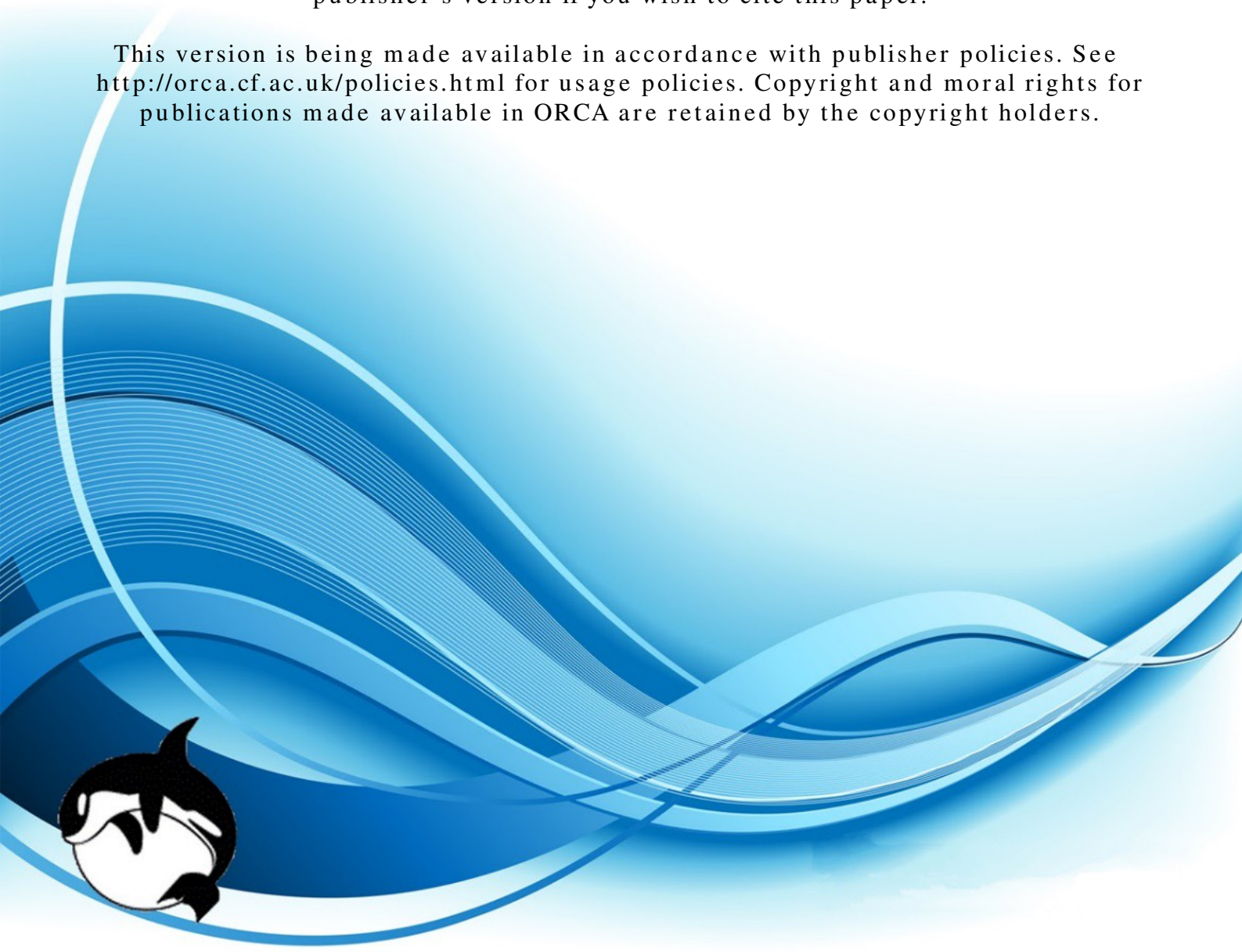

The Content and Meaning of Administrative Work: A qualitative study of Nursing Practices.

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The Content and Meaning of Administrative Work: A qualitative study of Nursing Practices.

Aim: To investigate the content and meaning of nurses' administrative work.

Background: Nurses often report that administrative work keeps them away from bedside care. The content and meaning of this work remains insufficiently explored.

Design: Comparative case studies.

Method: The investigation took place in 2014. It was based on 254 hours of observations and 27 interviews with nurses and staff in two contrasting units: intensive care and long term care. A time and motion study was also performed over a period of 96 hours.

Results: Documentation and Organizational Activities is composed of 6 categories; documenting the patient record, coordination, management of patient flow, transmission of information, reporting quality indicators, ordering supplies- stock management Equal amounts of time were spent on these activities in each case. Nurses did not express complaints about documentation in intensive care, whereas they reported feeling frustrated by it in long term care. These differences reflected the extent to which these activities could be integrated into nurses' clinical work, and this is in turn was related to a number of factors: staff ratios, informatics, and relevance to nursing work.

