THE ACTUALITIES OF REGIONAL HEALTH BOARD WORK: IMPLICATIONS FOR DECISION SUPPORT DESIGN

by

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A Thesis submitted in Partial Fulfillment of the
Requirements for the Degree of

DOCTOR OF PHILOSOPHY

in the School of Health Information Science
University of Victoria

We accept this thesis as conforming to the required standard

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ABSTRACT

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How is it that health data, information and knowledge (evidence) is taken up or not in health care governance? Fieldwork was undertaken in a Canadian regional health board as members routinely went about the work of governing an exemplary integrated health delivery system (excluding only community physicians) for 300,000 people with a budget of approximately $500,000,000. Institutional ethnography (Smith, 1987) provided an analytic method, theoretical orientation and a philosophical paradigm compatible with a health informatics framework. Meeting transcripts, related documentation, key interviews and observational data obtained from 1999 to 2002 were data sources. This thesis provides support for two knowledge claims: 1) longstanding governance practices developed to ensure accountability for resource management are in dynamic tension with those emerging to ensure the health of the population; and 2) institutional ethnography provides a method compatible with, and supplementary to, current health informatics approaches. Specifically, the regional health authority Board investigated used traditional and standardized governance practices, including face-to-face monthly meetings, with prescribed leadership roles and process rules of order including voting procedures. The Board primarily ratifies recommendations worked up by Board committees and is apprised on internal and external developments as they affect organizational objectives by the chief executive officer and senior employees. Two medical advisors representing public health and the medical chief of staff have a privileged reporting relationship. Information is transmitted on paper supplemented with oral presentation. I traced the everyday work practices of this Board to their institutional ruling relations – widespread and interconnected practices of government, law, medicine and administration that organize how their work is accomplished.

Governments create regional health boards by provincial legislation with the sole legal mandate to govern the health delivery system within their region and in concert with a regulatory framework that prescribes their responsibilities as employers and property owners. They are bound by legislation to create policies and procedures to specify how their work will be done. Governance models and rules of order are adapted that are in widespread use. Boards are legally bound to govern in the interest of the people of the region and to report on health system performance regarding health and resource use. Information about resource allocation and use such as budget and auditing statements and financial indicators are standardized, well understood and supported. In this Board, indicators for monitoring the population health status and estimating the effect of organizational performance on the health of the population are in the early stages of implementation. The opportunities for decision support include web based provision of electronic documents with enhanced functionality for board members and throughout their organization to facilitate knowledge translation, communication and telecommunication support for meetings between board members and stakeholder advisor liaisons, information infrastructure development support in collaboration with provincial and national organizations, and the development of tailor made decision support tools such as digital dashboards. Finally, new types of decision support are suggested – those that provide governing structures with information on the subjective experiences of health and health care that are typically omitted, as complex human experience is translated into simplified knowledge objects.

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The individuals who have guided this research project have gone far beyond their institutional mandate. I acknowledge Jochen Moehr for his pioneering spirit and sustaining his enthusiasm for this research; Marie Campbell who guided the analytical approach; Francis Lau for ensuring that this research stayed true to an emerging Canadian health informatics paradigm; Michael Prince for ensuring the policy relevance of the thesis and finally, Arminée Kazanjian for fostering my research interests through and beyond our long association with the British Columbia Office of Health Technology Assessment.

As well as introducing me to Dorothy Smith's pioneering work, Marie Campbell provided entry to a vibrant community of institutional ethnographers. The work of Ellen Pence, Eric Makalovski, Janet Rankin, Leanne Warren, Liza McCoy and Susan Turner work has been of inspiration and immense practical value.

I am grateful for the generosity of the Board of the anonymous health region that consented to have their work and that of their staff open to inquiry. Many individuals who will go unnamed gave generously of their time in interviews.

My doctoral training has been supported by a number of Canadian funding institutions. This work was inspired by and has benefited in its early stages from HEALNet legacy funding. HEALNet was a Canadian Network of Centres of Excellence, funded by the federal research councils, Social Science and Humanities Research Council (SSHRC), and Medical Research Council (MRC). I am particularly thankful for help provided by HEALNet investigator Harley Dickinson. My training was sustained through a Michael Smith Foundation for Health Research doctoral trainee award. The Canadian Institute for Health Research will make it possible to continue my investigations institutional ethnography through a fellowship award.

Finally I'd like to acknowledge family and friends who supported me through this journey in all kinds of ways. I am particularly grateful for the encouragement of my parents, Millie and Bus Green as well as friends Anne Franke, Rose Pils, Don Melady, Patricia Sloan, Reza Berenji, Tom Heah, Marion Irish, and Margareta Lund. I am most grateful to my husband Tony De Bruyne for being by my side throughout.

Dedication

This thesis is dedicated to Tony De Bruyne — my loving husband and friend.

CHAPTER 1:
INFORMATION AND COMMUNICATION TECHNOLOGY SUPPORT FOR REGIONAL HEALTH BOARDS

1.1 Health care reform and ICT

To provide an empirical basis for the design of ICT strategies to support health care governance decisions, I did fieldwork to explicate how a regional health board actually makes decisions. In this introductory chapter, I outline the origins and development of this doctoral research program, as well as a chapter-by-chapter overview of this dissertation. The rationale for the approach I used is illustrated by the stages this project went through in development. In keeping with the approach adopted for this research, whereby the researcher enters the investigation through a standpoint in the everyday world, I write myself into this thesis (Smith, 1987). I thereby avoid the fiction of presenting myself as an observer of social phenomena from an external and objective vantage point. In this chapter, I relate the career experiences that so intrigued me I believed them worthy of the sustained focus of a doctoral research program. I also outline the intellectual journey that I took in developing and conducting the research.

I took the standpoint of decision-makers – regional health board members – and examined their work as part of an institutionalized web of relations. I found governance practices in transition. Financial and utilizational information based on administrative datasets and accepted accounting practices are standardized, while population health status and health system performance information is just becoming available. These actualities of regional health board work have important implications for health system reform, including ICT, which I will outline.

This thesis is timely. As the 21st century got underway, controversy about health care abounded, yet there was a growing agreement that: 1) the current Canadian health care system is in need of reform to ensure high quality and affordable care; and 2) information and communication technologies (ICT) will play an important role in that reform (Canada

Health Infoway 2002; Romanow, 2002). The requirements of the anticipated systems to inform the decision making of regionalized health care systems, to share information throughout large and complex systems, and to involve system 'users' in system development is daunting. Though ICTs have been historically under funded in Canada, considerable resources are now being expended to construct and build a pan-Canadian information infrastructure (Canada Health Infoway, 2002).

Specifically, the following career experiences informed and motivated my choice of topic and methodology. During a career in health care that has spanned 20 years, I observed the health care system from the front lines as a care provider and consumer both in Canada and on international projects in non-westernized countries. In clinical practice as a physical therapist I faced the usual conditions of heavy patient responsibilities and lack of paid time to access and apply an exploding health research literature. I understand how challenging it is to incorporate research designed to be generalizable across settings into a specific clinical practice setting with individual patients.

As a researcher producing systematic reviews and meta-analyses of scientific studies (of varying rigor) on health interventions, I was puzzled as to how some medical technologies were swiftly adopted in practice, despite inconclusive scientific evidence of benefits in terms of the health of the population. With the British Columbia Office of Health Technology Assessment at the University of British Columbia I faced the difficulties of attempting to tailor health technology assessments to the needs of decision-makers (timely, relevant, lay language, brief) while upholding ethical and scientific standards. Though research evidence was often compelling it was difficult to identify how it had been 'translated' into policy or clinical decisions (Kazanjian & Green, 2004).

I also had the opportunity to conduct analyses on the large linked administrative datasets housed at the Centre for Health Services and Policy Research at the University of British Columbia (Green et al., 1996). I became increasingly aware of their potential to inform policymaking, as well as the expanding technological capacities to mine them. It seemed clear to me that health care decision makers were tapping little of the immense potential of research and operational databases, to inform their decisions and thereby

improve patient care. To become better able to support health care policy making with the new ICT resources emerging, I undertook this doctoral research program by special arrangement with the School of Health Information Science at the University of Victoria.

1.2 Health care reform and evidence-based policy making

The concepts of 'evidence' and 'evidence-based' practice are central to the arguments of those promoting reform based on scientific research. They are important to the development of this dissertation as they provide a counterpoint to the stance I have taken and a dominant approach that I needed to relate my work to. As well, my career has been caught up in this movement. I trained with leaders of the Evidence Based Medicine (EBM) movement as an undergraduate student at McMaster University in the early 1980s. My research in health technology assessment was focused on synthesizing evidence for policy makers.

The EBM movement became an increasingly important global effort throughout the 1990s. The goal of the movement is to apply clinical evidence from systematic research, integrated with clinical expertise, to the care of individual patients (Sackett et al., 2000). The logical, rational EBM approach involves following this series of steps: asking answerable questions, searching for the best evidence, critically appraising the evidence, applying the evidence to individual patient care, and evaluating the process (Sackett et al., 2000). The 'best evidence' in the EBM approach is the randomized controlled trial (RCT). The RCT is the gold standard for determining the effectiveness of clinical interventions because properly conducted it provides conclusive evidence of a causal relationship between the intervention and a health outcome.

Following the EBM approach is time consuming. As busy clinicians have limited time to search for and appraise evidence, review groups such as the Cochrane Collaboration[1] pooled efforts and resources to conduct and disseminate systematic reviews on important clinical questions (The Cochrane Collaboration, 1999). Clinicians could then rely on the rigor

[1] An international and initially a largely voluntary and physician led not-for-profit organization

of standardized review methodologies to ensure that all available trials had been identified and synthesized. They needed only to appropriately apply these reviews in their practice and evaluate their effectiveness. In practice, even this is challenging for busy physicians and the trend has been for expert groups to review the evidence collectively and formulate clinical practice guidelines for subgroups of patients meeting specific clinical criteria.

In the 1990s, an international movement to produce systematic reviews for health policy makers also became widespread (Kazanjian & Green, 2004). I was a part of this movement producing the first generation of health technology assessment reports in British Columbia (Green et al., 1996). These too were often related to clinical interventions of priority to health delivery systems. Mears et al. surveyed 97 international non-profit health technology assessment organizations (Mears et al., 2000). Most conducted systematic reviews of the clinical effectiveness of drugs, devices or procedures (Mears et al., 2000). Health technology assessments were most frequently undertaken with quality assurance policy objectives and target physician audiences (Mears et al., 2000).

Though the randomized controlled trial (RCT) is the gold standard for determining the effectiveness of clinical interventions such as the pharmaceutical drugs for which this research method was developed, there is controversy about whether it should be the gold standard for all types of evidence claims. As well as a diverse array of policy makers being included in the evidence-based movement, evidence-based concepts are now being extended to a wide variety of health care professionals, including non-physician clinicians and managers. If health policy decisions were to be restricted to RCT evidence there would be a very small base with which to work as, currently, few RCTs of policy interventions are conducted and synthesized. Although there is a hierarchy of evidence that is used in EBM that has systematic reviews of RCT at the top with several lesser study designs below, these are not inclusive of qualitative research designs. Though I am accustomed to conducting rigorous reviews of RCTs I have never been convinced that these were the only types of evidence of importance. In BC, I had helped to pioneer the application of comprehensive evaluation frameworks that included many types of evidence including economic, legal, social, ethical and health systems considerations (Kazanjian, 2002; Kazanjian & Green,

2002). Even the Cochrane Collaboration is extending its methods to include and review non-randomized controlled trial evidence.

The many other types of evidence used in health policy decision-making have been addressed extensively in the academic literature. Writers within the evidence-based movement have modified the hard initial stance taken by the Cochrane Collaboration, which restricted reviews to include only those with RCT designs. For example, Muir Gray applied the evidence based decision-making paradigm to those seeking to determine policy for populations of people needing care (Muir Gray, 1997). Muir Gray initially claimed that decision-makers consider three dimensions in decision-making: evidence, values and resources (Muir Gray, 1997). The point was made that though traditional emphasis had been on values and resources that evidence was increasingly important (Muir Gray, 1997). By evidence, Muir Gray initially meant scientific research on clinical effectiveness and safety (Muir Gray, 1997). He then expanded his model to include other types of evidence where dimensions overlapped: cost effective evidence (resources and evidence), patient preferences (evidence and values) and value or money information (values and resources) (Muir Gray, 2000). It would seem that these modifications were conceded under pressure from economists as health economists produce the included types of evidence. It seemed to me that Muir Gray's model of 'how decision makers' make decisions was itself not 'evidence-based'. While it would seem self evident that values and resources are important to making health policy decisions for example, the empirical support for these claims is lacking in Muir Gray's work. While based on the EBM approach the three dimension model appears to be prescriptive of an ideal decision makers 'should' be moving towards to base decisions on evidence of effectiveness and safety. Lacking a solid empirical basis then, Muir Gray's model could not itself provide a sound basis for the design of ICT support for regional health boards.

Other authors advocate the usefulness of qualitative evidence in health care decision making noting the many types of evidence that fall outside the standards imposed by the EBM movement. Some of these authors, such as Morse et al 2001, were also part of the HEALNet (Morse et al., 2001; Tan, 2001). HEALNet was a federally funded Network of

Excellence funded from 1995 through 2002. I was funded for the early work done on this dissertation by HEALNet. I participated, as a doctoral student through the School of Health Information Science, at the University of Victoria, with a team of graduate students lead by physician and pioneer health informatician, Jochen Moehr.

HEALNet entered the milieu of Canadian evidence-based efforts in the 1990s with a mission to fund collaborative research efforts to improve decision-making at all levels in the health care system (McMaster University, 2004). Being a multidisciplinary collaborative, HEALNet was composed of physicians, nurses, sociologists, psychologists, philosophers, informaticians, and individuals whose individual background spanned two or more disciplines. Issues of evidence and requirements of decision-making were at the core of debate. Some argued for evidence-based decision making with the evidence equated with the randomized controlled trial. They thereby were seeking to transpose the original gold standard of the Cochrane Collaboration and evidence-based medicine movement, to decision-making at all levels throughout the health care system. Others pointed out that there were many standards of evidence and that many disciplines had contributed to debates on evidence throughout the development of western rational thought (Morse et al., 2001; Tan, 2001). The HEALNet collaborative thereby resisted adhering to an evidence-based medicine standard of evidence, and became multidisciplinary in terms of the types of evidence produced as research.

Under the auspices of HEALNet, University of Victoria graduate students in Health Information Science, including myself, investigated a variety of topics. Relevant to regionalized health policy making, was a simulation experiment conducted by Gina Safranyik which compared two methods of allocating funds within fixed health care budget: one derived from ethics, the other from economics (Safranyik, 2000). This project illustrated the applicability of each disciplinary approach, and also that the application of different approaches resulted in quite different allocation decisions. The different tradeoffs between cost and quality adjusted life years (QALYs) gained by applying health interventions made by the competing models, led to one being more efficient, but resulting in smaller gains in QALYs and the other maximizing QALY but being relatively inefficient (Safranyik, 2000).

The investigation also revealed that actual data from the health system was unavailable for performing either calculation in support of regional decision-making, and recommended the development of appropriate tools (Safranyik, 2000). This project also illustrates the incorporation of models from source disciplines, by health informatics (Safranyik, 2000).

As I contemplated the array of approaches, it seemed to me that starting from a disciplinary perspective was perhaps counterproductive, because the actual decision-makers were not sufficiently represented. I had already had the difficulties of having decisions makers adopt an evidence-based perspective. The HEALNet collaborative was also key to my obtaining access to decision makers, but first I will situate my research program in the disciplinary perspective of health informatics, and relate my adventures with what was a new disciplinary perspective for me, to the development of my eventual research approach.

1.3 An evolving health informatics paradigm

This doctoral research project was undertaken within the multidisciplinary area of health information science also known as health informatics. I came to health informatics mid-career with clarity about the importance of the application of ICT to the support of health and health care delivery and a background in health care as well as decision support. Part of what attracted me to the discipline was the potential to harness the power of ICT for improved decision making in health care. The School's participation with HEALNet reinforced this. I found it challenging to identify a definition of the field that was as broad as my own concept of what was needed to provide adequate support for the group of decision makers I was intending on making the focus of my doctoral research -- regional health board members.

The field of health informatics is a rapidly evolving and applied field with strong national programs in Europe and North America. Variously defined, some definitions have a decision support focus similar to the following from the School of Health Information Science, University of Victoria website:

> Health information science is the study of how health data are collected, stored and communicated; how those data are processed into health information suitable for administrative and clinical decision-making; and how computer and telecommunications technology can be applied to support these processes (School of Health Information Science, 2004).

This definition is basically congruent with the series of formal definitions provided by the American Medical Informatics Association (AMIA) (AMIA, 2004). AMIA has taken a leading role in defining and promoting health informatics in North America and internationally. In comparison with the University of Victoria definition the following definition by Blois and Shortliffe of Stanford University, provided by AMIA focuses on knowledge as well as data and information.

> Medical informatics is the rapidly developing scientific field that deals with the storage, retrieval, and optimal use of biomedical information, data, and knowledge for problem solving and decision making (Blois & Shortliffe, 1990, p. 20).

Other differences between these definitions are also noteworthy. I mention, as an example, the use of 'medical' and 'health' in naming the discipline and the qualifier 'biomedical'.

The Canadian preference is for 'health' informatics. The British Medical Informatics Society (BMIS, 2004) is in the process of a name change from 'Medical' to 'Health'. Their definition embraces health oriented terminology:

> (T)he understanding, skills, and tools that enable the sharing and use of information to deliver healthcare and promote health… the place where health, information and computer sciences, psychology, epidemiology, and engineering intersect (BMIS, 2004).

In an update to the 1990 widely used textbook by Shortliffe et al. the following explanation is provided:

> Others express concern that the adjective 'medical' is too focused on physicians and fails to appreciate the relevance of this discipline to other health professionals, although most people in the field do not intend that the word 'medical' be viewed as being specifically physician oriented or even illness oriented. Thus, the term health informatics or healthcare informatics, has gained some popularity. We view it as an alternate term for medical informatics, but one that has the disadvantage of tending to exclude applications to biology (Shortliffe & Blois, 2000, p. 20).

The Shortliffe et al. (2000) focus on biological applications is reflected in the name change of the chapter containing their definition from 'The computer meets medicine: The emergence of a discipline' to 'The computer meets medicine and biology…' (Shortliffe et al. 2000, 1990). And while the University of Victoria definition mentions administrative as well as clinical decision-making it does not restrict data or information to a biomedical classification.

The increasing focus on biomedicine is due in part to success in mapping the human genome made possible by the computational power of contemporary information technologies. This has been recognized in the US National Institutes of Health Biomedical Information Science and Technology Initiative (BISTI). AMIA has also embraced the incorporation of medical and biological into informatics and incorporated it into a white paper on training informaticians (Friedman et al., 2004).

The debate on whether bio informatics and medical informatics are the same discipline can be resolved with the concept of 'low level' sciences (like physics or mathematics) versus 'high level' applied sciences like medicine and by extension medical informatics (Blois, 1984). Blois proposed that medicine has a complexity that is unknown to other sciences because it is built on a hierarchy of information levels spanning from microscopic to global. Medicine, Blois argues, requires knowledge from a range of more detailed abstractions (biology and even lower biochemistry) to those more comprehensive (by extension, those pertaining to society) (Blois, 1984). Blois' hierarchy of information highlights the range of essential 'sciences' or 'knowledges' that need to be understood and incorporated to develop computer applications in medicine and thereby problems of human health and health care.

Shortliffe and Blois also present medical informatics as being inherently inter and multidisciplinary (Shortliffe & Blois, 2000). They claim that medical informatics both draws on and contributes to 'component' disciplines such as computer science, decision science, cognitive science, information science, management science and others (unspecified). They see informatics as contributing methods and generalizable theories to other disciplines as a basic science. As an applied science, Shortliffe and Blois also see informatics as application driven – motivated by problems in the application domains of bio, clinical, nursing, public health, veterinary and imaging informatics.

As a basic science, Shortliffe and Blois claim that medical informatics develops new methods and theories. This is contested by other disciplines apparently. Musen, also out of Stanford University, relates that medical informatics has been slow to apply breakthroughs in computer science and so is not seen as advancing computer science (Musen, 2002). While contending that medical informatics is a 'science', Musen argues that medical informatics needs to better articulate 'unifying principles that can provide a theory for the diverse aspects of work in medical informatics' in order to gain credibility as an academic discipline (Musen, 2002, p. 12). Musen proposes that the work of medical informatics is in 'defining, refining, applying, and evaluating domain ontologies and problem-solving methods' (Musen, 2002, p. 12). By domain-ontologies, Musen means the 'primary concepts in the application area, and the relationships among those concepts' representing a 'rich reusable model of the domain' (Musen, 2002, p. 15, 16) and by problem solving methods Musen means the encoding of 'an abstract, possibly domain-independent algorithm that can automate the task for which the intelligent system has been built' (Musen, 2002, p. 15).

The definitions and descriptions of medical informatics as an academic discipline that have arisen from the Stanford University Medical Informatics division of the School of Medicine, provide useful support for positioning this dissertation within the dominant current paradigm. Medical informatics is inclusive enough to embrace non-physician users of information and indeed nursing and dental informatics have become prominent. Definitions presented including and along side Shortliffe and Blois' definition now include managerial and consumer decision makers. Still governance level decision-makers are rarely targeted for

health informatics applications. An extension of existing definitions to embrace the full range of actual health information users (practically everyone as representatives of the public, consumers, provider, manager, directors, the government or one of many stakeholder interests) would require little modification. I believe it is important to do so to avoid privileging some users of information above others and therefore creating the conditions for the health care system to be configured in the interest of providers. Also complex systems of health protection and care require support of decision making wherever decisions are made to enhance efficient and effective functioning of the health care system.

Social science disciplines are notable omissions among those disciplines formally cited as 'component' disciplines. If medical informatics is multidisciplinary and interdisciplinary then social science 'ontologies' should qualify. This dissertation has made use of an ontology and epistemology that arose from sociology. In Blois' hierarchy of information, society anchors one end and sub atomic particles the other. If biomedicine is being explicitly included into the dominant informatics paradigm at one end of the spectrum then there is a case to include social sciences at the other. This would seem particularly appropriate in the current era, which has seen an increase in infectious diseases, terrorist threats and public accountability frameworks necessitating more collaborative approaches to information sharing. The current health care environment makes it increasingly difficult to isolate a particular health care organization or its practitioners from participation in more widespread concerns with health issues (safety, security) and the quality of health care systems responses. As well the capacities of information and communication technology have only relatively recently made it possible to integrate information on such a wide scale. If the systems are to serve humanity more broadly rather then elite interests then the social sciences have much to offer.

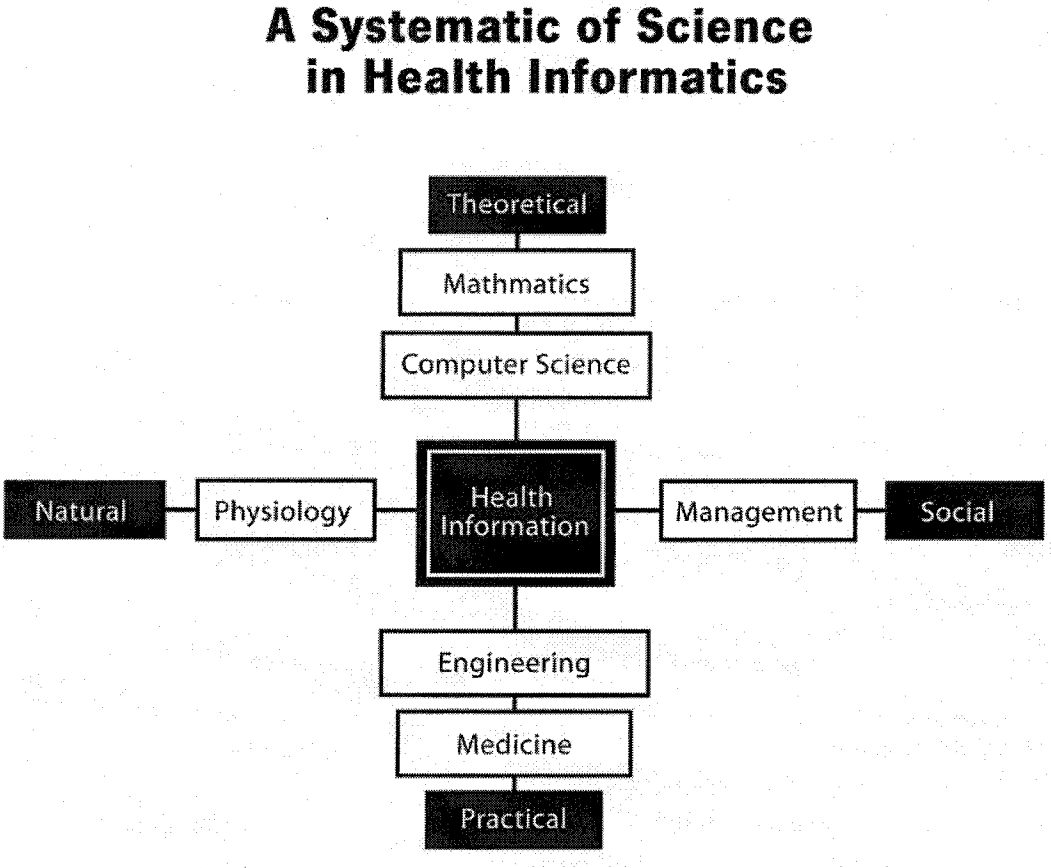
I have found the social sciences perspectives to be less well represented at AMIA notwithstanding the two working groups on 'ethical, legal and social issues' as well as 'people and organizational issues', and the annual Diane Forsythe prize for best qualitative paper. Diane Forsythe did ground breaking ethnographic fieldwork in an artificial intelligence lab with a medical informatics focus but her work did not progress to the point of having that

work incorporated into the development of decision support tools under development (Forsythe, 2001).

Moehr's 2002 presentation of a systematic of science in health informatics provides cartography that is more comprehensive than that offered by Shortliffe and Blois (Moehr, 2002). It has two intersecting continuums, as shown in Figure 1.

Figure 1:

Systematic of science in health informatics



One axis represents a continuum between natural and social sciences with the 'component' disciplines of health informatics like 'physiology' towards the 'natural' and 'management' towards the end of the spectrum. The other axis represents a continuum of sciences from theoretical to practical with mathematics closer to the theoretical and medical closer to the practical end. This dissertation is within a quadrant defined by the practical and sociological. Ultimately though, a technology artifact, a practical entity is the focus of health informatics and no matter how much a science is about a theory or the natural world it is brought into a real sociotechnical system.

Health informatics can also be conceptualized as a local theory of design that is concerned with the creation, implementation, and adaptation of artifacts (Patel & Kaufman, 1998). It is recognized that methods from the natural and social sciences, which seek to validate underlying unifying principles, cannot always be applied directly (Stead et al., 1994). A strategy that has been successfully applied in both health information system design and health informatics research design is to subdivide projects into a series of sequential stages starting with needs analysis (Blum, 1992; Stead et al., 1994). Approaches that insufficiently focus on the needs of the intended information system users risk failure. Information systems failures due to user resistance have been documented at rates of over 45% although the systems implemented were technically sound (Kaplan & Maxwell, 1994; Southon et al., 1999). For example, Reichertz et al. analysed information use within general practices in anticipation of designing a decision support tool (Reichertz et al., 1979; Reichertz et al.1999, Moehr, 1999). Instead the study found that the routine management and exchange of information within the practice was of greater priority than diagnostic support. Efforts to design diagnostic support systems as anticipated would have been misplaced (Moehr, 1999).

In this doctoral research program, a method obtained from sociology is used within a broader health informatics research agenda that recognizes that the use of ICT in health care occurs in a sociotechnical system. This research is intended to develop an empirical basis for the strategic use of technology through a richer domain model. There is increasing attention to collaborating with users to develop rich domain models of particular domains by software developers; however the starting point of interaction is often a particular application (Evans,

2003). The difference with the approach I am using in this thesis is that no particular technological solution is committed to at the outset. Also, it is assumed that users and designers may not be able to articulate their requirement for decision support in terms that could be taken as a starting point for developing ICT strategies.

The entry point for system analysis and design, using a textbook approach, is the identification of a need for an information system. Though this is seen as critical, the Shortliffe et al. chapter on system design and engineering actually says little about problem analysis beyond the following statement:

> The first step in the introduction of computers into health care settings is to identify a clinical, administrative, or research need – an inadequacy or inefficiency in the delivery of health care (Wiederhold & Shortliffe, p. 187).

Students are warned away from technology driven design and cautioned that the recognition on the part of the users for an information system is key to success. The authors themselves however, already have a particular technology in view -- a computer system used to automate some computational tasks. Students are advised that 'a system is an organized set of procedures for accomplishing a task' which can be described in terms of: '1) the problem to be solved, 2) the data and knowledge required to address the problem, and 3) the internal process for transforming the available input into the desired output' (Wiederhold & Shortliffe, 2001, p. 181). Next I will relate my experiences of approaching the issue of decision support for regional health boards with this approach.

1.4 Early attempts at analysis

1.4.1 Ruling relations and the exchange student

The limitations of a perhaps dated but still prominent medical informatics systems development approach are illustrated by early experiences with the original HEALNet project. At the time the transcripts of three board meetings arrived at the University of Victoria from HEALNet colleagues, there was a visiting health informatics student from Europe. As part of the learning experience, the student was asked to read through the

transcripts and suggest a coding system that would best represent the use of information in decision-making. This was a fruitful task in ways not anticipated. It became clear that there were difficulties in interpreting the transcript that went beyond language, vocabulary and the meaning of words.

The way this Board worked was sufficiently different from what would happen in the student's country of origin that it was difficult for him/her to interpret the talk at board meetings. As Smith suggests, those who have developed an experiential understanding of how things are institutionally ruled, develop competence in interpreting the setting. This 'knowing' may be difficult to speak about, because it is largely taken-for-granted. What the exchange student and I had in common as health information science scholars, was an expectation that certain types of information available through information systems, including information about the organization and scientific research from the literature, would be used explicitly in the decision making process. We were equally perplexed that formal presentation of such 'evidence' was lacking.

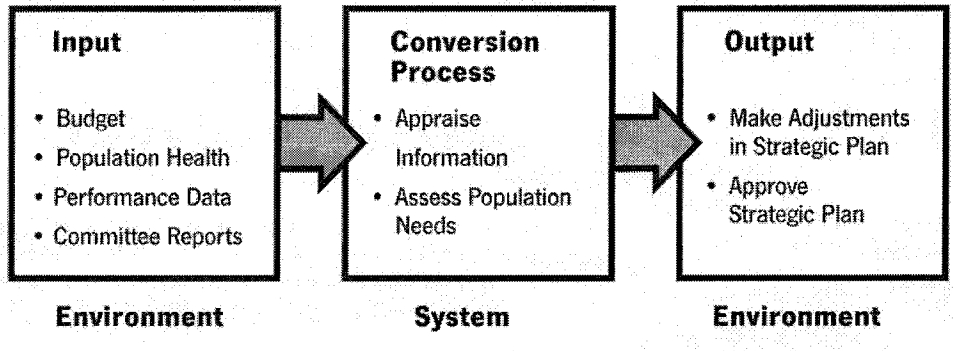
The extent to which the transcripts puzzled the exchange student in ways that did not puzzle me helped me realize that the workings of governing boards are based on practices widespread in North America but not universal. I could read and interpret the transcripts to a much greater extent than the European exchange student, based on experiences of meetings where parliamentary procedures or governance decisions were being made, and of the Canadian health care system more generally. The standardization of the decision-making processes that the Board was following was easily recognizable to me while the exchange student didn't share these taken-for-granted and largely unconscious understandings. The questions that the exchange student asked were useful in acknowledging that there was much that someone who has participated in or observed organizational governance proceedings in Canada knows, both about how governance happens the way that it does here and how it could be made visible.

The first major question that the exchange student had was: 'Where are the decisions?' This was followed by others: 'Where is the information?' 'Should we code this question as a request for information?' We ultimately abandoned the project of developing a

standard coding system for the transcripts. Originally we thought it would be possible to identify and code: 1) the information available and used, 2) information available, but not used, or 3) not available, but needed. We had thought that, once the information requirements of the Board were obtained in this way, strategies could then be developed to employ information and communication technology solutions that would better support governance decision making. This type of approach is based on a systems approach to information that sees information as input to a decision making process that has specific action or performance as an output (Wiederhold & Shortliffe, 2001). It proved difficult to fit the requests for information related to decisions into this framework. The idea that requests for information could be easily translated into requests for retrieval from information systems was too simplistic for this level of decision-making.

Figure 2:

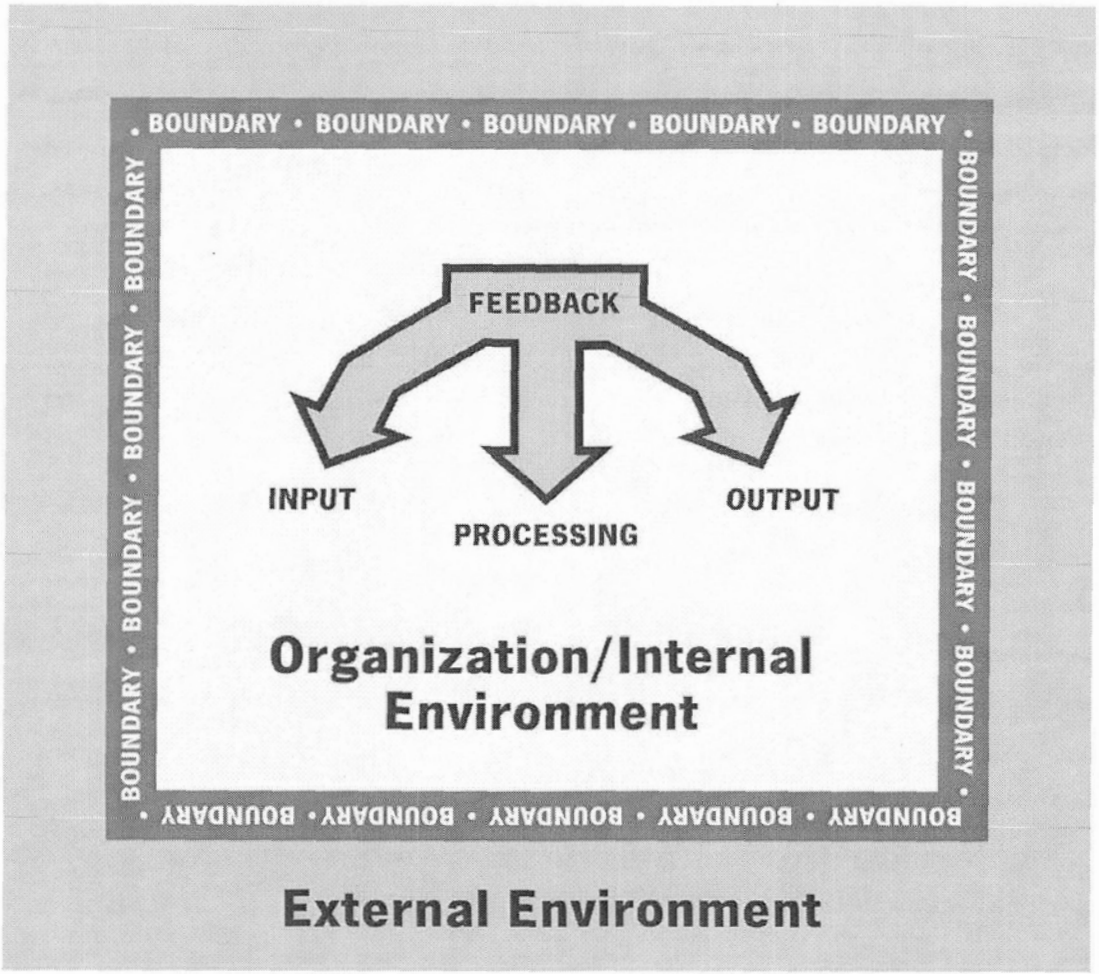
An Information systems view of governance decision making



Adapted from Tan, 2001.

Figure 3:

Internal/external environment



Adapted from Tan, 2001.

1.5 A sample analysis by way of comparison

When confronted with actual data from Board meetings, it was clear that coding information using a systems approach that identifies information flows was too simple a strategy to usefully capture work of Board members in relation to information. Questions

that seem to be simply requests for information often relate to the verbal summaries of reports distributed in print in Board information packages. For example, the following exchange indicates a request by a Board member for information that is relevant and easily satisfied by the presenter of information.

> Board Member 8: Ahh, the last contract was for three years, was it not?
>
> Presenter: Yes.

To classify this type of question as an information request would appear to be accurate. The answer 'yes' can be used to convert the question into a statement of the information required to fill the request -- 'previous time period of contract for auditing firm'. Proceeding through the transcripts, these types of information requests would then become a list of the 'information available and used.'

The one page sheet presented in the Board package is sparse. It simply includes a title and three lines of information (see Table 1). Yet the Board proceeds to make a decision (to ratify the committee selection of a firm) without 'facts' about the firm selected or a 'rationale' for why one firm was selected over others. Nor are any details about the auditing process itself provided. The information is therefore available for the decision at hand — approving the committee recommendation of an auditing firm.

As the discussion proceeds that purpose of the questions is revealed and the work of the board in making this decision also becomes clearer. Like lawyers questioning a witness, the questioners know the answers to the questions they are asking. It is actually a prelude to a brief exchange - the purpose of which is more than simply information retrieval.

> Chairperson: Yes, this was my question.
>
> Presenter: It was and it was actually extended. So we decided,...
>
> Chairperson: It was extended one year.
>
> Presenter: One year.
>
> Chairperson: And then you decided unilaterally to go five.
>
> Presenter: It was the recommendation of the audit committee that went forward and the proposal here.

The above questions are being asked of the presenter for the purpose of alerting the rest of the Board that there was missing information in the presentation -- the time period for which the contract is being proffered had been increased. A second challenge reinforces that the Committee that formulated the recommendation approved an additional change from previous practice. Without additional cues it is unclear how aggressive the questioning was. Probably not very, as the motion quickly goes to the vote.

> Chairperson: Are we going to accept that? Is there, we've had it moved, seconded, all those in favour? Carried.

Analysing this talk as a simple input of facts or information would obscure how the Board is organized to make this decision with few of the facts. Fitting the above exchange into the information input categories (available, used, needed) does not match the above exchange.

The decision could be made so quickly because the Board, having delegated this decision-making process to a committee, does not review detailed information that supports the recommendation they are approving. Once the presenter reveals that the committee extended the time period for which the contract was offered there was no further discussion amongst Board members or questions for the presenter. Having delegated the decision-making process to a committee, the Board apparently only 'needed' to know that the 'process' was followed and they knew about a significant change and that this change was approved by the committee. Confirmation of this was sufficient to achieve a decision to accept the committee's decision.

Table 1:

Committee recommendations included in Board information package

Recommendations of the Audit Committee
The Audit Committee of [StarCity Regional Health Authority] have completed the tender for external audit services for the upcoming five years. Six accounting firms submitted proposals, of which three were requested to give presentations [list of the names of three firms] After the presentations, discussions ensued around the selection. The proposal of the current incumbent auditors _____was selected.

Still it is somewhat puzzling that the Board left the decision making to a committee. Tracing out from what happens at meetings, the extent to which the Regional Health Authorities Act mandates the Board's activities is revealed. As the following excerpts from the Act illustrate, the talk of the Board in approving this motion relates to the Board's fulfilment of its mandate. For example, the Board is mandated to conduct regular audits:

> **Audit**
> 32(1) The accounts of a regional health board shall be audited at least once in each fiscal year by an independent auditor who possesses the prescribed qualifications and is appointed for the purpose by the regional health board (The Regional Health Authorities Act).

This part of the Regional Health Authorities Act reveals that the Board was mandated to appoint an auditor. Related regulations also specify the qualification of auditors and their independence so there is no input from Board members required on these points:

> For the purposes of section 32 of the Act, an auditor must be:
>
> - a registered member in good standing of the Certified General Accountants Association of [Province]:
> - a member of fellow in good standing of The Institute of Chartered Accountants of [Province]

- a certified member of the Society of Management Accountants of [Province]

(The Regional Health Board Operation Regulations).

