Hospital staff corridor conversations: work in passing

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GONZÁLEZ-MARTÍNEZ E., BANGERTER A., LÊ VAN K. & NAVARRO C. (2016) Hospital staff corridor conversations: work in passing. *Journal of Advanced Nursing* **72**(3), 521–532. **doi: 10.1111/jan.12842**

Abstract

Aims. First, to document the prevalence of corridor occupations and conversations among the staff of a hospital clinic, and their main features. Second, to examine the activities accomplished through corridor conversations and their interactional organization.

Background. Despite extensive research on mobility in hospital work, we still know fairly little about the prevalence and features of hospital staff corridor conversations and how they are organized.

Design. We conducted a study combining descriptive statistical analysis and multimodal conversation analysis of video recordings of staff corridor practices in a hospital outpatient clinic in Switzerland.

Methods. In 2012, we collected 59 hours of video recordings in a corridor of a hospital clinic. We coded and statistically analysed the footage that showed the clinic staff exclusively. We also performed qualitative multimodal conversation analysis on a selection of the recorded staff conversations.

Results. Corridor occupations by the clinic staff are frequent and brief and rarely involve stops. Talk events (which include self-talk, face-to-face conversations and telephone conversations) during occupations are also brief and mobile, overwhelmingly focus on professional topics and are particularly frequent when two or more staff members occupy the corridor. The conversations present several interactional configurations and comprise an array of activities consequential to the provision of care and work organization.

Conclusion. These practices are related to the fluid work organization of a spatially distributed team in a fast-paced, multitasking environment and should be taken into consideration in any undertaking aimed at improving hospital units' functioning.

Keywords: contingent encounters, corridor conversation, corridor occupation, hospital staff, mobility, multimodal conversation analysis, nurses, outpatient clinic, professional communication, video-based research

Why is this research needed?

- Contingent encounters between hospital staff feature centrally in the production of work, but have been difficult to capture and examine as they happen.
- Hospital staff spend time walking through the corridors of the hospital premises, where they talk with colleagues, but we lack systematic analysis on these occupations and conversations.
- It is not clear what these corridor conversations consist of, how they are produced or how they are related to the provision of care and work organization.

What are the key findings?

- The study demonstrates the prevalence of staff corridor occupations and conversations in a hospital clinic but shows that for the most part they are brief and do not involve stops.
- The conversations are overwhelmingly about professional topics, present different interactional configurations and comprise a wide array of activities consequential to the provision of care and work organization.

How should the findings be used to influence policy/practice/research/education?

- Video-based research is a means to gain quantitative and qualitative evidence on hospital work practices.
- Organizations should acknowledge the importance of the work involved in travelling through the hospital premises, including indispensable work conversations.
- Findings should be taken into consideration for the design of hospital units and communication tools and procedures.

Introduction

Face-to-face communication between hospital staff members, during both planned and contingent encounters, is crucial to work coordination, patient safety and overall healthcare quality (Nemeth 2008, Smith 2009). Planned encounters, e.g. nurses' shift handover meetings, have been amply studied (Staggers & Blaz 2013). Contingent encounters have long been suspected to be equally important, but have been difficult to study because their occurrence is hard to predict. A prominent example is staff corridor conversations. Qualitative observations suggest that they are highly dynamic and heterogeneous in terms of the activities accomplished and that they serve work purposes (Long *et al.* 2007). Professional corridor conversations may occur frequently because hospital staff and nurses in particular, spend substantial portions of their time walking in a multitask-oriented environment (Hendrich *et al.* 2008, Westbrook *et al.* 2011, Yousefi 2011). Observations in this sense have already been made in several hospital settings and geographical contexts: a haematology department in a Danish hospital (Bardram & Bossen 2005), an urgent-care department of a hospital in the US (Hollingsworth *et al.* 1998) and a spinal pressure area clinic in an Australian hospital (Long *et al.* 2007), among others. Nevertheless, systematic data on the prevalence of hospital staff corridor conversations is lacking and it is not clear what they consist of and how they are related to the provision of care and work organization. For this study, we video-recorded and analysed corridor occupation and conversation in a Swiss hospital outpatient clinic.

Background

Mobility in hospital work is a complex phenomenon that is inextricably linked to work organization, communication and patient care (Coiera & Tombs 1998, Bardram & Bossen 2005). Hospital staff spend substantial parts of their workday walking (Westbrook *et al.* 2011, Yousefi 2011). One study (Hendrich *et al.* 2008) found that in a 10-hour shift, nurses in surgical units spent more than 30% of their work time in places other than patient or staff rooms and walked a median distance of 3·0 miles. Hollingsworth *et al.* (1998) calculated that resident physicians of an emergency department walk 4·5 miles in a 9-hour shift and nurses 5·6 miles in a 12-hour shift. According to Bardram and Bossen (2005), hospital staff have such a high level of mobility because they must reach other persons (colleagues, patients) or places and access knowledge or resources (materials and tools).