Conclusion: Documentation and Organizational Activities are a main component of care. The meaning nurses attribute to them is dependent on organizational context. These activities are often perceived as competing with bedside care, but this does not have to

be the case. The challenge for managers is to fully integrate them into nursing practice. Results also suggest that nurses' Documentation and Organizational Activities should be incorporated into informatics strategies.

Keywords: nurses, administrative work, documentation, perception, activity timing.

Summary Statement

Why is this research needed?

- A great deal of nurses' work is composed of administrative and organizing work, essential for the process of care.
- Nurses express the feeling of being frustrated by the increasing time spent on so-called "administrative work".
- The content of this "administrative work" and why it is considered a burden remains insufficiently explored. Studying nurses' activities and perceptions in different wards enables us to better understand the organizational factors influencing nursing practices and perceptions.

What are the key findings?

- Nurses' administrative work is composed of six primary categories: documenting the patient record, coordination of activities and examinations/investigations, management of patient flow, transmission of information, tracking and reporting quality indicators, ordering supplies and stock management.
- Both units spent an equal amount of time on Documentation and Organizational Activities, but the work had different meaning for nurses.
- The meaning of Documentation and Organizational Activities reflects not only the time spent on these activities but their integration with nurses' work in the local context of care.

- Staff ratios, effective use of electronic health information systems, and the relevance of Documentation and Organizational Activities to nursing work are factors facilitating the integration of administrative tasks into practice.

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

- The findings suggest that hospital and nursing managers should focus on contextual factors in order to integrate Documentation and Organizational Activities into practice.
- Nurses' Documentation and Organizational Activities should be incorporated into the design of informatics strategies, to provide greater professional input and influence over this work.

Introduction

"Disillusioned with paperwork" (Galvin 2013), "Nurses drowning in sea of paperwork" (Royal College of Nursing 2013). Recent publications highlight the negative perception of time spent by nurses on "administrative work". These concerns may be warranted given that complex admission and discharge forms, risk assessments, policy documents, audits and evaluation sheets are now part of a nurse's daily routine. The rising demands for accountability, efficiency, safety and quality in health care also explain increased administrative activity and its negative perception (Healy 2009; Dent & Whitehead 2002). Such administrative tasks are often perceived as not directly relating to care and as preventing nurses from interacting with their patients (Tyler *et al.* 2006). In this evolving context, what qualifies as "administrative work", its relationship to the wider nursing role and where/when/why it is considered a "burden" remains insufficiently explored (Allen 2014 a).

Background

Morris *et al.* (2007) explain that nursing work is too often described in simplistic and sometimes contradictory ways. According to them, "It is acknowledged among experts in the field of nursing that difficulties exist in articulating and describing nursing work in sufficient detail" (p. 470). If the work of nurses is not sufficiently explored, it is also because research tends to focus on direct time spent at the bedside (Dearmon et al.,

2013; Antinaho et al. 2015). Thus, what nurses call administrative work is poorly described in the literature, portrayed only as a distraction from nurses' real work of patient care, rather than as the primary focus of research (Allen 2004).

Since the 1990s, several studies focusing on nurses' perception of their work have reflected this dominant frame; their results primarily concerned with the burdensome nature of administrative work and, in particular, the increasing time spent on documentation (Pelletier *et al.* 2005; Fitzgerald *et al.* 2003). Nurses regularly report feeling pressure to spend excessive amounts of time on so-called "non-nursing" activities, while simultaneously being criticized for not spending enough time with patients (Lundgren & Segesten, 2001). Several studies have also shown a link between nurses' reduced patient-contact time and a rise in harmful events, patient mortality (Aiken *et al.* 2002) and decreased patient satisfaction (Westbrook *et al.* 2011).

In conjunction with these researches stressing the burden of administrative work, there are a number of studies calculating nurses' time management, using Work-sampling or Time and Motion methods, which reveal a rise in nurses' general administrative duties (Fitzgerald *et al.* 2003; Hendrich *et al.* 2009). Moreover, several authors demonstrate that the time spent on documentation is internationally proportionate: 10% of nurses' time is spent doing paperwork in Britain (Farquharson *et al.* 2013), 9.3% in Greece (Kiekkas *et al.* 2005), and 13% in Australia (Fitzgerald *et al.* 2003). A lack of precision regarding the definitions and categories of nursing administrative and organizational duties limits the value of this work. For example, some classify nurses' administrative work only as "indirect activity," whereas others include it as part of the direct patient documentation (Lundgren & Segensten 2001).

