

# Institutional Ethnography (IE), Nursing Work and Hospital Reform: IE's Cautionary Analysis

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Key words: institutional ethnography; nurses; hospital restructuring; nurses' work; bed utilization; health information technologies; Canada **Abstract**: Hospitals in Canada have been subject to intensive reorganization in the past few decades as the public health care system absorbs and adapts to a neoliberal government agenda that promotes more "efficient and effective" use of public funds and increased involvement on the part of the private sector. A massive infusion of public money for health information technology and health services research has created the capacity to generate objectified knowledge and to use it to reform the health care system—both its organization and, increasingly, its therapeutics—with the promise of making it all work better.

The research reported here is on the engagement of professional nurses in their everyday/night work in restructured hospitals and on how nursing practice is being reshaped in consequence. Our research approach, institutional ethnography, focuses on the social organization of health knowledge from the standpoint of those involved in and subordinated to its managerial uses, in this case, the nurses. We argue that a new form of ruling is being deployed. Nurses play an active part in the subordination of their own professional judgment to the objectified knowledge and knowledge-based practices that externalize decision making and reposition authoritative knowing. The paper describes and discusses the conduct of an institutional ethnographic inquiry (RANKIN & CAMPBELL, 2006) and illustrates some of its distinctive features using examples from our research.

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<u>Acknowledgments</u>

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# 1. Introduction

This paper highlights the contribution of institutional ethnography (IE) to qualitative health research. To illustrate the use of this relatively new approach, the article draws from our (RANKIN & CAMPBELL, 2006) sociological study exploring nurses' work in Canadian hospitals. The distinctive contribution of institutional ethnography is in making links empirically—not theoretically—between everyday life and its specific social organization. Using institutional ethnography, we identify some troubling ruptures in patient care and provide evidence showing how they originate in new managerial technologies entering the

sphere of nursing. The focus of this paper is to show how we unpick the empirical connections between nurses' knowledge and work and their coordination to accomplish hospital efficiencies. Our analysis exposes the pressures that participating in this new coordination exert on nurses to standardize their efforts. What is being accomplished is an organization of efficiency that competes with and routinely subordinates nurses' professional judgment about what should be done for their patients' care and wellbeing. [1]

The expansion of the influence of managerial technologies over nursing has evolved over the past three decades of health care reform. More recently, driven by worries about costs and sustainability of Canada's public health care system, health care reform in our country has been directed into efforts to improve both access to care and health care outcomes while simultaneously reducing expenditures, or, as McKEE and HEALY (2002) put it, "to develop efficient use of resources, high-quality services and responsiveness to patient concerns" (p.7). Hospitals are a key site of health care reform and nurses' work in hospitals has been heavily implicated in the efficiency strategies being introduced. Nurses' work in Canadian hospitals, as in other countries in the industrialized world, is responsive to the increasing availability of therapeutic evidence, as well as to new accountability practices and outcomes measures that are believed to make the best possible use of hospital facilities. Our focus is on what that means with regard to nursing work and professionalism, and to nurses' patient care goals. Using institutional ethnography, our study begins by building an account of what nurses know and do, taking their standpoint (SMITH, 1987) in the inquiry we conduct. We attend to what nurses say about their practice of nursing as the new managerial discourse of "efficiency and effectiveness" enters the setting authoritatively. Different knowledge expresses different standpoints, and in any institution not all standpoints are equal—an important grounding principle of institutional ethnography, about which more is said in this paper. Finally, institutional ethnography has potential to guide action. It offers nurses an intellectually reliable way to "talk back" to the objectified forms of health care knowledge being authorized by, among other forms of knowing, the evidencebased practice and "outcome measures" through which hospital efficiency is managed<sup>1</sup>. [2]

<sup>1</sup> In our book *Managing to nurse: Inside Canada's health care reform* (RANKIN & CAMPBELL, 2006) we develop a critique of "the new public management." We recognize this as an approach to managing that is being adopted across all divisions of public sector work. The new public management is concerned with "capturing" what is going on in the public sector, objectifying all aspects of health care to bring everything being done into knowledge forms that are made accountable in new ways.

<sup>&</sup>quot;In this regard the new public management brings a specific set of knowledge practices to bear on health care, making its content visible in new and standardized ways. As an essential part of health care restructuring, health informatics links health care 'content' to formal structures of 'decision support', transforming all aspects of the organizational design of health authorities" (p.8).

# 2. Institutional Ethnography

Institutional ethnography is a method of inquiry that understands social life to be constituted in the actions of embodied people going about their everyday lives. This approach was developed by Canadian feminist sociologist Dorothy SMITH (1987, 1990a, 1990b, 1996, 1999, 2005, 2006). It examines how people are socially organized to accomplish their day to day existence—how the routine features of social life are thereby established and maintained. Because people's own knowledge and experience are assumed to be integral to all such action. what people know and do from inside their daily lives is studied. But institutional ethnographers do not stay inside people's accounts of their experiences. Studying the social means examining the material practices of people who are connected—drawn into actual relations with one another—through their work of putting together the multiple performances of their occupations and preoccupations. For example, the social world is being constructed in the work of a diabetic woman with a chronic leg ulcer, rising early to prepare for the 9 a.m. home visit of a wound care nurse. She is connected in the work of that nurse, a single mother, organizing her early morning child care and checking her computer to confirm her day's schedule. The local and familiar activities of these women extend outward (and depend on) the work and know-how of others such as the baby-sitter, the health agency clerks who produce the schedules for the home care program, the agency administrators, including the manager who oversees the home care agency budget, the supplier who sells the bandages and wound care supplies, and so on. The social world is brought into being in all such activities of actual people and they are activities that can be ethnographically observed and described. [3]