Despite extensive research on hospital mobility work, the existing literature still has little to say about the use of corridor space for professional activities. Corridors may constitute an important setting for conversations related to the organization of hospital work (Morán *et al.* 2007), encounters with patients and their relatives (Crawford & Brown 2011) or even teaching activities (Pearce 2003). 'Curbside consultations,' whereby care professionals informally seek medical advice from colleagues, may often occur in corridors or outside patient rooms (Kuo *et al.* 1998). In a video ethnography study, Long *et al.* (2007) recorded corridor conversations in a multidisciplinary hospital clinic, between nurses, doctors and other staff. They observed and classified corridor conversations into five main modes: clinical, technological, organizational, affective and reflective. Corridor conversations were flexible and heterogeneous in nature: Often, multiple staff members would enter and exit the conversations at different points in time, or a briefing might occur just before staff entered a patient's room.

Given the potential importance of hospital corridor conversations, more research into specific issues is needed. First: How often are corridors occupied and how often do corridor conversations occur? Second: What are the activities that staff engage in when talking in the corridors and how are the conversations interactionally organized? For instance, staff may exchange brief information on an upcoming task while passing each other by, or may stop walking to discuss a case in detail, both activities contributing to work organization. Interactional workplace studies provide a theoretical and methodological framework to investigate these issues, because they focus on participants' practices as they occur *in situ* and in real time (Arminen 2005). This framework champions conducting video-based field studies that provide direct and in-depth access to the complexities of participants' practices, making possible their detailed, repeated and shared examination (Iedema *et al.* 2006, Heath *et al.* 2007). Quantitative analysis of the recordings offers statistical evidence of the occurrence and main features of the practices of interest, while multimodal conversation analysis yields qualitative insight into what the interactions consist of and how exactly they are organized (Heritage 1995, Arminen 2005).

The study

Aims

The study first aims to document the prevalence of corridor occupations and conversations among the staff of a hospital clinic, and their main features. Second, it examines the activities accomplished through corridor conversations and their interactional organization.

Design

The study was conducted by a research team composed of two senior researchers (González-Martínez and Bangerter), a PhD student (Lê Van) and a research assistant (Navarro). It was part of a larger research project on mobile and contingent work interactions in a hospital clinic (González-Martínez & Bangerter 2011). The project adopted the theoretical and methodological framework of the interactional workplace studies presented by Arminen (2005). It involved ethnographic fieldwork at the clinic, including systematic video-recording of activity in several corridors. For this particular study, we combined quantitative and qualitative analysis of a selection of the recordings (Heritage 1995, Arminen 2005). We performed descriptive statistical analysis to obtain evidence of the prevalence and main features of corridor occupations and conversations. We used a multimodal conversation analytic approach (Stivers & Sidnell 2005, Koenig & Robinson 2014) to gain insight into the activities accomplished during corridor conversations and their interactional organization.

Setting

The setting of our research is a hospital outpatient clinic in the French-speaking part of Switzerland. At the time of the project, the clinic was open 13 hours per day and provided scheduled and walk-in care, including non-life-threatening urgent care. Staff comprised 36 persons (16 junior and senior physicians, one head nurse, 12 nurses, four nurse's aides, two nursing students and one secretary). On weekdays, 14 staff members on average worked at the clinic at the same time. The clinic had 22 rooms, including an eight-bed day hospital room, a three-bed urgent-care room, a wound-dressing room and triage and consultation rooms; there was no physician/nurse station. The rooms were served by two long hallways connected in the middle and at each end by short corridors. Every day, staff were assigned to activities in one or more rooms according to pre-established written schedules. Nevertheless, the actual distribution of the staff frequently changed throughout the day depending on the moment-by-moment needs of the clinic's functioning.

Data collection

In 2012, two researchers (González-Martínez and Lê Van) conducted fieldwork at the clinic, including systematic recordings of activity in several corridors. For this study, we used the recordings made in the 8·40-m-long middle corridor connecting the day hospital room to the urgent-care room and the two long hallways of the clinic (Figure 1). We chose these recordings because they gave access to corridor activity related to several central parts of the clinic. They amount to 59 hours, 48 minutes and 41 seconds of footage recorded on five consecutive weekdays from 7 am to 7 pm. The recording set-up included two high-definition video cameras suspended from the ceiling at opposite ends of the corridor, supplemented by three wireless omnidirectional microphones suspended from light fixtures. The sound tracks and video tracks were imported and synchronized in Final Cut Pro X®.