While nursing literature shows an increasing time spent on documentation and nurses' negative perception of it, the content of what qualifies as administrative work is poorly described. Furthermore, such analyses are wedded to a very particular view of the nursing function, expressed in terms of nurses' direct care for patients. Sociologically informed analyses have underlined the need to move beyond research predicated on essentialist assumptions about the 'true' work of nurses, and have focused instead on the work that nurses actually do. Allen (2014b), for example, has advanced this agenda with an in-depth description and analysis of hospital nurses' organizing work, then building on this analysis to marshal an argument for expanding "patient-centered" formulations of nursing to include "organizing work". This research highlights the

administrative and organizational elements of nursing roles and has opened up important debates about the future of nursing. We build on this work to examine the difference between the perception and reality of nurses' administrative work in two different contexts of activity.

Aims

This study aimed to explore the content of nurses' increasing administrative work and its perception by nurses, according to local contexts. The two intermediary objectives are:

- To compare nurses' perceptions of their administrative work in two different wards
- To compare nurses' perception of administrative work to the reality of their practice

Method

Design

The research utilized a "comparative case study" design in two hospital wards: Intensive Care (ICU) and geriatric long-term care (LTC). Using case studies is a powerful tool to examine the organizational systems of nursing work (De Chesney 2016). According to Yin (2009), the case study is an "in depth" empirical inquiry into a phenomenon "within its real life context". This method derives its strength from "multiple sources of evidence" such as documentation, interviews and direct observations. The comparison of case studies enables the identification of similarities and differences across sites, producing concrete and context-dependent knowledge (Flyvbjerg 2006). Furthermore, to deeply understand the dynamics of singular settings, we used what Flybjerg calls "polar cases". Such polar types lead to cross-case thematic analyses of their contrasting natures (Mills *et al.* 2009) and reveal phenomena that may not have been seen by comparing similar cases.

The Field

This study took place between January and December 2014. An intensive care unit (ICU) and a geriatric long-term care unit (LTC) in two French hospitals were selected as relevant polar cases. In general, ICUs tend to have a high nurse-to-patient ratio (1:3) while LTC units have a much lower ratio (1:40).

The first investigation took place in a 30-bed ICU at a large teaching hospital with a team of 20 day-shift nurses. The department cares for patients with very serious conditions, often requiring respiratory assistance and depend on medical and nursing care. ICU nurses provide intensive technical care and respond quickly to emergencies.

The second investigation took place in a 40-bed LTC unit with a team of 5 day-shift nurses who provide end-of-life nursing care. LTC nurses mainly focus on comfort care and often provide relational and emotional assistance to patients and their families. In both units, nurses generate documentation and undertake communication using both pen and paper, and Electronic Health Records (EHR).

Participants

Nurses were the principal participants in this study. The following inclusion criteria had to be fulfilled: having a French diploma in nursing and having been with the unit for more than 6 months (newly hired nurses are still in orientation and may be disturbed by the presence of a researcher shadowing them). The sample included 15 nurses in the ICU and 5 in LTC (**See table 1**).

The disparity in the number of nurses participating in the study can be explained by the ratio of nurses in each unit. In LTC, the number of nurses working the day shift was six. Five of them took part in the study, the sixth being on sick leave at the time of data collection. The ICU was composed of twenty nurses during the study, fifteen of which participated, while the five others were either newly hired or on vacation. The nurses' managers and head physicians were interviewed in both units, in order to answer questions about the general organization of the wards. In total, 20 nurses were shadowed and interviewed and 7 interviews were conducted with nurse managers and head physicians.

Data collection

In order to obtain multiple sources of evidence, three methods of data collection were employed: shadowing, semi-structured interviews and measuring the time spent

on particular activities.

Shadowing

The PI (principal investigator), LM, shadowed each of the 20 nurses (15 in ICU and 5 in LTC) during their daily shifts and took low-inference descriptive hand-written notes of situations and discussions in a notebook (McDonald 2005). No shadowing was performed during night shifts. The daily shadowing included all activities undertaken by staff nurses during their shift, with a particular emphasis on indirect care activities involving handwriting or Electronic Health Records, but also all team interactions and communication. Systematic field notes were recorded and organized into two main categories: the objective, low-inference, description of nurses' daily activities (taking notes on what nurses were doing without interpretation) and researcher interpretations of these observations (documenting personal comments on the meaning of the data). This enabled the principal investigator (LM) to retain a critical distance from the data and its interpretation (Hammersley & Atkinson 2007). The result was 254 hours of detailed documentation of nurses' activities, discussions and situations in the two wards (160 hours in the ICU and 94 hours in LTC). The notes were to be analyzed later and formed the basis for the themes discussed during interviews.