In a classic institutional ethnography, the research begins there, in the social relations of people's everyday activities. The researcher observes and talks to people to identify "clues" in the local setting that can be followed to track and map how people are linked together in chains of activities connecting them to others across time and geography, in ways that are not readily apparent until carefully examined and explicated. In this way, the research extends beyond the boundaries of any one informant's knowledge and experiences to make possible the exploration of the broad social organization of that person's life and her interactions. Doing so offers the researcher access to the institution that in institutional ethnography is understood to enter into and coordinate people's doings in local settings. In institutional ethnography, "institution" is not another word for organization or establishment, nor is it an objective entity that intervenes in people's lives. It is understood to be constituted in relations that, as SMITH (2001) writes, are "situated historically in the ongoing, never-stand-still of the social" (p.160) which means that the institution can be studied empirically through identifying and following the actual concerting of peoples' activities<sup>2</sup>. [4]

<sup>2</sup> There is a growing body of work describing approaches and techniques for doing institutional ethnography. For those readers interested in reading more detailed accounts of how to design and conduct an institutional ethnography we recommend (for a start) CAMBPBELL and GREGOR (2004) and SMITH (2006).

The institution of institutional ethnography plays an important part in guiding the researcher to move analytically from the ethnographic description of the local to the explication of the *ruling relations* that coordinate people's knowledge and activities. There is a politic inherent in the analytic work of tracking and mapping the relations that rule people's lives. Institutional ethnography takes up for inquiry the problematic of people's work<sup>3</sup> as they know it; the inquiry explores from that standpoint what is puzzling in actions taken within the broad complex of social, economic and political relations of their lives. In the study being reported here, the experiences of nurses working in restructured hospitals provides the problematic investigated and the research proceeds from their standpoint. Ethnographic description of nurse informants' work processes provided the clues to the institutional connections that we then analyzed to discover how nurses had become competent practitioners of restructuring and how their work with patients was being organized in contradictory ways. [5]

The analytic approach in IE requires that the research argues only on the basis of what can be empirically discovered about things actually happening. Unlike other qualitative methods, institutional ethnographers actively avoid developing thematic analysis. We do not collapse the data into broad categories, generic concepts or generalizable patterns. Our goal is not to develop theory from the data. The analytic story demanded by institutional ethnography requires the researcher to supply convincing evidence to account for the experiences that have been described by informants. The researcher's task is to persuade readers that a) any contradictions discovered and examined are "real" in the sense of being enacted and experienced in the setting, and b) the coordination of the setting that our further research exposes is also enacted in relations discoverable in and beyond, but entering into, that setting, and c) that the evidence of coordination of the local setting—which is the knowledge product of the research —establishes to everyone's satisfaction "how things actually work." An analytic account thus supersedes any informant's experiential account but without displacing or denying his or her experience. Indeed, the analytic account relies on and expands the experiential account. The goal of the research is to provide informants with an alternative account that legitimizes their experiences, extends their knowledge of it, and offers them a way to "talk back" from what they know. In what follows, we elaborate with instances of analysis that illustrate this. [6]

The methods used to conduct this study of nurses' work included participant observation and interviews with nurses as well as collection of texts that nurses used or referred to in their day-to-day work. These data were analyzed to identify the overlapping junctures where we could track nurses' work (and the texts they used) into the work of other people in the hospital. Analysis of nurses' work practices directed how we planned data-collection from other hospital employees and administrators to track coordinative practices linking them, even though they were spatially and temporally removed from the local sites of nursing work. [7]

<sup>3</sup> In IE "work" is a technical term meaning all the activities required to produce the "everyday worlds" in which people participate.

Making the analytic move from ethnographic description to discovery of institutional and ruling relations builds on institutional ethnography's particular social ontology and depends, as well, on a set of technical research practices. One of the unique contributions of institutional ethnography is its treatment of discourse as practical activities and specifically of activities conducted in institutional texts. Texts are ubiquitous in the industrialized and knowledge-based economies of the twenty-first century and discovering how texts work in institutional settings is central to the analytic potential of IE research. Texts insert institutional interests and relevancies into local settings where they are taken up and activated by local participants. Peoples' reading and activation of texts coordinate, organize, and dominate both what goes on and, as we argue here, what can be known authoritatively about that setting. SMITH (2006) writes "institutional discourse is set in texts ... texts are of central importance to IE because they create this essential connection between the local of our (and others') bodily being and the translocal organization of the ruling relations" (p.118-119). Observation and examination of texts and people's work with texts brings the institution and its coordinative practices into view. Our study paid close attention to the texts that nurses work with. We observed and analyzed how nurses used them, and how they informed what nurses know. We questioned how the text was being read within the local context of nurses' work, asking: "How does it work? Where does this text come from and where does it go next? What is this text doing (or what is its use accomplishing)?" [8]

## 3. Knowledge Technologies for Health Care Efficiencies

In the era of health care reform, almost all the texts circulating in hospitals and being taken up by nurses are managerially generated and many are integral to the efficiency agenda. Even texts used by clinicians, such as nurses' notes, have been redesigned as "quick glance" check lists, and standardized, pre-printed pages of physician's orders have become the norm. Computer-generated approaches to record keeping have multiplied. The apparently time consuming and "riskier" systems of handwritten records, and nurses' careful transcription work and narrative documentation are now outmoded and have been superseded. [9]