The appointment of an Audit Committee to make the recommendation on the auditor is also mandated by The Regional Health Authorities Act:

> **Powers of regional health boards**
> A regional health board may provide services, and for that purpose may...appoint committees to provide advice to the regional health board (The Regional Health Authorities Act).

These excerpts demonstrate how a complex web of institutional relations stands 'behind' the practices that the Board undertakes. They can be traced from the actual work of the Board in approving a motion to appoint an auditor. The ruling relations include the practices by which the government, its advisors and civil servants, formulate the Act and the concerted actions of members of parliament as they deliberate and vote to ratify the act. These prescribe how the Board will do its work. Enacting the legislation that formalizes the authority of the Board is dependent on the legal and judicial system for reinforcement.

Following through with the recommendation also relies on the institutionalization of auditing systems. Auditors are required to adhere to generally accepted accounting principles and reporting standards. This in turn depends on professional organizations participating in the development of training and testing and self-regulation to enforce standard practices. The work of the Board can be seen as one part of this complex institutional web and as a point, where the texts that prescribe ruling practices become active.

The way the work of the Board is seen to be institutionally organized corresponds to Smith's notion of institutions as interconnected institutional practices. The practices that regional governance work is hooked into include those of the health professions, government, law, finance, education, media, and business. Canadian and other major industrial democracies have developed an intricate web of mechanisms that are actively organizing the work of health care at every level, including the governance level under consideration here. The work of the Board can be seen as an enactment of rules prescribed by the practices of people external to the Regional Board in time and space. It is such rules

and regulations, operating more or less invisibly, that we call extra-local ruling relations. As the Board approves the committee recommendation of the auditor, they are relying on the auditing practices being prescribed and constrained by extant ruling relations.

Key to understanding the Board's rapid approval of this motion is the emphasis on process in the introductory remarks of the spokesperson for the committee report presented (See Chapter 6, Section 6.4.1).

> SP17: It went through all the process so I'll answer any questions you might have but on behalf of the audit committee and it's chair...

In summary, it would be misleading to classify as requests for information those questions that are asked to highlight support for the decision at hand. In general, answers to questions asked of presenters of committee reports were generally not of the type met by data-based or model-based decision support systems. Most questions about details of recommendations that Board members ask are readily answered, to the apparent satisfaction of the Board. Infrequently, requests for information did require presenters or senior administrators to follow up and provide retrieved information at future meetings. Board members did not typically evaluate alternative options or attempt to quantify the degree of certainty around estimated future impacts of their decisions – as in a classical decision analysis model. Some questions were left behind in the flow of discussion and may not have warranted the effort for follow-up. To understand or explicate the communicative purposes of these apparent information requests requires a method that will uncover institutionalized practices and their social relations.

Before identifying the social organization of the ratification of an auditor the intent of the questioning and the dearth of information was still puzzling. Once the social relations of the action are explicated as they are here, the 'intent' behind the questioning becomes clear.

In this dissertation, the main institutional mechanisms that are organizing Board work are mapped in Chapter 7. These are linked to the talk that occurs in board meetings outlined in Chapter 6. As the ruling relations of Board work are unravelled, elements arise

from the explicit mechanisms organizing its work. Thus, each piece has discursive elements that are addressed.

1.6 Knowledge practices

The grand challenge for health information scientists is how information and communication technology (ICT) can be used to support decision-makers at every level of increasingly integrated health care service delivery systems. I argue that the ability of informaticians to design adequate ICT strategies to support governance decisions is hindered by the lack of an empirical basis. I propose institutional ethnography to explicate: 1) how decisions are actually made in the boardroom and 2) how these are orchestrated in concert with ruling institutional practices that link governance work to the interconnected practices of government, law, medicine and education. Texts make up a virtual world that mediates decision-making throughout health care. There are myriad opportunities for this to be accomplished electronically through the design of information and communication infrastructure and specific decision support tools. Yet this risks reifying practices in need of reform and adapting to local actualities. The map I provide of current ruling relations identifies opportunities for improvement. In the following section (1.7), I provide an outline of this dissertation.

1.7 Thesis overview

This dissertation has been an exploration of how the work of regional health boards can be investigated in a way that is useful for decision support using information and communication technologies. It provides support for the following claims:

1) Governance practices developed to ensure accountability for resource management are in dynamic tension with those emerging to ensure the health of the population;

2) Institutional ethnography explicates the work of regional health boards in ways that is useful for the design of information and communication technology strategies.

In Chapter 1, this dissertation is situated in current Canadian health care reform strategies including the development of a national information and communication infrastructure and evidence-based decision making as a dominant paradigm. I relate my interest in support of governing boards to my career experiences and interests, which parallel these reform initiatives. Health informatics and decision support are reviewed as emerging solutions to health care problems. I also relate how an earlier approach to investigating the work of regional health boards failed and the limited usefulness of approaches that do not have the tools to examine actual work practices.

In Chapter 2, I further develop the rationale of turning the everyday world/work of governing boards into a research problematic, and the usefulness of this approach as an empirical basis for designing decision support strategies. I make the case that Canadian regional health boards warrant further investigation as they have the delegated authority to set policy for publicly administered health service delivery systems and ensure accountability to the public. Yet Boards report that the informational base for decision-making is inadequate (Kouri et al., 1997; Lomas et al., 1997).

Chapter 3 presents a systematic review of Canadian performance evaluation frameworks for health care organizations that was conducted early in my doctoral training. It provides insight into current efforts to provide health care boards and managers with standard information with which to identify how their organization is performing as compared to their peers. As such it is part of the current orientation towards enhanced accountability mechanisms for public institutions. During the time I conducted the analysis I was a HEALNet supported student and HEALNet was active in producing collaborative research on this topic. I had the opportunity to obtain feedback on the analysis from senior HEALNet researchers as well as present the paper at the American Medical Informatics Association in the fall of 2000 (Green & Moehr, 2000). The core analysis is supplemented by

a comparative analysis of frameworks developed in the United States of America as well as the United Kingdom.

Chapter 4 explores the similarities and differences between institutional ethnography and qualitative approaches that appear to be similar. As my dissertation focus was developing, the emerging new Canadian Institutes for Health Research were developing a knowledge translation focus that was well aligned with my primary research interest to better understand how decision makers use evidence. This chapter adopts the flavour of this new interest and incorporated the knowledge translation reference point and terminology. This paper was originally written for my supervisory committee as a methods review.

The recognition of the need for explicit, evidence based knowledge translation strategies among federal health research funding agencies parallels the health informatics quest for decision support strategies. The recognition of the dearth of empirical foundations to guide the development of knowledge translation has led to increased funding in this area which will make it possible for me to continue this research in post doctoral research. The objective of this chapter to consider more broadly research that could potentially provide a research basis for the design of health informatics solutions specific to the requirements of the work of governance decision-making. I summarize the chapter by illustrating how institutional ethnography serves this purpose better than alternative approaches.

Chapter 5 is the methods chapter. It provides an overview of the essential institutional ethnographic concepts necessary to correctly read the analysis in Chapters 6, 7 and 8. As well the study setting and data collection strategies are outlined.

Using the institutional ethnographic approach, Chapters 6-8 present a progressive explication of how regional health boards are organized to make decisions institutionally.

Chapter 6 presents an analysis based on the work of governance as it occurs in the boardroom. The setting of board work, the monthly board meeting, is introduced. I focus the analysis in the everyday work of Boards at the Board table. Here I address the question of what a decision is in governing work, and look to identify characteristic ways that the board is organized to do that work. At the end of Chapter 6 a series of puzzles are identified from the observed work, that are then used to deepen the analysis.

In Chapter 7, I shift the focus of analysis from the traces of ruling found in the everyday work, to more fully explicate the extensive ruling relations by mapping out how they are orchestrating governance. The puzzling aspects of board work are traced to translocal ruling relations. These explicate how board work is organized through an institutional web of the interrelated practices of government, law, education, accounting, auditing, accreditation and medicine. Prevailing professional discourses explicated include those pertaining to the rules of order and governance model.

In Chapter 8, I take one type of textual-mediation of governance - performance indicators - and illustrate how they are activated. The textual mediation of board work is thereby further explicated. I show how health information is being introduced to the board along side the standard accounting information. I show how health information is worked up, by staff, for the board, in concert with academic disciplines.

The final Chapter 9 reveals how the institutional ethnographic analysis is useful for improving the design and development of communication and information technology systems for Boards. First I demonstrate what has been revealed about the problematic set at the beginning of the analysis. I then demonstrate that once 'how it works the way that it does' is explicated, this map of governance work opens up the process for decision support. Finally I outline the implications of this research for health care policy and reform.

CHAPTER 2:
HOW DO REGIONAL HEALTH BOARDS MAKE DECISIONS?

2.1 Introduction

This chapter will relate the rationale behind turning the everyday world/work of governing boards into a research problematic, and the usefulness of this approach as an empirical basis for designing decision support strategies. The grand challenge for health information scientists is how information and communication technology (ICT) can be used to support decision-makers at every level of increasingly integrated health care service delivery systems. Systems analysis approaches based on input – process – output models (Checkland, 1981) relating to information are not sufficient to capture the complexity of decision - making in health care at the level of regional health boards – the focus of my inquiry. Canadian regional health boards warrant further investigation as they have the delegated authority to set policy for publicly administered health service delivery systems and ensure accountability to the public yet report that the informational base for decision making is inadequate (Kouri et al., 1997; Lomas et al., 1997).

I argue that the ability of informaticians to design adequate ICT strategies to support governance decisions is hindered by the lack of an empirical basis. I propose institutional ethnography to explicate: 1) how decisions are actually made in the boardroom and 2) how these are orchestrated in concert with ruling institutional practices that link governance work to the interconnected practices of government, law, medicine and education. Texts make up a virtual world that mediates decision-making throughout health care. There are myriad opportunities for this to be accomplished electronically through the design of information and communication infrastructure and specific decision support tools. Yet this risks standardizing and making inflexible practices in need of reform. The requirement that reforms meet local needs implies adaptation to local actualities. The map I provide of

current ruling relations identifies opportunities for improvement. In this chapter I outline a rationale for this approach.

2.2 Supporting evidence-based decision making

As debates about health care reform continue, the lack of an adequate informational base for decisions has been raised as a critical issue and resources have been pledged to develop an adequate infrastructure for the Canadian publicly administered health care system (Canada Health Infoway, 2002; Romanow, 2002). At the same time, the 'evidence based' movement including groups such as the Cochrane Collaboration and many provincial and national groups with an 'evidence' focus (The Cochrane Collaboration, 1999; Canadian Health Services Research Foundation, 2003) advocate rigorous reviews of quantitative and scientifically valid evidence be used for decision making at clinical, managerial and policy making levels in health care (Walshe & Rundall, 2001). Others focus on the problem of qualitative evidence in health care decision-making (Morse et al., 2001; Tan, 2001).

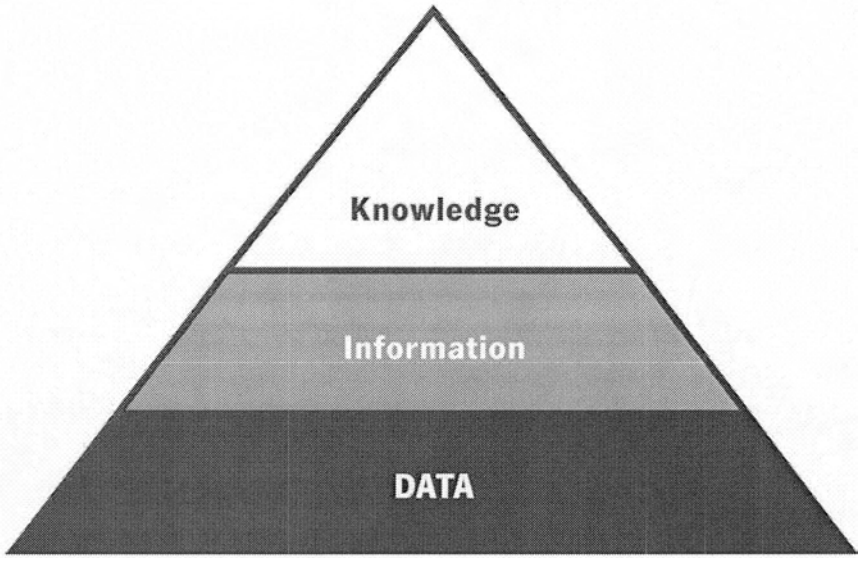
A not trivial informatics problem is how to design support that is integrated into a user's way of working so that human capacities are not only not hampered but actually enhanced. The failure rate of decision support systems in health care is high. Designing decision support systems that are adopted by health care users has proven more challenging in health industries than banking, for example, where the standardized decision processes and quantitative data are amenable to automation. When decision support systems are successfully adopted by users, alignment of support systems with material work processes is recognized as a necessary if not sufficient factor (Turban & Aronson, 1998). Centring the design of information systems on technology, not organizational requirements, has also been implicated in the slow uptake of ICT by the health sector (Tan, 2001). The challenge of eliciting user knowledge and obtaining user input during system design requires innovation of methodological approaches (The Cochrane Collaboration, 1999; Chen et al., 2003).

In the predominant health informatics paradigm, the counterpart to 'evidence' is a 'data, information and knowledge' pyramid. At the broad base, 'data' are representations of 'facts' – the symbols or traces left by facts. Databases are becoming increasingly available for

decision making as integrated information infrastructures are introduced into health care (Casebeer & Johnson, 2000). 'Information' is facts applied to particular decisions, and 'knowledge' is information that has been validated through experience (Tan, 1998, p. 52, 53). All are thought of as objects that can be incorporated into the design of decision support systems.

Figure 4:

Data, information and knowledge pyramid



Adapted from Georgiou, 2002

In a systems thinking approach, this pyramid relates to decision making in the following way. Both information and knowledge (with data input) are input to decisions that then lead to action (Tan, 2001). A feedback loop then leads from action back to data.

Health care is in the midst of reform, which provides both opportunity and obligation to ensure changes serve the expanded ICT capabilities. The rise in information availability has been unprecedented. In theory, high quality information should support health care reform. Health care information systems, scientific investigations and policy analysis provide decision-makers with abundant data. Conversely, decision-makers report that they cannot get that information in a timely manner to inform the decision at hand. Information systems require improvement in order to ameliorate this situation.

This doctoral research program provides an empirical basis for designing ICT strategies for an important set of decision-makers – regional health board members. As little research has been done on governance work, there is a dearth of insights to inform the development of decision support systems for its support.

2.3 Research into the information needs of regional health boards

No study has investigated the information needs of Canadian RHA board members in depth although a number of recent Canadian surveys are available. (Kouri et al., 1997; Lomas et al., 1997; Casebeer & Johnson, 2000) They uniformly report deficiencies and dissatisfaction with the information available to board members for decision-making. A 1997 survey of RHA board members in five provinces reported that information on service costs and utilization was available more often than information on health needs, service benefits or citizens' preferences (Lomas et al., 1997; Forsythe, 2001). Surveys of emerging RHA boards in Saskatchewan found that the adequacy of information for decision-making was a serious concern for board members (Kouri et al., 1997). Data was rated to be least adequate on research/scientific literature, satisfaction of providers, employees, patients and clients; quality of service indicators; program evaluation results; and citizen opinions and preferences (Kouri et al., 1997).

A survey of the use of health service utilization data by Alberta health care managers including board chairs found that 80% stated that the lack of data impeded problem resolution (Casebeer & Johnson, 2000). Among board chairs, 92% reported 'data of uncertain quality', 83% 'not timely data', 82% 'human resources were limited', 67% 'data was not specific to the problem', 62% 'new problems were discovered using data', 60% 'technology was limited', and 50% 'difficult access to data'. Utilization in acute care hospitals was the most frequently cited present and future source of utilization data (Casebeer & Johnson, 2000). Specifically, the health service data cited by managers included inpatients (Length of Stay, Census, Separations), inpatient procedures/diagnosis (Length of Stay, Resource Intensity Weight), ambulatory care utilization, home care/long term care utilization, emergency room utilization, laboratory utilization, diagnostic utilization, mental health, patient import/export between health authorities, readmission/death, waiting lists, waiting placement to community care, and demographics (Casebeer & Johnson, 2000).

Orlikoff and Totten identified the following common flaws in the information provided to health boards in the US:

1) reports and information do not flow from or support the explicitly defined role of the board on the issue;

2) there are no guidelines regarding what information should be reported to the board or how it should be reported;

3) reports provide data, such as clinical indicators, but not information, such as trends or projections;

4) meeting minutes are used as a vehicle for providing information to the board (e.g.,, the finance committee minutes are used as the financial report to the board);

5) too much material is presented in the reports;

6) governance reports are simply management or medical staff information with a new title;

7) ineffective report formats blunt the board's understanding of important information;

8) thick board agenda packets are distributed to board members so close to the scheduled meeting that they do not allow board members time to read all the material; and

9) significant amounts of material are routinely distributed to board members for review at the board meeting[2] (Kovner et al., 2001).

This analysis is based on the experience of Orlikoff and Totten with health boards, which seems to be reasonably extensive. Much of the governance and management literature is similarly based on experience rather than systematic research. Whereas this thesis confirms these observations it goes beyond.

The next challenge, that is well recognized, is that identification and elimination of an information gap or deficiency does not always lead to an effective solution. In other decision-making contexts, acting to supply the information indicated by users does not necessarily lead to the intended impact (Cytryn & Patel, 1998). Other methods of inquiry are required to obtain the comprehensive understanding of the context and dynamic patterns useful for the design process. Davenport and Prusuk view knowledge as the combination of human context and information that makes information actionable (Schultze, 2000). My work is also premised on this view. The survey findings summarized above, on the other hand, provide insufficient context-specific and resource-specific detail to be actionable. To create the ICT systems that could better support board decisions would require health region specific information and resources. This is similar to a physician's need for case specific information and the usefulness of records that meet these needs.

Stead et al. have addressed the challenges of health informatics research and concluded that 'research and development should be staged, and rigorous evaluation should take place at each stage' (Stead et al., 1994, p. 28). Blum provides a suitable framework: an iterative spiral through successive cycles of concept development, requirement analysis, planning, design, validation and verification (Blum, 1992, p. 40). Within this framework, the problem can be investigated in all directions at project inception, using a problem solving approach by way of preparation for the design work to follow. At later stages a quality improvement paradigm is more applicable. The design used for this study is based primarily on a quality improvement approach. There are well-established ICT systems within health care delivery systems that complement direct person to person information and

[2] Paraphrased from the Kovner article reporting on Orlikoff and Totten.

communication. These may be based on paper as well as electronic technology or some combination of these.

An exploratory approach is appropriate when the work domain is not well understood. Otherwise informaticians may end up designing 'solutions' to the wrong 'problems' because the 'problems' have been prematurely identified. This points to the critical importance of placing the user and their everyday work at the centre of information system design.

I chose an institutional ethnographic approach to learn what actually happens as decision making. Institutional ethnography can reveal how humans make information actionable within various kinds of social relations that they may overlook. Entering the setting without theory about how this is accomplished is suitable for exploring complex work about which there is little empirical data. The governance work of Canadian regional health boards is such a domain.

In undertaking an institutional ethnography, the researcher does not take a theoretical objective approach outside the work being investigated, but adopts a standpoint in the everyday work in alignment with the persons doing the work. In acknowledging that all research is shaped by the interests and circumstances of the researcher, I will occasionally write in the first person to reveal how I approached the analysis. I will start with the origins of my interest in this topic.

2.4 On the way to the problematic

My interest in the problematic that has emerged for doctoral thesis research goes to an early phase of my career working as a physiotherapist in international development projects in Nigeria and Nepal with organizations like CUSO and the World Health Organization. I was drawn into human resource planning projects that sought to determine and meet national requirements for rehabilitation services. At the same time, I was witness to the havoc that high cost/high tech diagnostic devices can play with health care budgets. I recognized the futility of this drain on resources where basic health determinants (clean water, primary health care) are not being adequately addressed.

A strong vision of the information needed but unavailable to human resource planning led me to a graduate degree in a health care planning program with a strong focus on epidemiology. Following this degree I took a research position doing health technology assessment with a university based health services and policy research unit. This put me in the position of supplying Cochrane style assessments to health care policy makers. I was able to pull together information resources that would appear to be highly relevant to decisions being made, and deliver it directly to the decision-makers (to an extent undreamed of from my experience in developing countries). However I was often puzzled that decision-makers were not oriented to the use of assessment research in their policy-making processes.

Lomas' seminal 1998 paper 'Improving research dissemination and uptake in the health sector: beyond the sound of one hand clapping' echoed my experience (Lomas, 1998). He outlined the situation as follows:

> To date the yield from these [research syntheses] efforts is more sound and fury than substance. The sizes of the Cochrane and other databases expand, but we have little idea of either whether or how decision-makers are using them. A few promising dissemination techniques such as audit, opinion leaders, or academic detailing seem to work sometimes but not always. Information provision, whether by hard-copy or electronically, may predispose towards changed approaches but it is rarely enough on its own to enable changed behaviour by clinicians, administrators or legislators. We are far from knowing what works in what setting for what kind of decision-making...
>
> There are a number of reasons for this spluttering progress. One is that efforts by researchers and by decision-makers seem to proceed largely independently. Each have their own (often misplaced) ideas about the other's environment. Opportunities for ongoing exchange and communication are few. Because most of the determinations are made by decision-makers, their focus is on the applicability, usefulness, and context dependency of research findings... More significant progress may come from a better understanding of each side of the constraints and possibilities of research and decision-making (Lomas, 1998 p. 1, 2).

Detailed recommendations arose from this document, prepared for the Advisory Committee of Health Services to the Federal/Provincial/Territorial Conference of Deputy Ministers, and it has had considerable impact nationally. What this meant to me at the time is

that a thesis that could further the understanding of why decision-makers do not use research as researchers expect, would prove useful for facilitating research uptake. Since the publication of this document, Lomas has gone on to become Executive Director of the Canadian Health Services Research Foundation, engaged in developing a national research strategy. Within this strategy it is acknowledged that 'research input is needed to aid the increasingly complex decisions on budget allocations and program design facing policy makers and health system managers' (Halliwell & Lomas, 1999). The parallel between the developments in this research program and my research interests reinforced my confidence that I was moving into an important area.

With the explicitly stated goal of doing doctoral research on the information needs of regional health boards, I entered a PhD program by special arrangement, in Health Information Science, motivated to do an informatics PhD through recognition of the increasing importance of information technologies in disseminating research findings as well as exploiting administrative databases for health services research. Furthermore health informatics was actively engaged in developing research strategies for furthering knowledge management initiatives. Health informatics therefore seemed to be well aligned with my research interests.

Regional health boards were of interest because decisions made at that level of governance would be expected to have greater implications than at decision points affecting fewer people. Regional boards were a relatively new feature on the Canadian landscape; because they are little researched they represent an area of opportunity to contribute new knowledge. Regional Boards were also a longstanding interest, as I had undertaken a MSc planning project with the BC Health Association on 'Appropriateness of care for governing boards and their senior management', which had raised my awareness of governance processes. One of the health technology assessments I had conducted had been taken up by the Women's Health Bureau, and its results disseminated to regional health boards, with little impact. This irked me and I wanted to be more effective in future efforts.

My training at UVic in health informatics added two pieces to my growing conviction that the area I was targeting for a doctoral thesis was important. My thesis

supervisor, Dr Jochen Moehr, was part of the leadership of HEALNet, a federally funded Network of Excellence with a mission to fund collaborative research efforts to improve decision-making at all levels in the health care system. Dr Moehr was frustrated with the thinking of some researchers who believed that simply supplying the Boards with the 'right' evidence was an adequate solution. His experiences over a career in informatics had led him to believe that perhaps we don't know what Boards need and that prescribing a solution prematurely could be ineffective (Moehr, 1999). This led him to a position of support for my evolving doctoral thesis design.

Decision support tools for governance were within the HEALNet mandate and I was exposed to a number of ongoing research programs. For example, as a directed study, I did a critical appraisal of health organization performance evaluation frameworks that made me aware of the accountability structures that were being developed using a top down approach, and their limitations (Green & Moehr, 2000). (See also Chapter 3.)

Probably the most influential experience of my training has been the difficulty in identifying methods within health informatics that could help me to gain understanding of how regional health boards actually use (or do not use) information in making decisions and design approaches that incorporated this perspective. This seemed to me an indication that the users' information needs, in relation to their work processes, were not being adequately considered in information system design. I examined the standard methods of systems analysis. The available methods could not obtain the in-depth understanding of board information uses and decision-making processes that I believed were needed to subsequently design information systems that met user needs.

I searched for applications and adaptations of qualitative approaches within the health informatics field. This led me to the work of Bonnie Kaplan and Diana Forsythe. Kaplan is a leader in the evaluation of either existing or developing information systems (Kaplan & Maxwell, 1994; Kaplan, 2001a; Kaplan, 2001b). The drawback to this approach for the research problematic that I am addressing is that the research scope is narrowed to the parameters circumscribed by existing or anticipated technological solution. For example, the information use and work processes examined are only those that fall within the

parameters of specific applications. Furthermore, there is not a focus on the key determinants shaping the work processes that might be relevant to the development of information systems – intra-organizational rather than translocal influences are the more usual focus.

Forsythe's work as an anthropologist in the world of artificial intelligence validated the problem I was experiencing (Forsythe, 2001).

> (M)y informants in medical informatics are positivists who conceive of their work as 'hard' science. Their model of science is a strictly bounded and rather rigid one that restricts that label to experimental undertakings involving formal, quantitative analysis of factors that they perceive as technical. This model brackets out as 'soft' (and therefore unscientific) such procedures as non-directive observation, qualitative analysis and consideration of non-technical factors. I have argued that the narrowness of this notion of science, along with the assumptions upon which it rests, contributes substantially to the problem of user acceptance. Medical expert systems are built and evaluated within a narrow conceptual world. Since designers do not routinely visit work sites or talk to users, they are unlikely to come across information that would cast doubt on the generalized beliefs about work and users on which their systems are based. Lacking such data—and excluding as unscientific the informal, local information that could help them to design systems better suited to real users in particular workplaces – it is little wonder that these scientists produce systems that users do not want to use (Forsythe, 2001, p. 11).

Forsythe later was involved in an attempt to include the ethnography findings about the tacit knowledge of both physicians and users into the design of an expert system to educate migraine patients. This attempt failed because the findings were inconsistent with design elements that the designers had committed to in the early stages (Forsythe, 2001). This told me that addressing the users' information use in the context of their work processes would seem to be an approach in its infancy. By pursing non-directive observation, qualitative analysis and consideration of non-technical factors some of the omissions of classic orientation to analysis and design could be ameliorated. The literature on systems failures confirms that the problem Forsythe and others have identified is serious

(Elson et al., 1997; Southon et al., 1997; Southon et al., 1999; Goddard, 2000; Forsythe, 2001).

2.5 The Problematic

Starting with the 'everyday world as problematic' approach of Canadian sociologist, Dorothy E. Smith (Smith, 1987; Smith, 1990a; Smith, 1990b; Smith, 1999), I will take as entry point the everyday experiences of governing boards; that is, my problematic is to explicate the problems of RHA Board members as decision makers with a specific mandate in relation to information use, resources and need. This problematic is situated in the actual experiences of actual people making decisions at RHA Board meetings. I explore (following Smith) the rich puzzle of how regional health boards are organized to make decisions and in particular how it is that population health status concerns are taken up or not by members of RHA Boards. From the standpoint of the decision-makers and with the entry point of RHA meetings, I explicate the work that occurs at these meetings, with a particular focus on the way that data, information and knowledge mediate decision-making. The ultimate objective of the research proposed is to generate results that can be used to improve the nature and quality of 'evidence' available to RHAs to govern.

2.5.1 Support for governance work

Designers of information and communication technology (ICT) systems are perplexed when users do not make effective use of newly available system capacity as envisioned (Forsythe, 2001). In undertaking research with the goal of improvement, my research project has an ultimate goal improved support for the work of governance of regionalized and vertically integrated health care systems. Our immediate purpose is to understand how board members use information in decision-making. This is required to both model the current ICT use in decision processes, as well as to design technology solutions congruent with these, at a later stage in the research program While a health decision support system may be optimal solution this is not assumed.

Advances in communication technologies such as web-enabled applications and wireless capabilities are opening up additional strategies. However even well established technologies enabling electronic transmission of data and asynchronous and real time communication at a distance still find fairly low levels of adoption at all levels in health organizations. While the adoption of technologies that are currently used in other contexts, such as email, informational list servers, personal digital assistants or teleconferencing capabilities may enhance the performance of workgroups at governance levels there is a dearth of evaluative studies to guide development, adaptation or adoption of one or another or combinations of such technologies in health care settings. Nor will this current doctoral research be sufficient to fill these gaps. This would require implementation and further evaluation. Nevertheless, it is assumed that the more comprehensive understanding of the domain will lead to more informed and therefore better design.

Decision support covers a wide variety of approaches. One definition of health decision support systems is as follows:

> An interactive, user controlled system (usually computer-based software) that is designed specifically to facilitate the decision maker (i.e., health admiistrator or clinician) in using data, models, and knowledge elements to solve semistructured (i.e., non-routine and nonrepetative) and complex decision problems (Tan, 1998, p. 5).

This approach leads to a classification of decision support systems or components of systems as data-based, model-based or knowledge-based (Tan, 1998). The decision support systems themselves are non-human and therefore based on the conceptualization and representation of data, or models, or knowledge as objects. Whereas applications based on this approach have been adopted in many industries as useful, health care has adopted these approaches less readily.

Health care decision-making entails a complexity absent from other industries. The range of possible ICT solutions to the complex challenges of health care is extensive. ICT support for governance level decision-making could focus variously on the information, decision support or communication components of a more comprehensive strategy. Strategies focusing on the information infrastructure relate to developing the information

architecture including developing data structures, information systems and the means of accessing these in a way that is relevant and timely for decision making. Improving the quality of routinely collected data contained in large administrative datasets and developing the expertise to analyse these for system wide decisions is still a largely undeveloped capability within health care systems. When this is in place it will provide the data-based component for health decision support systems.

Decision support strategies that could be useful include an array of performance indicator development efforts. System wide report cards enhance interest by increasing public attention to differences by location in health service quality parameters (Marshall, 2003). Digital dashboards are envisioned that present a comprehensive range of indicators, each monitoring a critical dimensions of health system performance, to one screen or page. Performance indicators all require accurate, accessible data-bases for their completion. The Canadian Institute for Health Information and its predecessors provided the core infrastructure for funded services and supplied information back to governments and health organizations.

More sophisticated decision support capabilities integrating database, modeling and knowledge elements are still more futuristic. As the data infrastructures become available, the question of how they are used will arise. Important are issues of whether or not the indicators that are being measured are optimal for evaluating the performance of the systems and lead to improved performance (Marshall, 2003). This is important for governing boards with newfound responsibilities for access to and quality of services in addition to traditional fiscal management.

Research and development efforts regarding decision support within health information science have been focused largely on clinical applications; that is, on supporting providers making patient care decisions. And yet the decisions of governing bodies and their senior managerial staff have far reaching consequences, including for the accomplishments of the latter. This alone argues for increased research in this area. A long standing under investment in ICT is just beginning to be addressed in the Canada. This has been related to the perennial competition for health care resources pitting ICT against service provision.

Unless a system wide view is taken that addresses the benefit of supporting decisions at all levels, it is unlikely that improvements can be realized.

Design that is not aligned with current work practices is unlikely to be adopted by users, however. Therefore, research, which provides an in-depth understanding of the work domain, would seem to be foundational to more refined strategies. The work of Jonathan Lomas in highlighting this problem was influential in Canada. His paper subtitled "Beyond the sound of one hand clapping" (Lomas, 1998) refers to the two solitudes of researchers and decision makers.

I contend that this is as true for research to contribute to design of decision support systems. To better understand the constraints and possibilities of decision making at the governance level of our health care organizations we need to better understand the constraints as well as the opportunities. This implies directly investigating the relevant work processes of governing boards.

CHAPTER 3:
CANADIAN HEALTH CARE PERFORMANCE EVALUATION FRAMEWORKS

3.1 Introduction

This chapter provides a contemporary history of the effort made in Canada to develop standardized information to ensure health systems are accountable for services. This effort is aligned with the mandate of the governing boards of health regions. I report a systematic review of Canadian performance evaluation frameworks for health care systems, which was conducted to better understand the information available and under development, to support the work of regional health boards.[3] I then compare Canadian efforts those occurring in the United States and the United Kingdom which are farther ahead in development.

The Auditor General of Canada has defined accountability as 'a relationship based on the obligation to demonstrate and take responsibility for performance in light of agreed expectations.' (Auditor General of Canada, 1998, p. 4). A more precise and operational definition for the purposes of performance evaluation is 'the obligation to disclose in adequate detail and consistent form the purposes, principles, procedures, relationships, results, incomes, and expenditures involved in any activity, enterprise, or assignment so that they can be evaluated by interested parties.' (Katz & Green, 1996, p. 303).

Performance assessment frameworks include a number of common components in Canada, the UK and US. Performance itself can be defined according to the perspective of the user. From an organizational perspective, a useful definition of performance is 'the application of inherent and/or earned capabilities to complete a process according to specifications/standards' (Katz & Green, 1996, p. 305). A framework is most simply a structure for holding or enclosing something else.

Organizational performance assessment models have been described as integrated frameworks 'used to establish a set of performance indicators relevant to the assessment of performance of an identified organization' (Leggat et al., 1998, p. 4). Indicators themselves can be defined as a 'performance measurement tool, screen or flag which is used as a guide to monitor, evaluate and improve the quality of client/patient care and service, support services, governance and management' (Canadian Council On Health Services Accreditation, 1996). A benchmark indicator is the 'best-in-class' achievement which becomes the standard for other organizations to aim at. National efforts to identify, develop and use performance assessment frameworks using indicators have been in development for over a decade.

3.1.1 Background

The current drive for enhanced accountability systems in health care in the Canadian context means that decision-makers are seeking to put performance evaluation systems in place quickly. Governments and the public they serve require assurance that publicly funded health care systems are performing optimally despite funding constraints. The need is particularly urgent in Canadian provinces where health care governance and budgets have been regionalized, creating unprecedented decision making challenges and information requirements. The regionalized systems are integrated health delivery systems; that is, they are "a network of organizations that provides or arranges to provide a coordinated continuum of services to a defined population and is willing to be held clinically accountable for the outcomes and the health status of the population served." (Shortell et al., 1993, p. 17). As a consequence, Canadian decision-makers would benefit from rigorous information about the basis of which to select among competing performance evaluation frameworks.

The major objective of this analysis was to identify major Canadian performance evaluation frameworks and to assess their appropriateness and applicability for the evaluation of vertically integrated health care systems. Our perspective sought to apply scientific principles to transform data into useful knowledge that can be applied to improve

[3] Critical feedback on an earlier extended paper was received from HEALNet investigators Ross Baker, Francois Champagne, Louise Lemieux-Charles, Claude Sicotte and Denise Kouri.

the performance of health organizations. To understand the frameworks, I examined the theoretical and empirical support for various frameworks and how they had evolved.

Systems theory and analysis and quality management approaches were identified as two separate but inter-related and expanding fields of knowledge that could provide useful insights in relation to the application of performance evaluation frameworks. The existing major frameworks were therefore examined to identify complementarity, contradiction or overlap between the knowledge base contained in them and the expanding knowledge in these fields.

Finally, I considered it important to evaluate the performance evaluation framework in relation to two major trends relevant to the Canadian context: the regionalized health care system (Health and Welfare Canada, 1993) and the emergence of an information infostructure harnessing the potential of integrated computerized information systems.

3.2 Methods

Systematic review methodology is more typically applied to the primary data about health care technologies such as drugs, devices and surgical interventions. The Cochrane Collaboration has taken the lead in this type of synthesis (The Cochrane Collaboration, 1999). This review applies systematic review methodology to literature on performance evaluation.

3.2.1 Search strategies:

To identify major performance evaluation frameworks, five electronic bibliographic databases (MEDLINE, HealthStar, CINAHL, EMBASE, and Current Contents) were searched from 1995–1999[4], using predetermined search strategies. Key words searched included: 'performance', 'evaluation', 'health services', 'outcome', 'process', 'indicators' 'quality', 'score card', and 'benchmarking'. The grey literature was also searched through a

[4] This search and related paper was conducted at the outset of doctoral research and published in 2000.

'snowball' search of contacts within the health care field with knowledgeable informants suggesting other leads and documents.

3.2.2 Assessment criteria:

The appropriateness of the identified frameworks for the evaluation and comparison of regionalized health care systems was appraised, using the criteria of whether they related to: 1) non-medical determinants of health, 2) population health status, 3) health throughout the life cycle, and 4) integration along the continuum of care. In addition, I assessed whether, from an informatics perspective, the frameworks: 5) addressed the capabilities of advanced computer information systems optimally, 6) provided a solution to the problem of suboptimization, and 7) addressed principles of process improvement. Population health status criteria were selected based on a review of Canadian research on the determinants of health (Evans et al., 1994) and the information needs of Regional Health Boards (Kouri et al., 1997). Informatics criteria were based on the theoretical underpinnings of systems analysis and quality management.

3.3 Findings

Six major Canadian frameworks were identified and appraised. These were produced by the British Columbia Ministry of Health (BCMOH) (BCMOH, 1997; Juzwishin, 1998), the Canadian Council on Health Services Accreditation (CCHSA) (CCHSA, 1996; CCHSA, 1999), the Canadian Institute of Health Information (CIHI) (CIHI, 1997), the functionalist conceptual framework developed by HEALNet researchers (Health Evidence Application and Linkage Network) (Sicotte et al., 1998), Ontario Hospital Association (OHA) (OHA, 1999), and Toronto District Health Council (TDHC) (TDHC, 1999).

The lack of explicitly documented theoretical or empirical support in the presentation of specific performance evaluation frameworks was conspicuous. This may be an indication that the proponents did not believe that such support was needed to justify the frameworks themselves – the real drivers of framework development may have been political, social, practical or other.

The major framework dimensions used by developing groups were reviewed. Overlapping categories were combined where the underlying concept, if not terminology, appeared to warrant it. An example of this is the concept of 'co-ordination', which implies different providers co-operating to streamline care for individual patients as does the concept 'continuity of care'. Dimensions were often neither clearly defined nor justified in framework documentation.

Six major categories of criteria appear to be well established in the Canadian context as important components of a performance evaluation framework (Table 2). These are: clinical outcomes/effectiveness (6), accessibility (6), customer/stakeholder satisfaction (5), coordination (5), financial/efficiency (5), quality (5), innovation and learning (4), and internal business/production (4). Less frequently used as framework dimensions were appropriateness (3), safety (3), health status (2) and integration (2). The following dimensions were used in only one framework: non-medical determinants of health, planning, community/health system characteristics, culture and values, adaptation and sentinel events.

The appropriateness of the framework dimensions for the needs of regionalized vertically integrated health systems appears as follows:

3.3.1 Non-medical determinants of health

Only one framework explicitly incorporated non-medical determinants of health as a major dimension, however CIHI, (CIHI, 1997) the developing group, is an influential one and at the centre of the development of a national "infostructure". The sub-dimensions included in the CIHI framework were health behaviours, living and working conditions, personal resources (of citizens) and environmental factors. Work conducted by the Canadian Institute for Advanced Research provided empirical support for these dimensions (Evans et al., 1994).

3.3.2 Population health status

The BC MOH (BC MOH, 1997) and CIHI (CIHI, 1997) provide indicators of population health status such as mortality and morbidity patterns for the whole population.

These components are missing from frameworks that focus on stand-alone corporate entities as presented by HEALNet and the balanced scorecard approach used by OHA (Kaplan & Norton, 1996).

3.3.3 Health throughout the life cycle

There is an opportunity to address the varying subpopulation health needs from infants at the beginning through seniors at the end of the life cycle. None of the frameworks incorporated a dimension that evaluated the ability of the system to support 'health throughout the life cycle'.

3.3.4 Integration along the continuum of care

While categories of coordination/continuity were incorporated in many frameworks, they did not explicitly apply to different levels of care. Integration along the continuum of care was applied only in the OHA (Kaplan & Norton, 1996) framework and ironically, this framework was developed for the hospital sector, not for a vertically integrated system.