Interviews

The PI also conducted 20 semi-structured and audiorecorded interviews with each of the shadowed nurses. An interview guide was developed, based on different themes that had emerged during shadowing. These themes helped to keep a focus on the aim of the study, i.e. "what is nurses' administrative work and how do nurses perceive and understand such work", while creating space for in-depth conversation. The themes discussed were, for instance: describing daily routines, defining administrative work, the content of specific tasks, general perceptions of administrative activities and more precise opinions of observed situations, etc. In addition, seven semi-structured interviews were conducted with chief nurses and physicians. These interviews aimed at collecting data about the general organization of the ward. All audio files were anonymized and transcribed by the PI. All names in interviews and fieldwork descriptions were changed.

Time and Motion Study

The initial classification of activities needed for the time and motion study is based on the French national reference on nurses' activities, created by the Ministry of Health in 2009. This referral (Diplôme d'Etat Infirmier 2009) was used as a basis for this study and was compared to international literature. The simplified classification is composed of 39 activities (**see table 2**); these activities appeared to be similar to a recent study (Antinaho *et al.* 2015).

Based on the data generated through shadowing observations and interviews, and after discussions with the research team, 10 of the 39 activities were selected as administrative tasks. To ensure the validity of this selection, the 10 activities were then discussed and validated during a focus group facilitated by LM and MW, gathering nurses, nurses' managers and an expert in the field of clinical nursing. Overall, the focus group produced slight modifications in wording the definition of each category and some activities were merged together, creating the final classification of 6 Documentation and Organizational Activities (DOA) (**See table 3 in Findings**).

The PI followed one nurse at a time with a stopwatch in order to measure the time taken by each task. When a new activity began, the time was noted and the activity described. Although the possibility of performing several tasks at once was included, it rarely occurred. Eight nurses (four in each unit) took part in this phase. In the ICU, nurses worked 12-hour shifts. Each shift was divided into two 6-hour sections to allow more precise data collection. The PI spent one morning (from 7.30 am to 1.30 pm) and one afternoon (1.30 pm to 7.00 pm) with each nurse. In LTC, the PI spent an entire day with each nurse (from 6.45 am to 2.30 pm). A total of 96 hours was spent on time and motion recording of activities.

Ethical considerations

The research received ethical approval from the Center for Human Research-MSHB, which funded the study. It was performed in compliance with the ethical guidelines of the Declaration of Helsinki (2008). The data presented in this article are part of a bigger cross-national study comparing France and the USA. The American fieldwork was approved by the Ethical Committee of the University of North Carolina at Chapel Hill (IRB N°16-0619). The researcher was sensitive to issues of confidentiality,

conducting interviews in private offices. Providing a comfortable and informal setting also allowed to introduce the project to individual nurses and to gather consent prior to the beginning of the work. Patients were also directly notified by nurses of the presence of a researcher.

Data analysis

This analysis relied on qualitative inductive reasoning and the triangulation of data. Data sampling and data analysis were conducted until it was possible to describe and understand the perception and content of administrative activities, according to the principle of data saturation.

First, field notes and interview transcripts were read as a whole and coded phrases were stored using qualitative data analysis software (Max-Qda 11). In this first phase, data were read with the research question in mind - nurses' perception of their administrative activities. Special attention was paid to identify meaningful themes reflecting nurses' opinions (such as: the burdensome nature of activities, utility, time taken, etc.…) via inductive analysis.

The data collected during the time and motion phase were then analyzed and calculated manually using Microsoft Excel. For each category, various activities were recorded, then grouped and time-calculated.

The final step was to triangulate the data. Field notes and interview transcripts were read once again, in light of findings from the time and motion study. The specific aim was to analyze the data more closely, looking at each activity in detail and creating codes for each one: time spent, nurses' perceptions, content, and precise descriptions of each task.

The interviews were conducted in French. Quotes have been translated from French to English under the supervision of an external bilingual researcher.

Rigor

First, through a process of reflexivity, the PI regularly turned back onto herself in order to examine the relationship between the knower and what is known. The methodology allowed the PI to participate in practices by observing and recording this involvement through reflective field notes (Hammersley & Atkinson 2007). Second, the research was conducted by one person, ensuring the consistency of the data collected in

both cases (Chen 2012). Finally, the validity of the data collection, analysis and conclusions was enhanced by the input of three senior researchers (MW, EM, DA).