New textual forms entering nurses' work carry the discursive features of health services research (see MYKHALOVSKIY, 2001). Health services research is focused on "captur(ing) clinical data to support more efficient and effective decision making and clinical care delivery," according to WARD, MIROU, BAHENSKY, VARTAK and WAKEFIELD (2006, p.429). The production of health services research relies massively on (and thus reinforces the installation of) large-scale administrative data bases and computing systems<sup>4</sup>. These systems, defined variously as health information systems, decision support systems, computerized medical informatics and clinical information systems are widely

<sup>4</sup> In Canada the management of health information has been an important feature of health care reform and to that end, in 1994, the federal government founded the Canadian Institute of Health Information. This institute is a national organization responsible for "developing and maintaining the country's comprehensive health information system" (CIHI, 2009, n.p.).

promoted with promises of "real benefits in terms of increased delivery of care based on guidelines, enhanced monitoring and surveillance activities, reduction in medication errors and decreased rates of utilization for potentially redundant or inappropriate care" (CHAUDRY et al., 2006, p.E18. The proliferation of what MYKHALOVSKIY (2001) calls medico-administrative data, generated within computerized systems of monitoring and counting enables managers to address technologically the patient care processes that they identify as wasteful or inefficient. This is how the health services research discourse shows up in the working texts of nurses. It appears in the form of carefully designed, standardized, checklists for timed interventions that can be vigilantly monitored for "variance" (from new evidence-based norms). Textual strategies require nurses to adhere to the schedules and pre-designed responses that prevent variance and guarantee system efficiencies. [10]

One such system addresses patients' length of stay in hospital beds. Throughout the last several decades, health services researchers have been gathering data to establish benchmarks that "optimize" the utilization of hospital beds. In Canada, bed utilization data have become one of the linchpins of hospital restructuring. Bed utilization programs are used to implement standardized (optimal) lengths of hospital stay for specific diagnostic groups that can be demonstrated to result in good-quality patient outcomes. Bed utilization technologies are becoming increasingly sophisticated, but in their basic form they are computerized systems operated by clerks who monitor and organize patients and beds through the use of "bed maps." The maps provide up-to-the-minute records of patients admitted, discharged and transferred, and, as well, the systems identify empty beds into which new patients can be admitted. [11]

Beyond the system's pragmatic daily usefulness in admitting, transferring and discharging patients, it builds a body of management information for submission to the Canadian Institute of Health Information to provide an aggregate repository of data for statistical analysis. As the hospital clerks enter information about patients into the computerized program to create bed maps and assign beds, their work makes possible the statistical "facts" that eventually circle around to support decisions made by local hospital administrators and inform more distant health officials regarding funding and hospital operations. For instance, as the number of patients "in" and "out" of each inpatient area in the hospital is counted, monthly reports known as "inpatient location statistics" are produced. These hospital-level data are organized into headings such as "bed days," "patient days," "average length of stay," "average daily and monthly census," "percentage of occupancy" and so forth. Elsewhere, use of these official statistics generates optimum (benchmark) lengths of hospital stay by contrasting the data on actual lengths of stay against recidivism rates—that is, diagnosis-related complications requiring medical intervention or readmission. Such calculations provide authoritative standards of quality care that clinicians in any one hospital can be expected to accept. These facts play "trump" in debates about how long patients should be occupying hospital beds (MYKHALOVSKIY, 2001). [12]

Then, on the basis of that new knowledge, certain work processes are designed and promoted as the best ways to support and streamline health care and they shape the practices of health care workers. At the same time, each program generates new data for managing the work. Categorized, transmitted to information banks, and re-analyzed, this information becomes the official account of "what happens" which is then used to organize and evaluate the fiscal efficiencies and clinical effectiveness of professional health work. [13]

A vicious circularity ensues, based on the epistemic privilege accorded to health information. Our empirical investigation has advanced a critique of the technological systems in which health information is constructed and of "the facts" being used to transform the work processes of nurses. Not just institutional ethnography's social organization of knowledge, but Michel FOUCAULT (1970, 1988) and postmodern philosophers (BAUDRILLARD, 2001, 1994 and LYOTARD, 1984) have resoundingly rejected the idea that any form of knowledge can stand as a "neutral" representation of what there is to be known. Nonetheless, health informatics assumes such neutrality, according its information product scientific authority and overriding whatever else might be known. As a powerful form of socially organized knowledge, it reaches into the heads of nurses who learn to reinterpret their own professional judgment and action in its light. [14]

# 4. Ethnographic Stories and Empirical Evidence that "Talk Back"

In contrast to health information's authoritative and prescriptive versions, we offer an analytic account that highlights the text-mediated character of nurses' work, contrasting it with its inevitable embodiment. As an illustration here, we discuss the work nurses do in discharging patients from hospital to home. Our observations show that, in spite of its new organization, this work remains highly contingent, and occasionally even chaotic. We see nurses responding to the somewhat unpredictable needs and demands of patients, families and intervening routines of hospital and allied professional staff. This, we insist, is the nature of health work: while some aspects of health care can be predicted, booked ahead and controlled, there is much about illnesses and accidents, bodies, pain, and healing that is unpredictable, making it necessary for a health care provider to act on the basis of professional judgment. Nurses are positioned and have always been expected to do just that. In addition to the technological systems and decision support tools used to reduce uncertainty in such settings, our ethnographic data found nurses thinking on-the-spot, putting together ad hoc plans in the moment, and attempting to cover off unexpected events, needs and troubles. Even in such carefully managed work, nurses' activities around patients who had apparently recovered and were ready to go home were seldom seamless or straightforward. [15]