Ethical considerations

The research protocol of our project was accepted by the hospital's board of directors and included ethical require-

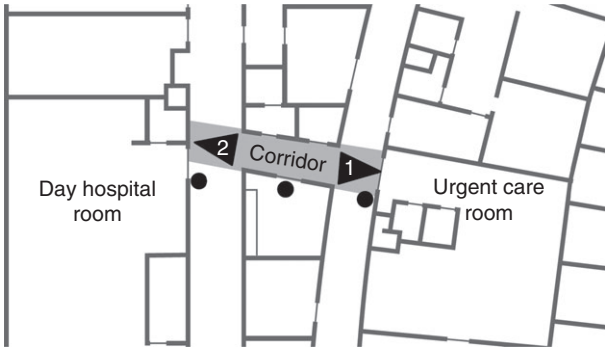

Figure 1 Clinic map section and recording set-up. Section of the clinic map with corridor and recording set-up (the triangles represent cameras 1 and 2 and the circles represent the microphones). The corridor is 8.40 m long.

ments specifically connected to the study's videography (Broyles *et al.* 2008). *Inter alia*, the recordings should not interfere with the provision of care and work in the clinic. Personal information, such as legal names and dates of birth, of recorded persons or people referred to in the recordings, should be kept confidential and changed into replacement terms. The clinic staff gave voluntary oral informed consent for research participation and approved the reproduction of video clips and still images of them for the purposes of the project. All other individuals entering the clinic premises – like external hospital personnel, patients and relatives – were informed by written and oral means that video recordings were taking place to study interactions between the clinic staff members in the corridors. They were also informed that the recordings could be interrupted at any time at their own request and that all images including individuals other than the clinic staff would be discarded.

Data analysis

For quantitative analysis, we used the Studiocode 4·6® software package, which allows online coding of video data with frame-level precision. We decided to code staff activity events occurring in the corridor (as defined by the grey area in Figure 1): (1) Onset and duration of corridor occupation by a single individual; (2) Onset and duration of corridor occupation by a group of two or more; (3) Onset and duration of talk by one individual speaking with one or more individuals in the corridor or outside the corridor area, talking on a cell phone or engaging in self-talk; (4) Onset and duration of stopping (one or more individuals have both feet on the floor). We also decided to further code talk events as featuring professional or private topics. A primary coder (Navarro) viewed the video-recordings and coded the onset and offset of each event on separate tiers. Descriptive statistics were computed from coded variables (Bangerter and Navarro).

For qualitative analyses, we worked with a selection of 92 video excerpts of staff conversations in the corridors extracted from the data previously coded. The number of selected excerpts corresponded to 10% of the total number of coded talk events and to the capacity of the research team to engage in time-consuming multimodal conversation analysis. The selection included conversations presenting a variety of the features described above. Two researchers (Lê Van and Navarro) transcribed the conversations using Jefferson's conventions (2004) for conversation analysis. These constitute an intuitive yet refined system for representing talk and prosodic and non-verbal oral phenomena such as pauses. The transcriptions were supplemented by descriptions and video snapshots documenting body behaviour, as is standard for multimodal conversation analysis (Stivers & Sidnell 2005). González-Martínez and Lê Van examined the interactions 'case by case' to identify the particular activities – such as informings, checks and requests – being accomplished, and the interactional configurations where they occur, such as staff members walking together, standing in the corridor and passing by each other. Rather than an exhaustive repertoire of such activities and configurations, the analysis aimed to provide a detailed description of the organization of the conversations, on a moment-by-moment basis, of the clinic staff.

Validity and reliability/rigour

Several steps were taken to ensure the reliability of the video recordings (Peräkylä 2004): they began only after the clinic staff were used to the presence of the researchers (González-Martínez and Lê Van) in the clinic; all details of the recording procedure were discussed in advance with the staff to ensure adherence; a static recording set-up provided for minimally invasive recordings; these were made over several consecutive days and for long periods of time without interruption.

For the quantitative analysis, intercoder agreement was assessed by having a second coder (Lê Van) double-code a random sample of 10% of the data and compute Cohen's κ for onset times and Pearson correlations (r) for durations (we assessed intercoder agreement for durations rather than offset times because cases, where coders disagree on onset times will also automatically lower agreement on the coding of offset times). We considered coding where coders disagreed with a margin of error <1 second as agreements. Agreement was good overall: $\kappa_{individual} = 0{\cdot}85$ (95% CI

0·82-0·89), κ_{group} = 0·76 (95% CI 0·66-0·87), κ_{talk} = 0·68 (95% CI 0·59-0·78), $\kappa_{stopping}$ = 0·64 (95% CI 0·50-0·78); all *r*s > 0·90, all *P*s < 0·001. Intercoder agreement for whether talk concerned private or professional topics was 96% (95% CI 89-99%).

For the qualitative analysis, a researcher (González-Martínez) reviewed the transcripts and then discrepancies were examined during team data sessions until agreement was reached. Unclear passages were marked with parentheses displaying, when possible, likely or alternative hearings. Analysis of the excerpts followed the orientations of the participants that exhibit their own understanding of the interaction (Koenig & Robinson 2014). The analysis performed by González-Martínez and Lê Van was discussed with the rest of the research team until agreement was reached. As is standard in multimodal conversational analysis, transcripts with images are provided with the paper to allow the reader to compare the analysis with the data (Stivers & Sidnell 2005).

Results

Descriptive statistics

The clinic staff corridor occupations were frequent, brief and mobile (Table 1). The corridor was occupied by an individual every 0·95 minutes and by a group every 6·38 minutes. Mean occupation times were 3·93 seconds (95% CI 3·80-4·06 s) for individuals and 6·62 seconds (95% CI 5·56-7·7 s) for groups. Only 5% of single occupations (95% CI 4-6%) and 30% of group occupations involved stops (95% CI 27-34%), $\chi^2(1,N = 4319) = 390·6$, $P < 0·001$. On average, stops lasted 7·14 seconds (95% CI 6·05-8·25 s).

