collaboration literature, our analysis is based on observational data that directly captures the social dynamics that modify information sharing. We find that respectful interactions - characterised by confidence, honesty, and appreciation – facilitate information sharing among and between nurses and physicians. Practices categorised into the LR group illustrate the many ways in which a low degree of respectful interactions challenges the flow of information within and between occupational groups. Interactions between physicians are sorely lacking in appreciation, leaving them angry and isolated as evidenced in one practice where they fought over a nurse. Interactions between nurses are characterised by a lack of honesty and confidence, as exemplified by a nurse who did not directly confront a colleague's phone behaviour and another who did not educate a colleague who was monitoring blood pressure incorrectly. Though the animosity between physicians undermines the confidence of nurses (who are subordinates in the practice hierarchy), nurses reinforce LR interaction patterns by not addressing the problematic behaviour of other practice members. In LR practices, practice wide meetings are either poorly attended by physicians, are restricted to only physicians, or do not occur at all. This situation clearly demonstrates how LR practices do not support respectful interactions since the absence of consistent physician participation with staff signifies a lack of appreciation for others and creates barriers to honest dialogue about the practice.

Compared to LR practices, UR practices feature respectful interactions among members of occupational groups, but respectful interactions between doctors and nurses tend to be limited to those who already have long-standing working relationships. In URs, interactions among doctors and among nurses are usually respectful and facilitate information sharing. In one UR practice, a covering physician suggested a change in a patient's medication regimen, which was well received by the patient's regular physician. In another practice a nurse with computer expertise confidently shared her knowledge with other nurses who were appreciative. Though interactions

between nurses and doctors were sometimes respectful, as illustrated in the interaction between Nurse Porter and Dr. Valencia, respectful interactions were often limited to those cases where a nurse and physician had a long-standing work relationship. This is evidenced by Valencia's lack of appreciation for Quinlan's experience and knowledge of Steward's patients, and Talbert's hesitancy to honestly bring this oversight to Valencia's attention. Though Talbert's hesitancy may belie her inability to confidently address an issue with a superordinate, it may also reflect a reaction to discouragement from physicians in response to past attempts at information sharing. Thus, UR practice dynamics facilitate information sharing among those with similar status and/or within established relationships that cross professional boundaries. However, information sharing by those who do not meet these criteria is inhibited. This dynamic sends a strong message that status and established relationships (i.e. favouritism) take priority over flexible information sharing that facilitates patient care. These priorities are reflected in meetings where, despite good attendance, the leadership in UR practice did not always encourage nurses and other staff to engage in honest dialogue about organisational issues. Though physicians and nurses were more respectful of one another in URs and did not display the pervasive hostility present in LRs, the friendly and polite environment of URs camouflaged those times when leaders failed to support respectful interactions, making it difficult for those who might have wanted to address interactional issues to do so. While the barriers to information sharing that are characteristic of URs are obviously less overtly hostile, they still feature shades of social rigidity that keep them from tapping into the potential of fluid-alliancing.