3.3.5 The appropriateness of framework dimensions

Assessment of the appropriateness of the framework dimensions from an informatics perspective, addressed the following three questions:

1. Did the framework address the capabilities of advanced computer information systems optimally?
2. Did the framework provide a solution to the problem of suboptimization?
3. Did the framework address the principles of process improvement?

3.3.5.1 Did the framework address the capabilities of advanced computer information systems optimally?

Information system capacity is critical to both evaluation and performance but most frameworks do not give this critical component sufficient visibility and attention. Performance evaluation cannot occur without computerized information system availability. The integration and coordination required to produce the information on a widespread basis

represents considerable resource implications. It is surprising then, that the issues around this are discussed, if at all, in a peripheral way. For example, the OHA framework evaluated the 'use of information' (Castañeda-Méndez et al., 1998). The one framework that has arisen out of an appreciation of the information system perspective is that of CIHI (CIHI, 1999; Canadian Institutes of Health Research, 2003). As a federal initiative with the mandate to provide information and the connections and hopefully resources to move forward, CIHI (CIHI, 1999) is perhaps the best positioned to meet the demands of performance evaluation frameworks with some substantive content. This indicates that coordinated efforts may be feasible.

Table 2:

A comparison of major dimensions included in performance-evaluation frameworks

Framework dimension		BC MoH	CCHSA	CIHI	HEALNet	OHA	TDHC
Present in 4 – 6 frameworks	Outcomes/Effectiveness	✓	✓	✓	✓	✓	✓
	Accessibility	✓	✓	✓	✓	✓	✓
	Customer/Stakeholder satisfaction	✓	✓	✓	✓	✓	
	Co-ordination/continuity	✓	✓	✓	✓	✓	
	Financial/efficiency	✓	✓	✓	✓	✓	
	Quality	✓	✓	✓	✓	✓	
	Innovation and learning		✓	✓	✓	✓	
	Internal business/production		✓	✓	✓	✓	
Present in 1 – 3 frameworks	Appropriateness		✓	✓	✓		
	Safety		✓	✓	✓		
	Health status			✓		✓	
	Integration					✓	
	Non-medical determinants of health			✓			
	Planning	✓					
	Community/health-system characteristics			✓			
	Culture and values				✓		
	Adaptation				✓		
	Sentinel events						✓

BC MoH = British Columbia Ministry of Health; CCHSA = The Canadian Council on Health Services Accreditation; CIHI = the Canadian Institute of Health Information; HEALNet = the functionalist conceptual framework developed by HEALNet (Health Evidence Application and Linkage Network) researchers; OHA = Ontario Hospital Association; TDHC = Toronto District Health Council.

3.3.5.2 Did the framework provide a solution to the problem of suboptimization?

Regionalization of health care governance in the Canadian context was intended, in part, to overcome the perceived problem of over investment in hospital-based care at the expense of other types of health care that are potentially more efficient. This reflects a key insight of systems theory—suboptimization. Suboptimization occurs when the poor

performance of the system as a whole arises from optimizing one part to the detriment of the whole system. An example of this would be investing in acute care facilities while neglecting the need for long-term care facilities. This has resulted in acute care beds being blocked by people requiring long-term beds, those needing acute care not getting the needed services and those requiring long-term care receiving services beyond their needs.

Those frameworks that attempt to achieve a balance in dimensions with competing goals are more likely to provide some protection against the problems of suboptimization. As long as the diversity in performance evaluation frameworks remains as evidenced in Table 2, the danger remains. For example, frameworks like that of the TDHC, which provide a limited set of categories, appear more likely to engender suboptimization.

3.3.5.3 Did the framework address the principles of process improvement?

Health system performance evaluation frameworks may benefit from quality management (QM) approaches to process improvement. Although quality management approaches such as total quality management and continuous quality improvement are in widespread use in the Canadian health care context, issues of process flaws and improvement are rarely targeted in performance frameworks. This is one area where frameworks might be in conflict with measurement systems already in place. It appears that there is a significant opportunity for further exploration of the overlap between established quality management approaches and evolving performance evaluation strategies (Berwick et al., 1990).

Frameworks grounded in systems theory provide distinct advantages in application along the continuum of care and in addressing all-important determinants of health. A number of frameworks gave some indication that systems thinking had been an influence or had informed the development of their framework. In considering a systems view from the perspective of a performance evaluation framework, a number of concepts emerge that are potentially useful. Knowledge of the impact of care processes on the customer (satisfaction and outcomes) can provide feedback (Batalden & Stoltz, 1993). Knowledge of social and community needs, although not necessarily part of the feedback on the processes of care, is nonetheless needed to design better processes. This makes explicit that the process of care

may be improved on the basis of information from performance indicators. The development of a system that is able to respond intelligently to feedback may benefit from combined approaches.

3.4 Analysis

While relevant research and theory may not be available, it is certainly possible to conduct the needed research and develop the theoretical foundation that would provide an empirical basis for the performance evaluation of health care systems configured regionally, as they are in Canada. Given the potential impact on finances and human health and suffering it would seem important to do so.

An approach grounded in systems theory is likely to provide distinct advantages. Within the scope of the health care system, a systems approach provides the analysis required to prevent over or under performance of critical parts that may lead to suboptimal overall performance. The understanding that a health care organization is a whole that is made of many parts working together to produce that which is greater than the sum of the parts is just what is needed as a foundation for continuity of care. In addition, frameworks that incorporate a wider view of the determinants of health require a systems approach to incorporate influences beyond the health care service delivery system and into a wider arena where economic, social and political systems have an impact on health. Issues of process flaws and improvement are rarely targeted in the existing frameworks though quality management approaches are in widespread use and work processes are at the point at which the opportunity for improvement can be found. The quality management approaches are compatible with systems approaches.

Information system capacity is critical to both evaluation and performance but most frameworks do not give this critical component sufficient visibility and attention. Here to systems approaches are key to the production of an information architecture suitable for widespread use throughout and between health care organizations. Broader evaluation frameworks imply that different types of data be collected, as well as new linkage requirements to integrate information flow vertically throughout the care delivery system.

This may require new configurations for the information systems in place or perhaps entirely new technology. In order to collect information on the determinants of health, which lie outside the care delivery system, novel sources of information such as that obtained from patients or citizens directly, or socio-economic indicators on the region, may need to be accessed.

In conclusion, health system performance evaluation frameworks can benefit from 1) being grounded in systems thinking, 2) drawing from quality management approaches to process improvement and 3) explicitly addressing approaches to developing the required information system capacity.

3.4.1 Recommendations

This systematic review of performance evaluation frameworks, conducted in 2000, confirmed the lack of an organized basis of theoretical and empirical support for performance evaluation frameworks. It was therefore recommended that more work be done to ground performance evaluation frameworks in theory and conduct rigorous research into their effectiveness as an intervention.

The 2000 review also explored a potential basis for hybrid approaches to performance evaluation – approaches that make use of underlying systems thinking and process improvement theory. It was recommended that further work be done to incorporate these approaches and make this type of analysis explicit in performance evaluation frameworks.

The review provided a basis for revising existing frameworks in the light of the need to apply them in the context of regionalized health care systems. It was therefore recommended that existing frameworks include health status and non-medical determinants of health indicators as per the CIHI indicator framework (CIHI, 1997).

Finally, the 2000 review revealed an opportunity to explore the intersection between performance evaluation frameworks and information systems frameworks. A crucial indicator of performance may be the ability of the system to obtain and apply information system technology. It was therefore recommended that an added dimension of performance

evaluation frameworks be the capacity to adopt and effectively use information system technology. Effective use implies not only that information is actually used in decision making but that substantive improvement occurs in work processes and health outcomes.

3.5 International Comparators: The US, UK and Canada

3.5.1 The Balanced Scorecard Framework

In 1996, Harvard Business School Professor Robert Kaplan with colleague David Norton outlined a balanced scorecard framework for organizational performance evaluation (Fig 2) that has proven influential (Kaplan & Norton, 1996). A balanced scorecard can be defined as

> A set of measures that reveals the interdependency of the organization, its employees, and its patients. It thus serves as a balanced perspective on the organization for senior management to use in designing, developing, deploying, and directing the strategic plan, consistent with total quality management principles. (Castañeda-Méndez et al., 1998, p. 10)

The balanced scorecard approach was supported for evaluating the performance of health care organizations in the US (Castañeda-Méndez et al., 1998). In Canada, Ross Baker and others adapted the approach for the Ontario Hospital Association (Baker & Pink, 1995). The OHA contributed one of the Canadian performance evaluation frameworks to the foregoing analysis.

Kaplan and Norton propose four perspectives as critical to organizational performance: the customers, the company's finances, its internal business process and learning and growth (Kaplan & Norton, 1996). They advise that measures are needed to demonstrate performance from each perspective. They also argued that these four perspectives on performance were all inextricably interlinked, so that what happens in one area affects all. This is a key insight of systems theory tied to the concept of suboptimization.

Figure 5:

The balanced score card framework

The balanced score card approach stresses the importance of using information strategically at the highest organizational level. The following passage illustrates this:

> Senior management has several roles. One role includes designing, developing, deploying, and directing the strategic plan. To do this effectively, the senior managers must translate strategies into key measurable organization drivers and in turn translate the drivers into actionable items. Given the pressures healthcare organizations

> face today, the measures of the key drivers must reveal all the critical aspects of the organization to management. (Castañeda-Méndez et al., 1998, p. 10)

The improvement of measurement systems was what motivated the developers of the balanced scorecard approach. It evolved into a management approach designed to effectively apply the knowledge gained from integrated multidimensional measurement systems. A key insight was that performance information was not just useful for internally reorienting for improved performance but that the information could also transform management's (and perhaps governance?) approaches to strategic planning.

The theoretical and empirical support for the balanced scorecard approach was provided by scientific management theory within a strategic management perspective. The scientific management school emphasizes the application of an operational research approach to organizational problems (Shortell & Kaluzny, 1993, p. 17). A strategic management perspective

> [A]ttempts to link environmental forces, internal organizational design and processes, and the strategy of the firm. It suggests that the firm's strategy needs to be consistent with both the external environmental demands and the organization's internal core capabilities and competencies. It is explicitly concerned with issues of organizational performance (Shortell & Kaluzny, 1993, p. 19).

In addition the balanced scorecard was developed from a long-term study of five companies undertaken by the authors (Kaplan & Norton, 1996).

That a US model developed for private corporations would be applicable for a public, not-for-profit Canadian health care system may seem surprising. Its appeal appears to be the integration of 'measurement' and 'strategic direction' approaches – a synthesis which is lacking in other approaches and is necessary to avoid suboptimization. Also, in practical terms, the balanced scorecard approach is compatible with quality improvement efforts directed at processes. For example, Kaplan and Cooper (1998) report that:

> The Balanced Scorecard approach to performance improvement identifies and highlights processes that are most critical for strategic success. It identifies those processes not only for their potential for cost reduction, but also for their ability to meet targeted customer expectations. With the Balanced Scorecard, managers usually see

> that excelling at entirely new processes may be more important for successful strategy implementation than making gradual cost improvements in existing processes (Kaplan & Cooper, 1998, p. 155).

Kaplan and Norton then demonstrate practically how to make full use of information systems in measuring the important qualities of performance. These features are compatible with prevailing concerns with accountability that are predominantly governance concerns.

3.5.2 The US Health Plan Employer Data and Information Set (HEDIS)

The US 'health plan', while different in many ways from a publicly administered Canadian health region, may be the closest reasonable comparison. Plan members receive a comprehensive range of services from a range of health organizations, which are geographically defined to some extent. The Health Plan Employer Data and Information Set (HEDIS) developed by the National Committee for Quality Assurance (NCQA) has been described as the 'most widespread effort to collect comparable data on health plan performance' (Scanlon et al., 1999, p. 5). Scanlon et al. report that the majority of health plan report cards use HEDIS data, though the specific indicators used, methods of aggregation and reporting formats vary widely (Scanlon et al., 1999). Therefore, I chose the HEDIS approach, from among a large number of US examples, to examine for this report.

Six principles were used by HEDIS designers to guides its development. The performance measurement and assessment system was required to: 1) be used in its entirety as an integrated set of performance measures; 2) have elements useful to both plans and purchasers; 3) have measures comparable between plans and defined as benchmarks; 4) use existing data where possible; 5) evolve with new information; and 6) respect patient confidentiality (Corrigan & Nielson, 1993).

The framework HEDIS used in an influential 1993 publication is presented in Table 3. The framework has evolved over the years and has become widely used. Table 4 represents a more contemporary framework using HEDIS data. Although developers stressed that the HEDIS framework was to be used in its entirety, HEDIS does not generate

the actual report cards. Scanlon et al. examined in detail and compared seven report cards produced by three major periodicals (Newsweek, US News & World Report, Consumer Reports), an accreditation agency, a large national employer, a consortium of employers and a non-profit consumer group (Scanlon et al., 1999). The inconsistencies revealed in the ratings among the seven report cards are problematic and reflect the sample, the measures and the aggregation methods chosen by the report card compilers.

HEDIS was started at the initiative of four large US employers including Xerox Corporation. Employers have been a driving force in demanding accountability because health insurance is a major employee benefit and therefore cost for them. Some employers found that health expenditures had overtaken their gross profits (Katz & Green, 1996).

Table 3:

The 1993 HEDIS Framework

Preventive services	Prenatal care	Acute and chronic illness	Mental Health
• Childhood immunization • Cholesterol screening • Mammography screening • Pap smears for cervical cancer	• Low birth weight rates • Prenatal care in the first trimester	• Asthma inpatient admission rate • Diabetic eye care	• Ambulatory follow-up after hospitalization for major affective disorders
Access and satisfaction	**Membership and utilization**		**Financial**
Access • Percentage of members age 23-64 who had an encounter in previous three years • Number and percentage of primary care physicians accepting new patients • Provision of plan access standards and actual performance for various types of visits and telephone responses **Member satisfaction** • Percentage of members who are 'Satisfied' with the plan • Provision of plan satisfaction surveys	• Membership: Enrollment/disenrollment • High occurrence/high cost conditions-Frequency and average cost of nine diagnosis-related group categories and Frequency of seven selected procedures • Global inpatient – Medicine/surgery, maternity, and newborns • Ambulatory care- outpatient visits, emergency room visits, and ambulatory surgery • Non-acute care-Stays in nursing homes, rehabilitation facilities, hospices, transitional, and respite facilities • Maternity –Total deliveries with subdivision of vaginal births, caesarean sections, and vaginal birth after caesarean section • Newborns–Well and complex newborn differentiated on length of stay • Mental health–Treatment on basis of inpatient, day/night, and outpatient location • Chemical dependency–Treatment on basis on inpatient, day/night, and outpatient location • Outpatient drug utilization–Average costs and number of prescriptions per member		• Premium trend information • Financial indicators • Plan revenues • Plan reserves • Short-term liquidity • Capital structure

Table 4:

HEDIS 1999 framework with examples of indicators

Access and convenience	Enrolee satisfaction
• Percentage of a plan's physicians accepting new patients • Provider offer of advice over the phone • Time available with provider • Denial of needed care • ...	• Overall satisfaction rate • Number of complaints per 10,000 members • Medicare complaint rate • Plan disenrollment rate • Telephone abandon rate • .... .

Physician quality	Utilization	Plan structure
Technical skills of providers • Competence of care • Overall quality of care • Results of care **Credentials** • Percent of primary care physicians with board certification • Percentage of specialists with board certification **Medical management** • Follow through on care • Coordination of care • Tracking member health **Interpersonal skills of providers** • Ability to relate to the physician • Listening ability of the physician • Provider explains care • Provider takes personal interest in patient	**Screening/Detection/ Prevention** • Cholesterol • Blood pressure • Breast cancer • Cervical • Childhood immunization • Pregnancies with first trimester prenatal care • ..... **Surgical and hospitalization rates** • Caesarean section • Vaginal delivery after caesarean • Cardiac catheterization • Cholecystectomy • Hysterectomy • Laminectomy • General hospital acute care days • Coronary artery bypass graft •	**Stability** • Number of primary care physician terminated • Number of physicians leaving a plan • .... **Reporting ability** • Ability to report coronary artery bypass graph death rate • Reports and records clinical management and credentialing • Conducts independent satisfaction survey • .... **Administration** • Responsiveness of plan personnel • Problem handling • Paperwork • .... **Accreditation**

The theoretical underpinnings of the NCQA approach were not made explicit and are probably mixed. There are a number of features of the systematic approach used by

NCQA that indicates their efforts to ground HEDIS empirically. Corrigan and Nielson report that 'Whenever possible the PAC (performance assessment committee) has worked to derive performance measures from well-established clinical practice guidelines (for example, guidelines pertaining to care for diabetics have been promulgated by major specialty societies)' (Corrigan & Nielson, 1993). The method used to develop and select indicators was extensive and rigorous. This indicates the influence of the evidence-based medicine movement.

NCQA started by developing a 'menu' of indicators from those already developed and in use. Given the profile and resources of NCQA they were able to gain cooperation from the giants of the US Health Plan community, including the Blue Cross/Blue Shield Association, Harvard Community Health Plan, Kaiser Permanente, Massachusetts Clinical Quality Indicators Project (begun in 1985) and Harvard Community Health Plan. NCQA reports that they took advantage of the work done by the US Department of Health and Human Services 'Healthy People 2000' to determine public health priorities (Corrigan & Nielson, 1993).

There is no absolute gold standard to evaluate the performance of health care organizations. It is understandable that performance evaluation applications would encounter some resistance from providers. HEDIS and similar systems are no exception. The question of whether there are unintended consequences of measuring quality on the quality of care is raised along with the possibility of creating perverse financial incentives. One study reports that physician report cards for diabetes were unable to detect reliably true practice differences, and warns that physicians can avoid penalties by avoiding or deselecting patients with prior high cost, poor adherence or response to treatment (Hofer et al., 1999).

US employers are now linking reimbursement to report card scores. If an organization does not meet standards they do not receive full funding. If all attention is focused on meeting standards for which there is reimbursement and if there are aspects of quality that are critical but cannot be measured, then measurement efforts might have unintended consequences. This point addresses the issue that indicators, even in a balanced mixture, will not be able to capture all the dimensions important to gain results. An

environment could be fostered, where gaming the system results in practices that appear to be of high quality, but conceal areas of poor quality.

The issue is the extent to which indicators are in fact valid. While HCQA reports that they based their clinical indicators in areas where there were established guidelines, there is a body of evidence that reports that guidelines are not necessarily based on the most rigorous application of research evidence (Green et al., 1996). If this is the case, then the indicators or benchmarks based on these may lead to widespread adoption of sub-optimal care patterns.

Despite these concerns, the contribution that HEDIS has made in developing indicators and providing employers, the public and government with information that previously was unavailable, is in no dispute. Other authors report that disclosure of risk-adjusted death rates by doctors resulted in a decrease in the cardiac surgery death rates in New York State by 52% over a five-year period (Green, 1995). This latter evidence suggests that the report cards were actually used by decision-makers and translated into this major clinical success. Canadian research has found that the public does not use health-system report cards to make decisions about their healthcare (Canadian Health Services Research Foundation, 2001). Given the difference in health care system funding and administration, US experience may not be generalizable to the Canadian context.

3.5.3 UK National Health Service Performance Assessment

The United Kingdom (UK) National Health Service (NHS) has embarked on program of reform that included a National Performance Framework as part of a wider effort to improve the quality of its service. The framework for 'setting, delivering and monitoring' standards is presented in Figure 6 (NHS, 1998). The objective is to 'ensure fair access to effective, prompt high quality care wherever a patient is treated in the NHS' (NHS, 1998, p. 1). The stated intention of the UK government is to match devolution of authority with accountability for performance. Its goal is to ensure that there is accountability for both efficiency and quality throughout the NHS. The following are the 3 main thrusts of the overall reforms.

> [C]lear national standards for services and treatments, through National Service Frameworks and a new National Institute for Clinical Excellence
>
> local delivery of high quality health care, through clinical governance underpinned by modernized professional self-regulation and extended lifelong learning
>
> effective monitoring of progress through a new Commission for Health Improvement, a Framework for Assessing Performance in the NHS and a new national survey of patient and user experience.
>
> (NHS, 1998, p. 2)

Figure 6:

The key elements of the UK quality strategy

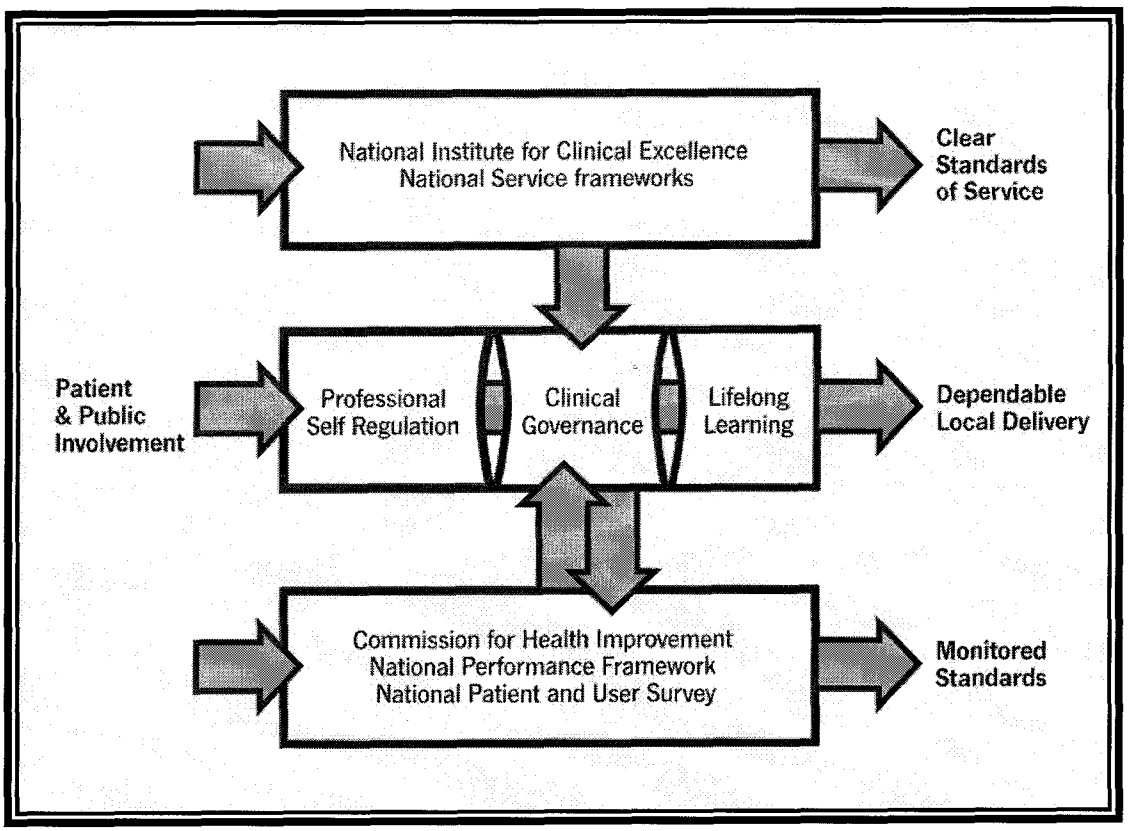


Table 5 presents the key elements used by the UK NHS for assessing performance. The framework focuses on the following six dimensions:

- Health improvement
- Fair access to services
- Effective delivery of appropriate healthcare
- Efficiency
- Patient and carer[5] experience and
- Health outcomes of NHS care.

High-level performance indicators for each of these areas were obtained from existing U.K. datasets. UK developers, in their selection of indicators, considered a number of qualities. To be desirable, indicators were to be objective, attributable, important, robust, responsive, usable, timely and unlikely to lead to perverse incentives. It was envisioned that the information derived from the application of the framework would be used to inform the public, to identify benchmark performance, to encourage information sharing between organizations and to improve practice.

[5] The term 'carer' is not in common use in Canada where 'health care provider' is used as a generic term.

Table 5:

The UK NHS performance assessment framework

Areas	Aspects of performance
Health improvement	The overall health of populations, reflecting social and environmental factors and individual behavior as well as care provided by the NHS and other agencies.
Fair access	The fairness of the provision of services in relation to need on various dimensions: • Geographical • Socio-economic • Demographic (age, ethnicity, sex) • Care groups (for example, people with learning difficulties)
Effective delivery of appropriate health care	The extent to which services are: • Clinically effective (interventions or care packages are evidenced-based • Appropriate to need • Timely • In line with agreed standards • Provided according to best practice service organization • Delivered by appropriately trained and educated staff
Efficiency	The extent to which the NHS provides efficient services, including: • Cost per unit of care/outcome • Productivity of capital estate • Labour productivity
Patient/carer experience	The patient/carer perceptions on the delivery of services including: • Responsiveness to individual needs and preferences • The skill, care and continuity of service provision • Patient involvement, good information and choice • Waiting and accessibility • The physical environment; the organization and courtesy of administrative arrangements
Health outcomes of NHS care	NHS success in using its resources to: • Reduce levels of risk factors • Reduce levels of disease, impairment and complications of treatment • Improve quality of life for patients and carers • Reduce premature deaths

Quality management principles are evident in the UK presentation of this framework although specific influences are not explicitly revealed. Likewise, there is much evidence of

systems design and thinking. For example, the framework itself is set in the round that symbolizes a whole composed of parts. The round has arrows circling, indicating movement around the wheel or the effects that each part has on the others.

A distinctive feature of the UK government is that the performance framework is oriented around the overall improvement goals of the NHS. This model also recognizes that the performance measurement alone will not improve quality but that this has to be supported by professional governance structures, clinical standard setting and local practice.

The non-medical determinants of health are mentioned in the NHS performance evaluation framework but are not presented as extensively as in other frameworks. The indictors in this area reflect health status rather than other determinants such as employment patterns or environmental factors. In other areas, risk factors are examined. The health systems information infrastructure that is essential to support the NHS performance evaluation framework is not explicitly addressed.

3.5.4 Comparison of Canadian with UK and US frameworks

This review of select US and UK performance evaluation frameworks reveals commonalities. Other members of the Organization for Economic Co-operation and Development (OECD) (OECD, 1996) are pursuing similar strategies. OECD Secretary General Jean-Claude Payne reports that member organizations have 'increasingly come to pursue a common reform agenda driven by the need for fiscal consolidation, by the globalization of the economy, and by the impossibility of meeting an apparently infinite set of demands on public resources (OECD, 1995). All governments face similar challenges, but it is also true that they are under the considerable influence of each other.

The US and UK approaches to health care organization performance evaluation demonstrate different aspects of an overall strategy for enhancing accountability structures. In Canada, the devolution of authority from provincial ministries of health to regional health boards is mediated through different structures. In the UK, a national approach is dominant. In the US, private interests have lead to the creation of comparable structures by the governance structures imposed by employee groups enforcing performance measurement.

This review found that performance evaluation frameworks designed for hospital performance and the for-profit sector are ill suited for application to vertically integrated health care systems in regionalized settings in many, but not all, aspects. Freestanding hospitals were the context of much of the past research and so the issue of generalizability can be raised in considering the research, which has emerged from organization science. While hospitals and regional health care systems are both 'organizations' broadly defined, the emerging regionally managed systems differ in important ways from hospitals. Many of the frameworks have categorized their performance evaluation framework in ways that do not capture critical concepts that regionalization was intended to address.

A common element is the enhancement of accountability though the governance structures. This has been shown to vary considerably by country. Chapter 7 will demonstrate how performance indicators are actually used in the StarCity regional health board.

CHAPTER 4:
MAKING HEALTH KNOWLEDGE TRANSLATION PRACTICES VISIBLE

4.1 Introduction and background

This chapter considers the research means by which the practices of translating knowledge into better health care decisions can be better understood, and therefore made amenable to improvement. Knowledge translation can be defined as the 'exchange, synthesis and ethically-sound application of knowledge' (Canadian Institutes of Health Research, 2004, p. 1). This definition implies people acting on knowledge in concerted ways to advance the health care system. The work of four investigators whose research provides a showcase of approaches applicable to knowledge translation in health care will be reviewed, contrasted and compared, and a case made for using Institutional Ethnography (IE). IE is featured as an appropriate approach for investigating the knowledge translation processes of the StarCity regional health board, given its rich set of analytic tools.

New research and information systems are extending the knowledge bases available to inform health care decisions. Individuals facing information overload and increasing decision complexity may, paradoxically, have difficulty retrieving the knowledge needed to optimize decisions if increased information system capacity does not reduce the burden being placed on human capacity. Organizations are therefore challenged to find new ways to harness knowledge resources and improve the transparency of the basis of decisions.

Knowledge producers, like researchers and decision support staff, are challenged to collaborate with decision-makers. Because improved health outcomes and considerable costs are at stake, the need to improve knowledge translation processes has become a research priority. Ethnographic fieldwork is a way of systematically investigating socio-technical systems in natural settings to gain a more in depth understanding of the social processes at work. Fieldwork may be useful for elucidating current knowledge translation practices as a

first step in developing strategies for improvement. Qualitative research has undergone rapid evolution and so offers a diverse set of approaches.

4.1.1 Decision making in health care

As debates about health care reform continue, the informational bases of the decisions that determine what services are available are coming under increasing scrutiny. Concerns about costs and quality are driving health care reform efforts globally, yet each health care system has its own set of local concerns and stakeholders. The Office of the Auditor General of British Columbia reports, for example, "the ministry [of Health] is allocating resources across the health care system without the benefit of essential cost and performance information" (Office of the Auditor General of British Columbia, 2002, p. 1). Surveys indicate that health care managers find many deficiencies in the information they have for making decisions (Casebeer & Johnson, 2000). Concurrently, the evidence-based medicine movement, and related strategies such as the Cochrane Collaboration, illustrate an alternate paradigm for decision making at managerial and policy-making levels in health care (Walshe & Rundall, 2001). The empirical support is lacking for making decisions in the systematic way envisioned in Evidence-based Decision-making (EBM) – a state of affairs that is garnering increasing attention from the Canadian research community.

My interest is in how knowledge is used in governance decisions. Of the multiple information elements, interactions and relationships that may be brought to bear, how they are synthesized is poorly understood. It is clear however that health care decision-making entails a complexity absent from other industries.

Decision theory and analysis has figured prominently among academic approaches to formalize and thereby improve clinical and managerial decision-making in health. Decision theory and analysis provides modeling techniques for facilitating decision making under risk. The expected outcome for each of a given set of alternatives is calculated by converting information on uncertainty into risk estimates. The goal is to identify the optimal decision based on valid criteria by a means that is reproducible (Tan, 1998).

People in naturalistic settings do not make decisions in the way that classic decision theory would recommend, however (Klein et al., 1993). This supports the need for new ways of thinking about and investigating decision-making, including ways of exploring how people actually do make decisions. The objective of this review is to compare and contrast a select sample of research approaches used to investigate and describe what people actually do in the process of decision-making. Each will be evaluated as to its usefulness for producing an empirical base useful for improving the means by which knowledge is translated into health care decisions and ultimately better health.

4.1.2 Knowledge translation as a focus of research

Knowledge translation in health care has become a priority for federal research funding agencies, with both the Canadian Institutes of Health Research (CIHR) and Canadian Health Services Research Foundation (CHSRF) funding knowledge translation research. Insufficient understanding on the part of the research community of the 'realities' facing policy-makers has been put forward as a factor in the failure of research to be applied more effectively in the Canadian context (Lomas, 1998). Filling the gaps in our collective understanding of how knowledge is translated into decisions in health care has become a priority. The CIHR is undertaking a collaborative approach to developing a knowledge translation framework. The following definition has been proposed in draft form, to stimulate debate.

In the context of the CIHR mandate, Knowledge Translation is defined as "the exchange, synthesis and ethically-sound application of knowledge – within a complex system of interactions among researchers and users – to accelerate the capture of the benefits of research for Canadians through improved health, more effective services and products, and a strengthened health care system" (CIHR, 2004, p. 1).

This definition can be seen as a progression from knowledge transfer concepts that focus on researchers as knowledge producers, to disseminating findings to the knowledge users. Rather than seeing knowledge moving one way from academic researchers to system based users, a full range of knowledge users is acknowledged within the framework –

including policy makers, planners and managers, health care providers, the general public, the private sector and not exclusive of researchers themselves. All knowledge users, including researchers, are seen as both actual or potential sources as well as users of knowledge and all are interrelated through complex processes and interactions. The sources of information, which are all created and accessed by people, include content on biomedical, clinical, health services and health systems, population health and all health determinants. The CIHR Act passed by the Parliament of Canada specifically mandates knowledge translation as follows:

The objective of the CIHR is to excel, according to internationally accepted standards of scientific excellence, in the creation of new knowledge and its translation into improved health for Canadians, more effective health services and products and a strengthened Canadian health care system (CIHR Act; April 2000).

Similarly, CHSRF promotes a knowledge exchange model that "involves interaction between decision makers and researchers and results in mutual learning through the process of planning, disseminating, and applying existing or new research in decision-making" (CHSRF, 2004, p. 1).

4.1.3 Analytic approach and chapter outline

Though the international literature holds a great store of candidate research approaches, the research of four investigators has been selected because their work is: 1) applicable to knowledge translation within health care organizations; 2) applicable to a publicly funded system such as exists in Canada, and which is in the process of reform and infrastructure development; and 3) sufficiently divergent from one another to illustrate the potential of diverse approaches and 4) based on a social constructivist paradigm. My selection of exemplars is thereby limited to four studies which are not representative even of the types of research which occurs under their respective research design labels. Standard research protocols like those for randomized controlled clinical trials which would enforce homogeneity are contested for this type of studies. The diversity of available approaches and speed with which they are evolving also makes the selection of an exhaustive sample outside

the scope of this study. Within the social constructivist paradigm knowledge is not an object as such, but a social construction. Approaches to evaluation of programs and information systems are excluded as they have been extensively reviewed elsewhere (Chelimsky & Shadish, 1997; Kaplan, 2001).

In Section 4.2 each of the four approaches (cultural analysis, grounded theory, critical ethnography and institutional ethnography) are introduced through the description of a particular study and the disciplinary orientation of the researcher(s) producing them. In Section 4.3, areas of convergence, overlap and divergence amongst the approaches are analyzed to highlight unique features and usefulness. Each approach is explored to explain what each 'does' and how they accomplish their aims. In Section 4.4, the potential contributions of each approach to knowledge translation research are discussed. Finally the usefulness of institutional ethnography for producing empirical findings useful for the design of decision support systems for a regional health board is outlined.

4.2 Four constructivist research approaches introduced

4.2.1 Golden-Biddle & Locke: Management science applications

Management science investigators like Karen Golden-Biddle and Karen Locke have championed the use of qualitative research methods for the investigation of health care organizations. Golden-Biddle, a professor with University of Alberta School of Business, is also a principal investigator with the Centre for Knowledge Utilization Studies in Practice program (funded by the CIHR) and heads up a multi-disciplinary study of health organization change. Locke is an Associate Professor in the School of Business Administration at the College of William and Mary in Williamsburg, VA. Together Golden-Biddle and Locke authored a book on qualitative research, which assists researchers to 'compose' qualitative research (Golden-Biddle & Locke, 1997). Locke is also the independent author of a textbook on the use of grounded theory in management science (Locke, 2001). In this section, two research projects are showcased that contribute to the theoretical basis of management science.

4.2.2 Golden-Biddle & Rao: Organizational cultural analysis

In a "qualitative field-based study" of the governing board in a charitable health foundation, Golden-Biddle and Rao investigated how the "functioning of boards is shaped by social context" (Golden-Biddle & Rao, 1997, p. 595). The authors justify their approach by citing the work of organizational sociologists, who have examined the flaws and deficits in existing theories that seek to explain and predict the behaviour of persons acting as agents on the behalf of others, like shareholders or the public. Agency theory posits that having independent boards representing the interests of shareholders is sufficient safeguard (along with various incentives and an external takeover market) against senior executives mismanaging information and resources for personal rather than shareholder profit (Scott, 2003). Agency theory has been critiqued for overlooking key structural, political, cognitive and cultural contexts that may mitigate the effectiveness of separation of management from ownership (Golden-Biddle & Rao, 1997).

In seeking to address the overlooked cultural context of corporate governance, Golden-Biddle and Rao specifically investigated the shaping influence of organizational identity on role enactment by board members (Golden-Biddle & Rao, 1997). Like the many non-profit organizations that have sprung up around particular medical conditions (like cancer or osteoporosis) or systemic conditions (i.e. heart or lung disease), the mandate of the unnamed organization investigated was to foster research, education and service for a particular though undisclosed disease (Golden-Biddle & Rao, 1997, p. 595). After participating in a seminar on cultural analysis offered by Golden-Biddle, the authors were invited by the organization's executives to conduct a culture analysis within their own organization (Golden-Biddle & Rao, 1997, p. 597). Cultural analysis provided a "detailed, contextually specified cultural portrait" of the organization (Locke & Golden-Biddle, 2002, p. 108). Their specific purpose was to investigate "how board members construed and enacted their roles over time" (Golden-Biddle & Rao, 1997, p. 595).

The fieldwork consisted of attendance at semiformal executive development sessions over a two-year period. As well, Golden-Biddle, a 'known ethnographer', collected data while she occupied an office at the national headquarters of the organization 3 days a week over a

10-month period. Data collection methods were participant observation, semi-structured interviews and archival sources. Analysis followed an iterative process of moving from data to theme and back to the data for confirmation (theoretical sampling in "grounded theory") to ensure the dependability of the data and to relate it to published and relevant literature.

Golden-Biddle and Rao use cultural analysis to challenge existing agency theories and then extend these by putting forward a model of organizational identity congruent with their findings (Golden-Biddle & Rao, 1997). In investigating the Board's debate about the budget, Golden-Biddle and Rao seek to examine the extent to which board members are 'culturally embedded' and their behaviour shaped by prevailing culture versus what would be posited on the basis of prevailing theory. The authors illustrate their critique of agency theory by providing examples of board members questioning practices, as part of the budget approval process. They demonstrate that board members alternately adopt supportive and challenging roles that are consistent with the organizational identity as understood by theory. Further the authors claim that their finding "addresses a central limitation of the agency theories' conception of the board as shaped by fiduciary and legalistic pressures" (Golden-Biddle & Rao, 1997, p. 608). While role theory posits that conflicting demands of multiple stakeholders lead to role conflict, their findings challenge this. They found that conflict can arise within board members as they try to adhere to conflicting aspects of organizational identity, e.g., as 'vigilant volunteers' needing to question travel expenditures by directors versus as 'supportive family' (Golden-Biddle & Rao, 1997, p. 593).

Having illustrated that the behaviours they found did not conform to what would be anticipated by prevailing theory, Golden-Biddle and Rao can then conclude that theories that did not incorporate the relevant contexts were 'neither realistic nor generalizable' (Golden-Biddle & Rao, 1997, p. 608). They then propose an extension to agency theory that better explains their data. This new model is based on how hybrid identities generate intra-role conflict as well as how individual and organizational identity is shaped by processes of identification and action (Golden-Biddle & Rao, 1997, p. 593).

4.2.2.1 Locke & Golden-Biddle: Grounded theory

Locke and Golden-Biddle produced "a grounded theory of contribution" by investigating the textual practices of researchers reporting scientific findings in published papers (Locke & Golden-Biddle, 1997). Academic achievement is evaluated by peers on the basis of the 'contribution' to a particular field – in this case organizational sciences. How this contribution is constructed and thereby achieved was an area were there was no previous theory though the 'uniqueness' of the contribution was thought to be an important quality in establishing the value of a particular work.

In setting out to establish theory in the absence of prior theory, Locke and Golden-Biddle identified within published studies, excerpts that revealed opportunities for contribution to an academic field. Studies published over a 20-year period in two pre-eminent academic journals in organizational studies were selected. Textual 'acts' were examined and their rhetorical features characterized and categorized. The relationships between components were examined. In refining the emerging theory, the investigators returned to the original texts and related literature iteratively (Locke & Golden-Biddle, 1997).