Both individual and group occupations involved talk: 25% of individual occupations (95% CI 24-26%), compared with 70% of group occupations (95% CI 66-74%), $\chi^2(1,N = 4319) = 481·5$, $P < 0·001$. Talk events occurred on average every 3·89 minutes and lasted on average 6·5 seconds (95% CI 5·54-7·46 s). Talk was overwhelmingly about professional topics (98% of the time; 95% CI 97-99%). The majority of the time, even when talking, staff kept moving. Only 29% (95% CI 26-32%) of talk events involved stops. Talk involving groups was associated with stopping 43% of the time, compared with 22% of the time for talk involving an individual, $\chi^2(1,N = 1327) = 62·5$, $P < 0·001$. Conversely, stops were associated with talk 69% of the time (95% CI 64-72%) and more so for long stops: 91% of stops lasting 10 seconds or more were associated with talk (95% CI 85-97%). Thus, corridor conversations are most often subordinated to mobility but mobility can occasionally be suspended to accommodate talk, especially longer conversations between two or more individuals.

Multimodal conversation analysis

The clinic staff talked in the corridor to accomplish a wide variety of activities in different interactional configurations. The most common professional activities during talk events were: informing someone of something; making enquiries about cases, colleagues or other matters; clinical conferring on a case; giving orders or instructions; making requests; checking how something is going; and offering help. Staff may accomplish several of these activities in one specific talk event. This is the case for instance with 'informal handoffs' that nurses perform in the corridor with colleagues coming to relieve them, and 'micro-briefings', where nurses review the state of the clinic's functioning, assess it and decide on the next steps to take (Lê Van & González-Martínez 2014). The most common interactional configurations of group conversations were talking: when crossing in front of/behind someone or passing someone by, while walking side by side or one behind the other, sometimes at a great distance and while converging and sometimes standing in a common spot. Several configurations may also combine in one specific talk event, for instance when two nurses coming from different rooms converge in the corridor, then stand there discussing a case before walking together to a room, where they will take care of the patient.

Table 1 Single and group occupations, stops and talk in the clinic corridor.

Event type	Number of events	Mean duration (s)	Minimum duration (s)	Maximum duration (s)	Minutes/ event
Single occupations	3757	3·93	0·04	51·2	0·95
Group occupations	562	6·62	0·04	167·46	6·38
Stop*	517	7·14	0·08	120·08	6·94
Talk*	922	6·50	0·04	310·06	3·89

*Stop and talk events may comprise multiple consecutive occupations.
s: seconds.

In lieu of an exhaustive and numerical repertoire of such activities and configurations, our analysis aims at a detailed description of the clinic staff's organization of the conversations, on a moment-by-moment basis. Below, we provide the analysis of two talk events exemplifying two different activities and interactional configurations: one mobile and very brief, the other stationary and of longer duration and examine their importance in terms of the provision of care and work organization. We have translated the original French talk into English and replaced all staff names with fictional ones. See Appendix 1 for a list of the transcription conventions following Jefferson (2004).

Brief mobile talk event: Passing-by informing

Excerpt 1 corresponds to a very brief passing-by exchange of 5 seconds between Suzi, a nurse and Justine, a nurse's aide. Suzi walks from the urgent-care room to the day hospital room through the clinic's central corridor. Justine simultaneously follows the same trajectory but in the opposite direction. Suzi and Justine talk as they pass by each other in the corridor, without stopping (Figure 2).

In this excerpt, Suzi informs Justine that a new patient, coming from the hospital's dialysis department, is about to arrive at the clinic to have a catheter changed. Suzi shapes her statement as something to be acknowledged only, thus projecting only a minimal response from Justine. Nevertheless, Justine first produces a dismissive receipt of the news followed by the display of an epistemic stance – not knowing – towards the factual accuracy of what has been said. Suzi treats this as challenging the information given, which prompts her to emphatically reaffirm its veracity. Simultaneously, Justine accounts for her reluctance to engage further on the issue and possibly on its practical consequences, stating that she is busy.

The encounter begins with Suzi and Justine moving forward, following opposite parallel trajectories, each of them occupying a different side of the corridor (I-1). At a distance of approximately six steps from Justine, Suzi turns her head and upper body very slightly towards Justine and starts talking to her. In response, Justine turns her upper body and head also very slightly towards her and smiles (I-2). Nevertheless, as soon as Suzi has caught Justine's

Excerpt 1 [Talk event no 100]

1		(1.6)[I-1]
2	Suz:	we ↑have a catheter[I-2] change that's going to arrive from
3		dialysis[I-3]
4	Jus:	↑oh well I don't know: I [I I'm kind of (running) around]=
5	Suz:	[yes yes I'm (telling) you]=
6	Jus:	=in all directions now[I-4]