The degree to which respectful interactions characterise the social dynamics between doctors and nurses in HR practices makes it possible for them to engage in fluid-alliancing, flexible interactions that maximise the sharing of information for the benefit of patients and the efficacy of a practice community. In HR practices, members of all occupational groups are encouraged to share information, and the character of social interactions among and between nurses and doctors, reflected in practice meetings and workday routines, illustrate confidence, honesty, and appreciation. In HR practices, members are able to tackle new challenges (such as improved scheduling of non-English speaking patients) by drawing on the diverse perspectives and experiences of all occupational groups. Practice members of different occupational groups are not only comfortable, but actually seek out, connections with those who they don't know (like when doctors and nurses mixed dyads) and thus demonstrate the flexibility that characterises fluid-alliancing. Indeed, the ease with which people are able to be honest and appreciative of one another, to work against social rigidities that can be associated with hierarchy, is why fluid-alliancing supports information sharing. Though it might be argued that fluid-alliancing merely describes a situation in which most interactions are respectful (and thus adds a component of conceptual complexity that seems anathema to the theoretical mission of this article), we argue that the fluidity that characterises interactions in HR practices deserves a concept of its own because the degree to which such interaction patterns unlock information sharing has benefits that go beyond the individual interactions that are its source. Though many of the interactions in UR practices are respectful, the number of interactions that are not respectful (like those between doctors and nurses who do not have long-standing relationships) create interactional bottle necks that restrict the flow of information and access to the knowledge and experience of all practice members. The benefits of respectful interactions (and fluidalliancing) becomes evident in the degree to which interactions between practice members either facilitate or hamper challenges associated with clinical practice (like the implementation of new technology). In the final part of this article we explore how the different practice types experienced the implementation of EMR, while at the same time highlighting how the behaviour of practice leadership has outsized power in supporting or undermining the kinds of social environments that make fluid-alliancing possible.

Differences in the experiences of LRs, URs, and HRs as they undertook implementation of the EMR demonstrates the power of fluid-alliancing, and the role played by practice leadership in modelling behaviours that encourage respectful interactions and information sharing. Variation in the degree to which superordinates' engage in respectful interactions shows the influence that leadership has on shaping the social dynamics of practices and the degree to which information sharing contributes to the efficacy of healthcare organisations (Ferlie and Shortell 2001, Nembhard and Edmondson 2006). This is exemplified in our results by different experiences instituting an EMR. As with all clinical processes, EMR implementation is shaped by interactions between physicians, nurses and other practice members. In one LR practice the selection of an EMR was presented at a meeting in the absence of physicians so subordinates did not have a chance to discuss the change with practice leadership. Moreover, when asked for feedback by the nurse manager, the staff did not have the confidence to voice questions and concerns. Instead, a nurse expressed to a field researcher (as opposed to her colleagues) her fear that if she made a mistake while using the EMR she would be punished. These social dynamics deny personnel access to the valuable experiential data of other colleagues that might make integration of an EMR system more efficient. By not being present to hear and address community concerns, the physicians displayed a lack of leadership that impeded completion of work tasks central to patient care. Although in UR practices the leadership exhibited interaction patterns that facilitate information sharing among themselves, at a meeting a nurse's concern was ignored while another physician, who asked the same question, was acknowledged. This episode shows that in UR practices the leadership models behaviours that favour role and status over respectful interactions. Unlike LR practices where the leadership was not present, UR practice leaders attended most meetings. However, they missed opportunities to show appreciation for the contributions of staff, and bolster the confidence and honesty of personnel in meeting future practice challenges.

In HR practices, leaders model respectful interactions that encourage information sharing and reward the contributions of others, and in so doing create a social environment in which interactions are flexibly geared towards drawing out diverse perspectives and knowledge and addressing the challenges of patient care. One of the HR practices described in our results clearly demonstrates the power of leadership to support fluid-alliancing when members overcame dismay with a new EMR by relying on information sharing to address emerging challenges. A nurse familiar with the new technology informed the practice leader and another nurse of her expertise, and they immediately asked her to present on it at a practice meeting. The flexibility demonstrated by the practice leader when she didn't wait to check with the other authority figures suggests that respectful interactions were a given among all practice members. The fact that this practice was able to effectively and efficiently transmit this one person's knowledge - even though they were lower down in the practice hierarchy - demonstrates the benefits that fluid-alliancing provides for the functionality and adaptability of healthcare organisations. A similar notion is addressed in the literature on the development of 'communities of practice', or groups of people who share a concern for something they do and learn how to do it better as they interact (Wenger and le May 2009).

When leadership promotes respectful interactions it supports fluid-alliancing, a process that augments the capacity of a practice to access the knowledge of all its members so that those with the most relevant skills and experiences can be efficiently identified and assigned to the task at hand.

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