The resulting theory of contribution reveals how organizational theorists construct opportunities for making contributions textually. The authors state that they are following in the footsteps of social scientist researchers investigating scientific texts from a social constructivist perspective (Locke & Golden-Biddle, 1997, p. 1023) and particularly those that attribute active agency to texts (Locke & Golden-Biddle, 1997, p. 1026). The two main processes identified were: 1) 'constructing intertextual coherence' and 2) 'problematizing the situation':

> [I]n order to establish contribution, organization studies manuscripts first must re-present and organize existing knowledge so as to configure a context for contribution that reflects the consensus of previous work. The presence of existing knowledge legitimizes a research area by underscoring the intellectual resources devoted to it and, at the same time, provides a theoretical orientation for present investigations. Second, our analysis disclosed that manuscripts must in a sense turn on themselves, subverting or problematizing the very literatures that provide locations and raisons d'être for the present efforts. Showing that existing scholarly

> and research efforts are wanting in some respects opens up opportunities for advancing knowledge about topics of investigative concern (Locke & Golden-Biddle, 1997, p. 1029).

Locke and Golden-Biddle claim that their findings challenge the extent to which 'uniqueness' constitutes contribution to scientific knowledge in the organizational studies, as previously claimed by researchers like Davis in investigations of sociological texts (Davis, 1986).

The grounded theory approach allowed Locke and Golden-Biddle to develop a theory grounded in a set of actual texts to explain how meaning was accomplished through these texts. Though these findings were compared with that of other researchers, the active role of the texts in the social construction of other processes was not investigated (the attainment of tenure or academic awards, for example) as they might be in an institutional ethnography.

4.2.3 Myers: Critical ethnography

Critical ethnography (CE) has been championed by information system (IS) investigators, such as Michael Myers from New Zealand, as a useful method for IS design, development and application within health care organizations. Myers, a PhD in social anthropology, worked with IBM before joining a faculty of Management Sciences and Information Systems at the University of Auckland. He hosts a prominent website on qualitative IS research.

Myers and Young provided an illustration of critical ethnography use in a study of the development of an IS in mental health (Myers & Young, 1997). User representatives involved in the development process with the IS project staff resisted having time-based costing in the initial introduction of the IS, anticipating that their peers would assume that it would be used by management to evaluate, compare and critique their performance. The authors report that the effective resistance of users demonstrated how deeply the IS penetrated processes of cultural control (Myers & Young, 1997). The study raised broad questions about the social and political nature of IS development and constraints on user

involvement posed by hidden agendas, power centres and user participation (Myers & Young, 1997).

The introduction of a time-based costing component alongside clinical and other administrative functions led to controversy that then became the focus of the analysis. Data sources were participant observation, structured and unstructured interviews, unpublished documents (such as minutes of meetings), newspaper and magazine reports, collected over an 8-month period. The 'hidden agenda' of management and government was identified by Myers and Young at several phases of IS development, in relation to time-based costing. The following findings are used to support their claims: 1) the absence of time-based costing from original user requirements; 2) statements by a senior manager as to the importance of time-based costing for measuring performance to justify funding; and 3) the avoidance and minimization of time-based costing by the IS project leader (Myers & Young, 1997).

4.2.4 Mykhalovskiy: Institutional ethnography

Eric Mykhalovskiy has directly applied institutional ethnography (IE) to an exploration of knowledge translation in a Canadian health care setting. Mykhalovskiy, who is currently with the Department of Community Health and Epidemiology, Dalhousie University, completed this work while a doctoral candidate in Sociology at York University, Toronto. Mykhalovskiy's IE of the textual mediation of health care reform initiatives, by a health services research report at a community hospital in Toronto demonstrates how health services research is taken up in the action of local health care managers and practitioners. (Mykhalovskiy, 2001). The report (Chen & Naylor, 1993) was produced under the auspices of the Institute for Clinical Evaluative Sciences (ICES) in Ontario – one of Canada's leading health services research organizations. Mykhalovskiy demonstrates how health care managers engage with the report to reduce length of stay and increase efficiency of the care of 'heart attack' patients through the use of clinical care pathways.

Mykhalovskiy's analysis was informed by observation of the setting through involvement in a related research project as well as eight targeted interviews that explored the work of managers and providers associated with the cardiac care unit and related

departments. They were asked how they were involved in reform, how they engaged with the research study and related texts and how their activities were connected. Mykhalovskiy found that:

> The report acts as a co-ordinator of a set of inter-professional relations within which physicians, through their participation in and support of the AMI care pathway, are being encouraged to change their clinical actions in ways that incorporate administrative concerns about cost and lengths of stay (Mykhalovskiy, 2001, p. 287).

This study directly demonstrates how a research report was activated in a hospital setting – that is, how knowledge was translated into action within clinical settings.

4.2.5 Definitional issues

The range and scope of available research design approaches presents a maze-like array of choices for investigating knowledge translation in health care. In this section, the approaches used by these four researchers will be located in relation to overarching paradigms, before more specific variations are examined.

Most fundamentally, research approaches are frequently sorted into categories of 'qualitative' and 'quantitative'. Standardization of definitions, descriptions and terminology is elusive as research design approaches proliferate. Yet, the attempt to compare approaches is valuable because many concepts, whose epistemological home is in approaches that have been criticized and even abandoned, continue to permeate current understanding and methodological developments. All research should be seen as being based on foundations collectively developed and under continuous debate and revision. A vigorous discourse on the merits and limitations of the various quantitative and qualitative approaches characterizes the social sciences at the turn of the 21st century and contributes to rapid methodological advancement. The diversity and lack of agreed upon standards in design of 'qualitative' approaches makes it more difficult to appraise approaches and their suitable application.

Quantitative research approaches are no longer the acknowledged gold standard in social science research. Quantitative research is defined as "based on testing a theory composed of variables, measured with numbers, and analyzed with statistical procedures, in

order to determine whether the predictive generalizations of the theory hold true" (Creswell, 1994, p. 2). Social science researchers like Gilman long ago:

> ...dismissed the scientific claims of positivistic social scientists altogether in relation to the social sciences: 'A sort of sympathetic magic seems to be involved, the assumption being that if you go through the motions attributable to science then science will result. But it hasn't' (Denzin & Lincoln, 2000, p. 59).

Knorr Cetina has demonstrated that what is know on the basis of the work of scientists doing quantitative research in high energy physics and molecular biology, for example, is determined not only by what is revealed to exist in the natural world but by social determinants such as affinity, necessity, and historical coincidence (Knorr-Cetina, 1999).

This type of analysis illustrates how even those sciences that would be considered 'objectivist' are also socially constructed. Scientists that base their science on observed objects and events in the natural world are objectivists as they are committed to reality as objective. As Knorr Cetina demonstrates however, the 'knowing' of objectivist scientists are also processes of social construction.

Qualitative researchers may measure quantities of phenomena. A quantitative study of the quality of media reporting on anthrax, for example, selected a representative sample of newspapers, measured numbers of words, lines or inches of texts precisely according to preset criteria and used quantitative statistics to analyse and compare subsets of them (Mebane et al., 2003).

Quantitative approaches may be equated with 'objectivism'; with its attempt to show causal relations among phenomena (objects) understood to exist in the natural world. Qualitative approaches have been equated with 'subjectivism', with a focus on discovering the unique internal experience of individual persons. While some researchers believe that both traditions tell different kinds of stories about the social world, a great deal of debate continues as quantitative approaches are commended as providing valuable safeguards from bias and subjectivity while opponents contend these 'silence too many voices' (Denzin & Lincoln, 2000, p. 10). A prominent current definition of qualitative research is by necessity

broad, to embrace the diversity of approaches that have evolved and been adapted to the range of worthy topics and problems in the social sciences. Denzin and Lincoln define qualitative research as:

> ...a situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that make the world visible. These practices transform the world. They turn the world into a series of representations, including field notes, interviews, conversations, photographs, recordings, and memos to the self. At this level, qualitative research involves an interpretive, naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or to interpret, phenomena in terms of the meanings people bring to them (Denzin & Lincoln, 2000, p. 2).

While some practices are widespread, particularly in methods of data collection, Creswell has delineated five traditions within the qualitative research endeavour, including ethnography, biography, phenomenology, grounded theory, and case study that can be distinguished on the basis of their focus, philosophical and theoretical frameworks, analysis, interpretation and reporting conventions. While this type of categorization serves to demonstrate the diversity of practice and its antecedents, it erases the blurring between traditions that arises amongst qualitative researchers as they seek to match and/or adapt various approaches to the research problem they have at hand. This has been termed a 'bricoleur' or 'patchwork' approach and makes classification efforts fraught with problems. Researchers who eschew positivism's causal relationships in favour of more nuanced analyses do not share the positivist need for defining mutually exclusive characteristics. In practice, a wide variety of research approaches are embraced under a qualitative paradigm ranging from quantitative to qualitative methods, and as the diversity of this set of research approaches grows so do the challenges in all-embracing definitions (Denzin & Lincoln, 2000). This view is consistent with others who have attempted to map the diversity of ethnographic research.

> "The field is too broad and diffuse: it escapes the neat categorizations that are demanded by encyclopaedic treatments. Moreover, the intellectual terrain is normally contested: authority and tradition are constantly undermined. It is inevitable that the

> coverage will be incomplete, and that treatments of its subject matter will be matters of debate" (Atkinson et al., 2001, p.1).

What constitutes ethnography is particularly contested ground. Denzin and Lincoln state that:

> "It may be that ethnography is one of the major discourses of the post-modern world, but if this is so, we can no longer take for granted what anyone means by ethnography..." (Denzin & Lincoln, 2000, p. xv).

Definitions of ethnography as traditionally aligned with cultural anthropology are narrow by contemporary standards.

> An ethnography is a description and interpretation of a cultural or social group or system. The researcher examines the group's observable and learned patterns of behaviour, customs, and ways of life (Harris, 1968). As both a process and an outcome of research (Agar, 1980), an ethnography is a product of research, typically found in book-length form. As a process, ethnography involves prolonged observation of the group, typically through participant observation in which the researcher is immersed in the day-to-day lives of the people or through one-on-one interviews with members of the group. The researcher studies the meanings of behaviour, language, and interactions of the culture-sharing group (Creswell, 1998, p. 58).

Although ethnography as practiced by anthropologists evolved to Creswell's description above, ethnographies are claimed as a core practice of sociologists from the 1920's in the US through the traditions of the Chicago School of Sociology. Ethnography has also been widely adapted for use in the health professions, education, communication, information systems and organizational studies. It is adopted with a key assumption that

> 'by entering into a close and relatively prolonged interaction with people... in their everyday lives, ethnographers can better understand the beliefs, motivations, and behaviours of their subjects than by any other approach' (Tedlock, 2000, p. 456).

A contemporary definition that points to the importance of data analysis within ethnography stated:

> Ethnography involves an ongoing attempt to place specific encounters, events, and understandings into a fuller, more

> meaningful context. It is not simply the production of new information or research data, but rather the way in which such information or data are transformed into a written or visual form. As a result, it combines research design, fieldwork, and various methods of inquiry to produce historically, politically, and personally situated accounts, descriptions, interpretations, and representations of human lives (Tedlock, 2000, p. 455).

Even this broad definition may not get at the essential features of a given approach, as the following comparison of four approaches illustrates.

4.3 The Four approaches compared and contrasted

The four exemplars that I evaluate demonstrate the variety of insights into knowledge translation that can be obtained using this diverse set of research approaches, all of which can be embraced under a qualitative and social constructivist paradigm. In this section, I will explore the distinct advantage of each approach, including the types of knowledge translation questions that can be most usefully explored. But first I will compare and contrast the research approach in terms of the type, aims, questions, analysis and epistemological frameworks that are represented in this set (See Table 6).

4.3.1 Research typology

The labels associated with each approach are respectively Cultural Analysis (Golden-Biddle & Rao, 1997), Grounded Theory (Locke & Golden-Biddle, 1997), Critical Ethnography (Myers & Young, 1997) and Institutional Ethnography (Mykhalovskiy, 2001).

This set of studies illustrates the divergences amongst research approaches that do not fall under quantitative and positivist paradigms (see Table 6). This divergence is perhaps not surprising, given the lack of agreement on a definition or standard description of qualitative research generally, and ethnography in particular. So, while Denzin and Lincoln characterize qualitative researchers as studying things 'in terms of the meanings people bring to them' (Denzin & Lincoln, 2000, p. 2), this is not true of this set of studies as only the grounded theory study of Locke and Golden-Biddle (1997) is focused on 'meaning'

explicitly, in their investigation of the meaning of 'contribution'. What is not discovered through this investigation of theoretical operationalization, are how these texts actually contribute in the 'real' world.

For the Locke and Golden-Biddle 1997 study alone, no fieldwork was conducted. If being conducted in a 'natural setting' is used as a defining criterion, (as is suggested by the Denzin and Lincoln definition), then the Locke and Golden-Biddle study might not be considered a qualitative study. Yet the Locke and Golden-Biddle study can be usefully compared with the Mykhalovskiy study which also had texts as a central focus (Denzin & Lincoln, 2000, p. 2). Likewise, the Mykhalovskiy study fits poorly under umbrella definitions of qualitative and ethnographic approaches, since it is more interested in how texts organize work than with the lived experiences or cultural attributes of the people in the work setting. That is, unless they are considered qualitative ethnography because they derive from original fieldwork.

Table 6:

A Summary and contrast of four social constructivist research approaches

Exemplar researcher	Karen Golden-Biddle & Rao	Locke & Golden-Biddle	Michael Myers and Young	Eric Mykhalovskiy
Research type*	Cultural Analysis	Grounded Theory	Critical Ethnography	Institutional Ethnography
Research topic	Role identity in a charitable health organization	Construction of academic contribution	Information system development in mental health	Health services research texts as active knowledge
Research aims	To confirm or extend organizational theory	To develop theory that explains social processes that are grounded (derived) in empirical data	To understand the relationships among knowledge, culture, society and action	To make the local organization of everyday work practices by translocal ruling relations visible
Research question	What routine habits and thinking characterize a particular setting?	What social phenomena are found in this setting and what do they mean to the human subjects?	What forces are shaping this context?	How does the integration of research texts happen the way that it does in a work process?
Analysis	Of organizational culture	Of repeating constructs emerging from data	Of hidden agendas, power centres and other taken-for-granted aspects of social reality	Of invisible, interconnected, taken-for-granted forms of governance that rule everyday life
Epistemological frameworks	Frameworks for understanding human organizations i.e., organizational and cultural theory	Frameworks for interpreting subjective experience, such as symbolic interactionism	A framework combining the Hermeneutics approach of Gadamer with the critical theory of Habermas	A critical, feminist based framework of the social organization of knowledge

* Standardization of methods does not exist in practice. In addition, the epistemic frameworks and methodologies presented are flexible enough to be adapted to diverse research challenges and interests. The information in this table is most correctly applied to these approaches as they have been taken up by this set of exemplar researchers and studies.

While Creswell describes ethnography as a description and interpretation of a cultural or social group, only critical ethnography as practiced by Myers has specifically formulated the research aim in terms of 'culture'. Both Myers and Golden-Biddle and Rao engaged in prolonged fieldwork. Though Mykhalovskiy became 'familiar' with his study setting through observation conducted in other research projects, the analysis was based on eight targeted interviews. The latter therefore might not be considered ethnography by researchers like Myers, whose defining criterion for ethnography appears to be prolonged periods of fieldwork.

4.3.2 A common social constructivist paradigm

Despite the difficulties in classifying the four approaches they all understand knowledge as socially constructed and so could be classified broadly within the social constructivist paradigm. Social constructivism has been defined as:

> A family of theories and methodologies in social sciences explaining how individuals and groups "produce" social reality by generating meanings and interpreting relationships, interactions and environments. [Social constructivist] theories of organization focus on communication flows, power asymmetries and change processes. They share an assumption that individuals and organizations move in a socially constructed reality, which had been intersubjectively agreed upon... (Magala, 2002, p. 23).

This is but one contemporary definition that can be nominally traced to a landmark 1966 treatise on the sociology of knowledge by Berger and Luckman that challenged more traditional conceptualizations of knowledge as existing independent of human creation (Berger & Luckmann, 1966).

> [S]ocial order is a human product. Or, more precisely, an ongoing human production. It is produced by man in the course of his ongoing externalization. Social order is not biologically given or derived from any biological *data* in its empirical manifestations. Social order, needless to add, is also not given in man's natural environment, though particular features of this may be factors in determining certain features of a social order (for example, its economic or technological arrangements). Social order is not part of the "nature of things," and it cannot be derived from the "laws of

> nature." Social order exists *only* as a product of human activity. No other ontological status may be ascribed to it without hopelessly obfuscating its empirical manifestations. Both in its genesis (social order is the result of past human activity) and its existence in any instant of time (social order exists only and insofar as human activity continues to produce it) it is a human product (Berger & Luckmann, 1966, p. 52).

Though Berger and Luckmans' (1966) seminal work stimulated discussion on the social construction, what is meant by the social construction of knowledge is not identical across approaches. Here, in their own words, is how the exemplar researchers relate their approach to a social constructivist paradigm. Golden Biddle and Rao (1997) focus on the shared meaning of role that is constructed by board members as a group:

> [D]rawing on the social constructionist perspective (Rabinow and Sullivan 1979), we conceptualize the board role differently than the one developed in agency theory. In contrast to viewing the board role as an objective entity comprised primarily of fiduciary and legal considerations, we see this role as constitutive of, and inseparable from, the shared meanings held by organizational members, e.g., employees, donors, and activists elected to the board. That is, the board role is construed, enacted, and interpreted during everyday, face-to-face interactions among members (Geertz 1983, Schutz 1976) within particular organizational arenas. Thus, the members' constructions of the board role may include, but are not necessarily limited to, fiduciary and legal attributes (Golden-Biddle & Rao, 1997, p. 594).

Golden-Biddle and Locke explain the usefulness of their approach as complementary to neopositivist approaches with one providing a 'worms eye view'; the other a 'birds eye view' (Golden-Biddle & Locke, 1993). They further acknowledge the extent to which the social is constructed and not discovered as objective by explaining:

> Few of us today would accept the proposition that researchers go into the field and gather up the pieces of reality lying around waiting to be gleaned. We appreciate instead that researchers, as well as organization members, shape the experienced reality... (Golden-Biddle & Locke, 1997, p. 8).

The authors relate their 1997 study of contribution to social constructivism as follows:

> Focusing on the "how" of contribution is grounded in two major assumptions: the socially constructed nature of scientific knowledge... That scientific knowledge is socially constructed is an increasingly accepted idea among sociologists of science... as well as among some researchers in organizational studies... A socially constructed view of science suggests that knowledge cannot be known separately from the knower, because the content of knowledge is influenced by social practices and interactions, and because the determination of what ideas count as knowledge is a meaning-making activity "enacted" in particular communities (Locke & Golden-Biddle, 1997, p. 1024).

Myers' following description of ethnography highlights it's usefulness for IS practices:

> Ethnographic research is a useful method for analyzing the institutional contexts of information systems practices, with the notion of context being the social construction of meaningful frameworks. When the form of ethnographic research known as critical ethnography is used (although this is not the only one), the findings can be scrutinized for otherwise hidden agendas, power centers and other taken-for-granted aspects of social reality (Myers, 1997, p. 295).

Myers' definition of context as 'the social construction of meaningful frameworks' is similar to the understanding conveyed by standard dictionary definitions of a context as a 'situation within which something exists or happens, and that can help explain it' (Cambridge Dictionary, 2002).

Mykhalovskiy's view of social construction is based on Smith's conceptualization of knowledge as socially and materially organized, as produced by individuals in actual settings and as organized by and defining social relations' (Smith, 1990a, p. 62). He therefore specifies 'context' more precisely than Myers does. Mykhalovskiy explores actual settings and the actions of individuals who are doing knowledge translation. Instead of conceptualizing context as 'hidden agenda' or 'power' as Myers does, Mykhalovskiy conducts ethnographic investigation of 'who is doing what'. He focuses on how a report is used by administrators (knowledge practice) to change doctor's clinical practice. He treats these actions as elements of 'the social relations' of health care reform. His stated interest is to:

> [E]xplore these relations as textual practice – as the interpretive processes and social relations through which the health services research study was activated by readers, both as part of their managerial work and as an organizer of it. A focus of my analysis is how, through its intertextual presence, health services research helps to coordinate medical and managerial practices and rationalities into medico-administrative relations (Mykhalovskiy, 2001, p. 271).

Mykhalovskiy's study focuses on the activation of a text that starts with the people's work practices of the organization but links these to knowledge translation practices originating beyond the hospital within the health services research organization that produced the report. In institutional ethnography, texts are recognized as important organizers and mediators of work practices, as this study illustrates, but are not the exclusive focus of analysis. Seminal work in institutional ethnography has suggested the kinds of linkages to be explored. For instance, Smith writes about the everyday work practices of teachers and mothers whose social organization and coordination accomplish education the way it is observed to happen, through ruling social relations that include institutional policy and practice, professional and educational discourse and media-circulated dominant ideology (Smith, 1987).

4.3.3 Academic affiliations and theoretical underpinnings

This set of exemplar studies highlights the role of social science disciplines, such as sociology and anthropology, as source disciplines for applied sciences like organizational studies and health informatics. The theories and methods of source disciplines are taken up and applied to the research problems of the applied discipline. Institutional ethnography as practiced by Mykhalovskiy arose from sociology, as did the grounded theory approach applied by Locke and Golden-Biddle. Critical ethnography as practiced by Myers and the cultural analytic approach of Golden-Biddle and Rao would cite anthropology as a source discipline, along with information and organizational sciences respectively.

Studies from the management science researchers Golden-Biddle, Locke and colleagues, are from a discipline that seeks to better manage organizations as distinct human

enterprises within society. The discipline claims organizational theory as its foundation. Organizational theory is a middle level theory that links evidence to behaviours. It does not seek to explain universal principles, as would a general or high-level theory, or simply represent ideas about observations as low-level theories would. Organizational theory can be defined as "The study of how organizations function and how they affect and are affected by the environment in which they operate" (Jones, 1998, p. 11). Three components are: organizational structure, culture, and design. Structure is seen as "the formal system of task and authority relationships that control how people are to cooperate and use resources to achieve the organization's goals" (Jones, 1998, p. 11). Design is "the process by which managers select and manage various dimensions and components of organizational structure and culture so that an organization can control the activities necessary to achieve its goals" (Jones, 1998, p. 11). Culture is the "set of shared values and norms that control organizational members' interactions with each other and with people outside the organization" (Jones, 1998, p. 11). An ontological question of how reality is known arises, as convergence of meaning across participants is assumed. Management as part of the organization participates in the same meanings, concepts and understandings of reality as others. Yet, as the above descriptions indicate, management science researchers would seem to be positioned as if they were outside of the organization as objective observers. How the 'culture' is socially organized within the organization is not accessible for investigation.

Both critical and institutional ethnography seek to understand the world from inside it and are 'committed' to support social change. For example, rather than seeking to better control the social, critical ethnography may be undertaken to release people from unwarranted constraints (Klein & Myers, 1999, p. 69). Myers reports that he selected critical ethnography from among the many types of ethnography for its unique focus on the "relationships among knowledge, culture, society and action" (Myers, 1997, p. 277). He identifies the goal of ethnographic research as an improved "understanding of human thought and action through interpretation of human actions in context" (Myers, 1997, p. 277).

The information systems (IS) discipline that qualitative researchers such as Myers align themselves with is undergoing what some see as an identity crisis in defining its core properties (Benbasat & Zmud, 2003). Senior scholars argue that keeping technology the focus of IS is critical to establishing an identity and maintaining disciplinary legitimacy properties (Orlikowski & Iacono, 2001; Benbasat & Zmud, 2003). The IT artifact is therefore placed at the centre of a nomological[6] net that constrains IS research to the investigation of the artefact's causal relationships to surrounding tasks, structures, and contexts in decreasing order of proximity (Benbasat & Zmud, 2003). Other types of research, which focus on the social as a way of aligning the social with the technical could thereby be claimed to be outside the realm of the scope of the discipline of information systems. The organization and individual only come into the research agendas in relation to other constructs and a focus on the broader institutional, social and historical forces that are placed outside the net of what is considered IS research according to this nomological net (Benbasat & Zmud, 2003, p. 186). Social construction is then limited to the meaning of technology, rather than implicated in its literal construction. Benbasat & Zmud (2003) also align IS with the theoretical, methodological and topical interests from the academic perspectives of "organization science, computer science, information science, engineering, economics, and management science/operations research" (p. 185) pointedly excluding the sociological, philosophical or anthropological underpinnings acknowledged by IS researchers like Myers. The contested ground of IS research can probably be understood as similar to the challenges to traditional positivist paradigms that have been occurring within the social sciences for decades. This approach carries strong political overtones, for example, that science and technology 'should' operate outside of human analysis, values and controls.

Smith uses the term 'institutional' to "identify a complex of relations forming part of the ruling apparatus, organized around a distinctive function – education, health care, law, and the like" while ethnography refers to a commitment to explore, describe and analyse such a complex of relations, not in the abstract, but from a standpoint of people in the everyday world whose work is thereby organized (Smith, 1987, p. 160).

[6] Meaning pertaining to physical and logical laws.

IE has since been applied by researchers to trace social organization from a standpoint in everyday work practices in health, government, corporate and legal systems to social relations far removed from the workplace geographically and in time (Campbell & Manicom, 1995). A distinctive feature is the use of IE to investigate how texts mediate the organization of local work as part of a web of institutional ruling practices. The ability of IE to span micro and macro spheres overcomes the classic micro/macro problem of methods pertaining to one sphere missing their interconnectedness to other spheres.

4.3.4 Topics, aims and questions orienting research efforts

The diversity of aims of research, which flow from the disciplinary topics of interests and the practical questions and problems they seek to address, are evident in this set of exemplary research. Golden-Biddle and Rao, in their investigation of role identity in a charitable health organization, seek to confirm or extend organizational theory by examining the patterns as they appear in the qualitative data they have collected from interviews, participant observations at meetings and immersion in the setting. Locke and Golden-Biddle examine the construction of academic contribution in organizational studies to develop theory that explains social processes that are grounded in (derived from) empirical data, by investigating the social phenomena found in a setting and their meaning to the human subjects. Myers and Young investigate information system development in mental health to better understand the relationships among knowledge, culture, society and action in particular; asking 'What forces are shaping this context?' Mykhalovskiy investigates the use of health services research texts within hospital settings, to discover how the texts themselves 'carry' organization and influence practice.

Each approach could be applied to produce research that could conceivably improve health knowledge translation and ultimately health outcomes. Possible applications for each will be briefly outlined in this section and then revisited in more depth in the next.

The qualitative research approach of Golden-Biddle and Rao illustrates a number of features that could be usefully applied to address different aspects of the knowledge translation cycle. This approach could be applied in other settings; in other locations within

an organizational hierarchy; and used as a starting point for any number of theories about organizational culture, as defined in this approach. Service delivery organizations, including hospital and other sites of care, are where most of the decisions in the health region are made and so are obvious sites for research. The Golden-Biddle and Rao study typifies those approaches that seek to understand shared meanings. It would be useful to examine how meanings about research or other types of evidence are successfully shared, negotiated and maintained over time in Canadian health care organizations. Lastly, it is not clear whether and how organizational theory developed in the US for for-profit organizations is applicable to Canadian health care contexts, and so there would appear to be some opportunities for cross border investigations.

In relation to knowledge translation, grounded theory could also be applied to develop theories relevant to the cycles and processes implied by the CIHR knowledge translation framework. Theory could be developed to shed light on knowledge creation, synthesis and uptake as social processes and to clarify the meaning knowledge artifacts have to the people at different locations in the health care and research communities. The findings could then be applied to marketing and communication efforts.

A critical ethnography similar to the one conducted by Myers and Young in the setting of a mental health organization could be envisioned for a knowledge translation project implementing information and communication technology. Critical ethnographers could investigate the social and historical forces that were constraining the rapid progress of research translation. To the extent that hidden agendas and power structures were unrecognized, this approach would increase awareness of their importance. To the extent that the existing power structures constraining knowledge translation efforts could be altered, this approach could lead to fundamental change. If change were not politically feasible it would, at best, indicate where further efforts were likely to be futile.

The Mykhalovskiy study directly demonstrated the usefulness of institutional ethnography for investigating knowledge translation in health organizations. Mykhalovskiy's intent was to investigate the relationship of discourse and action and to "make visible how health services research operates as social practice – that points to how it works as an active

constituent of the institutional restructuring and rationalization of hospital care" (Mykhalovskiy, 2001, p. 289). He was able to demonstrate "how health services research is implicated in hospital restructuring through the organization of local work activities and their coordination into sequences of action that link what is occurring [at the local hospital] with broader projects of hospital reform" (Mykhalovskiy, 2001, p. 289). He also demonstrated how health services research worked to overcome physician resistance to reform.

The conceptual and analytic features of institutional ethnography have been demonstrated in a wide range of settings to be applicable to knowledge translation in health care. Decision-making processes have been mapped in municipal government (Turner, 2001), the legal system (Pence, 2001) as well as other health care settings (Campbell & Manicom, 1995; Campbell & Gregor, 2002). Mykhalovskiy, for example, has also participated in an investigation that sought to make the self-management work of patients with a chronic illness visible. This study documents the active efforts and skills applied as patients seek to inform themselves, interact with doctors, make the best decisions and follow through on often demanding treatment regimens (Making Care Visible Working Group et al., 2002).

While many approaches seek to explain causal factors, institutional ethnography seeks to explicate or make explicit how social phenomena happen the way that they do. It is the focus of institutional ethnography on the actual mechanics of knowledge use – how texts are activated in local settings – that make it particularly useful for knowledge translation research. The power for change may be at the point in time at which decision-making is occurring (or knowledge is being translated into practice). That point in time is what institutional ethnography has been developed to examine.

4.3.5 Divergent epistemic frameworks

In a social constructivist paradigm, knowledge cannot be held to be neutral or value-free. Rather, the interpretive frame must be considered as relevant to the interests of the researcher. Though the exemplary approaches have various ways of viewing knowledge as

socially constructed, each has a distinct framework for understanding what knowledge is (epistemology) and how it can be obtained. These can be thought of as a selection of lenses, each focusing in on a different aspect of the social. A divergent set of influences can be traced from the set of studies examined in this paper. In brief, qualitative researchers like Golden-Biddle and Rao look for understandings and processes that reveal meanings of social phenomena shared, negotiated and maintained within human organizations, and relate this to what would be expected within a perspective shaped by organizational theory. Grounded theory researchers like Locke and Golden-Biddle investigate subjective understanding of meanings of social phenomena by letting repeated themes emerge from their data without reference to prior theory. Critical ethnography seeks to unveil hidden and powerful forces in the broader social and historical context that act as unwarranted constraints to the social accomplishment of collective enterprises. Institutional ethnography locates a research lens from the standpoint of participants' everyday experience, and looks outward to understand how social phenomena, often mediated by texts, are organized within local settings. Each of these distinct frames and their origins will now be explored in more depth.

Golden-Biddle and Rao and Locke and Golden-Biddle cite the earlier work of sociology of science investigators like Knorr-Cetina to support their approach (Golden-Biddle & Rao, 1997; Locke & Golden-Biddle, 1997). Knorr Cetina has roots in ethnomethodological approaches from both anthropological and sociological traditions. Her research investigates the 'manufacture' of knowledge particularly in the sciences (Knorr-Cetina, 1981; Knorr-Cetina, 1999). Galloway, 2002 described Knorr Cetina's perspective in the following way.

> [S]hared interests are not a given, and must be actively negotiated and maintained in very context-specific ways, and yet always part of larger networks of interaction (Galloway, 2002, p. 1).

The work of Golden-Biddle and Rao as well as Locke and Golden-Biddle has adapted the methods that have arisen from this philosophical base of science researchers to organizational settings and organizational science respectively. Their investigations are designed to demonstrate how shared meanings are negotiated and maintained in these contexts (Golden-Biddle & Rao, 1997; Locke & Golden-Biddle, 1997).

The philosophical foundation of grounded theory, as applied in the study by Locke and Golden Biddle (Locke & Golden-Biddle, 1997), was described as follows in a recent review:

> Both grounded theory and ethnography have common roots in Chicago School sociology with its pragmatist philosophical foundations. Anselm Strauss brought Chicago School pragmatist, symbolic interactionist and field research traditions to grounded theory while Barney G. Glaser's emphasis on rigorous methods and empiricism derived from his training in survey research with Paul Lazarsfeld at Columbia University. Glaser and Strauss (1967) developed grounded theory methods to codify explicit procedures for qualitative data analysis and simultaneously, to construct useful middle-range theories from the data (Charmaz & Mitchell, 2001 p. 178).

Symbolic interactionists conceptualize social reality as "symbolic, communicated, and subjective in both form and content" (Symbolic interactionism, 2004, p. 1). They postulate a "quest for an understanding of the logic-in-use deployed by people as they define themselves and the situations that confront them" (Rock, 2001, p. 27). Chicagoan symbolic interactionism is associated with "concerns with emergent meanings and everyday work as a practical accomplishment" (Charmaz & Mitchell, 2001, p. 178).

Both Golden-Biddle and Locke orient their work to organizational theory that, unlike the social constructivist paradigm they have adopted, generally treats concepts as descriptions of objective reality. In the study by Golden-Biddle and Rao, their use of the constructivist approach leads to a critique of agency theory (Golden-Biddle & Rao, 1997). Agency theory had its origins more than 70 years ago in the work of Berle and Means, theorizing the relationship between the modern corporation and private property (Berle & Means, 1932). Agency theory is prominent in the managerial, accounting and auditing literature as it plays such a prominent role in the design of control mechanisms directed at the governance and managerial levels (Scott, 2003). Within the institutional ethnographic approach the structures, processes and controls that are elements of that theory, assume that organizations would be explored as important parts of the apparatus by which institutional ruling relations are conducted.

The philosophical basis of CE according to Myers is critical hermeneutics, which integrates the critical theory of Jürgen Habermas (Habermas, 1984), with the hermeneutics of Hans Georg Gadamer (Gadamer, 1977). Hermeneutics seeks to make sense of the meaning of text by discovering hidden and layered meanings while recognizing an emerging dialogue between text and interpreter, which contributes additional layers of meaning (as well as text). Habermas's critical approach contributes to the understanding that each interpretation is only one of many alternative interpretations.

As distinct from other hermeneutic approaches, which seek to capture the definitive objective meaning of a text or holistic approaches that seek to understand other cultures in their own terms, a critical ethnographic approach understands all social inquiry as historical, exploratory and open to further interpretation, critique and revision (Myers, 1997). The critical ethnographer attempts to make transparent in their interpretations, how a topic is situated within historical, social, economic and political relationships (Myers, 1997). This forms the basis of an analysis that claims to be distinctive in its attempt to question underlying assumptions and ferret out hidden agendas and power centres (Myers, 1997). To do this, the analysis "moves beyond the immediate narratives of the subjects to broader processes within which the narratives are embedded" (Myers, 1997, p. 284).

Mykhalovskiy reports that while his aim was "to produce an analysis that was not narrowly orthodox or theoretically closed" his "theoretical commitment" was to ground his work in the "relations of ruling within contemporary capitalism" (Mykhalovskiy, 1999, p. 8, 9). In doing so he relies on D. E. Smith's writings. According to Townsend, Smith acknowledges multiple early influences including Wittgenstein for his recognition of the "inconsistencies between the ways in which people talked about their lives and the ways in which they actually lived", Garfinkel for challenging the "taken-for-granted way in which people live" and Marx for an "ontology grounded in the activities of actual subjects beyond the immediately observable and known." (Townsend, 1992 p. 19). Here is Smith's description of her concept of ruling relations:

> The phrase 'relations of ruling' designates the complex of extra-(trans-) local relations that provide in contemporary societies a specialization of organization, control, and initiative. They are those

> forms that we know as bureaucracy, administration, management, professional organization, and the media. They include also the complex of discourses, scientific, technical, and cultural, that intersect, interpenetrate, and coordinate the multiple sites of ruling (Smith, 1990b, p. 6).

A prominent scheme used by information systems scholars and others, classifies research approaches into interpretive, critical and positivist on the basis of underlying assumptions about knowledge and how it is obtained, that is, its epistemological basis (Klein & Myers, 1999). While acknowledging that these categories need not be pure or mutually exclusive, the following assumptions are matched to analytic approaches as follows: interpretivists assume that reality is only accessible "through social constructions such as language, consciousness and shared meanings"; positivists assume that reality is objective and can be measured independently of the impact of researcher or measuring tool; and critical researchers assume that reality is historically as well as socially constituted in ways that are not clear to participants and that critique can lead to emancipation from unwarranted domination (Klein & Myers, 1999, p. 69).

The grounded theory study of Locke and Golden-Biddle has roots in a positivist approach to qualitative analysis. If Klein and Myer's classification is accepted, then the other studies in this set could be classified as interpretive, as they are based on assumptions that "knowledge of reality is gained only through social constructions such a language, consciousness, shared meanings, documents, tools, and other artifacts" (Klein & Myers, 1999, p. 69). Each approach is based on a social constructivist paradigm as previously discussed. Yet the studies by Myers and Young and Mykhalovskiy could also be classified as critical. This again illustrates the complexity inherent in current classification schemata.

4.3.6 Relating to theory

The place of theory within the research approaches represented by the selected work of these four investigators also varies. One way of thinking about theories is to categorize them as substantive or conceptual. Substantive theory comprises a set of interrelated statements that can be tentatively proved or disproved by empirical investigation (Mouzelis,

1995, p. 15). Substantive theories can therefore be investigated with quantitative methods. Social scientists initially anticipated that laws would be found that apply universally to human societies in the way that universal laws of physics had been discovered in the natural sciences. If this were possible, then perhaps the technological success that has been realized through application of physics would be mirrored in successful prediction and engineering of human societies. These days few believe in such universality, though midlevel theories with an empirical basis are accepted as applicable to the specific contexts to which they pertain.

Management sciences have developed an extensive midlevel theoretical basis for organizational studies. Conceptual theories provide a structured way of thinking about given contexts that are useful in practical and perhaps strategic ways, but do not aspire to the same level of universality as substantive studies. Nevertheless, even these theories would seem to commit the researcher/theorist to positivist science approaches. Research projects that are oriented towards developing, evaluating or extending theory would seem to be based on the assumption that social phenomena are independent of their local accomplishment and therefore the findings generalizable and useful for prediction and control. If this is the case then there is an irremediable discrepancy between organizational theory and the social constructivist research conducted by Golden-Biddle and Rao and Locke and Golden-Biddle. For example, Golden-Biddle and Rao's critique of agency theory is that their findings are not best explained by this theory. That belies an assumption that the theory should have been generalizable to the setting of their study. Their extension of the theory would seem to be based on an assumption that their findings would be applicable in other settings.

Mykhalovskiy and Myers, though their research has its roots in theoretical constructs, do not state their purpose in relation to theory development. Mykhalovskiy specifically claims to be attempting to disrupt conventional ways of thinking about health services research. As Smith explains, institutional ethnography's

> ...methods of thinking and its analytic procedures must preserve the presence of the active and experiencing subject ... Methods of thinking could, I suppose, be described as "theories," but to do so is to suggest that I am concerned with formulations that will explain phenomena, when what I am primarily concerned with is how to

> conceptualize or how to constitute the textuality of social phenomena (Smith, 1987, p. 105,106).
>
> So the epistemology must also be an ontology, a method of thinking (a theory if you like) about how the social can be said to exist so that we can describe it in ways that can be checked back to how it actually is. Therefore, I shall argue that by the very character of the social itself that lies in the ongoing active recreation of a world in common, this possibly exists (Smith, 1987, p. 122).

The first exemplar study by Golden-Biddle and Rao was undertaken to find support for and/or extend existing organizational theory (Golden-Biddle & Rao, 1997). It illustrates the use of ethnographic fieldwork to validate and extend theory of role enactment. The second by Locke and Golden-Biddle uses 'grounded theory' to develop theory where none currently exists (Locke & Golden-Biddle, 1997). It develops a grounded theory of how contributions to the knowledge base are constructed by organizational studies scholars.

The grounded theory approach first proposed by Glaser and Strauss has been taken up by researchers from many disciplines, in multiple variations, for over three decades (Glaser & Strauss, 1967; Corbin & Strauss, 1998). It is frequently used to investigate the experience of patients as well as providers within health care settings. A grounded theory approach results in a theory that can be tested and validated by positivist approaches presumably. It seeks explanation rather than explication. An explanation is part of the positivist approach that seeks to associate or demonstrate a causal relationship between a variable or factor and a phenomena. Explication uncovers how social practices happen the way they do. To explicate requires an acceptance of what is found as social practice and a commitment to investigating them as social phenomenon.