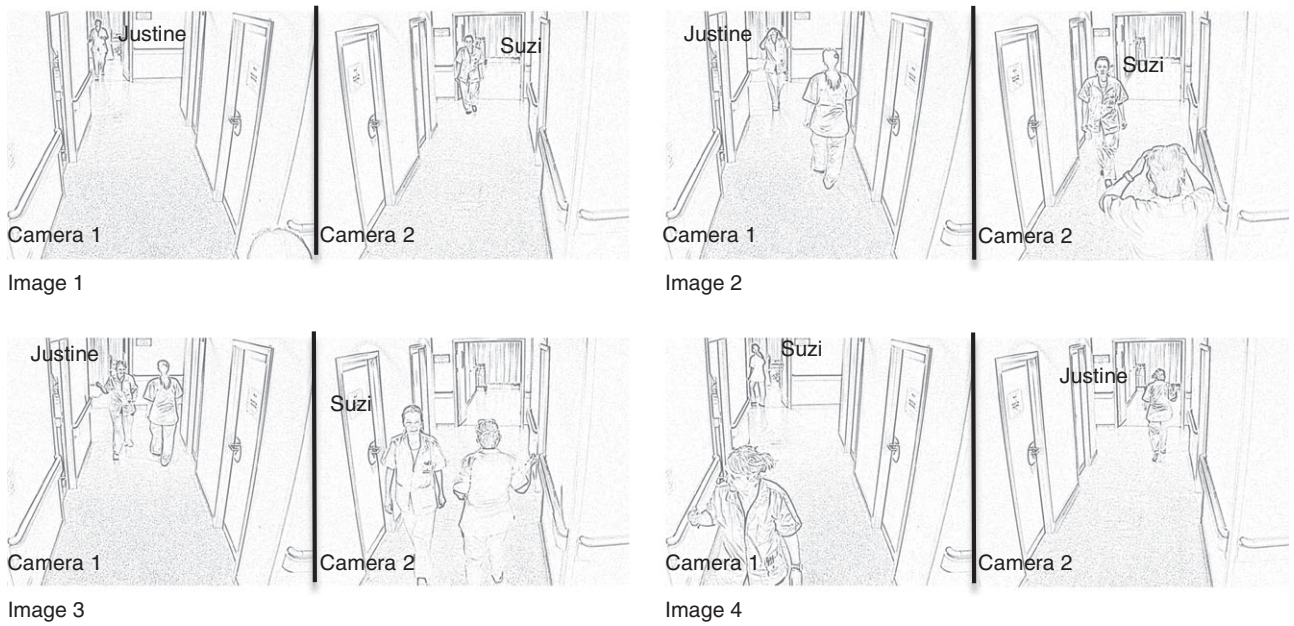

Figure 2 Split-Screen Images of Excerpt 1 [Talk Event No 100]. Abbreviations such as I-1 or I-2 in the transcript and the text refer to the corresponding images above.

attention, she reorients her body and gaze away from Justine and in front of her. As she sees this, Justine does the same and both participants pass by each other, both avoiding eye contact (I-3). The exchange concludes as they move apart, each going in an opposite direction (I-4). Both participants thus coordinate talk and body behaviour to limit interactional involvement and produce a brief, in-passing exchange.

In this excerpt, a nurse accomplishes an activity consisting of informing an aide of the upcoming arrival of a patient, which is consequential in terms of the provision of care and work organization. The informing helps to build not only a shared state of knowledge on the clinic's functioning but also has practical consequences in terms of the aide's work planning: she may later be called to assist the nurse with the patient. The informing thus forewarns the aide, inviting her to anticipate the future task. The nurse displays limited availability to share further information on the case or to negotiate its practical handling. The aide picks up on that in the sense that she sustains a passing-by exchange but calls into question the information given, stating the reason why she cannot confirm it (she is running around). This serves as an indication for the nurse of the fact that the aide may not be able to assist her on the new patient's arrival.

Longer stationary talk event: Clinical conferring

In Excerpt 2, Mathieu, an attending physician, goes past the day hospital door and towards the urgent-care room. He perceives Audrey, a nurse, just coming out from behind the curtain separating the day hospital from its entrance area and calls to her. She comes out and they talk together, for 44 seconds, standing in the corridor, about the case of one of the patients who is in the day hospital (Figure 3).