Findings

Frame and timing of Documentation and Organizational Activities

Results from this study indicate that Documentation and Organizational Activities (DOA) consist of six primary categories: documenting the patient record, coordination of activities and examinations/investigations, management of patient flow, transmission of information, tracking and reporting quality indicators, ordering supplies and stock management (**See Table 3**). Similar amounts of time are spent conducting administrative activities in both the ICU (35.4%) and in LTC (33.6%), but the percentage of time spent on particular activities varies by unit (**See Table 4**). The time nurses spent documenting patient records in the ICU (14.1%) was almost four times that of the LTC unit (3.6%). In both units, nurses spent a sizable amount of time on the coordination of activities and examinations/investigations (8.6% in the ICU and 7.8% in LTC), but the time spent on the transmission of information in LTC was nearly twice that of the ICU (9% vs. 4.7% respectively). The same trend was observed in the ordering of supplies and stock management; nurses in LTC spend 7.8% of their administrative activities maintaining supplies, compared to 4.1% for ICU nurses. Lastly, LTC nurses more frequently managed patient flow (2.6%) than those in the ICU (1.3%), but nurses in both units spent similar amounts of time reporting quality indicators (2.6% in the ICU vs. 2.8% in LTC).

Differences in perceptions and meaning

Even though the time spent on DOA was similar in both cases, there were notable differences between the two units in terms of the meaning of this work for the nurses. ICU nurses did not seem to view their administrative responsibilities negatively. One nurse remarked that:

> "We have so little administrative work to do that, um, I don't know. Anyway, it doesn't bother me." (ICU nurse for 6 years, interview n° 10)

These nurses tended to use the terms “documenting” or “reporting”, to describe their administrative work, and they considered it “part of the job”. This concept was made apparent by an ICU nurse who explained:

> “Care is a whole process; it’s before, during and after, and the after part is the reporting.” (ICU nurse for 10 years, interview n° 3)

Other nurses described it as integral to the practice; one even declared that the documentation she has to fill out “helps to see what I have to do and how the patient is doing”. They are also highly aware of the legal importance of paperwork. The old adage “if you didn’t document it you didn’t do it” was repeated several times by different nurses. The nurses in this unit did not feel that they were drowning in administrative work. They understood that paperwork is an obligation, that it is related to patient care, and that it is considered a necessary and helpful activity.

Interestingly, even before the study began, LTC nurses voiced their dissatisfaction with administrative paperwork. When the project was introduced during a staff meeting, the nurses spontaneously laughed and, with a touch of irony, one of them said, “Oh you are going to be buried under the weight of paperwork here”. Two of them immediately complained about administrative activities, which they described as “time-consuming” and “boring.” The same sentiment was expressed during the course of the study. When paperwork was necessary during the usual flow of their duties, it was viewed as an interruption that contributed to the fragmentation of their activity. Administrative work tended to get done at the end of the day because nurses considered it to be just “one more thing to do”, away from the bedside and from the patient.

> “It’s 9 pm, Emilie is getting tired. She pulls out of her pocket a dirty sheet of paper with her day's notes. She starts completing the patients’ folders. She yawns and seems to be struggling to remember some information. She looks at me and asks “do you remember if Mr. H finally took his pills tonight? I forgot to write it down”. After completing all the folders and the handover she starts preparing the examination planning. She tells me “You see, this is the work of a secretary.” (Fieldwork Diary, LTC, 13th of July 2014).

The negative association exists when nurses are responsible for paperwork that they do not consider to be a legitimate part of their duties. In LTC, preparing examination folders, documentation, or making appointment phone calls appears very disconnected from nurses' perception of their legitimate work.

Differences in content and organization of the Documentation and Organizational Activities

The analysis of methods used to organize DOA revealed differences in the two units.

The summary of the detailed content analysis of each DOA, presented in Table 5, shows that the same activity category involved different tasks in each unit. Thus, while the purpose of the activity was the same, the work involved in achieving it was different. The example of coordinating activities and examinations/investigations is very representative of these differences. As an ICU nurse explained, this activity is streamlined via the informatics system and all the appointments are made within the hospital.

> "The physician prescribed a thoracic scan. So you see, I just click here, print the document, and schedule the appointment for later this afternoon" (ICU nurse for 2 years, interview n° 5).

However, in LTC, this coordination can become very complex and require lots of effort from a nurse who is distracted from her other duties (as shown in the description below). The nurse faces this kind of situation alone, and does not have the option to delegate the responsibility.