Interpretive approaches seek meaning in context. Myers sees more traditional positivist approaches as restricting a full exploration of the social context because they either control for social context as a set of interfering variables (noise) that are then factored out or operationalized as control variables that are then varied experimentally to identify cause and effect relationships. While recognizing that positivist approaches produce useful insights, researchers like Myers see interpretive approaches as a means of overcoming a perceived superficiality in IS research in the commonly used forms of surveys, laboratory experiments

and descriptive case studies. Context is treated as the socially constructed reality of a group in interpretive approaches, with the analytic task being to unpack the webs of meaning.

Myers and Young reflect back with their study, as to the extent to which their findings fit with a theory: "We are interested in seeing how and in what ways information systems development can be viewed as a process of colonization of the lifeworld using the Habermasian model adapted by Broadbent et al. (1991)" (Myers & Young, 1997, p. 227). Habermas understands society as ideationally steered by ideas based on 'lifeworld' demands (Myers & Young, 1997). Lifeworlds are understood to be communicatively formed beliefs that guide behaviour and which have elements of culture, society and personality. If the steering mechanisms are not based on lifeworld demands, they can be seen as exhibiting colonizing tendencies. As an example, Myers cites Broadbent arguing that the UK government was acting through the Department of Health to colonize the internal lifeworld of the National Health Service (NHS), by imposing steering mechanisms including information systems consistent with the government lifeworld but not that of the NHS. Myers and Young found that their analysis did not entirely support this theory, as clinical users of the systems supported the development of mental health information system, perhaps because they have "come to share some of the overall goals and objectives of the Government." (Myers & Young, 1997, p. 238).

Institutional ethnography seeks to make visible how the social is organized by ruling relations, but it does not seek to develop, validate or extend theory. The emphasis on revealing ruling relations would appear similar to the way in which critical ethnography may examine 'lifeworlds', steering media and system mechanisms. Institutional ethnography, however, avoids the use of formal theory, insisting on studying the world, as enacted in everyday sites, as an ontology. This research relies on an ontology of what 'is' being socially organized. The goal of inquiry is to explicate <u>how</u> that social organization works. Following Smith, the inquiry follows traces in the everyday outward, toward the social relations extending far beyond the local, and frequently mediated by texts (Smith, 1987).

4.3.7 Common data sources, divergent analysis

The methods of collecting data and the data sources are similar across the four exemplar approaches though the analysis is divergent. With the exception of one study (Locke and Golden-Biddle) the investigators that produced this set of research engaged in ethnographic fieldwork. Studies used participant observation, interviewing and the collection and analysis of work related documents – all methods widely employed in the social sciences. The study by Locke and Golden-Biddle was distinctive in including only published literature as data. Only Mykhalovskiy examined texts as actively organizing the social.

The analytic styles were strikingly divergent and follow logically from the study purpose and epistemological foundations of the diverse research approaches: Golden-Biddle and Rao is part of a larger organizational cultural analysis conducted for the organization; Locke and Golden-Biddle conducted a grounded theory analysis of textual data; the critical analysis of Myers and Young focused on revealing hidden agendas, power centres and other taken-for-granted aspects of social reality, and Mykhalovskiy's instutional analysis was undertaken to explicate the invisible, interconnected, taken-for-granted forms of governance that rule everyday life.

The following excerpts are from the data that were quoted by the researchers to illustrate their knowledge claims. Golden-Biddle and Rao use the talk in meeting transcripts to illustrate their contention that board members have a role conflict in maintaining both their role as vigilant volunteers and as a friendly supporting family members when they challenge the senior leadership committee over excessive travel expenses in the budget. The following piece of a transcribed board meeting demonstrates clearly a thin attempt to maintain friendliness then a clear breach.

> CLARA: "I want to thank the committee in response to what I have heard here today. Regarding travel, though, I would hope that the committee would continue to look at the travel expenditures." Then she asks whether there is still a cap on increases in salaries, to which the committee responds yes. Then she adds: "The reduction in unrestricted legacy funds bothers me. Why does the trend keep declining?" The committee responds to her that these present times are unusual.

> CLARA: "Then if that is the case, don't tell us to go out and raise more money, for you'll just spend it on administration" (Golden-Biddle & Rao, 1997, p. 606).

Locke and Golden-Biddle use excerpts from the published research to illustrate how their grounded theory of contribution emerged from their data. One of the quotes they provide is from a research paper in which the researchers are constructing their contribution to an institutional theory that is part of organizational studies. They illustrate a number of strategies (like identifying lacunae) for constructing contribution that emerge from a thematic analysis. The following is an example of rhetorical practices associated with 'problematizing a literature as incomplete':

> Institutional theory provides a useful, but incomplete, view of how organizations cope with conflicting, inconsistent demands. (Elsback & Sutton, 1993: 700: 39-40). While the existing literature on institutionalization relies heavily on the role of myths... it is sketchy about the origins of such myths (Ritti & Silver, 1986: 9: 1–3) (Locke & Golden-Biddle, 1997, p. 1045).

The lacunae or gap in the literature that Ritti and Silver have identified is the origin of the myths (that they claim institutional theory relies upon to explain how organizations cope with conflicting, inconsistent demands). Presumably their research contributes to the narrowing of this gap.

Myers and Young, like Golden-Biddle and Rao, use discussion from the transcript of a meeting of the information system users' group. The following excerpt is used as evidence of hidden agendas and how deeply the system 'penetrates' social control. The project leader has revealed that time-based costing should be part of the initial rollout of the system.

> User 1: I am worried about perceptions of what this whole project has been about, they are going to say this has been a big brother project. It's been a way to keep a track on us, so if I'm not performing they can sack me.
>
> IS: No! What I get from time based (costing), the impression I got, costing is a report so we can get extra funding from the government."
>
> User 1: I know what you are telling me P. What I am saying is, I brought this up the first time you mentioned it, that I thought it would not be a good idea, to be in this project, because people are

> going to see this whole project as being based around that particular item.
>
> User 3: What we want is it to be taken on, and feel good about it, without feeling paranoid about it.
>
> User 1: That's right.
>
> User 3: Because they are already paranoid about it...
>
> User 1: They are going to sabotage it (Myers, 1997, p. 291).

Mykhalovskiy used part of an interview transcript to demonstrate how a health services research report was used to allay physician concerns about the safety of reduced length of stay in hospitals for cardiac care patients:

> All we had was the information that (the vice-president) has presented and we had the ICES (Chen/Naylor) report... and then I guess the other literature, studies... And the physicians were really concerned that if they had a pathway in place that was okay. But they wanted to make sure it was validated... The physicians were saying. 'if there's documents' – this is what you call evidence-based medicine – 'if there's clear evidence out there that we can decrease our length of stay x number of days without compromising our patients then that's fine. But I want to see your documents...' So when they saw the report that kind of swayed them into saying yea, 'okay we'll look at our practices.' (Director of Patient Care, Roxborough Hospital) (Mykhalovskiy, 2001, p. 287).

In this section I've shown how the different approaches can use similar data collection methods but different analytic strategies. This implies that the analytic approach can be used to distinguish them. What each investigator is looking for in the data, in the social construction, is defining of their approach. Golden-Biddle and Rao analyse role and role conflict -- cultural constructs. Locke and Golden-Biddle analyse rhetorical practices of contribution. Myers analyses social control. Mykhalovskiy analyses how a research text is actually used in a hospital setting to mediate the work of health care delivery. Next I will consider the usefulness of each of these analytic approaches to knowledge translation research.

4.4 Research for knowledge translation

Given that knowledge translation occurs within a complex system of interactions among researchers and users, a social constructivist paradigm based on an understanding of human endeavours as produced by individuals and groups, is a useful philosophical grounding for research approaches. Yet among the approaches based on social constructivism is a wide and diverse range of epistemological and methodological approaches. While this extends the range of application it also makes the choice of which approach to adopt to investigate knowledge translation, far from straightforward. This chapter has described and reviewed four studies based on divergent approaches. This section supplies a summary of the potential utility of each approach, to produce empirical findings of utility to the improvement of knowledge translation practices in Canadian health care settings.

4.4.1 Organizational cultural analysis

The research approach exemplified by Golden-Biddle and Rao provides a template for research that may usefully employed to investigate the relationship between culture understood as shared meaning and knowledge translation practices in health care organizations (Golden-Biddle & Rao, 1997). Organizational culture analysis draws on anthropological conceptualizations of culture including a wide range of related constructs such as "customary dress, language, behaviour, beliefs, values, assumptions, symbols of status and authority, myths, ceremonies and rituals, and modes of deference and subversion; all of which help to define an organization's character and norms" (Scott et al., 2003, p. 925). Within a cultural analysis, therefore, knowledge can be investigated as a social construction of how shared meaning is negotiated and maintained within organizations as Golden-Biddle and Rao investigated organizational identity (Golden-Biddle & Rao, 1997). The concept of cultural shared meanings, which includes the processes of negotiation, sharing and maintenance, is comparable to the CIHR knowledge translation framework which includes processes of knowledge exchange, synthesis and application. For managers seeking to

improve knowledge translation practices, a cultural analysis approach could be useful in providing insight into the existing culture and thereby revealing opportunities or potential barriers as they design appropriate change management strategies.

One rationale for applying an organizational cultural analysis is provided by improvement strategists from the UK and US who combine structural and cultural change, based on research findings that indicate that changing organizational structure is often insufficient on its own to support improvements in health care quality and performance (Scott et al., 2003). A recent review of quantitative approaches to measuring organizational culture revealed fourteen tools worthy of consideration – none of which were specifically oriented to knowledge translation beliefs, values and assumptions. Although select dimensions of the available tools such as 'information flow', 'engagement with quality improvement', 'incentive' and 'competence' (Scott et al., 2003) would seem to be germane to knowledge translation, these only partially reveal the potential attributes of a successful 'evidence based practice' culture. This implies an opportunity to conduct cultural analysis research that would clarify existing shared beliefs, values, assumptions behaviours and roles that are present in health organizations, where research knowledge is successfully translated, as well as related processes for negotiating, sharing and maintaining these. This type of findings could then be used as the basis of tools developed specifically to measure and perhaps eventually benchmark knowledge translation cultures (Scott et al., 2003). Given the many subcultures within health care, the research agenda could be extensive.

The approach illustrated by the work of Golden-Biddle and Rao has the further advantage of a theoretical basis (Golden-Biddle & Rao, 1997). If the existing theory is sound in correctly predicting critical success factors, then adherence to the theory in design will reproduce success. The basis of a theory provides a conceptual framework for subsequent evaluation, empirically testing refinements that should result in continued improvement over time, as understanding of the relationship between organizational culture and knowledge translation grows. Theory provides a foundation and fundamental principles for designing successful strategies that have been empirically tested to some extent. By drawing on and

adapting organizational theory research efforts, one then is able to build on past efforts at evaluating its validity.

A disadvantage of the organizational cultural analysis approach and related theory is that the unit of analysis is the organization as a freestanding legal entity. This might not always be the setting of interest for the purposes of knowledge translation research, which spans the many inter-related organizations of the health care system; especially in Canada, in the context of public health/organization. In contrast, critical and institutional ethnography approaches always extend inquiry and analysis beyond the boundaries of the organization. What lies 'outside' the organization and influences it is conceptualized as the 'environment.' Institutions are one constituent in organizational theory, as the 'social context' in critical ethnography and as 'institutional ruling relations' in institutional ethnography. To the extent that social construction of intra-organizational culture is shaped translocally, an approach that is focused internally within organizations is limited in its ability to investigate important phenomena relevant to understanding knowledge translation and culture. Within organizational theory, examining the relationship between environment and culture may provide an indirect strategy, but this is not intrinsic to the approach. Within organizational theory there is an aligned institutional theory that seeks to theorize the relationship between organizations within a sector and their environment including the effects of state, professional and cultural norms on the field of organizations. Within organizational theory generally, there are currently many different types of conceptualizations of institutionality vying for pre-eminence, with none having achieved clear dominance. Institutional theories are also proposed by other disciplines like economics and political science.

A further disadvantage of the use of an organizational sciences approach for contributing to scholarship on knowledge translation is that the science is organized and generally conducted from the perspective of organizational managers seeking to control organizational culture in tandem with other structures and processes. Depending on the problematic or question of interest, the managerial perspective may not coincide with or be useful from the perspective of the organization as a whole, or from the perspective of distinct stakeholders. Important other stakeholder perspectives may include customers,

shareholders, and employees and in the case of a pubic health care system the public, governing bodies and politicians. In addition, the limitations to managerial control may not be revealed from within a managerial perspective. In contrast, institutional ethnography is undertaken from a standpoint where knowledge is activated in the accomplishment of everyday work practices. Rather than assuming managerial control, institutional ethnography attempts to discover how it works in actual settings.

4.4.2 Organizational grounded theory

The grounded theory investigation of the construction of contribution in organizational studies by Locke and Golden-Biddle is not typical (Locke & Golden-Biddle, 1997). Most grounded theory studies collect data directly from people related to their experiences and perceptions, rather than what they write. The Locke and Golden-Biddle study, of only published studies, is useful to compare with the institutional ethnographic study by Mykhalovskiy, which also featured a textual analysis. While the former investigated the social construction of meaning within the texts as representative of the practice of organizational science academicians, the latter investigated how texts are active in the social construction of health care delivery in a hospital setting (Locke & Golden-Biddle, 1997). The objectives, methods and the potential uses of each approach, while not opposing, do not overlap.

The advantage of a grounded theory approach is that theory about people and social phenomena and their meaning to people can be developed where none existed. Locke and Golden-Biddle were able to discover how contribution is constructed in published journal articles in major organizational science journals (Locke & Golden-Biddle, 1997). This approach overcomes the limitations of going to data with an a priori conceptual framework and being constrained to examining what fits within that frame. Prior to the 'discovery' and popularization of a grounded theory approach, it was thought that social science data should not be approached without theory to avoid interpretation biased by the researchers biases. This limited what could be known, to what could fit within or be amended to previous theories.

A strength of grounded theory is that it fits with something that exists in the social world, because it has been discovered through an exploration of the experiences of actual people. It is located in time and space and associated with an identifiable situation. Grounded theory permits the discovery of theory about how meaning is constructed by persons that make up an identifiable cultural group.

The advantage for using a grounded theory approach with knowledge translation is that this area is poorly understood and theorized. A grounded theory approach could be useful to gain new insights. In fact, a growing number of grounded studies are contributing to understanding of health knowledge translation practices. For example, a grounded theory study interviewed general practitioners to understand why they continue to prescribe antibiotics for some patients with sore throats despite evidence of limited benefit (Kumar et al., 2003). They found that doctors are "uncertain about who benefits most from antibiotics for sore throat and are particularly concerned about complications" (Kumar et al., 2003, p. 6). This type of information would be useful in the design of communication strategies to improve doctors' prescribing patterns. The authors advise that:

> Efforts to reduce antibiotic prescribing will need interventions that target the contexts where general practitioners over-ride policy and research evidence and are workable in clinical practice (Kumar et al., 2003 p. 6).

As this study shows, a grounded theory study offers advantages over approaches seeking to validate and refine existing theory, in cases where existing theoretical constructs are not sufficient to guide the development of interventions to improve practice.

An additional strength of the grounded theory approach is that it systematizes analysis of qualitative data. This satisfies similar criteria to those generally used to evaluate quantitative analysis and therefore serves to increase confidence in and acceptance of study findings.

Not all research problems in knowledge translation or other fields require analysis of thematically coded data. For example, grounded theory would not be suitable for analysing social construction processes that may be largely outside of the conscious awareness of potential study participants. In the Mykhalovskiy study the participants could not be

expected to describe explicitly how their work practices are organized by texts and so interviews that were analysed thematically would not have been able to easily reveal the active character of the research text. A survey or interview cannot identify something that the participants do not 'know'. Grounded theories are designed and particularly well suited to seek and identify meaning within people's individual knowledge. But the taken-for-grantedness of their practices may allude to these 'off-stage' events.

4.4.3 Critical ethnography

The major advantage of the critical ethnographic approach is its quest to identify unquestioned assumptions and ensure that they are critically examined and do not continue to exercise an unwarranted influence. Critical ethnography is similar to institutional ethnography in operationalizing the recognition that much of what is shaping the social world is not within the conscious awareness of participants.

The usefulness of the critical approach from the disciplinary perspective of information systems is illustrated by Myers and Young (Myers & Young, 1997). By revealing the so-called hidden agenda of management and government that designers might otherwise have been unaware of, Myers and Young show that larger social and historical forces exercise a powerful constraint on the design process. It was thereby demonstrated that critical ethnography could reveal a relevant contextual framework of meaning for IS designers. Analysis further demonstrated that the process of information system development within this mental health setting 'penetrated most deeply into the social processes of cultural control' (Myers & Young, 1997, p. 295).

A limitation of this approach is that it is not clear how the findings (constraints on user participation), can then be used to improve the design process. Although one of the stated aims of critical ethnography is the emancipation of users from constraints that no longer are of service, Myers and Young did not demonstrate that action became possible once the hidden agenda was revealed. They could not demonstrate that the system was improved from a user standpoint after having made the larger social and historical framework of constructed meaning visible. Instead the study reveals that the users did this

to the system themselves by resisting the inclusion of a workload measurement component that could be used by managers and government auditors to evaluate their performance (Myers & Young, 1997).

Finally, though the findings of a critical ethnography can be related to existing theory, to do so provides an insubstantial evaluation of theory. This is illustrated by the comparison by Myers and Young of their findings to a proposed Habermasian model of information system as a steering mechanism. Though they conclude that their findings only partially support this model, the analysis provides only weak support for this claim, as their study did not specifically set out to evaluate this.

From a knowledge translation perspective, the critical ethnographic approach has been applied to identify research priorities. For example, a recent critical ethnography undertaken to identify patient needs concluded:

> The study addressed national research priorities for a vulnerable group of rural elders. Nursing implications include the need for expanded knowledge and educational preparation regarding elder issues and community-level services, inclusion of elders' perspectives in the planning and delivery of health services, and the need for community-level, interdisciplinary collaboration and advocacy (Averill, 2002, p. 654).

A similar approach could be applied to reveal the social and historical forces that constrain the use of research within health care settings.

4.4.4 Institutional ethnography

Institutional ethnography proposes inquiry into knowledge translation by observing and analysing it being done by individuals. Actual people taking action in specific sites, institutional ethnographers insist, accomplish knowledge translation. That is why ethnography is useful. It identifies the relevant activities so that what happens can be explicated; that is, how it is organized to happen that way is made visible and thereby available for improvement. Analysis of ethnographic data connects local sites of knowledge translation (work) to extra-local sites where knowledge is generated, organized, made

available, in specific texts, for specific uses, etc: the processes that are usually overlooked in information technology approaches.

Institutional ethnography is useful in uncovering the invisible and knowledgeable, though apparently taken-for-granted, ways in which work is orchestrated through ruling relations and increasingly mediated by texts. Mykhalovskiy describes institutional ethnography as 'providing the methodological and conceptual resources for responding to the problem of how to come to know the active and social character of formal discourses of knowledge' (Mykhalovskiy, 2001, p. 273). This would appear to be of critical importance to a knowledge translation research agenda. The Mykhalovskiy study illustrates the usefulness of this approach by explicating the active character of a health services research report in the work of health reform within the hospital setting. Mykhalovskiy claims the contribution to scholarship as follows:

> My analysis has taken up Smith's invitation to explore texts as mediators of action. It locates as central to a serious exploration of the operation of new modes of knowledge in health-care reform what, in its obvious character, eludes most critique – the textual specificity of expertise. Health services research exists as text. How it goes to work in local setting, the relations that it enables and is a part of, is a matter of the interface between its material character as text and the socially organized interpretive practices through which it is activated. Careful attention to this interface helps to avoid sketchy and vague formulations of the productive character of expertise, as well as simplistic models of knowledge as information. In their place one finds a route into how a knowledge form operates discursively as actual readers of the texts in which it is vested mobilize it (Mykhalovskiy, 2001 p. 289).

4.5 Investigating regional health boards

While all of the four exemplar research approaches could be reasonably expected to contribute valuable understandings to the emerging field of health knowledge translation research, the contribution of each would be very different, as the preceding analysis has illustrated. Institutional ethnography would seem to be most appropriate for investigating the work of governing boards at the interface between the organization and those to whom

it is accountable. Like all the exemplar approaches reviewed in this chapter, the institutional ethnographic approach is based on access to the working world as it happens, and therefore rooted in 'real life'. Among the candidate methodologies, only institutional ethnography is undertaken from the standpoint of the decision-makers and within their work practices broadly defined to include knowledge work. Furthermore, the extensive and web-like relations and texts that hook the work of board members to institutional complexes beyond, could not be reached by approaches other than perhaps those of the critical ethnographer's approach. But the advantage of the institutional ethnographic approach over the critical ethnography is that it undertakes to map the actual work practices sufficiently that they could be changed, and therefore improved as explicated. This is of non-trivial importance from the perspective of a health informatician seeking an empirical foundation for design of decision support systems.

CHAPTER 5:
METHODS: THE APPLIED INSTITUTIONAL ETHNOGRAPHIC APPROACH

> A mode of ruling has become dominant that involves a continual transcription of the local and particular activities of our lives into abstracted and generalized forms.... It involves the construction of the world as texts, whether on paper or in computer, and the creation of a world in texts as a site of action (Smith, 1987, p. 3).

5.1 Institutional ethnography and informatics

I have conducted this analysis as a health informatics information scientist. This above quote from Dorothy Smith, the social theorist who first developed and applied institutional ethnography, could be describing ruling 'modes' that health information scientists are striving to create in order to improve decision making throughout the extensive institution that is the current health care system. The core function of health information science can be thought of as constructing a world of health and health care texts (and other representations of the real world including numbers, algorithms, graphical symbols), stored in and transmitted by computers, that transcribes actual activities and experiences and stores these in information systems for later recall. The activities at issue are those that make up the work of health services delivery systems. The experiences of individuals; particularly of patients and their experiences of health states, is the impetus for interaction with the actual and virtual system of health care, and the essential information upon which to judge the need for and effectiveness of services.

Once the virtual world of health care information systems is created, it rules by becoming the authoritative version of what has occurred or has been experienced. Some types of information are easily incorporated into forms and databases and are therefore included, while other less standardized, more subtle or infrequent types of information are less easily incorporated and therefore are not included. The virtual world becomes what is known and readily available for incorporating into formal decision-making. In this way 'what

is known' – the virtual textual and computerized world of knowledge objects – 'rules' what is accorded importance and activated in work and experience. The challenge for informatics then, would be to translate the actual into the virtual world in a way that enhances the goals of the real world – health care that optimizes health outcomes and uses resources efficiently. When the ruling function of these systems is understood, they can be examined to determine whether the effects of the rule are working as anticipated, according to their intended purposes.

To the largely interpersonal world of health care provision has been added a world of administrative texts that make up the virtual textual world (a virtual reality that isn't real). By virtual world I mean one that is not directly experienced but composed of representations of experiences. Managers, auditors, researchers, directors can 'know' this world through analysis without encountering the lived experience. The virtual world made of up clinical and administrative records is supplemented by another virtual world made up of the texts of science, including applied sciences like medicine, nursing and health informatics. The experiences these are representations of were obtained within scientific studies. Clinical research, for example, provides definitions of normal and abnormal health states, as well as effective patient care management strategies. These can be translated into clinical practice guidelines which can be put in electronic form. Electronic clinical practice guidelines can be embedded into analytic models which interact with patient specific data collected administratively. In this way the virtual world of representations stored in health care delivery information systems can be compared with an ideal virtual world described by the guidelines derived from scientific research. This type of comparative analysis can then be fed back to the participants in the 'actual' real world where patients and providers interact.

The same applies to professional knowledge, such as accounting information systems that control the types of information that can be entered and therefore 'count' as knowledge. Auditing practices ensure that resource use is correctly accounted for. The expansion of this virtual world in health care is being accelerated by the developing information infrastructure and the development of sophisticated decision support tools that permit more sophisticated types of data, knowledge and models to be incorporated into the reporting systems of an

organization. But it is important to remember that the available selection that determines the ruling relations is to a large extent opportunistic, rather than determined by the purpose to be accomplished. Many health care data sets, for example, were originally designed for billing purposes.

While all support tools rely on simplified models as compared to the actuality of the work of health and health care, for better or worse, ruling practices mediated by decision support tools actively co-ordinate the everyday accomplishment of work by a variety of people at every level of the health care system, including health care providers, patients and people in support roles such as administrators. This dissertation focuses on those who govern health care in their roles as regional health board members. The trend in health care is toward increasing use of these support tools, which parallels the rise in prominence of health informatics. An understanding of ruling practices and the active role of electronic texts in everyday work practices corresponds to the informatics mandate and practice. This alignment makes the institutional ethnographic approach that Smith has developed compatible with investigating topics of informatics interest.

Institutional ethnography (IE) (Smith, 1987; Smith, 1990a; Smith, 1990b; Smith, 1999) provides the analytic method, theoretical orientation and philosophical paradigm I have chosen to address the complex and non-linear decision-making processes of health region board members. The range and scope of available research design approaches present a maze-like array of choices for the informatics scholar seeking to understand information use by regional health boards. Developed to explore 'the status of knowledge as socially and materially organized, as produced by individuals in actual settings and as organized by and defining social relations' (Smith, 1990), IE is uniquely capable of investigating work practices. Smith's definition of work is a generous one, drawing on ethnomethodology as it encompasses everything people do to accomplish the organization of everyday activities. That would include the work of decision-making. Thus, it is grounded in careful ethnographic observation and interviewing. Its analytic procedures rely on the notion of the everyday work being socially organized and interconnected. The local being organized by the extra-local through what Smith calls 'social relations'.

Bowker and Star's analysis of classification and its use in informatics elaborates usefully some of the points my inquiry touches (Bowker & Star, 1999). Following Harvey Sacks (Sacks, 1972) and other conversational analysts, they examined several cases of classification, demonstrating that 'each standard and each category valorizes some point of view and silences another' (Bowker & Star, 1999, p. 5). This is useful because to omit (silence) the decision-makers in standardization and classification schemes in health care settings could result in omissions with health consequences. If the information and communication technology systems including decision support systems are 'silencing' points of view that would result in safer, more efficient and effective care then there is a significant opportunity for improvement. The type of analysis put forward by Bowker and Star highlights the importance of careful analysis of the taken-for-granted elements of people's work, such as categorization, that are thereby made visible and therefore accessible for targeted change.

My work advances that of Bowker and Star by conducting an analysis from the starting point of transcribed interactions, i.e., audiotaped talk, supplemented by observations at selected Board meetings, and interviews with key informants related to regional Board activities and responsibilities. I employ institutional ethnography, an analytic approach with the capacity of discovering connections between local and extra-local sites of action. What that means for my own research interests is that it allows me to identify, in the local interaction at Board meetings, the traces of what in institutional ethnography are referred to as 'ruling relations'. I will be mining 'what people say' for the traces in their talk of how they know what to do – in other words, how they make the decisions that they actually make.

5.2 The Problematic

An inquiry in IE starts with a problematic in everyday working life. Somehow Board members make decisions that stand as 'adequate', but it is a puzzle how they do so. They exercise competence in their work. They get to agreed-upon decisions that stand in the ongoing work of allocating financial resources, managing human resources and planning and delivering services. This study attempts to show how they actually do that work, using data,

information and knowledge they formally or informally acquire, including advice, common-sense, background knowledge, personal or official understandings of responsibilities and decision making processes. With a view toward exploring this problematic, the current communication and information use patterns of one regional health board were mapped and related to their decision-making processes.

This problematic addresses an important gap in the understanding of governance decision-making. People in HEALNet and others concerned with putting accurate and up-to-date information in the hands of policy makers for their use to make good decisions are frustrated by the seeming lack of use of this information in decisions. Scanning of my transcript data also suggests that such information does not appear as an important resource in their deliberations. The question arises "What does underpin these decisions?" I take this as the problematic to be explored in my institutional ethnography. My study attempts to show how they actually do that work, using whatever knowledge resources are available, be it formal or informally acquired information, advice, common-sense, background knowledge, personal or official understandings, responsibilities and decision making processes.

5.3 IE Concepts from roots in everyday practice

IE analysis is based on concepts that have labels that appear straightforward in lay terms but are understood quite differently within this approach. While the need to define terms and semantic precision is the hallmark of academic writing, issues of definitions are compounded in IE by the standpoint of analysis. This standpoint marks a radical departure from most orientations that are conducted from the perspective of an 'objective' researcher outside the everyday world looking in. IE starts in the everyday world to examine how this is socially constructed and not always locally, but by widespread institutional practices. The latter involved looking outward from the local. In the following section I will summarize the features of the Smithian IE approach that are most salient for the investigation of the proposed study problematic. Combining theory and method, IE offers an approach based on a social ontology that sees the social as best understood through the actualities of everyday work processes. It proposes that the world as commonly known is socially

organized, thus attempting to understand everyday life by mapping *how* people constitute their lives, their work and, in this case, aspects of the health delivery system..

5.3.1 Institutions: A complex of relations

The central task in an IE analysis is to describe the social and institutional relations shaping everyday experiences, broadly conceived as the everyday work of living. 'Institution' is a broad concept that may be defined according to research interest in the political, organizational, economic or cultural dimensions. IE defines institution as practice:

> ...[a] complex of relations forming part of the ruling apparatus, organized around a distinctive function – education, health care, law, and the like (Smith, 1987 p. 160).

> ...the varied and interconnected practices of management, administration, government, law, finance, education, business and the professions (McCoy, 1999 p. 28).

IE involves explicating rather than explaining – a key distinction that directs the IE analysis and enhances its usefulness to informaticians. To explicate is to make visible how actions happen the way they do, using the concepts of social organization and social relations. Explaining, in the sense of clarifying cause and effect relationships by reference to theory, in an effort to successfully predict events, is more standard in the social sciences. The IE method traces influences (social relations) on work practices from micro to macro levels of analysis, thereby overcoming the limitation of locating a study in one or the other. Research in the social sciences addresses this problem by theorizing the relations between sites. A criticism directed at many qualitative approaches to research is that they remain unable to produce findings that can be generalized. IE is different in this way. It avoids the problem of separation of the spheres or levels of analysis, by explicating how translocal ruling relations enter into everyday work processes, thereby making explicit the links between practices that are potentially geographically separate and asynchronous.

Ideologies, theories, professional discourses, and the practices of state-regulated profit and non-profit organizations impact everyday life in unseen ways. In modern societies, much of the social organization of everyday life is invisible to the participants. For example,

studies have shown that midwives provide comparable care to that found in hospital settings and their services might be efficient, effective and accepted with alacrity by patients. But their services are not widely and easily available. Perhaps it is professional turf protection. Analysis would show that there may be a variety of impediments to using their services, such as jurisdictional regulations that restrict the providers of birthing services; lack of formal educational programs to provide training, or professional organizations to set standards, and the existence of organizational and accreditation standards that do not accommodate midwifery practices. This illustrates that the institutional complex of practices that are required by modern society to make health care services available in any particular jurisdiction is extensive, but taken-for-granted for those services that are routinely available and have the same constellation of institutional support practices. Therefore, although the IE investigation starts with the everyday lived experience, it does not stay there. After identifying a problematic in everyday experience, an IE researcher traces to their origin, the invisible organizing forces that shape that lived experience.

5.3.2 Institutions as distinct from organizations

The institutions referred to in an institutional ethnography are likewise not limited to the bureaucratic infrastructures of organizations. Also of interest are the intitutionized state regulatory frameworks that govern organizational practices and the conceptual frameworks of professional discourse and ideologies that permeate their policies and practices. These same structures and functions are often the focus of interest for researchers using other methods of inquiry. What sets institutional ethnography apart is the way in which the impact of institutions is traced from a standpoint in the everyday work of people who translate the texts which mediate insitutional ruling practices into local action (see Figure 7). Researchers (in IE) seek to explicate the social and institutional arrangements that actually organize their informants' experiences. Ethnographic data offer the clues that must be followed to discover which institutional arrangements are involved.

Organizations themselves, although they may be implicated, are not the focus of an institutional ethnography. Institutional ethnographers seeking the relevant institutional

arrangements organizing the activities of their informants may follow social relations that originate in not one, but a complex of organizations. The institution therefore, conceptualized in IE, may span many organizations, for example, the institution of education may involve individual schools, municipal school boards, university based training and research programs, the ministry of education and so on, but it is not limited to the walls and boundaries of these organizations.

Misconceptions about similarities between organizational analysis and institutional ethnography are due to assumptions about the different meanings of the terms. IE does not have as the subject of inquiry, the organization as business entity, whether that entity be a profit, non-profit or public organization. As the above explanation of the concept of institution in IE demonstrates, the practices of an organization are but one of many potentially ruling practices that are thought of within a broad conceptulization of institution. Neither does ethnography in this context imply that a cultural analysis in being undertaken. In IE, the focus is not on shared values and assumptions, as it might be if undertaken using cultural anthropological approaches.

5.3.3 Social relations

In IE, social relations are the intricate webs of activities and interactions through which the everyday lives of people in a society are orchestrated. They may not be marked by a physical presence. Though 'invisible' unless explicated, social relations are central to how things happen the way that they do. Smith explains the concept of social relation that is at the foundation of IE as follows:

> This sense of social relations understands people's activities as coordinated in actual temporally concerted sequences or courses of action. In and through these the work of a multiplicity of people known and unknown to one another is coordinated... [W]hat people do is already organized as it takes up from what precedes and projects its organization into what follows (Smith, 1987 p 183).

McCoy claims that Smith's concept of social relations leads to analysis that permits the identification and empirical investigation of the coordination of activity across time and space (McCoy, 1999). Further, McCoy makes the point that this is what is missing from

approaches that focus on local, same-time coordination. For example, analysis of work processes look at actions as they occur sequentially in time in actual places, by people or machines though these might be located at quite a distance from each other and take a long period of time to be accomplished. IE makes it possible to look at relations between activities separated in time and space and yet active in a certain local time and place:

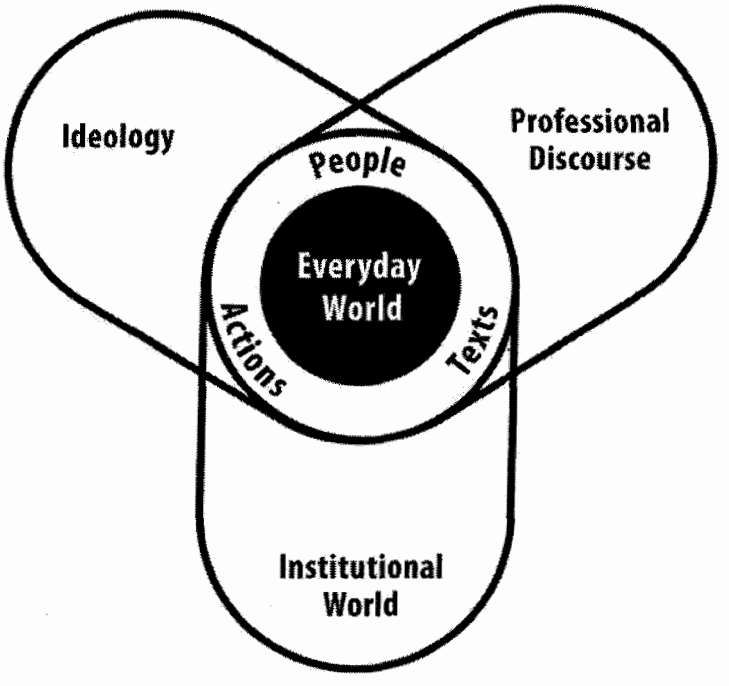
> A central feature of contemporary society is that the 'everyday world' – the material setting of each subject – is organized in powerful ways by trans-local social relations that cannot be wholly known (in their character as extended chains of action) from within the subject's experience. Many of the socially-accomplished things that happen to people, or that alter the physical settings of their lives, are shaped by an 'organizing logic' or 'logic of transformation' originating elsewhere (McCoy, 1999 p 28).

For example, when someone is resuscitated using cardio pulmonary resuscitation, this activity is accomplished locally but organized in part by the drowning that initiated the development of the practice and the many ways that CPR has been taught and practiced.

The notion of an organizing logic originating elsewhere is particularly useful for the proposed study, because it permits the analysis to move outside of the Boardroom to identify the way the activities in the Boardroom are shaped by social relations trans-locally; that is, activities making up social relations that may be distant in both time and space to what transpired in the meeting, but that are nonetheless shaping it powerfully. Figure 7 identifies what some of these institutional constellations might be. The strength of the approach is that inquiry stays grounded in the actualities of the decision-making processes.

Figure 7:

The Institutional complex



5.3.4 Ruling relations

An IE analysis identifies the ways in which widespread institutional ruling practices organize a local work setting. The ruling relations imposed by the most influential institutions are a prominent type of social relation that shapes our lives – though often invisibly. Citizens must order their lives in relation to the shaping influences of schools and universities, doctors' offices and hospitals, the laws and practices of taxation, employment,

housing, business and police. Practices closer to home include the immediate affiliations of family, religion, work and community groups. The ubiquity of ruling relations is most obvious in cases where a newcomer or non-conformist violates the generally understood rules. The distinction between a ruling relation and other (non-ruling) social relations is in the extent of influence and authority exercised. Ruling relations are a widely spread network of relations. Smith explains them as follows:

> The phrase 'relations of ruling' designates the complex of extra-(trans-) local relations that provide in contemporary societies a specialization of organization, control, and initiative. They are those forms that we know as bureaucracy, administration, management, professional organization, and the media. They include also the complex of discourses, scientific, technical, and cultural, that intersect, interpenetrate, and coordinate the multiple sites of ruling (Smith, 1990, p. 6).

This concept of ruling relations is particularly useful for an investigation of the decision-making practices of governing Boards. Board members make the rules that will shape the everyday activities and practices of others, but they are themselves situated in a much larger ruling apparatus or accountability structure, as it is termed within governance discourses. So IE permits an investigation revealing both how the Boards rule and how they are ruled.

Ruling may conjure up negative associations but does not inherently imply a moral or ethical transgression. Ruling relations represent the institutional use of power, and in many circumstances, when the translocal practices of ruling relations are aligned from micro to macro, as in the coordination of efficient transportation networks, they provide widespread social benefits. When institutional ruling practices serve the interests of an elite, to the disadvantage of those at the local site of the accomplishment of work, the case for a social benefit breaks down and moral and ethical issues are legitimately raised. Health care is the premier social service in Canada. Though reform is widely recognized to be necessary, it is also understood that ruling relations that privilege the interests of an elite over those needing health care services would not have a sound ethical basis.

5.3.5 The standpoint of the researcher

IE takes the everyday-working world as its standpoint or starting point for investigation. In this respect, it differs from classic quantitative approaches that seek to protect research from bias by taking a standpoint external to the setting of interest. Figure 8 shows this standpoint figuratively. The researcher is separated from the meeting of the Board in another room looking in through a window. Even if not actually observing from behind a one way mirror, the researcher can mentally adopt the classic standpoint and attempt a neutral stance for observation outside the social world.

This stance is habitual for those trained to adopt the classic Archimedean position. Archimedes said that if he had a place to stand and a lever he could move the whole world. With regard to research about the social world, this standpoint outside the world is assumed to be this platform with which to accomplish leverage – presumably social change. By extention the social change that is based on this science would be objective – that is free from researcher bias or tendency towards confirming prior opinions partilarily ones that are self-serving. In terms of physics, without an unmoveable position an action results, not in a change in the object being leveraged moving as desired. Instead, the action generates an equal and opposite reaction of the mover. Yet the removal of the researcher from the social world has important limitations.