Excerpt 2 [Talk Event no 205]

```
 1  Mat:   Audrey?I-1
 2         (0.2)
 3  Aud:   yes::?=
 4  Mat:   =>has she finished her transfusion< Ms: Dupont?
 5  Aud:   good.
 6  Mat:   so if you can we can: disconnect her and then: we are going (to
 7         go) to the plaster roomI-2
 8  Aud:   °very good°
 9  Mat:   but I'm annoyed by her wound >I would like to take off the
10         dressing so you can see [her wound.<]
11  Aud:                           [I:         ] I: have just redone itI-3
12  Mat:   °but then° >so we can- we can ↑put a cast over a ↑dressing?<
13         (1.2)
14  Aud:   °as long as we open the dressing every: (0.8) three days°=
15  Mat:   =>we open the cast?<=
16  Aud:   =becau:se yeah to open the cast
17         (0.3)
18  Mat:   °oh no:°
19         (0.3)
20  Aud:   (what [is) the cast like      ] circular?
21  Mat:          [what is her wound like?]
22  Aud:   ·h you see [it's uh: ]
23  Mat:              [is it    ] just the upper part of the hand?I-4
24         (0.4)
25  Aud:   °non non° ( )
26  Mat:   >I'm going to check with Daniel to see how we are going to
27         proceed<=
28  Aud:   =because you see it's uh:: she has hit herself and she has
29         [such thin skin that the skin is] gone.
30  Mat:   [ah yeah indeed: (huh)          ]
31  Mat:   °hm° =
32  Aud:   =otherwise underneath it's ni:ce huh it's granula:ted it's=
33  Mat:   =[mmh ]
34  Aud:   =[not:] (0.4) it's not infected it's not fibrous but: indeed
35         °yeah° =I-5
36  Mat:   =>I'm going to check with Daniel then< [(thank you)]
37  Aud:                                          [>yeah<     ]
38         (1.2)
39  Aud:   I'm going to: disconnect her °huh°.I-6
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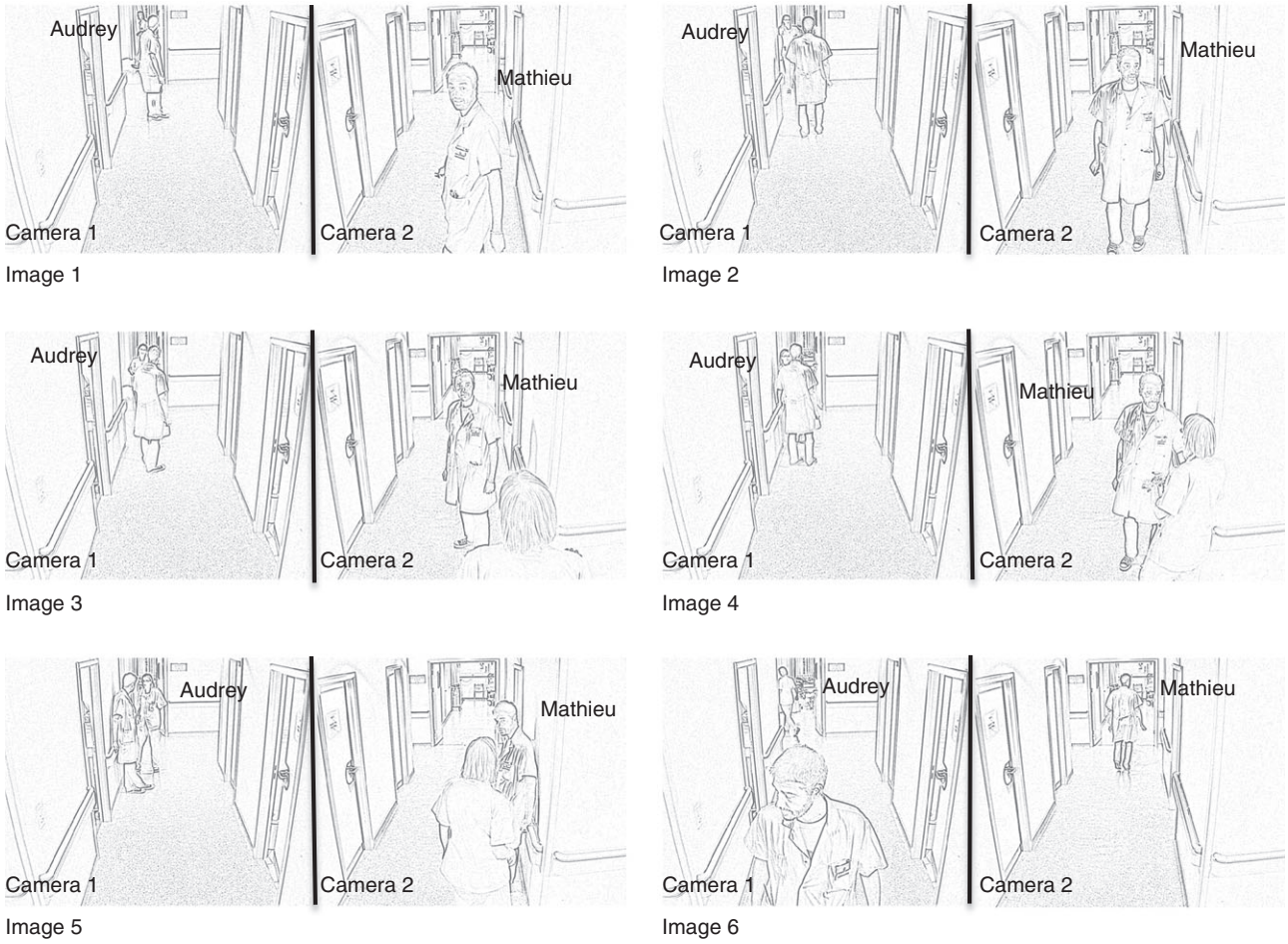

Figure 3 Split-Screen Images of Excerpt 2 [Talk Event No 205]. Abbreviations such as I-1 or I-2 in the transcript and the text refer to the corresponding images above.

In this excerpt, Mathieu first asks for confirmation that the patient's transfusion is concluded and then indicates to Audrey the next steps in the patient's care – to disconnect her and proceed with the casting, to which Audrey agrees. Mathieu then shares with Audrey his concern about the patients' wound and his intention to have her examine it. Nevertheless, Audrey signals that she has just redone the dressing, which leads to a discussion on whether the patient can have a cast on top of it. In the process, Mathieu requests and obtains from Audrey a description of the wound. At the conclusion of her description, Mathieu reiterates that he is going to check with the resident physician and heads to the urgent-care room. As Audrey returns to the day hospital, she states that she is going to disconnect the patient, thus going back to the physician's initial instruction from the beginning of the excerpt.

Although Mathieu and Audrey have a mostly stationary encounter, their body distances vary subtly over the course of it. At the beginning, Mathieu notices Audrey, calls her over and initiates a conversation with her in the corridor (I-1). Audrey approaches Mathieu but at first remains at a distance of approximately three steps while she receives instructions about how to proceed with the case (I-2). She moves closer as she says that she has in fact just dressed the wound that Mathieu would like her to examine (I-3). When Mathieu voices his concern with applying a cast, the participants move closer to each other and adopt stationary positions where Audrey can give a description of the wound, illustrated with hand gestures (I-4). It is Audrey who breaks up this close huddle, taking a step to the side at the conclusion of her description (I-5). As Mathieu and then Audrey state their respective future actions, they move apart, heading in opposite directions (I-6).

This encounter is also clearly consequential in terms of the provision of care and work organization. The physician checks the progress of the case's handling, provides instructions on how to move forward and shares his concerns with the nurse. The nurse informs the physician of the care already provided and, when the physician points to a problem, they both confer about it. The clinicians vary their mutual distance and volume of voice depending on the nature (either commonplace or problematic) of their topic of discussion, showing an orientation to a possible overhearing audience. Because of their physical closeness, the nurse can provide a very thorough description of the wound using various hand gestures. The conversation is also the place where a decision to consult another physician is communicated and agreed to and where the nurse assures the physician of her imminent involvement in the course of action he has prescribed. In conclusion, the conversational multimodal analysis of both excerpts shows two distinct uses of contingent corridor talk for organizational purposes.

Discussion