# 4.1 Three occasions of discharge work<sup>5</sup>

In this section of the paper we turn to three occasions described in our data when nurses were discharging patients. We offer a concise overview of relevant particulars of each situation and outline how the data grounded us in the everyday activities of nurses. These three occasions were chosen for analysis in part because they are mundane and so commonly encountered that they have become taken for granted as how a competent nurse acts. These three stories provide important clues into the ruling relations that are the focus of the analysis we are discussing here.

A woman was being sent home from hospital on the day after a routine surgical procedure on her shoulder. However, the patient's discharge was complicated by ongoing pain and nausea. The morphine being administered for the pain was contributing to the nausea. The patient had been unable to eat or drink since before the surgery, and she was dizzy. The nurse reorganized her own morning plan of care to address the additional discharge work this patient's condition required. She waited for the patient's husband to arrive and adapted her discharge instructions. She ensured that the patient had a disposable emesis basin. She offered the patient an antacid and directed her to stop at a pharmacy on the way home to purchase medication for nausea. Complicating this situation was the nurse's other assigned work—five other post-operative patients and an "extra" patient—a new arrival for whom there was yet no bed, but who required immediate preparation for surgery and who would require a bed following her surgery. [16]

Emerging from this data was a compelling sense of the time pressures that nurses face. Everything this nurse informant decided to do was hurried. The work, fraught with interruptions, was carefully orchestrated to ensure that the new pre-operative patient was delivered to the operating room in time for her booked surgical appointment and the post-operative patient was discharged by the 11 a.m. "checkout" time. In these data, we noted how the nurse responded to the unexpected severity of the patient's pain and nausea and how she worked around the interruptions and unpredictability. We noted her putting together an ad hoc plan (the antacid and emesis basin) neither of which would offer the patient any symptom relief. We puzzled over how patients are being organized to enter and leave a nurses' assigned complement of beds. "How was the new patient organized to arrive when she did? How are discharges organized? How did the nurse know that it was time to send this patient home? Who authorizes this work organization? What accounts for its urgency—which the nurse responds to by hurrying and offering the patient an antacid, unlikely as it was to be effective for nausea?" [17]

The second data excerpt concerns a nurse discharging a confused elderly patient who had undergone major surgery.

<sup>5</sup> The first data excerpt was elaborated in more detail in "Managing to nurse" (RANKIN & CAMPBELL, 2006, pp.46-48; the second excerpt appears on pages 64 and 73). The third data excerpt is not included in *Managing to nurse* and was related to RANKIN by one of her graduate students.

The nurse had arrived on duty and had noted that it was "day seven" and that the patient would be sent home. The nurse spent time with the patient who was confused, slightly combative and who, after he had been helped to dress, had been incontinent. The rest of the nurse's discharge work was directed towards the patient's wife, who was the primary caregiver. The patient's wife seemed frail and overwhelmed; she tearfully disclosed to the nurse her concerns about being able to manage her husband's needs for care. The nurse responded to the wife's tears with compassion and reassurance. She gave detailed tips for managing the patient's urinary incontinence and also spoke to the nurse in charge to request additional in-home supports. The nurse acknowledged that sometimes the "work feels like hell." She added "I mean, it might not look like it's very caring, but it's just not efficient use of resources to hang onto this patient for another night just because his wife is having trouble coping. There are all those other patients waiting for surgeries to think about." [18]

From this data we wondered how this nurse's work was organized in such a way that it felt "like hell." We were curious about the significance of "day seven" for this patient's discharge. We also noted that this nurse was "hurried" as she told us "I am rushing, though—through the discharge instructions, the prescriptions, his bowel meds and stuff." We learned how she managed the unexpected work of the patient's incontinence and confusion. We noted how her activities seemed organized by her knowledge of "other patients waiting." Again we wondered how this nurse's rushing and hurrying was socially organized? What would have happened if the patient's elderly wife could not be persuaded to take him home? [19]

The third story comes from a nurse who works in cardiology. Interviewed in a different province, almost eight years after the original research data was collected, this nurse informant expressed concern about her discharge work with patients who had experienced myocardial infarction. She related how she is regularly (almost every day) concerned and worried about the patients she is discharging:

I really wonder what these people go through after we send them home. I always get this sort of yucky feeling. There is never enough time for the teaching. The first night they may be in ICU, then two nights being monitored on the ward, then, the next day we send them home. They have just had a heart attack. They're scared. Some go home on medications, for blood pressure, for angina, for cholesterol and they don't really know about the meds, or sometimes, you get a sense they won't know what to do if they get angina. They have questions: When can I go back to work? Is it okay to walk my dogs? What should I be eating? Their cardiac rehab doesn't start for six weeks and sometimes it is six months before they get their follow-up with the cardiologist, and unless they are readmitted they may never see a nurse again. It's the standard now, (for) first timers who are young and have no other co-morbidity. We start them on the pathway and three days (of hospital care) is all they get. I don't think it's enough. I think they need a least another day. But apparently the data is pretty clear that the outcomes are okay with a three day stay. [20]