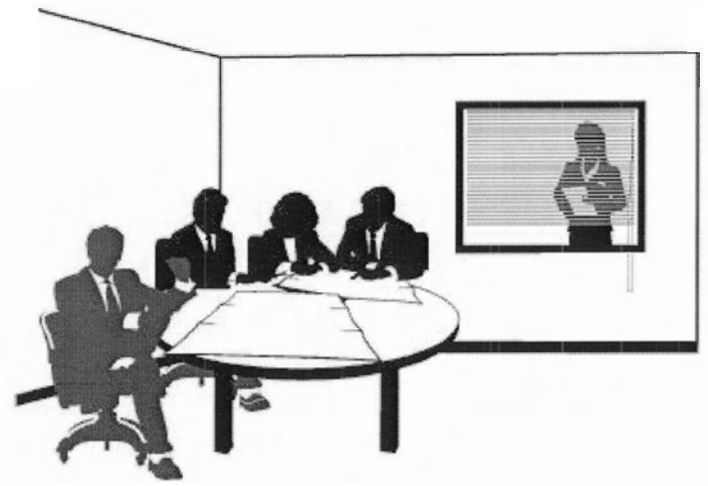
Smith argues that an external standpoint enforces an exclusion of the interests and concerns of subjects. She writes about how the observers' account supersedes that of those observed.

> Riding a train not long ago in Ontario I saw a family of Indians: woman, man, and three children standing together on a spur above a river watching the train go by. There was (for me) that moment – the train, those five people seen on the other die of the glass. I saw first that I could tell this incident as it was, but that telling as a description built in my position and my interpretations. I have called them a 'family' I have said they were watching the train. My understanding has already subsumed theirs. Everything may have been quite other for them. My description is privileged to stand as what actually happened, because theirs in not heard in the contexts in which I may speak (Smith, 1987, p. 112).

Smith argues that an external standpoint enforces an exclusion of the interests and concerns of subjects – but these are exactly what would be useful for her in developing a sociology for women. Whereas the argument that the objective stance is necessary to prevent the context from being affected by the researcher or researcher perspective from biasing the analysis, it also has limitations as a research standpoint. I argue that designers of ICT systems likewise need to understand the interest and concerns of the decision-makers whose work they are seeking to support and the Archimedian position of the researcher does not further this purpose.

Figure 8:

The classic Archemedian standpoint of the researcher



Therefore, another distinctive feature of IE, and one that is compatible with the in-depth understanding needed by decision-makers to address the stated problematic, is the standpoint of the researcher in the everyday work-a-day quotidian world that Smith has outlined (Smith, 1987). The IE eschews Archimedean stance as probably not possible, but even if it were possible, as not desirable. For those seeking to understand how the social is actually created by those doing the social in the everyday interwoven web of events, a standpoint outside of the everyday actualities loses contact with exactly that, which the

researcher seeks to explicate. The vantagepoint at the site of actual creation of the social is lost. A by-product of this is that people can only be turned into objects of inquiry rather than subjects of investigation. It is as subjects that people constitute the everyday world through their activities (the 'generous concept of work' in IE).

In order for the researcher to explicate how ruling is happening to, and with, people the way that it does (accomplished locally), it is necessary to take the standpoint of those in the everyday world at the entry point of where the work is taking place. In the context of the proposed investigation, this means that the researcher takes the standpoint of RHA Board members as they go about their coordinated creation of a socially organized decision-making process.

Smith's academic work as a social theorist inspired her to turn sociology upside down – that is to 'take the standpoint' of women, as a researcher doing IE – through her participation in the women's movement and her collaboration with community based activists seeking positive change in women's everyday lives. In applying IE, I would like similarly to take the standpoint of people whose actualities are not considered by the creators of decision support systems. In this attempt to put IE into practice it is necessary to obtain information to improve governance practices.

The decision-makers with whom I stand are in the middle of the larger constellation governing health care. They are both ruled and rulers. Smith addressed a similar problem for women academics. As a sociologist in an academic setting, Smith found that standard research practices of the time were aligned with ruling practices which eclipsed the interests of the women's movement (Smith, 1987).

In making decisions they act in accordance with ruling practices that connect them to others separate in time and space – those who have played a part in creating the ruling structures they participate in. The policies that the Board approves will organize the work of administrators, health care providers and patients in invisible ways as well. So the everyday actuality of decision-makers provides an important point in the exercise of power, though they may express powerlessness to decide otherwise, given the relations and practices they recognize they are caught up in. How this happens is worthy of explication because of the

impact it has on their ability to make decisions as community representatives. This perspective is important from an applied informatics perspective if we accept that the actuality of decision-makers is insufficiently considered in the design of decision support systems (Moehr, 1999).

5.3.6 A 'generous' definition of work

> The concept of work is extended (in IE analysis) to what people do that requires some effort, that they mean to do, and that involves some acquired competence. The notion of work directs us to its anchorage in material conditions and means and that it is done in "real time" – all of which are consequential for how the individual can proceed. Addressing the institutional process as a work organization in this sense means taking as our field of investigation the totality of work processes that actually accomplish it: hence it means going beyond the functional boundaries as these are defined by its ideological practices to explore those aspects of the work organization that are essential to its operation. For these are an integral part of its operation, whether they are recognized or not and whether or not they might be considered positive (or functional) in relation to its objectives (Smith, 1987, p. 165-166).

This generous definition of work makes it possible to consider information use in decision-making as work, including the reasoning processes employed. This approach can then lead to knowledge about how people are socially organized to use information in their work as decision-makers. It also opens up the research field to investigate and explicate the multiplicity of other things that individual board members do, which might extend beyond the functional boundaries imposed by more restrictive work concepts. Lastly, this definition of work opens up a promising approach to contemplating what board members do that is different from researchers' prior understanding and conceptualization of their decision practices.

5.3.7 Investigating the social

As the above descriptors of the conceptual foundations of IE illustrate, IE provides a social ontology/epistemology based on everyday activities. IE does not seek to disprove or

create theory but rather provides a way of thinking about the social that provides a useful (theorized) framework for analysis. The IE approach rests on an ontology that recognizes the social as arising from the material; that is, arising from the actual events and interactions (actualities) of everyday life. Smith describes this way of looking at and understanding the social world as follows:

> We see, then, people very much as they are, the competent practitioners of their everyday worlds, active in definite material and social contexts, desiring, thinking, feeling, and actively engaged with others in producing the actualities of the world they have in common with one another (Smith, 1987, p. 125).

This ontological basis is not unique, but shared with phenomenologists, ethnomethodologists, and symbolic interactionists (McCoy, 1999, p. 25). The ontology of the social that is at the core of the IE approach provides for an epistemology, or theoretical understanding, of what constitutes knowledge, and of the means of our knowing the social through IE research. Smith explains it like this:

> So the epistemology must also be an ontology, a method of thinking (a theory if you like) about how the social can be said to exist so that we can describe it in ways that can be checked back to how it actually is. Therefore, I shall argue that by the very character of the social itself that lies in the ongoing active recreation of a world in common, this possibility exists (Smith, 1987, p. 122).

The ontology/epistemology of IE sets the stage for an examination of the work of Board members as data to describe how they are engaged in producing the actualities of the decision-making process. It is of practical usefulness from an informatics perspective because it is in the everyday world that people actually use information and technology. Board members actually do something to get to their decisions. It was not Smith's intent to develop and validate theories:

> Methods of thinking could, I suppose, be described as 'theories,' but to do so is to suggest that I am concerned with formulations that will explain phenomena, when what I am primarily concerned with is how to conceptualize or how to constitute the textuality of social phenomena. I am concerned with how to write the social, to make it visible in sociological texts, in ways that will explicate a problematic, the actuality of which is immanent in the everyday

> world...This is an exploration rather than an account of a destination. We are in search of conceptual practices with which to explicate the actual social relations disclosed in investigation and analysis. We are looking, in other words, for methods and principles for generating sociological texts, for selecting syntax and indexical forms preserving the presence of subjects in our accounts (Smith, 1987, p. 106).

Smith's interest in the social relates to her analysis and critique of sociological accounts in which theory displaces and suppresses what is happening outside of texts and prior to textualization. She calls her interest in the everyday world a materialist analysis. Materialist analysis follows from this epistemology. The materialist analysis of IE is the investigation and documentation of how things happen the way they do. While texts are seen as playing a critical role in mediating the construction of the social, the IE epistemology (way of knowing about the world) has sought to create "an inquiry into a totality of social relations beginning from a site outside and prior to textual discourses" (Smith, 1987, p. 212). With an analysis based on actual events in everyday life, what is said and what is written is then rendered knowable within an IE ontology. Smith explains the intent of this key methodological approach:

> What we are trying to make visible in this way is an ongoing production. The social process is always in the making; it is also always coming into being as a condition of our own activity, confirmed in the very process of coordinating our own moves with those of others, corrected as it is found to fail as a condition of theirs. A socially organized reality is known as such not as "objective", but as an ongoing practical matter of accomplishing presence by and among subjects (Smith, 1987, p. 126).

5.3.8 Textual mediation

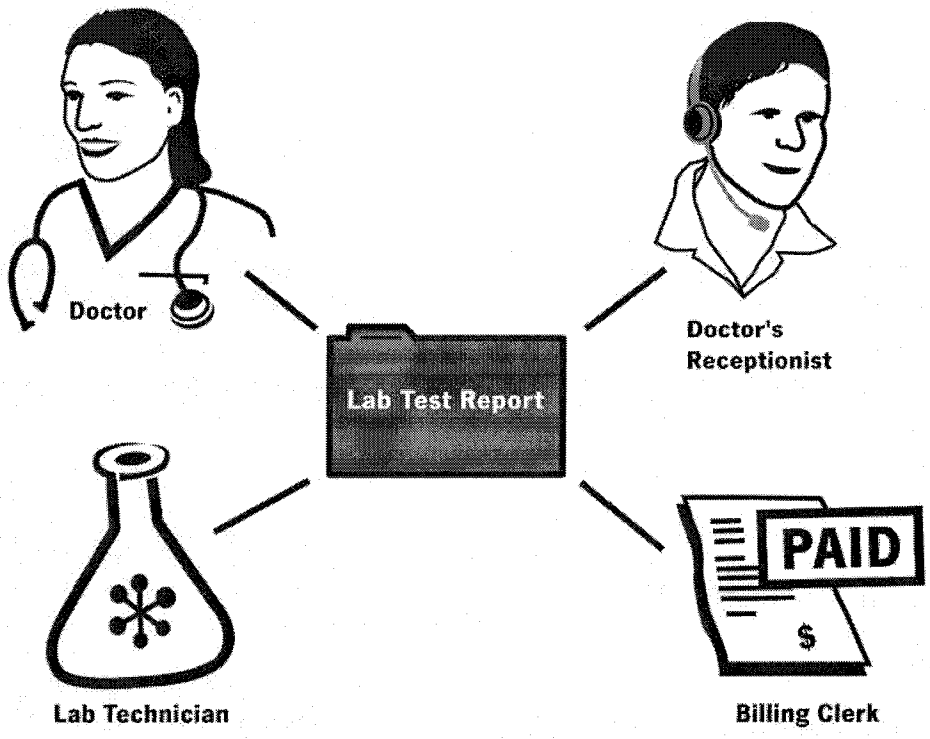
As the quote that starts this chapter illustrates, the central insight of Smith is that textual-mediation is a prominent way that ruling relations are activated in the post-industrial world. In IE, texts are recognized as an important feature of how ruling is coordinated locally and trans-locally (Smith, 1987). IE is particularly useful in discovering empirically the invisible and taken-for-granted ways in which human work is orchestrated by texts, including

graphics and other such representational forms (McCoy, 1995; Bresalier et al., 2002). IE has been applied by researchers to trace translocal social organization from a standpoint in everyday work practices in education, health, government, corporate and legal systems (Campbell & Manicom, 1995). Thus IE has been used extensively to explicate the textual mediation of ruling relations in a variety of organizations; that is, to show how texts coordinate the work of people with different functions at different times/sites, who may or may not be aware of each other, as shown in Figure 9.

In health care, various people handle health information in their work. Figure 9 illustrates some of the most obvious people who will use the information in a laboratory report in completely different ways. The laboratory technologist's work is to ensure that the correct value appears on the form. A billing clerk will use the report to determine what to charge for the test and perhaps who to bill. The doctor's receptionist may ensure that the test results are included in a patient chart (assuming a paper-based system) or whether to contact a patient for an appointment. None of these people working with the information may be concerned with what the test contributes to an understanding of a patient's health problem. Not shown are the other people who will be affected by the test report, such as the patient and their family, or researchers or health care administrators needing to determine whether the utilization of testing levels are appropriate.

Figure 9:

How texts coordinate the work of people with different functions at different times/sites



Texts provide the "material" connections that coordinate people's actions in different sites. For example, Pence and McDonnell demonstrate the role of texts in coordinating the response of the criminal justice system to domestic violence using an IE approach (Pence & McDonnell, 1995). They demonstrate that the texts produced by dispatchers and police officers coordinate the response of prosecutors, sentencing judges, probation officers and others who use the information they contain. The police report pertaining to incidents of domestic violence is seen as so critical to the case processing that reform strategies have focused on changing what is required on the forms used to produce

the reports, rather than trying to change police attitudes. Likewise, the role of texts will be important in demonstrating how information resources and analysis shape the actualities of Board decision-making processes.

5.4 Study design

Data-collection methods used in institutional ethnography are the same as those used in other ethnographic approaches. The methods of interviewing, gathering and selecting texts, observing work processes, taping and transcribing meetings are common to many other qualitative methods. It is the focus and scope of the analysis of the data collected by this common method that distinguishes IE, and perhaps also the general focus on, and analytic use of, texts. The analytic use of the ethnographic data is put in the service of explicating the social relations, particularly those influential and trans-local ruling relations that shape everyday work practices. The intent of IE analysis is to learn how to understand (read) the texts, to explicate how they are used in the organization of local work and get at their active role, the institutional frame(s) that apply.

5.4.1 The site of inquiry

The desire to understand how evidence was or was not taken up by regional health boards was met with an opportunity provided by HEALNet, a Canadian Network of Centres of Excellence funded by federal research councils.

HEALNet was a national network of researchers from disciplines throughout the health, social and applied sciences, whose common aim was to better the health of Canadians by improving decision-making at all levels in the health care system. HEALNet research focused on enhancing the use and utility of information in healthcare decision-making, from analyzing information needs to developing strategies and tools to facilitate effective information use and assess performance (McMaster University, 2004)

HEALNet brought researchers together from 1995 to 2002. Of particular interest was regionalization – the reorganization of health care governance along regional lines. This focus of the collaborative led to seed funding for the Canadian Centre for Analysis of

Regionalization and Health (www.regionalization.org/). The setting of this study was also the subject of a HEALNet study 'Conceptualization of Evidence by Regional Health Board Members'.

This doctoral research program project benefited immensely from gaining access to a setting that is usually restricted. The collaborative approach made available for analysis a set of transcripts of three Regional Board meetings, along with the accompanying information packages including minutes and agendas. Sharing data and having it analysed from two disciplinary perspectives was the original intent. Cooperation between research sites fostered the obtaining of transcripts for the work of a regional health board in one province, and having them analysed from two disciplinary perspectives. This work ended when HEALNet funding was not renewed in 2002.

The setting of the study is one urban Canadian regional health board, comprised of 12 persons, responsible for an annual operating budget of more than $500 million to meet the needs for health services of a population of approximately 300,000. Members are joined in Board meetings by the chief executive officer (CEO) and usually a small cadre of the most senior administrators and senior managers or staff who are most able to report to the board on select issues. The anonymous health region that provided the setting of this study ranks amongst the highest nationally in annual health report card performance measures. My data offers a look at the regional health authority board after a major transition to a regionalized health care system had been accomplished and as the Board was deliberating on a three-year strategic plan.

The name and genders of the speakers in meetings, interviewees and their named subjects as well as some features of the organizational structure and documentation of the health region have been altered, to preserve the anonymity and confidentiality of the people involved. This research project is not an evaluation of individuals, the Board, the organization as a whole or its administration or staff.

5.4.2 Sources of data

I have used six sources of data in my investigation:

1. transcripts of audio taped meetings,
2. meeting-related documentation,
3. non-participant observations,
4. key informant interviews,
5. working documents of the organization, and
6. documentation of relevant discourse.

Three consecutive closed monthly meetings of the board, which occurred in 1999, were taped and transcribed using Ethnograph™ software by another HEALNet researcher.[7] I attended a later meeting of the board from which the transcripts had been obtained, and made field notes.

Interviews were conducted over a six month period in 2001 and 2002 with board members, senior management, senior staff members and members of outside organizations with a role in providing information to health regions. The interviews explored the work of each informant as it related to regional governance decision-making, their accounts of how board members became informed and how decisions were actually made. Besides those involved in decision-making, persons involved in working up information or contributing to the design of the information infrastructure for the board were also interviewed.

The University of Victoria Ethics Committee approved both a waiver for ethical approval for the meeting transcripts, as the participants involved were speakers at public meetings seeking public visibility; and later, approval to conduct interviews (See Appendix A: Consent Form).

5.4.3 Analysis

The meeting transcripts were the entry point into the analysis. As I read through the talk of the meeting I sought to identify the decisions. From there, I looked backward to the discussion that occured prior to the decision. In examining the talk prior to the decision I paid attention to how these decisions had been accomplished. I looked for what information

or knowledge appeared to be salient as the board moved towards a decision. I paid particular attention to points at which something seemed to be coming in from elsewhere and was puzzling in some way.

After identifying the major types of decisions the board was making I turned my attention to the people in the organization, the board materials and key informants external to the health region. These I interviewed to determine how their work informed the board. I was particularily interested in matching what I'd found in the meeting with work processes without.

From both the interviews and meeting transcripts I gathered actual texts or references that informed me about what was happening in the meeting. These I sought to link to the work of board members. Finally, I examined most closely how the organization produced the information for the board with which they were to evaluate health and the performance of the organization about health.

5.4.4 Study limitations

A standard critique of this type of explication is that it does not meet the criterion of generalizability. This arises from the perspective of researchers seeking to understand causal relations statistically. While an institutional ethnography may indeed identify causal relations that can be usefully quantified by other methods, this is not the purpose. A social constructivist paradigm accepts that social phenomena are human creations that are amenable to change unlike many phenomena in the natural sciences (see also Chapter 3, Section 3.1).

[7] I am grateful for the help received by HEALNet researchers Harley Dickinson and Susan Robertson in accessing data.

CHAPTER 6:
THE EVERYDAY WORK OF GOVERNANCE

6.1 Introduction

Most of the work of the regional health board meetings is done in meetings that are closed to the public so few people have first hand experience of how the work there is conducted. This chapter will provide entrance into the boardroom and a surrogate experience of the everyday work of Board members as they sit about the table and ratify decisions that will shape the evolving character of regional health care systems and thereby have a direct effect on the health of populations.

In this chapter, I use a social science approach to further my understanding of how regional health boards make decisions and thus to consider what might be the information implications. I have conducted ethnographic fieldwork on the Board's activities and here I will use those data to argue that there is more to Board decision-making than is generally recognized by those who design information systems for their use. In making this argument, I am inspired by Lucy Suchman, who did much the same kind of thing; using ethnomethodology to rethink how system analysts were understanding clerical work (Suchman, 1987). Her analysis allowed her to propose a different way of relating knowledge and action to particular situations; she saw that clerical workers' activities didn't follow the 'planning model of action' that underpinned systems analysis. Rather, she came up with the notion of 'situated action' where clerical workers used plans as resources for the actions that they decided to take in the course of events that occurred, and that was 'their work'. That is, Suchman's important discovery was that plans could be made to 'cover' and 'account for' what happened, retrospectively, but as a prospective account of the work, they failed. Suchman argues that as long as machines are designed according to an analysis of the stipulated planning models they will be limited to what designers can anticipate of users actions.

This chapter makes the work done by board members visible, as they make decisions. While work accomplished manually can readily be observed, the work of Board members is primarily accomplished collectively through talk. How talk is organized and decisions are accomplished is often taken-for-granted by those accomplishing it. I take the standpoint of the board members to enter into their everyday world and systematically unravel how their work is actually accomplished. I do this not only to better understand the local setting, but also to anchor the rest of the investigation in material actualities. Analysis in this chapter is drawn primarily from meeting transcripts and related documentation supplemented by observation. The next two chapters will continue explorations beyond the boardroom.

The formal work of board members appears to occur as they sit together around a table in board meetings. All the information related and communicative tasks that the Board engages in I investigate as work 'generously defined' in the Smithian sense as

> what people do that requires some effort, that they mean to do, and that involves some acquired competence. The notion of work directs us to its anchorage in material conditions and means and that it is done in 'real time' (Smith, 1987, p. 165-166).

This is important analytically, as I will be drawing on that "anchoring" of the local features of the decision "work" to lead me to its extra-localities in future chapters. This chapter will alternate description of observations with the puzzles that these observations elicit.

The transcripts and related documentation provide empirical evidence of Board members engaging in the work of governance. The organization of the work in real time unfold as the Board works through a preset agenda, listens to presenters, raises questions, weighs responses and deliberates on various issues and courses of action. Board members reveal prior preparation by asking questions pertaining to the Board information package. These are just some of the decision-related work activities that are easily visible from observing a board meeting and reviewing the transcripts and related documentation.

Decisions are the identifiable point in the work process at which the authority of the board is actually exercised. Collectively, the decisions of the Board are a formal

representation of the work of governance. They therefore are of particular importance to understanding governance work as they affect many of the other tasks that occur at a meeting and indicate the actions that are intended to follow. The decisions represent an end to the information seeking and exchange that has characterized the period of time that the decision has been worked on to the point that a decision was imminent. The decisions are the point at which information has become actionable – at which all the preparatory work that the board members and their staff have done – culminates.

I will first describe the formal decisions of the board, primarily from the transcripts and related documentation. In selecting the excerpts of the transcripts to illustrate how it actually happens in board meetings I chose points at which there was some tension among board members. These puzzling passages are more useful for exploring the dynamic complexity of the fast paced boardroom exchanges because they can often be traced to ruling relations that are invisible in the Board room but may be organizing how decisions are made. They may indicate that something outside the field of vision is coming in to organize the local work of governance.

6.2 Decisions as approved motions

Motions 'moved', 'seconded', 'voted upon' and 'approved' are the form in which the decisions of this board are made. The work of a Board member is to understand, adhere to and provide input to the governance decision-making process used by this Board (by following a formula that, although largely taken-for-granted, is prescribed). The excerpt below contains the basic structure of a board decision that does not involve discussion. To those uninitiated in governance work it would be enigmatic. This passage would be decipherable on first reading provided the reader has some experience with how governing boards work. Speakers are identified by numbers, not names, (SP18, SP1, SP9), to conceal their personal identity for this research project.

The passage pertains to one of the most routine decisions made by this board—approval of a 'consent agenda'. Some speakers are identifiable by the role they are performing but only if the procedural 'rules' of the meeting are understood. For example, it

is clear to an initiated reader that SP1 is the Chair of the Board as SP1 is orchestrating the discussion and vote on the motion.

> SP1: Approval of the consent agenda. The consent agenda really represents the minutes of those non-public and special board meetings. I'll go over them one at a time. 5.1, 5.2, 5.3 and 5.4. And the other consent item is review of up coming board agendas. June 3rd and June 17th…
>
> SP18: I would like to raise from the consent agenda the June 17th non-public agenda.
>
> SP1: Well let's raise all of 8.1.2.
>
> SP18: Okay.
>
> SP1: And we will just deal with the 5.1234, which is the approval of the minutes.
>
> SP18: I move the approval of the consent agenda.
>
> SP1: Seconder. SP9. All those in agreement?
>
> ALL: Aye.
>
> SP1: Opposed. Thank you. Therefore we will consider the minutes approved.

In keeping with an institutional ethnographic approach, I'll now provide a description of how the work illustrated by this excerpt happened the way that it did. When SP1 says "Approval of the consent agenda", Board members know this signals they are now dealing with this agenda item. They also know that a consent agenda is made up of a number of items that are routine and require board approval but are non-controversial and therefore not requiring discussion. The consent agenda routinely appears near the beginning of the meeting agenda for rapid approval, as there is, by definition, no discussion.

The numerical guides need clarification. Numbers in the format 8.1.2 represent an ordered item on the agenda, for example, 8.1.2 is the "review of upcoming board agendas" and "5.1234 is the approval of the minutes." In this case there are a series of four sets of 'minutes' from different public, non-public and special Board meetings numbered 5.1, 5.2, 5.3, 5.4 as the Chair explains. The motion itself is: 'I move the approval of the consent agenda.' The decision for each board member is how they will vote.

Motions therefore are Board decisions formulated in a specific format. The minutes represent a written summary of what transpired at meetings including wording of approved motions. The final official version of the motion will read like this…

> The Board
>
> RESOLVED: To approve the consent agenda item as the minutes of the [dates] non-public and [dates] Special Board meetings [name of sponsor 1 – name of sponsor 2] – CARRIED)

Staff of the health region prepare minutes after meetings and circulate them to Board members in sufficient time before meetings for review. At the beginning of a meeting, the minutes of prior meeting(s) are routinely approved. Part of the work of Board membership is to read over and scrutinize carefully the minutes of meetings to ensure there are no errors, or requirements for deletions or additions. As the minutes will become official documentation of the Board's work this type of approval motion endorses the minutes as a public record of decisions and deliberations of the Board.

Experienced Board members know there is an alternative to approving the consent agenda. They recognize, as SP18 has, that if they want to discuss an item they have to make a statement such as: "I would like to raise from the consent agenda the June 17th non-public agenda". If any member wants to discuss something on the consent agenda it automatically 'is raised off'; that is, it is put on the current meeting agenda, discussed and voted upon. If no further request is made to raise another item from the consent agenda, it is understood that all board members have read and wish no changes to the minutes that are covered by this consent agenda.

Another task of Board members is to sponsor motions. According to the rules this Board follows, every motion needs two sponsors, a member 'to move' the motion, i.e., to propose that the motion be put to a vote and a seconder to raise a motion. The sponsors of each motion are noted in the minutes. While deciphering the 'rules' of this work process can be done from observing board members work, it is possible to go beyond the Boardroom to identify texts that describe the procedure. In this case, the Board is following 'rules of order'. The 'rules of order' hook the Board into more widespread institutional ruling relations that actively orchestrate how things happen in the boardroom. The 'rules of order' and the

ideological, discursive and institutional practices that they are part of will be expanded upon in the next chapter.

From my observations and text data, it appears that the Board passes between five and seven substantial motions per meeting — not counting those governing the meeting like 'a motion to adjourn the meeting'. The examples that follow all illustrate the work of Board members in making decisions that, unlike the consent agenda, involve discussion.

6.3 Agenda approval and development

The agenda organizes Board meetings powerfully by delineating the Board's work and organizing its occurrence in time. The first item on the Board's agenda therefore is a decision to accept (perhaps with revision) a largely preset agenda that has been included with the Board information package. The agenda serves to separate the items that will become the focus of decision and debate and then order them – thereby keeping the meeting on track and on time. The work done in advance to prepare agendas means that they are generally approved with slight if any, revision. The active character of the agenda in textually mediating governance work will be discussed in Chapter 7. In this chapter, the focus is on the actual work Board members do to set the agenda. This includes, not only approving and perhaps improving the meeting agenda through revision, but also providing input to upcoming agendas as the following transcript excerpt shows. The work of setting the agenda is somewhat simplified through the use of a standardized template. The basic meeting format for this group includes structured headings; Call to order; Check In; Approval of Agenda; Approval of Consent Agenda; Approval of Minutes; Board Inquiries and Requests; Business Arising (from prior meeting); New Business (most of the meeting agenda is scheduled under this category); Old Business; Other Business; and Adjournment.

Once the agenda has been set, the Board is bound by the 'rules of order' to proceed systematically through the agenda items sequentially and according to protocol. The sequence in which the items are considered is sometimes modified to accommodate constraints such as the availability of speakers or the timing of a break. The limited time

(about 3 hours) the Board has to complete their deliberations on all items necessitates attention to the pacing of discussion.

The following data excerpt combines discussion of two agendas: one for a public meeting and the other a regular non-public Board meeting. First the Board chair orients the board to numbered items indicating the position on the current meeting agenda.

> SP1: Okay we've got a, 9.7 is review of up coming board agenda, 9.7.1 [date] public meeting. And you'll notice that you have nothing in your package on it. That's just about what's coming forward for the public meeting. Ahh, the one issue that we did have that we had sort of tentatively set up was the official announcement of change of ownership at [name of hospital]. I talked to SP27 today, and like I said, they're going to bring some people down and that could be arranged at another time. But SP23 and SP33, what all did we have on the agenda at that time? What else was on there? There were no presentations.

The coordinating work done by the chair in soliciting items for the agenda both within the meeting and before hand is illustrated by the above passage. The Chair's role as a facilitator as well as a presenter of general information for Board discussion further illustrates this coordinating. In response to the dearth of agenda items for the public meeting, there is (next excerpt) a discussion of agenda items that were eliminated after consideration. This informs Board members of the fate of items they may be making or suggesting.

It is also clear that some speakers are located differently from others by the extent to which they have been involved in generating items for the agenda. It is not possible to tell from the transcript whether SP33 or SP5 are regular Board members who are involved in committee work or perhaps the Board Coordinator (a staff support person) or one of the 'visiting' senior executive team made up of the Chief Executive Officer and all the Vice Presidents.

> SP33: Well, we thought the health plan but then there's no money allocated for it so… That's gone. That was about it. And then the financials and then as well just the minutes that need to be adopted from [date].
>
> SP1: And the [ownership] issue. So I lean to your guidance. Do we reschedule it, combine the two meetings.

SP23: Did SP5 have something cooking.

SP5: No we were unable to put together a committee report in time for today, because we need to advertise and in fact we need to advertise for that meeting.

With apparent agreement the above-mentioned potential agenda items were appropriately eliminated. Next other items were raised for consideration. There is minimal deliberation on each and none is decided on definitively. It becomes clear, in this passage, that the work of the whole Board is to generate and support ideas in a general way rather than do the concrete agenda planning that is also discussed.

The Chair presents information on Board work as well as facilitates discussion. In the next passage, the Board's work is in generating or sanctioning ideas while leaving further development and concrete agenda planning to staff and committees is illustrated.

SP33: Well, there are the grant presentations. But we're still discussing that about the luncheon. So I don't know if you'd want to do a public meeting, slash, grant presentation, luncheon, ...

SP1: We had a request. We have some grants that are before us now for preliminary approval and we had a request that that would normally come forward to the board meeting. As you see they're not too plentiful. But we had a request from this group here awhile back that we'd like to know what has been spent on some of the other grants that we've given. What the result was. And SP23 and SP11 were suggesting that we sort of get some flair out of it, present these grants and have some of those recipients come back and have a luncheon or something and sort of get some press out of it. And that kind of a method. So that was another issue that was on the agenda that was being squirreled away if possible.

The Board's concern with fostering positive public relations is illustrated by the talk of a luncheon to garner some favourable publicity ("some flair", "some press") for the health region. Given the public concern about health care it is curious that this Board is having trouble generating substantive items though it is understandable that the Board would want to garner favourable media coverage. Board member SP20 attempts to orient the Board to more fundamental concerns of the relationship between the Board and the community and how to establish or maintain this relationship.

SP20: I think I'm a little confused about how this happening, ...

SP1: I don't know.

SP20: In fact we've had very full agenda all the time. Two times a month, and all of a sudden the last couple of months we seem to not have that case.

SP1: I guess I would say, is there nothing coming forward or what are the issues. The other amazing thing is that there's nobody that wants to present. The last couple of times we've phoned around to get people to present. What does that mean?

The need for the Board to ascertain how it is that no agenda items are coming forward for public board meetings illustrates the type of information need or request that would be difficult to fill in a systematic way. A solution is proposed.

SP20: I think it means to me that we better get our community meeting, consultation process, community meeting program off the ground quickly. And maybe we should delay, postpone the public meeting a couple of weeks and...

While the issue of the date resonates with the Chairperson, SP20 reiterates that a community consultation process is needed.

SP1: Incorporate it with them. I think that would be my wish that we would put the [date] with the [date].

SP20: That's not what I'm saying SP1.

SP1: Well, ...

SP20: I'm saying can we get a proper community consultation meeting later on in the month of [date]

SP1: Yeah, whatever. But we may have, unless we get a, well we could have the other situation. We do have the minister's meeting on the [date]

Yes, SP21.

The concept of a 'proper community consultation meeting' is raised. While the Chair acknowledges the point, what happens next is that another member of the Board diverts the discussion from the public to the non-public agenda, and raises the issue about what the Board needs to know. This member is concerned that they do not know what they need to know and requests that this be reported on.

> SP21: I'm just wondering whether administration has had the opportunity to inform the board enough about everything we're doing to determine the health status in the region and the work that [person's name] was doing and the research initiatives that are coming out of the region.
>
> SP11: Have we had enough time to do that?
>
> SP21: I'm just wondering if there is enough information or direction since he's been on board for about six months and whether that would be of interest to the board. Because I mean that's one of the things.
>
> SP1: Sort of an interim. We would normally get that later but you're suggesting an interim report?
>
> SP21: Well, I'm just throwing that out since we're looking for things that we should know about. Whether it would be possible to give the board some direction as to either the process or some preliminary results or something like that
>
> SP11: There is a group that is meeting ahh, next week I believe. But what I would suggest. It's a good suggestion. We will look at it and ahh, and have a discussion with [person's name] and see if there is something of value that we can advance on that. On the issue of the report on the health of the community, even if it's the process. We'll talk and report to the board.

The above passage illustrates the work of Board members as information recipients. The agenda item was generated by the Board member who first highlighted an information need – something within their mandate that they needed to be better informed about. This information need generated a request for information related to the health status in the region. In contrast with doing the work involved in carrying out their instructions, for example, the work of preparing a report or presentation, arranging luncheons, orchestrating meetings etc., the Board work is to provide guidance in the form of suggestions of themes for meetings and things they want to be informed about for example. Someone (SP11) then committed to follow-up on the item to make it happen (presumably SP11 is either staff, or working with staff on a committee). The discussion quickly moved off the item with fairly minimal input from the whole board on how it would be accomplished.

The Board request for 'evidence' on community health status and regional research initiatives provides validation that at least one member of the Board wants this kind of

information. It also illustrated how this happens – as a result from a request from a Board member during discussion of future agendas. The agenda item has an emerging quality to it – the reporting will be on work in progress and is associated with a 'new' Board member who has only been on the Board for six months. Perhaps because the report is not yet complete and therefore ready for public release the report on the process of reporting on community health is discussed in the context of the non-public Board rather than the public meeting.

The Board's work in generating suggestions, rather than being directly involved in carrying these out, is reinforced as the discussion continues. It is suggested that a selection of themes could be put forward that would help others doing the work of setting the future meeting agendas.

> SP11: ...and I think probably what SP12 and SP33 are looking for is some feedback from the board in terms of what's the first theme that you would be comfortable with us advancing and going out and doing that. And it may not be done with strict accordance with strategy because it may not fit the subject.
>
> SP1: SP10.
>
> SP10: How controversial do you want to get?
>
> OBS: Laughter.
>
> SP10: There is a subject that is current in the news and that is the status of the services to diabetics in [the province].
>
> SP1: The what?
>
> SP10: The status of services to diabetics in [place name]. And in this region. The changing demographics and the explosion and epidemic of diabetes in the First Nations community. And what is its impact on our health services. And this is a subject that [person's name] and I can arrange to have a big presentation for you but do you really want to get into topics of that scope and ahh...

While the health topic suggested is clearly of interest and importance to the public, the next passage again demonstrates the Board's work in fostering 'positive' public perceptions of the health region.

> SP20: Actually I wouldn't want to get into that kind of controversial area right square one with our new community format. It may be an attention getter but I think you've been in the

> media plenty. In the last month. We'd like to get something more positive. But I thought we had a whole series of themes outlined at our last board and our public meeting, it wasn't optimum there to have a good discussion around them. And we either have one now or maybe the executive could think of a way to facilitate a discussion about themes. But I think I'd like to see it get off the mark. I don't want to see us have fewer meetings with the public. I want to see us having effective meetings and frequent meetings that will generate information and appropriate public response.

It is evident here too, that the Board relies on the 'executive' or senior administrative staff to do the concrete planning and execution work – this suggestion extends their work to the task of facilitating or supporting the Board discussion around themes. The governance work of setting expectations – 'generating information and appropriate public response' – is also seen.

In the following meeting excerpt, the work of the Chair to get the Board to agree on dates for future meetings and whether or not to amalgamate meetings can be seen. This work is woven through the discussion. The Board member who speaks next derails another quest for a date by the Chair by again raising issues of agenda content and moreover of a process to decide.

> SP1: You pick another date. Let's have one in March.
>
> SP20: Well do you know what we're going to talk about though. How are we going to decide that?
>
> SP1: Well, I think it's just the development of those themes that were suggested that we're going to jump on.
>
> SP5: We are looking at the feasibility of some of those themes and will advance from those.

The expectation that the administration would bring forward topics for discussion is raised, though with deference – perhaps to minimize the suggestion of conflict that underlies the statements that follow.

> SP20: Well, I humbly expressed a will at the last public board meeting to have a discussion with the board to determine the themes. So I thought we would have a process to facilitate that happening. Not that a committee or a subgroup would do a theme

but that the options would be brought here. So some kind of a process for deciding on those.

SP1: Well, I was under the impression that we rolled out a bunch of themes and whichever one we could pick any one of those if we didn't have any comments or difficulty with. But then line it up. Because there is a bit of a lining up with themes you would say.

SP5: And timeliness and we also agreed that the meeting as I understand it that we want it to remain sufficiently flexible to accommodate topics that were timely.

SP20: Well couldn't we have in this little group that's meeting on the recommendation for an orderly process of themes, at least we could have a chance to debate here at the board and determine. And maybe because of the timing we need to have to rely on them for the first choice. And not determine it here.

SP1: Okay.

SP11: So that group in consultation with the executive will pick the first theme. Okay.

SP1: And it will most likely be on the [date].

SP22: So there is no [date] meeting. We know that for sure.

SP1: Yes. The stuff had to go out today.

SP11: There will be a meeting on the [date] and we will have a meeting.

SP1: Okay. Thank you.

There is some tension here between what is done by the whole board and a smaller group that will pick the first theme – 'at least we could have a chance to debate here at the board'. Instead the Board has to rely on the smaller group to pick the theme. Given that the discussion moves on easily it seems there is unanimous agreement that the whole Board is willing to delegate this job. The next time the Board sees the agenda that they have had input to, will be when it appears as an item at the beginning of a meeting, for approval. Note that, of the fourteen Board members in attendance, relatively few speak. There are also twelve staff and physicians present. The minutes will record a decision, though the Board does not formalize this with a motion.

Though this excerpt on the Board's input on future agendas illuminates much about Board work, it also highlights that much of the job is delegated. The work of the chair in coordinating discussion, and date setting under tight time constraints is revealed. The work of a board member in proposing and having an agenda item of public health significance taken up by staff for further development is revealed. The work of determining process and delegation itself is an undercurrent that is partially revealed.

The need for persistence on the part of the Board member who continues to push the discussion on process is intriguing. Some of the tensions within this discussion relate to processes that the Board itself has not fully worked out: is the administration to assist the Board to be more involved with developing themes, and developing a more effective public meeting process or is the Board to assist the administration? These may indicate opportunities for decision support tools – to generate themes for example, or to make the work of the Board available to the public, e.g., in the form of a website. They may also indicate that there is something else going on behind the scene that is not fully revealed, that is orchestrating the work processes of the Board.

An overall picture of how the agenda is set for either the public or non-public meetings is not yet explicit from the talk in the transcript, or meeting observation. It remains very vague. The work of the smaller group who will actually set the agenda, as well as the work of the 'executive' as consultants, are not fully revealed. Given the dearth of ideas on items for the public meeting that the Board has generated, there is an open question on the executive staff's work in organizing meetings and how this consultation is done with the smaller group. The difficulty the Board has in generating an agenda is still not explicit – the analysis has not yet explicated how it happens this way. Therefore, this difficulty is a puzzle for further investigation and analysis using an institutional ethnographic approach (see Chapter 7).

6.4 Approving committee reports

A decision seen repeatedly in this transcript series is the acceptance of a committee report. The following transcript excerpt illustrates the work of Board members in reviewing

committee recommendations. Like the small group who will select a theme for the next public meeting, committees are set up by the Board to handle some aspect of governance work that cannot be dealt with by the entire Board, within Board meetings. The committees of the Board have the delegated authority to review information and make recommendations. The final authority rests with the whole Board, which reviews recommendations and accepts them. The Board is presented with committee reports, usually as part of the board package. A spokesperson verbally summarizes the report on behalf of a committee of the Board. Once the summary presentation has been made, the Board raises specific questions or concerns and considers the response of the spokesperson before moving to accept or revise the report.