Our results are related to those of previous studies on walking and communication activities at the hospital. Time-and-motion studies have amply demonstrated the large amounts of time hospital staff spend walking (Hollingsworth *et al.* 1998, Hendrich *et al.* 2008, Westbrook *et al.* 2011, Yousefi 2011). Bardram and Bossen (2005) argue that moving around the hospital premises is necessary for hospital staff to obtain access to essential human and material resources, request and collect information, coordinate and accomplish their activities and maintain shared awareness of the unit's operational state. Studies relying on the Communication Observation Method show that staff participate in an impressive number of communication events per hour – favoring face-to-face communication, including chance encounters – usually in multitasking situations (Spencer *et al.* 2004, Woloshynowych *et al.* 2007, Edwards *et al.* 2009). Studying corridor conversations among staff in a clinic for patients of spinal cord injuries, Long *et al.* (2007) distinguish five prominent modes of communication and hypothesize that corridor conversations are related to a highly flexible, dynamic, economic and targeted organization of work. Nevertheless, these studies do not provide quantitative evidence of the prevalence of corridor conversations or detailed analysis of the diversity of interaction configurations and the activities being accomplished in this way, as our own study does.

This study demonstrates that the clinic staff occupy the corridor very frequently but also very briefly and rarely stop in it throughout their shift. While in the corridors, staff become involved in frequent talk events (every 3·89 minutes on average) that are also brief (6·5 seconds on average), mainly produced while they are moving (71% of the time) and overwhelmingly about professional topics (98% of the time). Stationary occupations are more likely to occur when two or more individuals are involved in the talk. Staff sustain corridor conversations in a variety of interactional configurations, accomplishing an array of activities consequential to the provision of care and work organization. The qualitative analysis above illustrates in particular the accomplishment in the corridor of passing-by informings and stationary clinical conferrings.

The results are to be examined in the light of research showing the importance of unscheduled coordination practices – such as the examined corridor conversations – to a hospital unit's performance (Argote 1982). Contingent encounters constitute important and adaptable means for coordinating work and maintaining situation awareness of a spatially distributed team in a fluid, fast-paced work environment (Eisenberg *et al.* 2005). Tempering the push for technology-mediated means of distant communication, the study reminds us that impromptu co-present conversation remains an information-rich, rapid and flexible form of organizational communication (Coiera 2000). As a complement to planned meetings and written communication, it helps ensure 'continuous coverage' of the clinic, namely the staff's readiness to take whatever action is necessary for its operation (Randell *et al.* 2010). It would nevertheless be worthwhile to consider the link between the prevalence of very rapid professional exchanges between staff in the corridors and the present 'fast health-care' and the obligations of 'tight-flow', 'just-in-time' work organization (Crawford & Brown 2011).

Usually used to study caregiver–patient consultations, video-based research has also proved valuable in documenting communication among co-workers in clinical settings (Iedema *et al.* 2006, Heath *et al.* 2007). The study shows how naturalistic recordings can provide systematic quantitative evidence on the features of the studied practices and a basis for an in-depth understanding of their organization, as they happen. More specifically, it puts forward an innovative methodological and analytical framework for the study of unplanned, mobile work practices, which are frequent and central, but notoriously elusive.

Limitations

The study focuses on occupations in one particular corridor linking two heavily used rooms in one hospital clinic; prevalence may fluctuate in other settings. Moreover, it does not correlate the number of occupations and the exact number of staff members present at the clinic, which varies not only every day but also throughout the workday. It also considers staff as a whole without discriminating occupations according to professional categories, which would require additional coding and analysis. According to the research protocol, we considered the physical occupations involving the clinic staff exclusively. The prevalence of corridor occupations and conversations would have been much higher had we been able to consider occupations of staff with patients and other individuals external to the clinic. Qualitative analysis