> "It's 9 am, Caroline is furious. For the third time, Ms. T's family has cancelled an appointment with the podiatrist. She calls the daughter again and asks if she can organize transportation for Ms. T, so that no member of the family needs to come. The daughter agrees. Caroline takes her list of ambulance companies and starts with the first number… after 6 rejections, one ambulance is set for an appointment in two weeks. (….) It's 2.30 pm, Caroline is about to leave, she

answers the phone on her way out: Ms. T's daughter has decided that she doesn't want her mother to go alone to the appointment, she wants to reschedule and to cancel the transportation." (Fieldwork diary, LTC, 7th of July 2014)

The analysis of each activity also revealed differences in how nurses valued their documentation. For instance, nurses manage patient admission and discharge, ensuring that the proper documentation has been filled. This activity is perceived as a key moment of the care process for nurses in LTC, where they take the time to evaluate the patient's condition. Admission becomes a meaningful administrative activity that helps nurses build a holistic picture of the patient from which to plan care, as one senior nurse explained:

"Even though we have a lot of paperwork to fill out when someone comes in, I like to do it because it's an important step for the rest of the patient's journey here". (Nurse in LTC since 20 years, interview n° 3)

In the ICU, however, admissions paperwork primarily serves accounting purposes. Nurses do not value this type of paperwork and consider that they can easily delegate it to Nurses Assistants in order to concentrate on the patient's condition. This young nurse's testimony highlights it clearly:

"I am so happy that our assistant agreed to help us with admissions paperwork, because I really have better things to do when someone is admitted with septic shock". (ICU nurse for 7 years, Interview n° 11)

Moreover, documenting patient records in the ICU consists of very meticulous reporting of the patient's clinical condition: reporting vital signs every 4 hours, documenting medication administration, collecting special epidemiological information, and following up on the care plan. As such, nurses tend to focus on care and documentation sequentially, in a connected fashion. Documentation is mostly done via Electronic Health Records (EHR), although some vitals are reported on a sheet of paper by the bedside. In this case, EHR is supporting care, as a young nurse explains:

> " I think the informatics system is easy to use and I like that it helps me get a big picture of how my patient is doing; when I see the numbers on my screen I feel secure" (ICU nurse for 1 year, interview n° 7)

In LTC, the nurse must take care of 40 patients by herself and document the activities elsewhere, away from the bedside. Clinical documentation is brief; it includes basic vitals (blood pressure, glucose level) but needs to be repeated 40 times. So while walking from one room to another the nurse rapidly documents on the EHR in the hallway because she has "better things to do". Care plans also needs to be updated and are a source of frustration when the patient's status remains unchanged over months or even years. As one nurse explained, the informatics system doesn't always support her work:

> " I don't mind the informatics system, we have to be modern, you know, but there is so much redundant information that it drives me crazy. Look at me: I'm walking and typing at the same time, and everyday I report the same things. I don't think the people who created this software were nurses! " (LTC nurse for 5 years, interview n° 1)

Discussion

The combination of a comparative approach and a time and motion study has highlighted differences in the meaning of administrative work in different clinical contexts and the factors that explain these findings. This offers a different perspective on nurses' administrative work, which focuses on its relationship to the content and organization of nursing practices. Most studies are based on an idealized patient-centered model of nursing and either report on nurses' complaints about administrative work and its burdens or criticize it by emphasizing its impact on decreasing bedside nursing time (Hendrich *et al.* 2009, Farquharson *et al.* 2013 Dearmon *et al.*, 2013; Antinaho *et al.* 2015). This study moves beyond this frame to show that nurses' perceptions of DOA and its burdens are not necessarily linked to the time spent, but to organizational factors. In this sense, our findings resonate with a Swedish study wherein the authors conclude, "nurses had a feeling of spending too much time on non-nursing

activities of a service type (…) but no objective basis justifying this feeling was found" (Lundgren & Segesten, 2001). Taking our lead from sociological studies (Allen 2014 b), our observations prodded us further to identify the contextual factors influencing the integration of DOA into practice. These related to the content and organization of nursing work and highlighted three major context-related elements.

First, DOA are a largely invisible element of the nursing role (Allen, 2014b), but their complexity and volume has increased in contemporary healthcare systems. Generally, staffing matches patient acuity and the need for nursing care (Needleman *et al.* 2011), which can leave less acute areas under-staffed compared to acute counterparts, even if DOA complexity is more marked. Staffing shortages are a challenge for nurses as they are left with a limited amount of time for documentation tasks (Chelagat *et al.* 2013). The content analysis of nurses' activities showed that not only is the ICU well-staffed, but that nurses can delegate part of their DOA to support staff. In LTC, on the other hand, the number of qualified nurses is small, with no delegation whatsoever. A better integration of DOA should start with taking these activities into account with staffing decisions. .