In this story we noted the "yucky feeling" expressed by this nurse. Although these data are collected in a setting geographically and temporally removed from the

previous two excerpts, this nurse's discharge work is also troubled. Inside the account of trouble, we begin to identify some of the same clues about its social organization. We note the inherent unpredictability and individualized nature of each patient's medications and life circumstances. This nurse and her patients are organized by time constraints that do not allow for the nurse to teach the patient about self-care. That is one reason that, in the nurse's judgment, patients are being sent home too soon. Again we get a sense of the "hurried" care being given. We note the nurses' reference to the "pathway" that organizes the three day hospitalization. As well, this story has elements of "waiting" as we note a sixmonth wait for follow-up from a medical specialist. [21]

# 5. Analysis and Argument

Approaching this data as institutional ethnographers, we are directed towards the institutional relations that organize the particular standpoint of these nurses. Taking the standpoint of the nurses, we examine the hurried activities and explicate the "moments of chafing" (CAMPBELL & GREGOR, 2004, p.48) when the work "feels like hell" and nurses experience "this yucky feeling." We do not assume that the nurses are simply resistant to change, as is the easy explanation. We begin to identify the social relations concerting and coordinating hospital nurses' activities. We pay attention to the practices and experiences of trouble that have emerged as similar or at least familiar across time and geography. Our analytic goal is to extend these nurses' knowledge—what they tell us and what we have observed—into a new and useful awareness about how their work activities (and the troubles they suggest) are being put together. What stands out is nurses' communicated sense of not having adequate control over their own work with patients to do what they consider is a good job. In each of the three cases noted above, the nurses' work involved their efforts to address adequately the unique circumstances and their patients' unpredictable responses to illness, surgery and medication. [22]

Nurses' work is filled with the (often overlooked) coordinating work that ensures the smooth unfolding of patient care, tests and procedures. As the data illustrate, their work happens on the ground and requires responses in the moment. It is characterized by the uncertainty that also complicates the job of hospital administrators who work to bring order and predictability into managing hospital staff, beds and budgets. Managers, unlike nursing staff, are removed from the busy "churn" of direct patient care. They work at a distance from the sites of care to plan and model the future. They develop strategies to gain control of patients' illness trajectories to ensure optimum outcomes, including effective utilization of hospital resources (beds and nursing labor). [23]

The expanding managerial task thus includes developing ways to regulate and standardize nursing responses within models of "best practice" in order to meet quality-assurance standards for efficiency and effectiveness. One of the areas in which hospital managers can exercise this sort of control is around "patient turnover" that accomplishes the "inputs and outputs" of hospital processes. To do this, the workers on the hospital "production line" (and nurses are important in

this regard) need to activate competently the managerial strategies. Nurses must be organized to carry out a production of health care that can be carefully monitored and measured and held up to the new accountability practices. Nurses must somehow be persuaded to *mediate and*, when necessary, *overlook* the individual and unique experiences of patients in order to align their work with the managerial imperatives. As we argue, nurses both as individuals and, more broadly, within discursive processes active in the discipline, are being organized to subordinate their professional knowledge and education and to *rationalize* their actions within what we call the institutional relations of ruling. But the question that remains to be answered is "How is this orchestrated?" [24]

### 5.1 Bed utilization technologies

In each of the discharge practices described earlier, we observed nurses choosing one course of action—securing the discharge—over other possible courses of action that would involve using more of nurses' time and might delay the discharge. Disrupting predictable discharges requires a nurse to assert herself and advocate for a patient. In extreme circumstances, nurses *do* advocate and intervene to delay discharges. However, owing to the effectiveness of the high-pressure strategies to improve patient turnover, nurses' advocacy work or room for discretion (such as standing firm to delay a discharge) is reserved for extreme occasions of risk to life or limb. Most routine discharges (such as those described above) are part of the taken-for-granted competence of a nurse doing her job as expected. Any contradictory distinctiveness within those discharges will be glossed over, and the accomplishment of the discharge itself is regarded as good nursing practice. We have come to recognize how this happens within precisely managed institutional arrangements in which nurses participate. This we see as nurses enacting the social organization that coordinates what they do. [25]

Picking apart these institutional practices, we begin to see the relevance of bed utilization programs to what otherwise would be the exercise of nurses' discretion in their work with patients. Bed utilization programs have been in place in hospitals for some time, and are heavily relied upon to plan bed assignments. Our ethnographic field work led us to the work of the patient placement clerks whom we observed navigating the complicated computer fields and whom we then interviewed. Clerks explained the complexity of their work. Patients cannot be randomly assigned to beds. There are protocols in place to organize the placement of patients based on their age, illness, and (until recently) their sex. In the context of scarcity of hospital space<sup>6</sup>, the bed utilization program with its computerized bed maps provides a system whereby hospital space is matched to a list of patients waiting for beds. It contributes a screening and monitoring process to ensure that patients are assigned to the "right" beds and it enables clerks to track which beds have been cleared. The bed utilization clerk explained

<sup>6</sup> Long forgotten by now are the massive cuts sustained by Canada's health care system in the mid-90s that resulted in reduced hospital facilities and downsizing of the labor force and created what is now talked about as a crisis in health care, including scarcity of treatment beds and of nursing labor.

some of the maneuvers possible in the textual "hyper reality"<sup>7</sup> of the computer software that generates the bed maps:

"We admit people but we (may) have no beds for them. They come in before the bed is ready for them. So, in the system we create this place called SDA's (Same Day Admits). They are fictional rooms." [26]

Thinking back to our questions about how patients are organized to arrive or leave a nurses' sphere of work, we discover that patients undergoing elective operations are admitted to the hospital, and, indeed, undergo surgery, before there is any confirmation that there will be a bed (or a nurse) available for their recovery. In the computerized texts that constitute the "hyper reality" of the bed utilization program, the problem of the line-up of patients waiting is addressed by the creation of a textual "space" in which to house them. (However, the new patient requires and gets nursing attention, even if he or she is not counted on any nurse's workload.) [27]

Efficient bed utilization is demonstrated through a textual construction in which "fictitious" beds apparently expand the hospital's capacity. Tracking the texts from the work of the patient placement clerks, the institutional ethnographic method directed us to examine the "inpatient location statistics" that the clerical work generated. We explored who worked with the statistics and how that information might enter and alter nurses' thinking and their decisions about what to do for their patients. Our interest in these texts led us to the work of hospital managers and executives where we learned that the textual expansion of hospital beds was understood as "110% utilization." The executive director interviewed described his work to maintain "full efficiency" (110% was judged as highly efficient). He explained his job was to balance maximum efficiencies with "quality." He also talked about the importance of "risk management," explaining how this is intensified if a system is pushed beyond its "design capacity." As the research moved beyond the local setting of nurses' work, we began to understand the accountabilities that the bed utilization program produced, and the inherent sense that could be made from these facts. Yet, as institutional ethnographers, we continued to be methodologically grounded in the standpoint of nurses for whom the highly efficient, 110% utilization, created extra pressure. One nurse said, with bitterness and resignation, "you should have been here yesterday when I had three patients for one bed." The constant overlap of patients shapes the hurried, cursory, and troubling discharge practices of nurses who are irremediably grounded in the embodied actualities of their daily/nightly work with patients. [28]

BAUDRILLARD (1983) uses the term "hyper reality" to discuss physical places and activities so "artificial" and removed from any "real" reality that they can be termed "hyper real"; completely bounded by simulation, imitation and "transient simulacrum." We find BAUDRILLARD's term useful for characterizing the managerial "realities" that information and other health care technologies construct. Our research leaves unaddressed issues of reality, preferring to ground our findings in and make claims about "actualities." An actuality is something that people do, experience and can talk about as such. However, like BAUDRILLARD's claim for hyper reality, we recognize that the managerial versions have effects, including how they are taken up into nurses' work, and part of our analysis is to discover how one account becomes authoritative and another is suppressed.

As analysts, we kept looking for the organization that makes possible the nurse's experience of having "three patients for one bed." Managers are under increasing pressure to manage for efficient use of resources. As increasingly detailed data about the various activities being accomplished in hospitals are made available to managers, they are expected to use them to make decisions about efficiency and to intervene on that basis in aspects of patients' hospital care. One patient-services manager explained how he uses, and is accountable to, the bed utilization programs:

"We need these statistics for a couple of reasons. We need those ones that the Ministry insists on and I need some purely to do my work. I use them as backup for proposals. I guess every second day you get involved with discussions with other hospitals in comparative talks. You get at the table in budget discussions or whatever, and you can talk statistics at people. We can say 'okay yes, well we do 280 joint replacements a year, so we do need more money in our joint program'. Utilization and length of stay are big issues with the region. They say, 'Look here, what's happening here? You're not utilizing well' ...and certainly, in our discussions with the Ministry, in order to receive any extra funding, for the joint program for instance, they talk about length of stay and utilization a lot." [29]

He is showing how the "hyper reality" of the bed utilization program extends out from the hospital, informing the health authorities who set benchmarks, assign funding levels accordingly, and monitor the results. He is also implicitly identifying the sources of pressure to which he must respond. During one of our research interviews, a hospital manager pulled out a bundle of papers and explained how he had reviewed them saying:

"At any given time we can pull the statistics. Actually, we're not doing very well right now. We've started to vary a little bit with our hips and knees, probably by a day or two here and there. We have to get better at that." [30]

When he says "we have to get better at that" he is referring to his managerial responsibilities. He is explaining how this statistically generated knowledge becomes part of an accountability practice within the Ministry of Health, for whom "utilization and length of stay are big issues." As a manager, it is his job to initiate strategies to address the problem of cases that "vary a little bit," occasions when a patient's allocated five day hospital stay is extended "a day or two longer." For him, these statistics provide the substrata of "efficiency," the virtual reality towards which his everyday work is directed. It is true that the computerized bed utilization programs help to bring order and predictability to the movement of patients in and out of hospitals. And it is this managerial success that can be traced as the technological coordination plays out in the work of the nurses discharging patients. Following the clues discoverable in our participant observations and interviews, we examine, from the standpoint of nurses, how bed utilization programs work as technologies of surveillance and control. Our data expose them as powerful ruling relations that organize nurses to subvert what they know as insiders and expert practitioners of nursing work. We see in our data that their nursing knowledge is being replaced by different rationalities that,

when scrutinized, are incongruent with what they have been taught and what they learn from experience with patients and families<sup>8</sup>. As an example, nurses say they are compelled, in deciding what to do for one set of patients, by the knowledge of "patients waiting." [31]