was exclusively carried out on a selection of all talk events. Further research would be needed to systematically analyse the variety of activities accomplished through corridor conversations and the interactional configurations where they occur. The fact that the staff members knew they were being video-recorded may have had an effect on their behaviour, especially regarding the number of private conversations. However, observations collected during extended fieldwork previous to the recording allow us to be confident that staff behaviour was natural overall. Not only were staff fully compliant with the study, but routine walking/talking behaviour is also particularly difficult to modify suddenly and consistently in a fast-paced work environment.

Conclusion

Our study yields quantitative evidence, based on systematic naturalistic video recordings, of the prevalence and features of staff corridor occupations and conversations at a hospital outpatient clinic. It also describes how these corridor conversations are interactionally organized and some of the professional activities that the staff achieve through talk.

The general results of our study may be transferable to other settings as there is already strong evidence indicating that walking and talking while walking, are practices where hospital staff engage recurrently (Hollingsworth *et al.* 1998, Woloshynowych *et al.* 2007, Westbrook *et al.* 2011, Yousefi 2011). We suggest using the same methods to study how the prevalence of corridor occupations and conversations changes depending on the type of hospital unit, its spatial layout, or the number of staff and forms of work organization being implemented. For example, it is unclear whether the prevalence of corridor conversations may be different in care units that have a physician/nurse station or regular handover meetings.

Further research is needed to identify the categories of staff members involved in corridor conversations and the wide variety of activities accomplished in hospital corridors as these manifestly constitute an important workspace. This will lead us to identify new forms of unplanned mobile communication taking place in response to the specificities of work at the hospital. On this basis, we could subsequently examine in detail how these practices contribute to work organization and the provision of care.

In conclusion, the study points to work practices to take into consideration to understand, manage and improve the functioning of hospital units. Namely, the fact that staff are made to travel around the hospital premises while sustaining communication through brief, mobile and contingent work encounters in multitasking situations, for instance walking while leafing through a medical record and talking over the phone or to a passing colleague. This has implications in terms of the computing of work activities and time spent, spatial design of hospital units and communication procedures and technologies aimed at improving efficiency, reducing work strain, securing patient information confidentiality and ultimately healthcare quality (Coiera 2000, Yousefi 2011).

Acknowledgements

The authors thank the staff of the hospital *La Providence* (Neuchâtel-Switzerland) for their participation in the study, and in particular Micheline Mantegani, APN, Olivier Lebeau, MD, and Pascal Stauffer, APN for their assistance in preparing the research and data collection. None received compensation for their contributions.

Funding

This research was supported by Swiss National Science Foundation grant no. 134875 (EGM, AB) and internal grants from the University of Fribourg (EGM), the *Haute école de santé Arc*, University of Applied Sciences and Arts Western Switzerland (EGM) and the University of Neuchâtel (AB). The sources of funding and support played no role in the design or implementation of the study; in the collection, analysis and interpretation of the data; in the preparation, review or approval of the manuscript; or in the decision to submit the manuscript for publication.

Conflict of interest

No conflict of interest has been declared by the authors.

Author contributions

All authors have agreed on the final version and meet at least one of the following criteria [recommended by the ICMJE (http://www.icmje.org/recommendations/)]:

- substantial contributions to conception and design, acquisition of data, or analysis and interpretation of data;
- drafting the article or revising it critically for important intellectual content.

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Appendix 1: Transcription conventions

[]	overlapping talk
=	continuous talk
(0·2)	silence in tenths of a second
(.)	micropause
.	final intonation
?	rising intonation
:	prolongation of the preceding sound
we-	cut-off of the preceding sound
you	emphasis
°yes°	very quiet talk
↑	rise in pitch
>yes<	talk is compressed
·hh	inhalation
( )	unachievable, likely or alternative hearing