6.4.1 The Audit Committee report

Here the Board's work is to authorize an outside professional firm to conduct a financial audit for the regional health Board by approving a motion to accept the Audit Committee's report. The one page included in the Board's information package consists of a statement on recommended choice of firm and designated time period.

> SP17: You have before you the recommendations from the audit committee. The motion is fairly self-explanatory. It went through all the process so I'll answer any questions you might have but on behalf of the audit committee and its chair, I'll move the motion and it's amended from what you see printed. The audit committee of [StarCity Health Region] Health recommends to the Board of [StarCity Health Region] that [name of firm] be appointed as auditors for [StarCity Health Region] for the years ending March 31st and then the dates. We cannot appoint an auditor for [named] hospital; they will be doing that themselves.
>
> SP1: Is there a seconder for that motion? I have just one question. Any other questions?
>
> SP18: Ahh, the last contract was for three years was it not?
>
> SP17: Yes.
>
> SP1: Yes, this was my question.
>
> SP17: It was and it was actually extended. So we decided...
>
> SP1: It was extended one year.

SP17: One year.

SP1: And then you decided unilaterally to go five.

SP17: It was the recommendation of the audit committee that went forward and the proposal here.

SP1: Are we going to accept that? Is there, we've had it moved, seconded, all those in favour? Carried. Ahh,

The explicit reason for the committee's 'unilateral' decision to progressively extend the auditing period is not given, though this seems rapidly to gain approval with the statement that it was the recommendation of the committee. The theme of deferring to the recommending committee is more fully revealed later in this chapter but is highlighted here as an important principle in organizing the governance work of approving the committee report.

The statement that reassures the Board as to suitability of the chosen firm reveals an assumed underlying process: "The motion is fairly self-explanatory. It went through all the process so I'll answer questions." The 'process' that the speaker refers to and that the Board members take for granted is the process by which the committee has selected an auditor. It is acknowledged to exist in this passage and can be traced outward to see how it is organizing the decision-making process of the committee involved, as well as the role it plays in coordinating committee and governance work (see Chapter 7). The board has apparently done its job in ascertaining that the process was followed and therefore approval of the decision is warranted.

The auditing process revealed in this passage can similarly be problematized to unravel the ruling relations implied by the existence of a number of auditing firms available to do the work required by the Board. The eventual auditor's report will contain information that the board needs to carry out its work. What the audit entails, specifically including the scope and specific tasks, expected results, and anticipated usefulness to the board cannot be determined from the 'talk' in the meeting. Nor is this contained in the committee report contained in the Board information package. Though this type of professional process would seem to be understood by those present at the meeting and others, including perhaps you, as an informed reader, the institutional ethnographic approach allows the researcher to trace

out from this finding in the everyday work of governance to the outside process, to uncover and reveal the web of ruling, thereby making it explicit enough to be amenable to improvement (see Chapter 6, Section 6.2.1).

6.4.2 Concerns about a committee recommendation

Next concerns about the recommendations of a committee are raised by Board members and addressed by the spokesperson. The report involves the funding of a number of community grants projects in the area of community wellness. The questions themselves have arisen out of the report included in the Board information package. The Board approved the report as presented, but not before a discussion about the funding of one of the projects for a family planning poster display, and an unusual request. Two Board members raise their concern like this...

> SP20: I get a little concerned though when it seems to be implied that [organization] would be proposing a particular approach to family planning in lieu of other methods... I've got a bit of a problem with that. Simply because I think people should ahm, you know have broad information and freedom of choice.

The Board's work here is to uncover and raise concerns about the information they are presented with and to compare it to criteria about information quality and personal choice. Whether the Board has made the criteria explicit is unclear from the debate. These criteria are values that have ethical components and may or may not be part of a well-articulated ethical framework. In response, the Board hears from the committee spokesperson how the same concern was raised in the committee and resolved.

> SP39: I think that is a fair comment. Certainly the committee looked at this and ahm, and decided that we probably did not, were not taking a position on whether we wanted to go with one side or the other. And so long as we knew that there were other methods that were generally available as well, and as I said, public health has been looking at some of the other you know, birth control clinic which provides some of that information. We thought it was just one other initiative in the community. And from time to time we get certain initiatives that may seem to maybe propose one kind of philosophy and sometimes it is a bit shaky to see whether we should side with one philosophy over another. But so long as in a

> general sense it's consistent with the board's mission and values, the committee feels comfortable in bringing the recommendation forward.

It is noteworthy that the Board does not deal with substantive issues related to the content of the poster, such as the evidence of effectiveness of the family planning method proposed, or related research. A general statement on how the community project proposal on family planning is consistent with the board's mission and values apparently suffices – not how ethical principles relate specifically. This latter point, combined with the consideration that there were other sources of information within the community, overcomes Board members' concerns that the proposal did not provide sufficiently broad information on a potentially sensitive issue. The principle that the committee is not expressing a preference for one philosophy over another is reinforced as follows.

> SP20: So it would be fair to say Dr. [name] that say, were Planned Parenthood to come forward with a similar proposal to promote other options for family planning that we would probably support that too?
>
> SP39: That's what I'm saying.
>
> SP20: Okay. Thanks.

This passage gives some further insight into the criterion that the Board is applying to justify approval of these recommendations despite concerns. The implicit criterion that the process of funding community partnership projects be non-discriminatory is key to this. The argument that any community group, regardless of their position on the philosophical debate on family planning, would be funded if they had a 'similar proposal' satisfies this principle. After a diversion the discussion comes back to concerns about the group receiving funding in the area of family planning.

> SP17: Just to follow up on SP20's question. So what we're approving is a thousand dollars for a display board...
>
> SP39: That's right.
>
> SP17: I guess my only concern is when we get into some of these areas that someone would follow up to make sure that their display board accurately reflects what they said that they were going to do.

> Because I would argue that there are right and wrong ways to do things...
>
> SP39: That's a fair comment. One of the challenges that we've had with the evaluations, is because of course with manpower, we pretty much rely on the reports that they give to us. And also in terms of accounting for dollars, we just built in the fact that they should have [StarCity Health Region] partners so of course there is some level of accountability. But we don't normally verify all of the receipts, for example some of the expenditures. And likewise we also trust that the evaluations accurately record what they actually indicated that they were going to do in the first place. So there is that level of you know...

This response to the Board does not reassure that adequate accountability practices are in place, but acknowledges the concern by describing the limited existing mechanisms. The Board's work in knowing about and overseeing accountability mechanisms is prominent here.

> SP20: Would it be appropriate SP 39, that when we approve this, assuming that we do approve it, to pass along a comment to the people who are, saying by doing this we are not supporting one method over another, we are simply supporting yours...your approach to family planning? If so there would be no question about [StarCity Health Region] taking sides.
>
> SP39: I have made a note of it and we could actually do that.

The concern that the Board could be seen to be taking sides on the birth control debate is allayed by the assurance that the people who are receiving the funding can be told that the Board is not supporting one method over another. The ambiguity of 'we could actually do that' as well as the 'I've made a note of it' leaves uncertainty as to how the concerns of the Board will actually be taken up by the speaker, an administrator who actually does things. The motion is then passed.

> SP1: Any further questions. Would someone be prepared to make a motion to approve the report as presented? SP9. SP23. Any other discussion. All those in favour.
>
> ALL: AYE.

The following aspects of the work of reviewing and approving the report are visible from the talk. In this instance the ethical principles articulated in general terms are brought forward as criteria on which community grants funding decisions are made. The concern that health information presented to the public is balanced and non-partisan would appear to have been an appropriate one given the sensitivity of the issue within the community, but there are still some puzzling aspects to this decision. The statement that the decision is consistent with the board's mission and values is not explicit; for example, what aspects of the mission/values and decision are aligned is not made clear. This trace of an official guiding policy statement organizing the board's decision can be explored to discover how this ruling relation works (see section 7.7).

6.4.2.1 Amending a committee recommendation

The Board generally approves committee recommendations. An interesting puzzle is how the Board creates agreement around every motion put forward. There is no occurrence of a motion voted down by this Board in the series of meetings included in this study. As the following passage illustrates, a Board member is concerned about overruling a committee recommendation on the basis of the advice of the CEO. The Board then finds a way to overcome this reluctance. The deliberation is again on grants. Just prior to the excerpt of transcript provided below, a suggestion was made by the CEO (identified by the act of giving the CEO's report) that a group that did not get funded should have been considered under another funding category. They were turned down because of the salary implication of their proposal, whereas the other funding category did not have this restriction.

> SP22: Well I seconded this to facilitate the discussion. I guess I'm a little worried about ahh, end-running or over ruling the committees. So I don't quite understand what the process is that we're talking about here. Are we saying provided the committee is comfortable with this reallocation we approve it ahead of time so there is no need, is that what I'm hearing?
>
> SP1: We're asking the committee to, I guess what we're doing is we're asking the committee to consider this application under the community services grant applications.
>
> SP22: Okay, so we're not forcing them then to approve this.

SP1: It may well be though...

SP17: It would be approved though if it meets the community grants criteria.

SP22: Oh, okay.

SP1: It may well be that there is some other missing elements that doesn't make it eligible.

SP22: Okay, I'm comfortable.

SP1: So any more questions on the amendment. All those in favour of the amendment? Carried. Then ahh, the motion itself as amended. Which would be to approve the grants plus the proviso that this other be considered to be under the community services area. SP8 you moved? Seconded by SP21. Any other questions on that element. All those in favour? Carried.

Here the Board's work is to decide whether to support a request from their administration. To do so would be a departure from their practice of deferring to Board committees. This excerpt reveals the Board affirming a governance role in amending the motion with a 'proviso' that directs the committee as a condition of the decision. They decline to do the decision making work of the committee. The statement "It may well be that there is some other missing elements that doesn't make it eligible" reveals that there is an approval process this committee is following and the Board as a whole is not familiar with its details. The decision therefore goes back to the committee.

The discomfort of SP 22 in overruling the committee recommendations and the extent to which the Board declines to overrule the recommendation directly relates to the different specific decision-making tasks made at various levels in the organization. The Board's relation to its committees and to senior management is not entirely elucidated from this discussion and so these relationships need to be followed up through further investigation and analysis. Note that, in the case of the Medical Advisory Committee report that follows, Board members hastily approve recommendations without discussion.

6.4.2.2 The Medical Advisory Committee

The next motion to accept the report of the Medical Advisory Committee (MAC) suggests that the Board approves some recommendations without substantive scrutiny or

discussion. This is a practice referred to as 'rubber stamping' in reference to the marks of approval applied with a rubber stamp automatically, to some types of documents by an authority figurehead.[8]

> SP1: Okay, agenda item 8.3. MAC Report. I apologize for the lateness of it, but just look at how hot off the press it is..., the meeting was last night. SP26.
>
> SP26: The meeting was last night. We tend to run into this about every two or three times a year where we have a meeting Monday and you have your meeting Tuesday. Ahh, just some highlights if you haven't had time to read it is ahm,

A brief summary of three highlights follows: the anomaly of terminating a physician who had not resigned but is working in another province, the appointment of a new department head to replace a retiring physician, and a transfer of function (infusion of epidermal anaesthetics) to trained nurses. The related report details the recommendations of the Credentials Committee of the MAC related to the approval of appointments to medical-dental staff, temporary appointments, extensions of temporary appointments, leaves of absence and resignations.

> SP26: If there are any questions I would be happy to answer them.
>
> SP1: Questions? If not, could I have a motion accepting the MAC report. Moved by SP3, seconder? SP5. All those in favour? Opposed? Carried.

The rapidity with which the Board votes to accept the MAC report on the basis primarily of this brief verbal report is curious. The Board has had little time to review the related report but it doesn't seem that this is expected to pose any important problems. The Chair (SP1) has set a rapid pace and also mediates the discussion that follows in keeping with the facilitation work that goes with the role of chairperson. Although one board member resists simply 'rubber stamping' the motion to accept the MAC report, the discussion that ensues highlights the extent to which clinical governance work has been delegated to the physician body reporting to them.

[8] Rubberstamping is defined as routine authorization of an action without questions (www.hyperdictionary.com)

> SP17: I'm still trying to read the rules and regulations for the department of long-term care that we've just approved.
>
> SP1: We didn't approve them. That's draft number four. I'm sure that we're going to get another draft before we...
> SP17: It's not a part of the MAC report that we approved?
> SP26: That's draft three, that's the one we approved, that just has to be, there were two drafts before that. You haven't approved a draft. It just says draft three because when it came to MAC that was the third time, they'd done it themselves. Their own executive committee met with MAC so that is what is going into effect.
>
> SP17: So we've just approved it.
>
> SP1: Is there a big change in this?

The Board member who raises the question of what they have approved has to be persistent until eventually it is revealed, by not being refuted, that the Board has indeed just approved draft rules and regulations for long term care though revisions are expected to continue. The following clarification of a further concern, of the small number of physicians approved for long term care, reveals that the Board knows little about how medical care is organized in the region.

> SP26: No. The only change is that it ahh, I understand long term care became a department about three years ago. And they didn't have a lot of structure to them, and Dr. [name] has done an excellent job of bringing that structure to the department. In fact (s/he's) done a yeoman's work of doing that seeing that there is 17 long term care facilities. Ahh, one of the difficulties was is that they didn't have any kind of format to work on so the rules and regulations that they have in there are not much different from any other departmental rules and regulations except they have things like you have to see the patient at least once a month if there's going to be once every three months, you have to discuss it with the nurses and have the region, it's just because it's a different type of care than acute care. But it's still an institutional care and so you have to have some kind of parameters on it so that if they're not going to see the patients, if there are problems they have somebody to call. In other words if their physician isn't, or excuse me, if client isn't being seen at the long term care home, now there is a mechanism by where the director can phone Dr. [name][9], Dr.

[9] The space for names was left blank in the transcript so it is unclear how many doctors are referred to in this sentence.

> [name] can then intervene and if Dr. [name] has a problem (s/he) can come to me. Before we didn't have anything.
>
> SP18: I'm pleased to see it and I hope that the next time we approve the membership of the long-term care department it has more than two physicians. Which it had last time.
>
> SP26: Understand, no understand that you probably never will get more than two physicians on that because those people practice only out of long term care. They're not in family medicine. Family medicine has a huge number.
>
> SP18: Oh, I see. So family medicine...
>
> SP26: Family medicine practice in long term care has to have privileges.
>
> SP18: Oh, I see. Thank you.
>
> SP1: Ahh, the acceptance of them through the MAC committee in recommendations for privileges now automatically will allow them into the long-term care?
>
> SP26: Long term care, no. You have to apply for privileges into long term care.
>
> SP1: That's still on the books, eh?
>
> SP26: Any other questions? SP17.

Like the previous example where the Board approves recommendations of a committee reviewing community grants, the Board has delegated authority for decision making to a committee. Likewise there would be a similar reluctance to overrule committee recommendations in recognition that they cannot reproduce the work of the committee in the Boardroom. Unlike the work of reviewing recommendations of the Grant committee, the Board seemed to be actively led away from a discussion of the draft long-term care policy. This is surprising given health and governance implications, such as long term care patients not seen regularly by a physician or out-of-date procedures ("that's still on the books?").

A hierarchy of policy-makers is more fully revealed in how the MAC report is reviewed. A subcommittee of the MAC, the Credentials Committee, has reviewed physician appointments. The long-term care executive with a physician lead has worked up and presented this draft policy to the MAC.

The more puzzling part is the relationship between medical and other committees of the Board. The excerpt reveals physicians and surgeons located differently in relation to health care management and governance structures such as the other committees. While this is partially revealed in the Board meeting talk, it requires more investigation to understand fully how this happens and to explicate the organization of governance work by ruling relations. This will be expanded upon in Chapter 7, Section 7.5.5.

6.5 Policy setting: The Spiritual Care Strategic Plan

The foundational policy setting work of the Board in overseeing formulation of an overall strategic plan and approving it had been accomplished before the period covered by this study. This series of transcripts provides just one example of the Board engaging in a strategic planning decision. A motion to approve in principle a draft spiritual care strategic plan is before the Board. The plan has been included in their Board information package.

The motion comes forward under Old Business, but is alluded to in the meeting three previous times. This reveals the continual and rich information environment within which Board members are immersed and become more conversant with the longer they continue in Board service. They hear about this plan in progress and fit it into the larger picture as the Board focus shifts to different aspects of management of this large organizational entity. As part of the CEO's report on the implementation of the region's three-year strategic plan, the CEO notes:

> And the last area under health promotion and prevention there, is bereavement services. We're trying to develop a system across the [StarCity Health Region] but it needs to be linked to a spiritual care strategy as well.

The spiritual care plan comes up again in a discussion of implementation of the overall strategic plan.

> Number 47 addresses the implementation of the spiritual care plan that was brought forward to both boards very recently. And as you can see, we see over the next three years we would begin the implementation and continue the implementation of that plan.

It isn't clear from this passage which two boards are being referred to, so this is another puzzle to be unravelled. Later a board member asks for a reaction on the implementation plan, from an aboriginal Spiritual Advisory committee as well as the Mental Health Advisory committee, before the plan is made public.

> SP22: Will there be an opportunity for and not saying that day has come yet, not today, but for our advisory committees to give us some feedback on this plan. Sometime, you know, before it goes public. Before it gets perceived as etched in stone. Just in terms of their reaction. And I appreciate that management may want to do more work on this first and that's fine. I'm just saying at some point, I can see ...[an aboriginal], spiritual advisory, or mental health advisory, you know being very interested in this document and maybe giving us some initial feedback that we're going to get from the public anyway and if that would be helpful as part of the planning process. Is one of my concerns.

The Board's work in ensuring regional health staff obtains community feedback is illustrated. That the plan may generate some controversy is something this Board member would want to prepare for and use in the planning process. The role of the Spiritual Advisory committee in preparing the Spiritual Care Strategic Plan is also a question that arises from this discussion, as seems to be the practice with many actions.

Within the Chairperson's report there is further vague reference to 'issues' and 'concerns' as follows, though what these are exactly is not explicit in the talk of the meeting. These would seem to be 'taken-for-granted' by Board members familiar with the situation.

> SP1: Ahh, we had a shared services meeting since the last time and ahm, the one issue at the shared services meeting. If you recall, there was still the issues around the spiritual care, the management of spiritual care. And there had been some concerns expressed at this table about certain issues. Those were brought up at the shared services meeting and the people of [hospital] are addressing those concerns and they're going to bring us a report back and they wish to air that at a shared services meeting which we'll have early in March. So that's the main issue out of there. Also they were advised that this board had voted to allow the ownership to change over from one group to the other and we're just battling with, for a suitable time to get some favourable press out of that. Ahh, they would very much like to have [religious group] present at the time,

> one of our meetings, the public meetings is the ideal situation where we would officially advise them etc.

It is not clear what the Board is talking about in terms of 'shared care' and 'ownership change'. The concepts seem to be linked as they are in proximity to the spiritual care plan and the reference to a religious group. The importance of favourable press is raised in proximity to the public meeting. Here is another puzzling point from which institutional ethnography can assist in tracing the ruling relations from the everyday work of the Board (see Chapter 7).

The motion to approve the spiritual care plan is put on the table in the following passage. Again, another board approving the plan – we also learn that the other board is a hospital board. The introduction acknowledges that the board is aware of and generally supports the work done by others to prepare the plan. The number of times the spiritual plan is mentioned in other discussions gives a sense of how the Board absorbs information on the efforts to integrate the administration of service delivery.

> SP1: We were talking this morning that we would be asking the boards, both ours and [hospital name] to approve the strategic plan in principle. Are you comfortable with doing that at this time, I think manage, I think, though it isn't final approval of the three year strategic plan because it has to be developed further, but I think it's something that administration needs at this time. I know you all said yes this is great, this is wonderful and so on, this is really good work. But are we prepared as a board to approve this in principle at this stage, because we're asking [hospital name] board to do the same thing and if they have any concerns please voice them at this time.
>
> SP2: I would be so prepared to move.
>
> SP1: SP2 and SP22. Are there any questions at this time? Have you voiced all your concerns to admin? Admin picked them up this morning.

What has been done and what will be done next is unclear to the uninitiated but seems understood by those at the meeting. No questions are raised though this passage reveals that the Board has also had the opportunity to submit concerns to the

administration. The comments submitted in writing are not visible to the rest of the Board. As these have been 'picked up' by administration they are presumably on paper.

The main intent behind the motion – to provide administration with the endorsement of the Board to develop the plan further – has been achieved. The impact that this will have on the collaboration with another committee, or internal structures is not specified.

Next comes the formal discussion period preceding the vote. It is interesting that the contents or details of the plan itself are not discussed. While the Board looks forward to a time when the plan will require a budget, it would appear to be too early in the planning cycle to have this detailed information available.

> SP20: Well I certainly support the very good work that has been done and this is just approval in principle of this work. Not related yet to the budget and I guess I just sort of wanted to say that when it comes time to make the difficult decisions based on budget information we know that it's going to be coming back to us so we can see where the cut off line of those various areas exist. And I think the board needs to have some input there. I certainly support in principle what's been said. I'd like to do all of them.
>
> SP1: SP20, you're the second one that has mentioned that when, the board as a whole would like to see, when you come back with the dollars on these things, if there are some deinvestments to take place, or the level of priority is in question, the board would like to help you to make that decision. You could give us the options, some of the options, with the ramifications. Probably they're pretty valid but ahh...

The above passage provides some clarification on how the board and administration will work together in the future, when the Board will have to approve a budget that allocates resources to the plan the Board is approving in principle. It is anticipated that the region will not have funding to do everything (a cut-off), that there will be tradeoffs as they take funds away from something else (disinvest). A Board member indicates to the administration that the Board will want to see the numbers and 'help' administration make decisions about priorities in implementing the plan and taking resources away from some other area.

Next, SP11, a member of the administration, presumably the CEO, lays out for the Board an alternative way of working with the administration. Instead of consulting with the

Board about what choices to make, the 'administration' could work out the priorities and tradeoffs and bring back recommendations to the Board. Administration defers to the Board to choose the approach.

> SP11: There are two approaches that could be used. The one that you are suggesting SP1 or the other where we would do that. We would go through the process, wrestle some of the issues to the ground as an administrative group and then bring forward to you the results of our various thinking and ahh, I guess it would be appropriate for you to let us know today how you would like us to proceed. Ahh, does the board want to make the decisions in terms of the priority, in establishing priorities for ends, as well as considerations for investment, disinvestment and reinvestment. Does the board want to make those decisions or do you want to get recommendations from us.
>
> SP22: Well, the latter I would think.
>
> SP1: This is the time to voice... Ahh, based on the administration working through their amputations. But when you get to the area of disinvestment in particular I think the board has to be aware of what is being targeted to be eliminated because we're certainly going to have to bear the public brunt of the reaction to that. And so I think some detail needs to be there.

The financial implications of what they are about to endorse seems to be the emerging concern. The administrator relates the spiritual care strategic plan to the part of the budget set aside for 'healthy communities'. . The Board has already provided direction on the size of the 'healthy community' budget in relation to the overall and payroll budget.

> SP11: Just to re-emphasize, we have recommended and what you're about to vote on is that for the initiatives under healthy communities which you are endorsing as a principal commitment to the tune of 1% of the budget in the first year and in the second year 1% of payroll to be dedicated to staffing, staff development, retention and recruitment strategies and safety issues. So you're making a financial decision as part of this plan in terms of that strategic investment. We're not asking you to identify, or we haven't identified yet how we're going to pay for that. If we got all of that as new money then the decision for that would be fine, we would just be advancing. However, I don't think we will and therefore we will have to talk about reinvestment and disinvestment.

The above explanation, along with the uncertainty of future funding and assurances that the Board is going to be involved as this unfolds over time, would seem to be sufficient to end discussion on the motion and it is swiftly approved.

> SP1: Are you comfortable with that explanation and you understand both sides of what they want. So on that basis are we ready to vote on the overall approval in principle. All those in favour.
>
> ALL: AYE.
>
> SP1: Carried.

The Board's work in endorsing allocation decisions in relation to ongoing budget cycles is revealed in these passages. Little is discussed about the specifics of the strategic plan to be approved 'in principle' and clearly the Board does not see this as work for them. They have asked that others evaluate the plan to gauge community response presumably in time to make adjustments. Neither is the work of the Board setting nor monitoring the strategic planning process. It is revealed that this is continuing without the direct involvement of the whole Board. It is unclear whether the Board has already done some work to endorse a planning process. The Board's work in authorizing development of this plan, despite lack of details or feedback, has led to a motion that provides for approval of the plan 'in principle'. Approval 'in principle' implies a general endorsement that does not bind the region to specifics of the plan, which can be modified.

That this strategic plan is a sensitive component of the larger overall strategic plan of the region is evident (concerns will be aired at a shared meeting). It is clear that this plan has been largely developed, but also the extent to which the strategic planning process has taken place outside this governance structure ("I certainly support the very good work that has been done"). The work of developing strategy has apparently happened over an extended period of time and involved many players beyond the boardroom, though board members may have been part of this work.

The administration spokesperson outlines for the board the support requested and the reason for requesting it at this time, given that the plan is going forward in tandem with a second Board. It is also revealing of Board/Administration relations to see the presentation of alternative options to the Board as to how they would like to be involved in providing

input, specifically in relation to resource allocation as the plan is implemented. While the collaborative nature of the working relationship of administration and Board is revealed ("We will be working together with the board all the way through"), the governance work in overseeing the implementation of the strategic plan versus being involved in the difficult resource allocation decisions and 'taking the heat for disinvestments' is not entirely explicit.

The work that takes place in Board meetings as revealed in these passages is not to directly formulate the strategic plan but to provide the process with its endorsement through a review of the current draft plan and approval process. Though the approval in principle is explicit, none of the contentious issues alluded to are named or directly addressed by the Board and so Board support remains somewhat tacit – at least to an observer of Boardroom talk. There is the request for early feedback on the plan that reveals that at least one member would like some additional input from others (other than the plan developers presumably). The taken-for-granted processes by which this plan is being developed and the mystery of a second board, a religious group and a change of ownership are puzzles to be explored through further application of institutional ethnographies investigation and analytic tools (see Chapter 7, Section 7.10).

6.6 Ad hoc decisions

The following decisions are 'ad hoc' because they are non-routine. The Board will not deliberate upon them again in the same form though they could be revisited due to changing circumstance or new information. They arise due to developments from outside the organization that require the response of the Board and the Health Authority. One example pertains to facility closure, the other to a proposal for a new facility.

6.6.1 Reaffirming a facility closure in response to opposition

The Board is considering a motion to reaffirm their original decision to relocate clients from a community group home to a new and bigger long-term care facility. This example illustrates the Board's work in responding to unfavourable community and media reaction to a prior decision. A family member of one of the residents went to the media in

opposition to the closure announcement. The group home facility (now being closed) at the centre of the controversy, was established in response to acknowledged difficulties in aboriginal patients accessing culturally appropriate services. The cross-cultural interest in the story contributes to the controversy.

The Board has access to various types of information. They have background knowledge from prior Board deliberations when the decision was made to close the group home facility. They have a report on the issues in the Board package. Board members have also heard from individuals in the community directly.

> SP17: And there's certainly been rumours that the caregivers won't be going to the new facility with their patients. And I read this here, it says they all will be employed in the new facility. Is that true?
>
> SP15: It is true, ahh, but we don't have that agreement in writing. It was done verbally a few months ago. We will have to sort through that.

A motion to reaffirm the original decision is accepted by the Board following discussion. The informational basis of that decision is an analysis assembled, presented and defended by the administration. The report in the Board package outlines the:

> ...administration's definition of the situation by describing events leading up to the current issues, a summary of recent communications among parties directly involved with the issues, and a synopsis of the positions taken by the parties involved. (excerpt from position paper provided in the Board's information package)

Administration's stated intention is to replicate the favourable conditions for patients in the new facility. The facility closing was intended as a temporary measure from the beginning and a case was made that there were not the resources to sustain it over time. The input of the Board was on how administration could best handle the closure with the community and the potential political fallout.

While the case seems straightforward, from an outsider's perspective the one sided nature of the information coming to the Board is puzzling. The administration orchestrates information that comes forward to the Board. How does the Board know that all relevant information is on the table as they make the decision? The account of the administration has

been privileged whereas that of the community becomes 'rumours'. What has been left out of the privileged account is not visible in the boardroom. This institutional analysis will continue to pursue the central puzzle of Board/Administration relations: the Board is dependent on administration to supply them with information, yet the information source has an interest in being favourably reviewed and having their preferred solution accepted.

6.6.2 A proposal for a provincial heart centre

The next ad hoc decision is a "request for Board support and approval in principle of the proposed (provincial) Heart Centre. Immediate needs include space and financial assistance." Advocates of the proposal are from the Board of a voluntary charitable organization external to the regional health authority system. Making 'highly sophisticated, technologically complex care' available through one state-of-the-art facility that would serve the entire province is the central idea behind the proposal.

This excerpt illustrates the work of Board members in investigating the position of other stakeholders in the system. The Board initially hears an update on discussions about the proposal from two Board members who have talked directly with people at the provincial ministry of health, the college of medicine and the local university as well as the proposal sponsor.

The Board's work is to handle the situation and respond in a politically sensitive manner in relation to key stakeholders. Although there was a presentation at the previous meeting there was no time for discussion and response. An unstructured question and answer and discussion period gets right to core issues:

> SP1: Queries from the board members? Ahh, SP17.
>
> SP17: So do I hear you both politely saying that we're really not into having a free standing organization in this area.
>
> SP14a: I think that's correct. And I think that this, the, I think the challenge here would be to harness both the political and the lay enthusiasm and at the same time harness it within our current structure and governance arrangements.

This brief exchange foreshadows the mixed response to the proposal rounded out in the ensuing discussion. Opposition to the proposal is expressed while it is acknowledged they have not been given enough specific information to agree to the proposal even in principle. Board members make the argument that the need for more information precludes the Board making a decision, yet the senior management team recommends that the proposal be referred to an internal planning process.

The reasons put forward in support of this motion are that it provides a means to 'avoid being seen as a 'nay-saying' board', to be seen as 'going on record as supporting a good idea', and to 'harness' the good will and spirit the proposal represents and even to give 'some tangible evidence that something is going to start happening in terms of allowing them to take a small step forward'. The following motion is therefore approved:

> I move that this board refer the question of ... possible support to the ... [provincial heart centre], and including all of the matters that were raised before the board today, to explore those matters ... through our planning cycle.

The motion is remarkable in that a Board with a legislated mandate to govern health is entertaining a proposal from a voluntary organization with no such mandate. The proposal is from a 'voluntary' community board that has formulated its own mandate to raise funds for and lobby for a provincial heart centre. Advocates for the proposal have generated enough political and public support that despite considerable opposition expressed by Board members they pass a motion that provides it with some measure of endorsement. Yet the proposal could not be realized within the current structure unless the board endorses the idea and modifies the current strategic plan.

The interpretation of the Canada Health Act requirement that provincial health delivery systems be publicly administered has limited the role of for-profit and not-for-profit charitable organizations in health care service delivery. The proposal therefore depends on this and other health authorities as well as the government and other stakeholders for its realization. Though this much analysis seems warranted from information available in the meeting, there remains much taken-for-granted in this discussion that may be usefully explored in institutional ethnography. How do external advocates for new service delivery

models, gain access to put forward their proposal, and garner the support of the health care system governance structures? How do members of the public express their wishes about service provision and lobby for projects to be taken up officially?

6.7 Decisions unrelated to health care

Other decisions of the Board do not relate to issues of health services delivery within the region. An example of this is a request to the Board office to be a sponsor of the Young Women's Christian Association (YWCA) Women of Distinction award at the same level as the previous year ($3,500).

> SP18: I move that we participate.
>
> SP17: Second.
>
> SP1: You notice all the women jumped right on that. We haven't got enough votes here to vote them down. (laughter). Okay, comments.
>
> SP20: My only comment would be, I certainly support it and you do get a lot of profile out of it and it's good partners and all of that stuff but I would just draw to our attention that this is becoming an annual event and in some other instances we've taken the kind of view that ahh, sometimes annual things can't happen with other groups. I thought I would just mention that. Having mentioned that, I support the vote.
>
> SP4: I had the same, the same question...
>
> SP1: Well, I think we've always felt quite closely in line to the YWCA for various reasons. Their programs, our programs, etc., that you will recall the first time this came forward was one of the real emphases. So first off, it has to be in that sort of ahh, atmosphere before we would support it. I mean we wouldn't be supporting ahh, the curling bonspeil of...
>
> SP4: I'm just thinking that the Women [name] Awards are coming this year to StarCity and the [name] awards are going to be here, like you know, there's all kinds of awards...
>
> SP1: Well, they can apply and we can give consideration if we can support, if they fit the criteria that we have sort of followed.
>
> SP17: Are they in this fiscal year SP4, or the next fiscal year. Are they after April one? They're before?

SP4: Yes.

SP1: Any other comments. All those in favour of the motion? Opposed if any? Carried.

This short passage reveals the Board rapidly reviewing pros and cons of the motion and thereby revealing the rationale for each and the underlying values. Concerns raised in the discussion are that the annual sponsorship has not been extended in other circumstances, continued annual sponsorship raises expectations of continued sponsorship and there are many other opportunities to sponsor annual awards. Members of the Board briefly reiterate the advantages for the RHA in terms of 'profile', presumably referring to the profile of the health region with the public. The criteria of alignment between health programs of the region and this community group, as well as the openness of the process to other groups are also considered important. The function that this award holds in a broader sense (providing recognition for women in a predominantly male community power structure) is unspoken and possibly taken-for-granted by the Board.

6.8 Reporting without decisions

Many of the items that the Board works through during a meeting are not accompanied by decisions. Over half (56%) of the transcript of the talk of the meeting is for two items that appear on the agenda as the 'CEO's report' and 'Quality report'. Given that a defining role of the Board is overseeing the performance of the organization, it might be assumed that these items would require official endorsement. Instead the minutes report that 'Suggestions of the Board will be considered in the next reporting period'. This points to two aspects of the Board's work: besides their mandated controlling function, they also 'advise' the regional administrator on how to handle 'quality' issues that are arising from the reports.

In this next section I will provide a tour of the Board's work in receiving and reviewing both written and verbal information on the organization's performance as revealed in the quality report. I show how information is presented, the type of information and the Board's responses. The CEO has called on four senior management executives or staff members to deliver four components of the quality report; 1) risk management; 2) media

monitoring; 3) quality reporting of indicators; and 4) the client representative. These represent the formal information the Board receives on the organization's performance. Each presentation is accompanied by summary documents the Board has received in their information package prior to the meeting. The presenters guide the Board through these documents, emphasizing some pieces of information or providing a summary or interpretive commentary.

6.8.1 Risk management report

The speaker introduces the presentation as a one year review of 'what's been happening' in the risk management program, to be covered in four segments 1) claims management, 2) insurance coverage and renewal, 3) risk assessment training and reporting and 4) education and program development. As the presentation proceeds on claims management, the reporting unit is the claim and the numbers and types of claims are detailed. For example under property or crime claims, the following relatively inconsequential information on claims is reported.

> SP24: And the third piece that we work with as far as claims management are non-insured claims and those are generally people's dentures and glasses. We spend $ [number] a year replacing dentures and glasses that have been broken or misplaced and it's usually involved staff.

Not all the claims are comparatively small and commonplace. In the report on the trend we hear that some claims have been settled at relatively high cost.

> SP24: [W]e had one very large claim which represented well over three quarters of that so ahm, that's sort of where we have been in these last couple of years. The ones that we have now is [number] claims, are all pretty much active and requiring a lot of work in the litigation process. There's not too many there that are sitting, that will go away without much activity. Ahm, of the [number] active claims the insurer has set aside a $ [number] reserve and that reserve is what they think these [number] claims, the worst case scenario that that's what they could cost them. And that's the money that they have set aside. So it gives you a bit of an indication of what's in those claims.

For the curious there is very little indication of how the bigger claims have arisen. The focus of presentation is primarily on 'managing risk' – a euphemism for mitigating the cost of 'harming patients or their property' including the cost of information gathering and litigation. But unlike many corporate boards the regional health board also has a responsibility for health outcomes more generally and so it would be reasonable for the governing board to want to know whether the claims represent system problems that require correcting. Instead the Board asks technical questions and received answers that apparently satisfy them.

> SP18: When you say that the claims are within the deductible that means we incur all the costs up to $ [number]?
>
> SP24: That's right. And that's why having an in house counsel is really to our advantage because he can bill at much smaller, a lesser rate than what we would be charged out, and we are able to manage our costs quite a bit easier

Board members also indicate what types of information they would be interested in seeing and this reveals analysis performed for management and a discussion of program savings and advantages that seems relevant for governance level presentation but was presented only in answer to board member questioning.

> SP20: I would be interested in sort of a trend analysis over several years as to what our costs are for insurance and claims.
>
> SP24: When we went to a deductible that's exactly what we did...And it was very much hooked to having in house counsel doing the work because that's where the savings come in.
>
> SP20: So we have had savings?
>
> SP24: Well, we'll have a small savings and we will also be able to manage it in house, which does have some advantages for us
>
> SP?: Is there any significant understanding to frequency of the site?
>
> SP20: Uhm, it's just a snapshot of the logistics in this, in the claims. Uhm, this changes as things are settled and I don't think there is a relevance by site.

The presenter then goes on to reveal some details about the claims that are a little more revealing of their nature.

> SP24: I've just sort of clumped them into categories. There's [number] that are surgical complications, and that includes things like infections, people that had complications in surgery that required multiple surgeries. I was pointing out this morning that there are [number] claims that are falls, sort of a slip and fall nature and I anticipate that that is a number for us to watch because that's with a change in auto insurance I think there's more business out for the slip and fall business so we're kind of watching this. Ahh, there's [number] that were related to diagnosis and treatment errors, ahh, a couple of them were linked to pathology concerning mis-reading or mis-diagnosis.

While this type of detail does bring the claims to something that could be related to the experience of patients, the people involved are not really visible. The issue of the validity of the claims is raised primarily in the context of fighting some claims and shifting responsibility to other insurers – not the implications for patients.

> SP20: Just because we have the claims doesn't mean we're not resisting the claims?
>
> SP24: That's right.
>
> SP20: We have a range, from negotiating a settlement to actually fighting the issue.
>
> SP24: Yes. Yes, these are their allegations and we certainly have, in some cases our own interpretation. I guess the other piece that we work though, is identifying who, if there is a problem, who was at fault. You know, that the physicians have their own insurer, or a body, somebody that represents them so we often differentiate who's at fault and what percent. We spend quite a bit of time doing that. So that's not a lot of detail but it gives you some idea what some of the risks are.

This focus on determining who is at fault shifts during the three segments of the presentation: risk assessment, trending and reporting. The risk management program has just started to provide one-year of incident reporting and analysis to managers.

> SP 24: And why it's important that it's in the quality part of your report is because that's how we want the people to look at their incidents. Not that they were bad, they work in a very risky environment but what are things that are maybe starting to stand out that if they put their heads around developing quality improvement initiatives they can maybe diminish some of those

> risks or manage them a little bit better. So the acute care is well under way. The community care is the medium, low. And then if it happens how serious of a risk is that? Is it very serious, not as serious, so what it does is it gives them a map to then work on that upper right hand quadrant, do you have some policies in place. Is there 'standards of care' to address those concerns? What needs to happen to manage those risks?

The Board is also told how the system will be improved to decrease 'risks' and how as the reporting system is improved there will be improved reporting to the board. The Board's response to this news is favourable and the presenter is congratulated. The presenter then describes a shift away from faultfinding that is in contrast with what they have heard about claims management.

> SP24: The issue of incident reporting is that we want people to see it as a tool for improvement. That putting their name there could be seen as being quite a risky thing; they're having to admit that something went wrong. We're trying to build an environment where people see that something's wrong with the system that this happens so lets work on improving the system. It's not personal blaming, but that takes a little while to catch on. But once you start giving them data back and summarizing it in a way that it's general enough so that they don't see that they were involved you have some success.