Secondly, our study shows that nurses perceived DOA more positively when they were relevant to, and readily integrated into, clinical practice. The problem of documentation relevance has been emphasized as the key finding of a large British National Health Service (NHS) study: 68.1% of nurses considered that the paperwork they have to complete does not add value to patient care (Cunningham *et al.* 2012). In the ICU, documentation tends to supports minute-by-minute care and each record is integrated into this ongoing activity. In LTC, the patient's state changes very little, yet the nurse needs to record their same status over and over. In this case, paperwork is not perceived as relevant and each administrative activity appears isolated and disconnected from direct care in the organization of work, giving a global view of non-integrated care.

Finally, Fitzpatrick (2004) made a distinction about records being understood as an "information repository," or as a "record at work in the practical delivery of healthcare". Healthcare organizations tend to treat records as serving both purposes equally (Allen, 2014), but this is not necessarily the case. Our study highlights this argument, as DOA reflect and support clinical work in one case (ICU), but are

overshadowed by broader concerns with record-keeping and accountability in the other (LTC). This exploration of two clinical entities raises the question as to whether nurses need more latitude to develop documentation that reflects their work. Nowadays, this documentation is linked to electronic health records (EHR). The benefits of EHR are not yet fully apparent, as nurses' technological acceptance level is still low, and since this recognition is influenced by the context and environment of care (Strudwick & Mc Gillis Hall 2015). These case studies clearly showcase how DOA are articulated within this context. While nurses in both units were willing to work with informatics, it is clear that only in the ICU were communication and reporting streamlined through the informatics system. This result is in line with those from a previous ethnographic study in intensive care, outlying the importance of nursing technology development (Crooker 2009). In LTC, however, the informatics system sometimes competes with the activity of care, as it seems predominantly geared towards professional accountability. Involving nurses in the strategic development of informatics (Hussey & Kennedy 2016) could avoid such situations and support the delivery of care.

Limitations

There are certain limitations to this study. It focuses on polar cases with important differences in the nurse-to-patient ratio, the patient focus, and the organizational structure and pace. This difference could explain varying perceptions of the DOA; a higher nurse-to-patient ratio leading to less constraints and to more acceptable conditions for the integration of DOA. However, our findings show that this case polarity helped to uncover another fundamental aspect. The time spent on DOA being equal in both units, it suggests that if the difference of nurse-to-patient ratio plays a role, it is limited by the amount of time dedicated to DOA. ICU nurses probably have more bedside care and DOA per patient than LTC, reinforcing the notion of interruption by DOA when they appear. We believe that further research is warranted to compare our results in LTC and ICU with other units, which would show how far our findings can be generalized to other contexts.

Conclusion

This study has implications for further research and theory development. First, the combination of three methods (shadowing, interviews and activity timing) in two

specific units sheds light on the complexities and singularities of nursing work. This method leads to the generalization of important factors that are being tested in other French units, as well as internationally, in the study's next phase. Secondly, this study could provide a basis on which to test more precise managerial recommendations in order to integrate Documentation and Organizational Activities (DOA) into practice.

Describing nurses' work is fundamental for bringing adequate information into debates about the future challenges nursing will face. These changes in health care will address issues around new needs in population health, including the complexities of caring for the elderly, the importance of care coordination and transitional care, as well as using Electronic Health Records and the need to improve inter-professional collaboration (Fraher *et al.* 2015). This study confirms that administrative work is not merely a distraction from the bedside; it is a factor with a number of implications for the benefits of care. Nurse managers should pay attention to the organizational context of their ward in order to fully integrate administrative work and to make sure that nurses take control of it. The importance of nursing leaders and staff in designing informatics strategies has already been outlined. This article highlights the need to incorporate DOA into these strategies.

Table 1: Participants

	Shadowing and Interviews	Interviews
Intensive Care Unit	- 10 nurses were shadowed over a total of 210 hours - The same 10 nurses were interviewed	- The physician in charge of the unit - Two nurse managers
Long Term Care Unit	- 5 nurses were shadowed over a total of 140 hours - The same 5 nurses were interviewed.	-The physician in charge of the unit - One nurse manager

Table 2: Simplified and translated version of the French referential of nurses' professional activities.