Can managerial accountabilities be counted on to guide nursing care, satisfactorily? This question raises the issue of different standpoints on health care operating within the institution and how they are organized. Managerial knowledge generated by the bed utilization program organizes hospital restructuring (and nurses' work) from several different organizational levels. Our research is explicitly designed for its utility to empirically track what is going into the broad restructuring of hospital care. We find the bed utilization data being used to generate "provincial averages" and to provide an ever expanding production of "facts" upon which to establish competitive relations that are linked to hospital-funding formulas. At the Ministry of Health (the branch of the provincial government that presides over health care) the in-patient location statistics are aggregated and fed back to the hospital executives and managers in the form of "provincial averages" and "benchmarks"9. Statistical knowledge allows like hospitals and like regions to be compared giving both high level administrators and hospital administrators a new form of oversight of any one hospital's efficiency. This constitutes a form of pressure to achieve ever-rising expectations of productivity and efficiency. [32]

Despite the compelling rationality of these data and the additional pressure their use brings into the system, our institutional ethnographic method requires us to constantly look back to the nurses on the ground level. Our research helps us to bear witness to the increasingly hurried, perfunctory, practices of nurses whose work is being relied upon to achieve the efficiencies. Different agendas are built into the different forms of knowledge and our data suggest that a social process of persuasion is undermining nurses' judgment. Nurses' adherence to the managerial agenda is required to achieve its efficiency effects, creating for the institution the ongoing necessity to enroll nurses in a practice of nursing care consistent with the efficiency discourse. [33]

To change nurses' practices, they must be persuaded and organized to think differently. Often, the on-the-job requirements of nurses are directly contradictory to how nurses have been taught to think and this creates new tensions for them. New nursing discourses emerge to explain and address these tensions. For example, there is a new focus on a nursing "generation gap" that identifies hostilities among four generations of nurses who have significant ideological differences (WIECK, 2006). Another posits "bullying" to be a problem among nurses (HUTCHINSON, VICKERS, JACKSON & WILKES, 2006, 2008)—a new version of the theories of "horizontal violence" in nursing (ROBERTS, 1983) that blame nurses' inappropriate interpersonal skills for creating "toxic work cultures." An assortment of strategies complementary to these explanations are arising, including the effort to support the transition of new nurses into the "new realities" of practice. For instance, one idea is to make funding available for student nurses to work in hospitals before graduation to facilitate their practical skills. These sorts of explanations and remedies serve to divert analytic attention from the social organization of nurses' work and, we argue, they perpetuate the very conditions that subjugate nurses.

<sup>9</sup> In Canada's publicly insured health care system these sorts of strategies closely mirror the strategies developed for the profit driven health care system in the USA. The effects on nurses' work are uniform across both public and private institutions (ARMSTRONG et al., 2001).

We turn now to explicate one way that this happens as hospitals "get better with hips and knees." Our analysis reveals the taken-for-granted junctures when nurses' autonomous knowledge and their reliance on their own judgment are displaced by (their belief in) the institutional knowledge practices. [34]

# 5.2 Care pathways

One of the central technologies of care associated with bed utilization programs is the "care pathway." A care pathway is a text-based tool that directs and monitors key interventions to occur at timed intervals throughout a patient's hospitalization. Pathways have been developed for a wide variety of medical diagnosis and surgical procedures. The manager quoted above explained how "we have to get better" organizing the care of patients undergoing hip and knee surgeries. This managerial work is not directed by any perceived general incompetence in nursing care provided to patients undergoing arthroplasty. At this hospital, Orthopaedic Clinical Pathways were initiated because current care practices were found to be inefficient in regard to increasing variances in patient stays. Discharges were being delayed ("probably by a day or two, here and there") and the average length of stay for hip and knee surgeries would then surpass the provincial average. According to a 1997 Ministry report, the hospital was "remiss in employing effective utilization management efforts in order to ensure the residents have reasonable access to health care services" (Regional Hospital, Financial Management & Operational Assessment—Review Team Report, 1997). It was in response to this "encouragement" that the Orthopaedic Clinical Pathways were implemented as the managerial solution to bring local practices into line with the ruling perspective embedded in the provincial benchmark. [35]

Traces of the care pathways are visible in the data excerpted previously, describing nurses' discharge work. For instance, each one of the nurses "knows" when her patient is to be discharged. In the first excerpt, the nurse was adhering to an 11 a.m. discharge imperative that was made more intensive by the actual presence of a "waiting" patient who had expanded the workload demands on that nurse. In the two subsequent data excerpts, the nurses made explicit reference to the standardized length of stay: the elderly incontinent patient was known to have reached "day seven" and the nurse involved in discharging cardiac patients described how she was held to a "three day" limit. [36]

In all three excerpts of discharge data, nurses experience practical problems related to holding a nursing work-site together. The nurses themselves describe how their work "chafes." At each turn of nursing activity the nurses relied on knowledge from a care pathway—as opposed to relying on what they know as knowledgeable actors, embodied and embedded in a *professional domain*. The objectified knowledge that guided their activities had constructed their patients as ready for discharge. The authoritative construction of readiness was accomplished within the time rationing of the care pathway protocols that preestablish and textually govern what is knowable. This social construction of knowledge begins, for any patient and nurse, with a care path form that is

included in the hospital record—and it becomes for the nurse a working text. The text directs nursing interventions and makes them visible for monitoring. Often the care pathway is supported by pre-set and authorized physicians' orders. In some hospitals, especially those that have made the transition to the electronic medical record, patient care (and variances) can be managerially monitored hour by hour, day by day. Yet in each of the data excerpts included above, the nurses identify troubling patient issues that do not show up in the authorized accounts. Nonetheless, the care pathways align the nurses strongly to the managerial agenda. [37]