A. Observation and collection of clinical information 1. Observation of global situation of an individual or group 2. Observation of relational and social behaviour 3. Measure of ? physiological parameters 4. Measure of autonomy or dependency 5. Measure of pain 6. Data collection about general information 7. Data collection of epidemiologic information	**B. Care and activity of prevention, diagnosis or therapeutic** 8. Prevention (vaccine…) 9. Diagnosis 10. Therapeutic (medication administration, respiratory therapy, stoma…) 11. Psychological 12. Pain relief 13. Emergency or crisis management
C. Care and comfort 14. Personal hygiene 15. Feeding 16. Output ?(fluid balance? Bowels) 17. Rest and sleep 18. Moving 19. Awareness 20. Physical and psychological pain management 21. Occupational therapy	**D. Coordination and organisation of the care** 22. Organisation and elaboration of the care plan 23. Coordination of activities and examination, 24. Management of patient flow (bed management, admission, discharge..) 25. Documenting the patient record 26. Tracing and reporting of quality indicators 27. Updating care protocols 28. Transmission of information 29. Intervention in institutional meetings
E. Information and education of the patient and his family 30. Welcoming 31. Listening, informing, educating and counselling	**F. Control and management of medical products and material** 32. Preparation of material and cleaning 33. Disinfection or sterilisation 34. Hygiene control 35. Ordering supplies, stock management
G. Surveillance of the patient health condition 36. After special exam or treatment 37. Special condition or potential harm to themselves 38. Specific risk link to cycle of life (pregnancy, youth, aging…)	H. 38. Training of new grads or students I. 39. Research

Table 3: Documentation and Organizational Activities categorization

Documenting the patient record	Documentation of the first assessment, all the written entries in the record, every clinical notes, observation charts, documentation of medication, Data collection of epidemiological information, Organisation and elaboration of the care plan.
Coordination of activities and examinations, clinical/therapeutic interventions	Communication with the physician and other health care professional, organization of examination, and therapeutic appointment and other communication for scheduling.
Management of patient flow	Managing the entrance and departure of the patient, and make sure the proper documentation are done for entrance and discharge
Transmission of information	Written or oral hand-over during and at the end of the shift with nurses and other healthcare workers
Tracing and reporting of quality indicators	Documentation of data for quality reports both internal and external quality management (ex: documenting pain assessment, documenting hand hygiene,)
Ordering supplies and stock management	Check supplies, and order stock of pharmaceutical products and medical material and equipment

Table 4: Time spent on Documentation and Organisational Activities in Intensive Care and Long Term Care.

Activity	ICU (%)	LTC (%)
1) Documenting the patient record	14,1	3,6
2) Coordination of activities and exam	8,6	7,8
3) Management of the patient flow	1,3	2,6
4) Transmissions of information	4,7	9,0
5) Tracing and reporting of quality indicators	2,6	2,8
6) Ordering supplies and stock management	4,1	7,8
Total of administrative activities	35,4	33,6

Table 5: Comparative analysis of the content of the 6 Documentation and Organizational Activities in Intensive Care and Long Term Care

Activity	**Content of Activity in ICU**	**Content of Activity in LTC**
Documenting the patient record	Reporting of vital signs every 4 hours, documenting medication administration, the collecting of special epidemiological information and following up on the care plan. The documentation is mostly done on the Electronic Health Records (EHR). ➔**Meticulous activity directly connected to the care**	The clinical documentation is brief; i pressure, glucose level) but needs to needs to be updated and is a source same state over months or even yea ➔**Repetitive activity**
Coordination of activities and exam	Communication for coordination is facilitated by the proximity with other health care workers, especially physician. Most of the appointments are scheduled within the hospital and the processes are streamlined by the informatics system. ➔ **Ease of communication: Streamlined informatics process within the hospital**	Communicating to coordinate the ca to write detailed notes in a noteboo than the care plan or nurses' assessr appointments are schedule outside of private practice, ambulance and t very hectic and is a great source of s ➔ **Complex and time consuming p**
Management of the patient flow	Part of this activity sometimes shifts to the nursing assistants. For instance, when the patient arrives, most of the time in a critical and emergency situation, the nursing assistant takes care of the admission documentation. All these tasks fall under the responsibility of the nurses but they are happy to delegate it. ➔ **Delegation of task and streamlined process**	Admissions are a key moment where patient and evaluate his level of dep ➔**Key moment as part of the care**
Transmission of information	All along the day the nurse writes down information and a synthesis at the end of the shift. She uses this information to give an oral handover to her colleague; the handover is done one by one with the nurse who takes over her patient. ➔ **One to one transmission**	The same activities represent twice it to the number of patients. But wh the nurses' role as team leader durir animate the discussion, listen to eve synthesize particular questions, conc ➔**Team leadership**
Tracing and reporting of quality indicators	The reporting of quality indicators is directly linked to the patient care. As patients are frequently receiving blood transfusions, pain medication or dialysis, nurses have extra paperwork. The manager does the unit-related reporting. ➔**Clinical documentation**	Mostly report quality and safety indi report the number of narcotics, the and use of the emergency cart. ➔**Unit- related documentation**
Ordering supplies and stock management	They take care of the material they need everyday for them and mostly spend time on preparing medical equipment like the dialysis machine. The nursing assistant and the nurse manager handle the global stock. ➔**Managing personal material**	They are responsible for the whole r supplies themselves using special so have to order them and tidy them in ➔**Managing the unit supply stock**

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