Our analysis shows care pathways to be standardizing texts inserted into the routine practices of nurses. They systematically insert the relevance of "counting" and "benchmark targets" into the everyday/everynight activities of nurses doing direct nursing practice. It is now routine that patients with cardiac illness, patients undergoing surgeries, and even patients experiencing mental illness be grouped and categorized to determine "optimum" lengths of hospital stay. The care pathways are often linked to health services research that can be defended as evidence based and quality assured<sup>10</sup>. They create an ever tightening loop that persuades nurses of both their validity and their practical importance, especially as nurses are invited to adapt and tweak the textual tools. We have seen two things happening. As they adapt to the use of pathways and are guided away from hands-on to textual readings of patients' needs, nurses begin to doubt their professional judgment. Also, a dangerous ratcheting-up effect occurs that intensifies nurses' work. It happens this way: when length of stay is reduced at one hospital, so must it be at the next, in order to maintain that institution's comparative advantage. There is never any end to the pressure for the realization of efficiency. Care pathways and bed utilization programs are just two of the many strategies that superimpose authoritative knowledge about the primacy of the discharge onto nurses' professional decision making. Inexorably, these new public management strategies exert increasing control over nurses' professional practices. [38]

### 6. Conclusion

Institutional ethnography is a method of inquiry that provides insight into the social organization of nursing practice that is otherwise invisible from accounts of experience made by those inside that practice. Yet nurses recognize that their practice and their work settings are being fundamentally changed, and many nursing researchers are trying to understand and address the tensions and challenges that permeate nurses' work (see, for instance, RODNEY, DOANE, STORCH & VARCOE, 2006; NELSON & GORDON, 2006; WEINBERG, 2003). Here we describe how institutional ethnography contributes something new and useful to that effort. Note, however, that as institutional ethnographers, we are not trying to understand the essence of nursing work, or the meaning nurses give to their disquieting experiences as we would if we were undertaking hermeneutic phenomenology. Rather, our work unpicks empirically what might otherwise be

<sup>10</sup> Also, see MYKHALOVSKIY (2001) for a critical analysis of how health services research intersects with nurses' work in hospitals.

conceptualized in the nursing discourse as nurses' "moral distress" (AUSTIN, LEMERMYER, BERGUM & JOHNSON, 2008; RICE et al., 2008; ULRICH et al., 2007). To do so, we do not code, categorize or conceptualize what we are discovering in the data as grounded theorists might. Institutional ethnographers actively reject the "leap" into theoretical thinking that, as an explanation of what is going on, would require us to translate into abstract and pre-theorized categories what we see and hear. Our interest begins and remains in the actual activities and workings of people and institutions that construct the social. As McCOY (2008) writes, "Institutional ethnography is a determinedly empirical project" (p.706). [39]

In the data and analysis presented here we empirically examine and track the experiences of three nurses who were troubled to be discharging certain patients from hospital. Occasions of work such as these are so ordinary as to be considered mundane and within hospitals pass as entirely routine and unproblematic. (To not accomplish the discharge would be a problem!) Our data display nurses carrying out their work as expected, in a way that makes sense to them, their managers, and surprisingly often, even to the patients, too, even as they suffer the inevitable but overlooked consequences<sup>11</sup>. We are well aware that, in Canada, nurses' work is being conducted within a powerful public discourse centered on fiscal restraint, efficiencies, and questions of sustainability. In this ideologically constituted setting, our research took up these nurses' experiences—paying attention to their subtle expressions of disquiet—and examined them from the "inside out." [40]

Our approach has allowed us to scrutinize the organization of the knowledge practices conducted within the institutional domain of health informatics and health care reform. Using this approach, we step outside the dominant discourses and their categories to follow clues in the ethnographic data, our aim being to discover how things actually work. While the research does not unsettle the ruling relations themselves, the study problematizes the forms of knowledge that rule the setting. This research strategy delivers the capacity for nurses to "talk back" to otherwise authoritative accounts, drawing confidently from their own experiential and professional knowledge. Our research uncovered how nurses become complicit with bed utilization practices that they might otherwise see as questionable for their patients' wellbeing. In our illustrations, we have begun to display how a dominant rationality of "efficient use of resources" comes to centrally occupy nurses' decision making. The mechanics of the knowledge produced through the administrative data bases and computing systems we examined reveal the workings of the technologies that direct nurses' activities and decisions. On that basis we assert that technologies such as these produce an authoritative (and virtually unassailable within that knowledge domain) rendering of the facts about what is going on in hospitals. Our analysis opens up a troubling knowledge disjuncture in which nurses get caught up, the implications of which should be taken very seriously. It constitutes a contradiction at the heart of nursing practice and health care. Nurses are counted on to be with patients as

<sup>11</sup> See RANKIN and CAMPBELL (2006) for elaboration of some "consequences."

professional observers and interveners, responding confidently and knowledgeably in the moment to changes in patient conditions. Yet, increasingly, as we have shown, nurses are incapacitated from exercising this form of professional discretion. When the full weight of institutional authority is accorded to health information and to the objectified decision-making it supports, nurses' professional knowledge and judgment are routinely overridden and subordinated. [41]

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