Here it is made explicit that reporting data in a way that staff 'don't see that they were involved' leads to success in terms of increasing the incidence-reporting rate. Research is not presented to back this claim up though. It is also puzzling that the change in staff accountability for error is not discussed more by the group authorized to oversee accountability mechanisms throughout the health region.

> SP24: There was always, you filled out an incident report but it did not, it didn't state in the chart and the fact didn't go into the chart either. Those details were separated out. So it was a bad thing that happened but it didn't belong in the patient's chart, it was handled outside. So now we say it happened, and chart the follow up and the assessment and everything else. We'll deal with it in the trending sort of way, or deal with the incident separate and apart, you're going to double chart the incident. Chart it and make sure it's, everything's included in the patient's record but we're also going to take that piece away and deal with it separately.

As the Board starts to hear how the region is working to get the data available used to improve the system, some of their interest in what happens to people seems to be piqued. A Board member raises a tentative question that, for the first time in the discussion, addresses the issue of preventing harm to patients.

> SP 17: One of the things that really came to my mind was that [an incident in another jurisdiction that led to a coroner's report that generated much media publicity] is a system problem. And I guess my question is in this sense of reporting incidents is that in some way allowing us to manage the risk of that not being able to occur here? Or that kind of similar event...
>
> SP24: Well, incident reporting is one way we do that. There's, we do it through M and M reviews[10] to get a sense of what's going on. Ahm, SP11 and I were talking today about patient complaints. There's all sorts of different sources that you take, that's when you put the data down and you begin to look at it as a system and see what's really happening here. Was there a trend that's occurring? Hopefully what we do to figure all these sorts of issues out would help.

This answer is somewhat balanced between reporting what is in place and not being overly confident in the results or adequacy of the systems in place.

> SP17: Actually, I wasn't interested in [area of medicine]. It wasn't that. It was my question was that what struck me about that that was so strange was that people had concerns that people were raising complaints that there was a lack of people to go to and people's concerns whether they were patient driven or staff driven really weren't validated because of the culture of the organization. And so that's why I was asking the question because it seems to me that every system needs some kind of protection from that kind of internal suppression of information.

The Board members' concern seems to be shifting from prevention to internal suppression of information. The answer again tells the Board what is being done while not entirely discounting that suppression of information could occur.

> SP24: We've done things like removed the need to have a physician's signature on an incident report. It's not about ratting on somebody, it's an incident. Take it for face value. If you have a

[10] M and M = mortality and morbidity reports.

> concern document it we'll follow up. So we're getting rid of some of those things that were in the system that maybe put a different light on it.

The above passage reveals conflicting goals in overseeing the risk management program from the standpoint of a board member. The initial orientation risks to the organization from the costs associated with liability for patient harm, seems to be predominating while the Board also is entrusted with ensuring quality of care with any legitimate case, indicating that standards were not met. While the Board does not ask questions that indicate their concern with the patients they are being sued by, the orientation completely turns around as the presenter talks about the capacity being developed to track incidents, change the culture around reporting, and prevent harms through better information.

What is puzzling is that no board members directly raise issues of patient safety and how it might be improved as might be expected of the regional trustees of public health. Though it seems that one Board member is raising a concern it turns out to be more a concern about the internal suppression of information than about harm to patients. This raises a question of whether the importance of ensuring the system isn't harming patients is being eclipsed by other managerial and liability concerns.

The way information is aggregated and summarized ensures that the group overseeing care in the region does not get the perspective on 'risks' in human terms, the way they might do perhaps, if one of these 'incidents' is covered by a journalist and appears in newspapers or on television. This is an issue for the improvement of information services.

6.8.2 Media coverage

Next, an administrator provides the Board with a summary of how the region is portrayed in the media.

> SP5: Part of our quality reporting is to give you periodic updates on the news coverage. Ahh, and the news coverage analysis that we have been doing is based on favourable and unfavourable coverage, ahh, coverage of StarCity Health Region, ahm, coverage of provincial, national and international health environment. Ahm, so

> just in terms of in table form you see ahm, the table of percentages of SD, provincial, national and international. Focus on the bottom three months, July, August and September, which is the new period that we are reviewing. Ahh, I'll show it to you now in graph form. What it says to us is that 85% of the coverage of StarCity Health Region has been favourable. Fifteen percent has been unfavourable. In terms of provincial, national and international health environment, 70% on average in the past three months favourable for provincial, national and international and ahh, 30% unfavourable.

Considering that the regional situation compared favourably to the national scene, it is puzzling that no other comparative information is provided. How do these numbers compare to other time periods or other regions? Also it is not clear what the enumerator and denominator are for these numbers. Is it the number of articles, square footage in print or something else being measured?

> SP5: Ahm, the references to ahm, items contributing to favourable reading includes things like improved emergency response system for rural areas, organ donations, consolidation of community health services, new nursing positions, flu immunization, needle exchange anti HIV strategy. And for the local unfavourable stories such as the Fraser report on waiting lists, the AIDS community being upset with services, the temporary service removal of the outreach van, MD Ambulance labour situation and keeping in mind we are going back to July. Any questions? Thank you.
>
> SP1: Questions of SP5? Must be all favourable.
>
> SP14: Well now since we're done with that we'll take you through the non multi-media presentation part.

It is somewhat curious that the Board engages in no discussion on media coverage in the region. It would seem that the figures presented are sufficient to convince them that the coverage of the media is acceptable and requires no discussion. On the other hand, the topics that generated unfavourable coverage may indicate quality concerns. For example, it isn't clear from the talk whether Board members were otherwise sufficiently informed about complaints with services that the AIDS community has taken to the media, or management's actions to address them. The categorization 'favourable' and 'unfavourable' obscures details of the situations being reported or that perhaps should be of concern to the Board.

6.8.3 The Client representative

The Board hears the report of the client representative next. This is the staff person that patients and families and the public can contact. Information on the volume of calls is categorized into "inquiries, complaints and compliments" and the categories of concern such as 'access, care, communication, cost, and environment'.

> SP11: As your final piece in the quality report the ahh, quarterly summary of inquiries, complaints ahh, and ahh, as you can see that in July, August September we were under in nine complaints and that was down from April, May and June from the 136. So the trend there is down. In terms of the detail as you move in and look at it in care group perspective you can follow each of the compliments in terms of inquiries. SP25 is here to answer any questions you have in regard to this report.

The information presented is aggregated and devoid of the details of personal or human interest that would engage Board members emotionally. The Board does hear directly about the large volume of calls the client representative is taking.

> SP25: The calls seem to be coming fast and furiously. A lot of people have it in their minds that the client representative can listen to all concerns and solve them. And that is not a realistic expectation of the client representative. I can see my role in having enough, I can see the role being useful and one person doing the role but we can't have this barrage of people calling for umpteen and one different reasons. What we're doing right now is when people are phoning those calls are being screened and if those people can be referred back to someone, or they can talk to their physician. I no longer can talk to them myself.
>
> SP20: But everybody who calls in does get a return call of some kind?
>
> SP25: Ahh, eventually. I will say that they are not being promptly returned but you probably have heard that by now.
>
> SP20: Mmmm.
>
> SP25: They're being, ahm, I guess worst case scenario it's been about three and a half weeks before I got back to the person. And that's not necessarily as though an initial attempt wasn't done to follow up.

> SP20: Do you think it's a question of resources or just unrealistic expectations?
>
> SP25: If the expectation is that the client representative will speak to everybody who has a concern you will need fifteen of me. At least that is my opinion. The client representative is utilized for advocating certain scenarios where they have already brought their concern forward and they feel as though they are up against a brick wall. Then I may be useful. Keeping in mind that sometimes they are up against a brick wall because that's the way the system is. I may not be able to alter the way the system is. So some days I may be utilized and the results are positive and other days I may be utilized and I make no difference.

The Board has heard directly from the client representative his/her 'opinion' on the current problems with the job. A Board member then tries to ascertain whether it would be possible to screen calls and is politely but directly advised that they are 'moving into an area of operations'.

> SP22: Would there be any advantage or is it insignificant or small to having somebody between the public and SP 25 to filter whether this is frivolous and just phone such number instead or whether it takes a little bit more hands on type of case.
>
> SP11: I really want to on behalf of SP 25 to see the leadership thanked for raising the issues around resources. Ahh, looking at the issues we have to deal with from that perspective. I would caution you that you are now moving into an area of operations that quite frankly I would prefer you did not. Ahh, that the issues of resources are being addressed within the organization as we go through the planning process, I would like to, I would encourage us to keep it there and we will be bringing forward a plan for you.

SP11 would seem to be acknowledging indirectly that there is a problem that management will be addressing through their planning process. Arising as an issue for further exploration is the apparent division of labour and responsibility between the Board and 'operating' management. I return to discuss the social organization of that division in Chapter 7.

6.8.4 The Quality indicators

The presenter of the quality indicators leads the Board through a series of summaries that pertain to "Board Goals"; that is, goals that the Board has set strategically, with corresponding themes, priorities and outcomes. These are described in words and matched by indicators or measures reported for one or more reporting periods and sometimes accompanied by 'target' values as well as a variance analysis. In discussing these figures Board members and management get into substantial discussion.

As the following passage illustrates, the Board moves quickly through some epidemiological, financial and operational summaries without discussion.

> SP15: I refer you to your agenda documents, section 8.2. Ahh, what I'll do is go through this page by page and stop at the end of each page for any discussion or questions. The first page describes epidemiological data that you have already previously seen. Since this is reported on an annualized basis there is no change therefore from what was reported to you in September. Any comments or questions? The next page describes some financial information. Ahh, which is presented for the reporting period of July through September. As you can see for the current operating position ahh, the deficit which compares favourably to last year. Operating costs, however, are up in terms of in-patient, operating and home care costs as well as [name of facility]. And it's my understanding that relates primarily to overtime costs. Is that right SP14?
>
> SP14: In the in-patient there is a lot of costs incurred because of the difficulty getting staff.
>
> SP15a: Any questions or comments? If not, moving on to the third page which again covers the reporting period of July through to September and this concerns a number of volume pieces. In terms of the volume of surgery ahh, we are up for this particular quarter in all areas including, also separations, patient days, occupancy rates. For the year we are down somewhat in surgery and has been previously explained that is due to anesthesia shortages and theatre closures because occupancy rates are remaining relatively constant. No questions.

Waiting list quality indicators start substantial discussion. Initially, the following overview is presented.

> SP 15: The fourth page is waiting list information. In general with elective surgery in all three sites considering longest, shortest and medium times we are up about a third this year compared to where we were last year. The one exception is the shortest waiting time at [hospital name] for elective active cases. You will note quite a difference there and that's the effect of the lithotripter. So that's a bit of an anomaly. That's why that number is down. In terms of the good news that you can read out of this in person cancer patient surgery waits we are at or below targets in pretty well all the cases. That part we're handling all right.

Some minor questions about the meaning of terms are quickly dispensed with. The Board hears how a sum of $500,000 they had approved to reduce waiting lists had been allocated. Interpretation of the figures then becomes a hot topic of conversation as everyone agrees the indicators are worsening. The implications of this are debated.

> SP20: So what is your overall sense in terms of, I know we're paying more attention to this, we're going to get some relief, and hopefully with your other committee we're going to get even more relief but without those two interventions what is your sense about what is happening overall?
>
> SP15: I think our waiting times are worsening.
>
> SP20: Looks like it.
>
> SP18: Over a five or ten year period do you notice that they're....
>
> SP15: Well certainly, over the past three years I would say and certainly over the past years I mentioned we are up generally if you look at all of those ahh, time intervals we are up about a third over last year.

A Board member then provides an interpretation of waitlist indicators –too little money is being allocated to this publicly funded system. The speaker holds neither Board nor Management responsible for the growing waiting list – both have done what they can. This is an unexpected stance for a member of the Board with a role to ensure accountability.

> SP10: I think that the board has done it's best to help however it is obvious that as a system we are continuously losing ground. Losing ground probably because of significant underfunding.
>
> SP1: Speak up.

> SP10: We are continuously losing ground because of underfunding. We are not funded enough to fulfill the mission that we are supposed to be doing. This is why we are accumulating more and more waits on this list. It is discouraging for patients, for families and for the providers. And I do not know, the solution is not in your hands. ..... I think you've tried to do that with government. There has been some bending. But the fact is there is a lot more needed than the Band-Aids that have provided to date.

While the Board member takes a line of argument that absolves the administrators from responsibility for waiting lists (because funding is inadequate) that is unexpected given their governance role, the administration argues counter to this with the following arguments: management of resources has been improving, some difficulties interpreting the data are due to data problems and management may be further improved.

> SP15: I think you, ahh, you know, I'm not sure whether the system is falling apart. Certainly we have waiting problems, ahh, I think it's also necessary to bear in mind that overall over the past decade if you look provincially and in fact [StarCity], the volumes have actually increased. So we're actually doing more work than we did before. So what's happening we're having more people put on the waiting list at an increasingly rapid rate. So it's to some extent if one believes that that is a measure of capacity then we are obviously at capacity and exceeding it. Ahh, to what extent the waiting list represents valid information in that sense of course is one of the huge debates that's going on. We know for instance in the case of opthamology patients are booked by eye rather than by individual so there's obviously going to be some doubling up of information in that particular part of the queue. So there are a few things like that. But I think overall, the sense that I would take out of this is that yes we are having a waiting list problem. I wouldn't call it severe but certainly it's becoming noticeable.

At this point the CEO steps in to defuse tensions and defends the work being done on developing and reviewing the indicators with the Board.

> SP 11: ...No one disputes that there are issues around waiting lists. What we are trying to do is to define those and understand them more effectively.

Two initiatives the region is involved in to tackle the waiting list issue are discussed, one involving the province and another spanning a number of provinces. The Board is then cautioned by management, as to expectations of further funding from the government.

> SP 11: I guess what, it's fair to say that there aren't any quick fixes that we have or that we're going to be rolling forward on and it does mean we have to continue to work with government to bring these issues to their attention and encourage them. Hopefully they will acknowledge and recognize and provide funding to support us in addressing these issues. But we've all heard the message very clearly from the minister and others that we are headed into tight times and tough times again. Ahh, we are concerned about that.

The administrator continues to reinforce the positive aspects of the situation, such as that emergency demands are being met whereas the wait lists are for elective procedures and gains made in reducing waiting lists by individual departments.

Although much is revealed about how the Board does this work, many puzzles arise that cannot be pursued with data on the talk from the boardroom. Where does the information contained in these reports come from? How has it been developed? Do the performance indicators provide accurate, valid and comprehensive picture of quality of care from the patient and provider perspective? Is it standardized enough to be comparable with other systems? Is something missing in this quantitative analysis that might be important? The many other professional work practices that orchestrate production of information that appears in the Boardroom will be investigated further in Chapter 8, which focuses on textual-mediation.

6.9 Check-in

This group passes a rock around board table. The rock is smooth like those from a riverbed and fills the palm of the hand. Each meeting attendee 'checks-in' before the start of the meeting. The check-in consists of brief comments and greetings of board members, senior management presenters or guests. The comments are of a personal nature unrelated to the business of the meeting. Following are some illustrative comments, part of the last

meeting of the Board before the December holiday season. The collegial nature of 'check in' is evident.

Many of the speakers discuss their home situation like the following member...

> SP12: [declines to hold the rock explaining] ...because I'm not a member of the cold and flu club yet. I can't tell you how exciting my house is right now with the ahh, two kids. One just seven and the other about three and three quarters. And ahh, they are just so into Xmas and all kinds of concerts and ahh, trimming the tree was ahh, yeah, it was a disaster and our tree looks like it, but its a very exciting time. I'm looking forward to a couple of weeks off and I'm looking forward to the new year.

Besides extending greetings to the group as did most speakers, the following speaker gives some insight into the personal challenges of 'keeping up' a demanding schedule as a member of the senior leadership team in addition to the extra demands of the season.

> SP 11: Well, this is another day like all other days. Senior leadership, two board meetings, ahm, quarterly meeting and a banquet this evening. A day like all other days over the last while anyways. And we are ahh, I am looking forward to Xmas. Well, it's a pleasure to attend most of the events at this time of year. It is certainly trying; it draws on a lot of energy, both emotional and physical to keep up with the social calendar these days. But I wish everybody, because I won't see you probably after today, I wish you all a very 'Merry Christmas' and hopefully a very 'Happy New Year' as well.

The check-in procedure is an anomaly to those familiar with the rules of order that the meeting is otherwise following as it is not a standard part of these. How has it come to be a part of the meeting format of this regional health board – a formal governing body? As the institutional ethnography continues from this puzzle in the everyday working life of the governing board this practice will be investigated to find out how it might be orchestrated by ruling practices (or not) that are more widespread (see Chapter 7, Section 7.4.1).

6.10 Chapter summary

In this chapter, some of the everyday work of the governing Board has been revealed. The Board uses traditional and standardized governance practices including face-

to-face monthly meetings with prescribed leadership roles and process rules of order including voting procedures. The Board primarily ratifies recommendations worked up by Board committees and is apprised on internal and external developments as they affect organizational objectives, by the Chief Executive Officer. Information is transmitted orally and on paper.

Decisions are the identifiable point in the work process at which the authority of the board is actually exercised. Collectively the decisions of the Board are a formal representation of the work of governance. They therefore are of particular importance to understanding governance work, as they affect many of the other tasks that occur at meetings and indicate the actions that are intended to follow from meetings. The decisions represent an end to the information seeking and exchange that has characterized the period of time that the decision has been worked on to the point that a decision was imminent. The decisions are the point at which information has become actionable – at which all the preparatory work that the board members and their staff have done culminates. At every step of the way the process is textually mediated. The textual mediation of governance work is more fully explored in Chapter 8.

The work of the governing Board has been revealed through selective review of excerpts characteristic of what actually happens in meetings. The Chairman's use of rules of order to moderate meetings including the use of a preset agenda is made visible. The ways in which information is communicated by spokespersons is revealed in relation to the decisions (motions) the Board will vote on – frequently acceptance of committee reports and recommendations summarized in board information packages. The extent to which decisions and related information are 'worked up' for the Board by committees of the Board and senior administration staff is revealed. Senior medical advisors appear to be in a privileged reporting relationship with the Board reporting independent of the administrative structure on clinical and public health matters. The Board's work is not organized to consider detailed information on recommended actions though their approval legitimates these. Public perception and community based stakeholder interests are prime considerations in the strategic and policy making work of the Board.

Over half of the time the Board spends in face-to-face meetings, is taken up in keeping abreast of the organization's progress towards strategic goals, using emerging performance indicators and highly summarized reports supplemented by details on ad hoc developments, often those with interorganizational implications. These are unlikely to become routinized or standardized. In this, their role is to provide support and guidance as much as oversight to the administration.

These intriguing aspects of regional health board work cannot be completely deciphered from what is observable in governance work but traces therein point to complex and interconnected institutional ruling relations that orchestrate work behind the scenes. For example, the practices this Board uses to organize meetings are prescribed procedures for conducting meetings known generally as 'rules of order' for the conduct of general meetings. While this Board uses Bourinot's Rules of Order, a Canadian parliamentary procedure, other commonly used formats are Robert's, Sturgis and Merriam-Webster's. Having identified the occurrence of rules of order in the everyday work practice of this Board, the explication of these can deepen and broaden the understanding of work practices and provide an expanded empirical basis for decision support. Practices like this are often taken-for-granted by participants yet, for designers, the identification of authoritative reference books provide the code for explicating how boards do their work. These ruling relations and the texts that mediate them, with further implications for ICT design of governance work, will be explored in future analyses.

Just showing how everyday work of this important group of decision-makers is actually accomplished may have uses to a diverse group of people with an interest in improving health care. As I have just done, an institutional ethnography starts with gathering data on everyday work and shows how it is accomplished – how the work happens in time and space, preserving the people, their talk and other features of their material environment such as the texts they use. Newcomers to the Board need to be trained in using their decision making format, in order to perform their work competently. They might find this type of description useful to understand their role. Experienced Board members might find

it useful to step back from many things they might otherwise take for granted; become more aware of how their work is organized and thereby identify ways of improvement.

Others who might also find it useful to understand how governance work is accomplished, are those who would seek to support governance decision-making in various ways, using the basis of how it actually happens to guide their support. These might be informaticians and other types of researchers retrieving, synthesizing and presenting information, or the governing boards or designers of decision support systems seeking an empirical basis for design. Others who would be interested in how the work happens the way it does are senior administrators who need to have the Board review their performance and that of their organization favourably and policy analysts, health care reformers and lobbyists among others, seeking to influence health care governance decisions.

Outsiders seeking to support or change work practices might find an understanding of how work is done useful in strategizing, as they are less likely to miss the mark by relying otherwise on unsubstantiated assumptions about decision making work. For example, if it is assumed that Board members as decision-makers do their work by rigorously evaluating alternative courses of action, as is prescribed by decision theory, they might supply an analytic tool, perhaps computerized, that permits Board decision makers to calculate the likelihood of each alternative actually occurring. This is the basis of software tools based on theory of decision-making under uncertainty. It is easy to recognize that this type of tool will not be helpful to the Board in approving minutes.

Other types of computerized support come to mind once the work is understood. For example, this board uses paper-based minutes, which requires minutes created on computers be manually printed and distributed to Board members manually, which takes time. Hard copies of documents then may be carried back to meetings. Computerized minutes can be envisioned which would be available immediately on a web-based platform. This would require members to log-on to a password-protected secure website. Perhaps they would be able to download documents from this site, store these on personal laptops that accompany them to meetings. There could be mechanisms for submitting corrections asynchronously and then approving them in real time collaboratively. This type of system

may or may not work better, but the understanding of work practices would at least fairly easily generate a feasible alternative that incorporates what is known about how work is done now. This paperless system may fail. It would require Board members who currently don't use this type of technology to adopt it and they might not have a strong enough incentive to do so. Different resource implications are implied in obtaining the technology. A paperless strategy might change the work practices related to approval of minutes substantially and in unwanted ways. So this type of analysis does not guarantee that work practices will be changed for the better. Still, attempting to improve or support governance work practices without understanding current work practices is much less supportable. People who are habituated to governance work likely take these foundational work processes for granted and may be unaware of how their actions are constrained by them. They no longer think about how things could be done otherwise. While an understanding of how everyday work is organized in the setting of its local accomplishment is powerful, institutional ethnography can do more than provide this type of description for improvement of the immediate work process. As an IE researcher, I bring the assumption that what happens is not idiosyncratic, but organized. I have selected instances where it would appear that outside interests are coming in to orchestrate the local work of governance.

Institutional ethnography provides a framework for looking for more widespread institutional practices that organize the work we observe occuring in the Boardroom. This window into the world of the governing board not only opens up the everyday work practices for the uninitiated, it can also problematize them. Problematizing them is to ask fundamental questions of how it is that this group organizes their work this way and not some other way. It is to look for how everyday governance work practices are part of a web of more widespread practices.

6.10.1 The Puzzles

What can be revealed about 'how it happens the way that it does' is limited if we only look at the talk of the Board as they go about the work of making decisions. The next chapter will reveal those relations that are organizing the Board's work from beyond the

boardroom. The institutional ethnographic analysis will extend outside the boardroom to better understand how governance work is organized or orchestrated, if you will, from beyond its occurrence in the time and place of its accomplishment. For example, the practices this Board uses to organize meetings are prescribed procedures for conducting meetings known generally as 'rules of order' for the conduct of general meetings. Having identified the occurrence of rules of order, for instance, in the everyday work practice of this Board, and documented it in this chapter, the next chapter will explicate how these are part of the ruling relations; that is, the way they organize work will be made explicit. Along with a description of the actualities of governance work, this chapter also reveals a number of puzzles that will be used as a jumping off point for the next chapter. Yet, examining what happens in this important decision-making forum goes beyond the survey research in indicating the information and communication technologies most aligned with actual practice and those that might be useful but require more extensive change management.

Here I will expand on how the more comprehensive explication of the work of governance provides for uses of the analysis over and above that are envisioned upon understanding how motions are carried. Tracing from the work processes surrounding 'motions', and identifying that a particular version of 'rules of order' is in use, leads one directly to the authoritative rule book of these practices – the template upon which the practices in widespread use are based, the codification of this practice already formulated. There are parliamentarians who advise on the application of these procedures. There are alternatives to the one in use. Once the practice of following rules of order is more fully explicated, it is then open for more expert application by those using it during meetings. It is also available as input to design of information and communication technologies. Perhaps it would be useful for Board members to have the reference manual on rules of order online or in a personal digital assistant. Perhaps templates for use in collaborative groupware would be designed following the standardized procedures to orchestrate meetings. There are likely many ways they could be incorporated into decision support systems.

The above excerpts from Board meetings of a regional health authority contain many more puzzles that can similarly be explored. They may have raised more questions than they answer. I will review some of these puzzles here.

Administration is in a special relationship with the Board and the work is carried out in parallel. Work carried out by the Board is based largely on information supplied by administration and yet the Board is overseeing the performance of these administrators. They therefore have an interest in being favourably reviewed and organizing the work in a way that best suits their own interests, which may not necessarily coincide with those of other Boards or those of the community they are to serve. This is a central conundrum. Organization of work of the regional health system is a backdrop to Board's work. How strategic plans are developed with what input from individuals and what formal analysis, is incompletely revealed, though there are traces throughout that organizational work happens prior to and after the Board presentations. There is an overall plan that the Board is attempting to monitor performance against. There are administrative strategies revealed that involve setting up performance measures and measuring performance against these. How these are more broadly determined by widespread practices needs further exploration.

It appears that the physicians reporting to the board have a different relationship to the Board than administrators and spokespersons of other committees. That the Board will approve the recommendations of the MAC would seem to be taken-for-granted, if not by the Board member raising the concern, then by the MAC spokesperson and the Chair of the Board. When the MAC spokesperson claims "Their own executive committee met with MAC so that is what is going into effect" after claiming that the Board did not just approve the draft, it would seem that the authority of the Board to NOT approve the MAC recommendations is being overlooked despite whatever governance relationship exists on paper. The special relationship of physicians to the Board will be explored further in Chapter 7, Section 7.5.5.

The Board's relation to its committees is not entirely elucidated from this discussion and so these relationships need to be followed up through further investigation and analysis to be made explicit. The discussion suggests that the Board holds a principle that committee

decisions not be overruled or perhaps it recognizes that the Board does not have the information available that the committee has (there may be other 'missing elements'). Committees would therefore seem to be the holders in practice of the delegated authority of the Board, as the Board does not have sufficient information or expertise to review the basis of the decision-making. This suggests that much decision-making goes on outside the vantage point of the boardroom.

The relations of the board to other stakeholders are also only partially revealed and explicated in relation to their work. Initial analysis of the data relating to the heart health centre reveals the interconnectedness of this board with the many stakeholders involved in provincial health care, including government, public, private and community interests. The Board's work in working in concert with other organizations as well as representing the interests of the regions is incompletely revealed. It seems that ownership of a religious hospital is being handed over. If ownership is being handed over to the regions, would this garner 'favourable' coverage? Is the religious hospital's board the other board that also needs to approve the spiritual care strategic plan? Have the region and the religious hospital had a joint 'shared care' committee? These are further taken-for-granted things that the Board members know, that are unexplained to an outsider, on the basis of the transcripts.

The relation of the Board to the community that relies on it for health services is also only partially revealed. It is puzzling that this Board is finding it difficult to come up with an agenda for a public meeting particularly given that regions were set up to devolve priority setting to regions and to involve communities more. The Board expresses a wish to avoid controversy. This would effectively eliminate many topics, as health care has itself long been a matter of heated public debate. While the concern is raised explicitly by a speaker and acknowledged with the laughter of recognition, the Board member advocating for a better process, that includes discussion with the Board and with the Community, also makes it explicit that s/he does not support diabetes as a topic given that the community format is new and s/he favours keeping a positive focus. At the end of the discussion, while there seems to be agreement that there will be a small group with the executive, the executive will picks the first theme. How is it that the Board has insufficient time to focus on this critical

task? How this work will be actually done slips outside of the purview of the Board. This raises the questions of whose interest the Board is representing. Does their work bring them to be more closely aligned with the administration by 'knowing' about the organization through the information that administration provides?

Ad hoc decisions have the feature of being controversial in the greater community and therefore requiring governance level endorsement – something senior management of the region cannot decide as part of their operational managerial responsibilities. They also are decisions that Board members have to know about, as they require a response or a stand on the part of the board. They appear to have been included in the agenda for the purpose of supporting management, which needs to take action that will be under public scrutiny. The information coming directly to the Board from the community is put forward as 'rumours'. How can the Board's work be protected from lobbying efforts that do not represent all interests such as the voluntary community board lobbying for a heart health centre?

These puzzles will be explored in the following chapters. Those relations that are invisible in meetings are revealed as part of the web of ruling relations that organize how work is accomplished. These include an examination of legislative and legal frameworks, governance models, new public management practices, accreditation and auditing roles and reform, with special attention to evidence-based decision-making and population health discourse.

CHAPTER 7:
THE RULING RELATIONS OF REGIONAL HEALTH CARE GOVERNANCE

7.1 Introduction

> SP23: [J]ust yesterday I received a document, that you'll all be receiving sooner or later, from the government on population health promotion and ahh, many of the things in that document have been reflected and picked up in [an internal document the board is reviewing].
>
> SP 11: It's amazing isn't it? (laughter) I guess it demonstrates that more than just us are thinking in that direction. That there's other people in the province that think similarly or the same as we do. (Board members remarking on the congruency of an internal with a provincial document)

Speaker 11 is 'amazed', perhaps facetiously, that there are others out there that 'think similarly or the same as we do'. Board members may have developed an awareness of the ways in which work done elsewhere is active in organizing the local work of the Board. There are many influences on the Board's work. Some may seem obvious. Others may be completely submerged. However, translocal relations, like producing a government report on population health promotion, is something people often take for granted to the point that it disappears from understanding of how the everyday work is accomplished locally. This is one of Smith's important insights (Smith, 1987).

In health informatics, the concept of tacit knowledge is another way of articulating the idea that people have knowledge of the 'systems' that they interact within and work that they do that they are not aware of and therefore cannot easily articulate (Nonaka & Takeuchi, 1995; Weick, 1995).

Knowledge elicitation techniques seek to capture the tacit knowledge of 'knowers' for inclusion in knowledge management systems (Gaines & Shaw, 1993). Institutional ethnography, based on an understanding that knowers' tacit knowledge may relate to taken-

for-granted institutionalized practices, explicates practices beyond what users can reveal in interviews.

In the exchange between Board members above, the pervasive professional discourse on population health promotion is written up in provincial and regional texts that are widely distributed and lead to the activation of these ideas in actual work practices at the level of the Board, administration and staff. This chapter will reveal how these and other ruling relations are actually taken up in the work of governance.

Other institutional ethnographers have sought to make explicit or explicate how people's work is organized by ruling relations. Making such links explicit offers participants insight into the forms of authority and power that otherwise might seem to unnecessarily or arbitrarily constrain or control them or him. Mykhalovskiy shows how a health research report is used in hospital reform (Mykhalovskiy, 2001). Turner maps resident participation in municipal decision land management decision-making (Turner, 2001). Pence explicated how texts mediate the process of working up cases of domestic violence within the criminal justice system (Pence, 2001). McCoy has investigated how a new funding formula is used in the work of College Deans in garnering support for the programs they administer (McCoy, 1998). Warren made explicit how musical scores orchestrate the collaborative accomplishment of music by an orchestra (Warren, 2001).

In keeping with the institutional ethnographic approach followed in this thesis, ruling relations were first identified as puzzles or tensions in the actualities of the everyday decision making practices of Board members as outlined in Chapter 6. These puzzles were the points at which what was happening was not understood through observing the talk of the Board. Though puzzling to those uninitiated in governance work, institutional relations are likely to seem 'obvious' to those familiar with governance work. This may reflect competence in the socially organized practices of governance. It may also reflect different acceptance of the inequities associated with silencing some perspectives.

The particular institutional ruling relations that these board members are connected to include regulatory practices (e.g., legislated mandates, Board bylaws); discursive practices (e.g., rules of order, governance models, population health promotion frameworks) and

ideological practices (e.g., regarding privatization; relying on data versus trusted people). All these are operating at once in Board work.

7.2 Creating a Board and mandating its work

The provincial legislation that created this regional health board provides a basic framework that orients board members to their collective authority. Similar legislation can be found in other provinces that have reorganized and regionalized governance structures. The overall frame for the work of the Board is set out as follows:

> (3) In exercising the powers given to a regional health board pursuant to this Act each member of the regional health board shall act in the best interests of all of the residents of the health region; and
>
> 1. comply with the provisions of this Act, the regulations and any agreement between the regional health board and the minister pursuant to section 22; and
> 2. conduct its activities and affairs in a manner that is consistent with and that reflects the health policies, goals and priorities established by the minister.
>
> (The Regional Health Authorities Act[11])

Board members are oriented to their mandate to govern the health region according to the legal mandate provided by provincial legislation. Whatever their understanding of the institutional mechanisms for governing health care, the orientation package for Board members provides them with the proper version in the text of the key Regional Health Authorities Act. Board debates and decisions can be usefully understood in relation to members' mandated authority and responsibilities to govern in matters of health and health care. The Board members are responsible for acting in the best interests of residents of the region, and complying with regulations and the provincial health minister.

Reading legislation requires orientation and skill in interpretations, as it is steeped in legal language traditions. Though not lawyers, Board members, who come from many backgrounds, are required to ensure that their work and that of the health region conforms

[11] This text has been altered to mask the province and health region in which this research was conducted. These changes are not substantial.

to regulatory requirements. The Board was created in the following section of the act. The dense language also reflects the reshaping of health regions through changes to their boundaries though the name remains the same.

> **StarCity Regional Health Board**
> 12(1) The StarCity Regional Health Board established pursuant to *The Crown Corporations Accountability Act* is continued as a regional health board under the name StarCity Regional Health Board.
> (2) The StarCity Regional Health Board is deemed to have been established pursuant to section 5.
> (3) The members of the StarCity Regional Health Board continue as the members of the StarCity Regional Health Board for the terms for which they were appointed to the StarCity Regional Health Board.
> (4) The chairperson of the StarCity Regional Health Board continues as the chairperson of the StarCity Regional Health Board and is deemed to have been designated pursuant to subsection 6(5).
> (The Regional Health Authorities Act)

Now that the Board has been established as a legal entity, members appointed by the Lieutenant Governor in Council populate the Board. The Lieutenant Governor is the official provincial representative of the 'crown' (at this time Queen Elizabeth II of Canada) and the formal representative of the power of the state. Likewise board members have this sanctioned authority. Appointment to the Board occurs following a nomination process that requires community participation but not representative election. The Regional Health Authorities are constituted as not-for-profit 'crown' corporations and Board members serve without remuneration, as volunteers in public service.

The Act is about 25 pages and establishes all the regions and boards for the province. There are sections defining terms; providing the requirements for forming the area of health regions (not splitting urban areas, excluding Indian reservations); as well as for forming the Board (must be 14 members) and requirements of Board members (not under investigation for indictable offences; to miss no more than 3 consecutive meetings). While this province and Board has been disguised, it is relatively easy to access similar legislation online among the provinces that have had health care systems' governance structures reorganized along regional lines.

Governance structures were originally developed to ensure that the enterprise was managed according to the interests of 'owners' not the self-interest of management (Berle & Means, 1932). Regionalized governance structures are a quite recent innovation and the traditional structures and processes designed primarily to ensure fiscal accountability are still being adapted.

The Act grants Boards the power to provide health care services, which private corporations are not allowed to do in this state financed, publicly administered system under the terms of The Canada Health Act. The section of the Act on the powers and authority of Boards prescribes much of the work expected to be done (see Appendix B: The Regional Health Authorities Act). Boards are granted powers specifically tied to the provision of regionalized health services. These are used specifically to assess needs, make plans, coordinate services among providers, promote health, and evaluate services. Here are some specific reports the Board must submit, including the audited statements prescribed:

> **Reports**
> 34(1) A regional health board shall submit to the minister, in a form specified by the minister, any reports that the minister may request from time to time.
>
> (2) Without restricting the generality of subsection (1), a regional health board shall, within three months after the end of each fiscal year or at any other time approved by the minister, submit to the minister, with respect to that fiscal year:
>
> 1. a report of the regional health board's services and activities and their costs;
> 2. a detailed audited set of financial statements;
> 3. a detailed audited schedule of investments; and
> 4. a report on the health status of the residents of the health region and the effectiveness of the regional health board's programs.

The Board is also the legal entity under which all real estate, property, facilities, employees and monies involved in the production of health care in the region are managed. This is the same for the Board of any corporate entity. In addition, the Health Board is responsible for health status and the effectiveness of the programs of service it provides.

The information infrastructure to report on clinical effectiveness is undeveloped, as the Quality Report to the Board, presented in Chapter 6, illustrated.

Chapter 6 also provides a discussion related to the agenda for a public meeting. The purpose of these meetings is not stated though the types of information the Board is required to present indicate a public accountatility function. This Board discussion can be illuminated with reference to the Act:

> **Public meetings**
> 33(1) At least twice in each fiscal year, a regional health board shall conduct a meeting of the regional health board to which the general public is permitted access
> (2) At one of the meetings mentioned in subsection (1), the regional health board shall present:
> (a) an operation and expenditure plan for the next fiscal year; and a report on the health status of the residents of the health region and the effectiveness of the regional health board's programs.

The Board's work is also to cooperate with the Minister of Health and a number of other specified levels of health and other government agencies, as well as with persons providing education or training. How this cooperation will be accomplished is something the Board is still negotiating with the Minister of Health.

> SP15: The report is due to be presented to the minister at the end of this month. Ahh, we are actually meeting this Thursday and then we will get a better idea of whether we're going to meet that target. How soon and what s/he then chooses to do with that report will of course be up to him/er.
>
> SP22: Okay. Then its too soon.
>
> SP3: I was just thinking of ahh, where s/he's coming from in his/er vision of health care. That would include rules that's developed to that. Rules of the board and that kind of stuff.
>
> SP1: Expectations of the board. I think we could ask him/er very clearly what's his/er expectations of us as a board. And then that gets into a conversation of our expectations of him/er as a minister is. (laughs)
>
> SP11: The only thing I raise, SP1, on that issue is that it's almost as if it's been beat to death.

> SP1: Yes it has. Have you any expectations of us as a board right now?
>
> SP11: Getting onto the issue of saying okay, where are we going from here. How are we going to work together in the future. I'm not sure in terms of your discussions how that's, what the next phase of that is in terms of [the provincial association of health care regions] and the government. How, I haven't talked to [person's name] in a couple of days so I'm a little behind.

The following passage from the meeting transcript reveals one board member's insight into the orchestration needed between organizations to implement a report pertaining to the local medical college.

> SP 16: [I]t is a report prepared for the minister so the minister must be prepared to act on it. It has a very significant direct impact on the University and the University must be prepared to act as well in bringing the recommendations into place. We see our role very much as facilitating and assisting those two parties in implementing the [named] Report.

Later, as part of the same discussion, another board member reveals that relations between the government and board are not strictly those of 'ruler' and 'ruled', but that the Board can assume an advocacy role for the Board in relation to the Minister.

> SP 7: I myself am very disappointed that they haven't picked [the recommendations of the report] up with a little more enthusiasm and in fact some places to the point that nothing was intended to be done. But I think it's up to us to at least pursue that and continue to encourage the Minister to act on it.

The Health Regions Act has been highlighted as specifically pertaining to the governance work of this Board. Provincial Acts like this are broadly under the Canada Health Act, which provides the overall framework for Canadian health policy. For the province to meet federal health insurance legislation and thereby qualify for federal funds, it must meet the five program criteria: public administration, comprehensiveness, universality, portability and accessibility (Health Canada, 2004).

The public administration criteria are as follows:

> The intent of the public administration criterion is that the provincial and territorial health care insurance plans be administered

> and operated on a non-profit basis by a public authority, accountable to the provincial or territorial government for decision making on benefit levels and services, and whose records and accounts are publicly audited (Health Canada, 2004).

The Canada Health Act and the public administration criteria in particular provide the foundation for corresponding provincial legislation that governs the health minister and regional health boards.

Scattered throughout the transcripts are references to the various other regulations relating to health and health care and pertinent to the Board's work.

With reference to the Trade Union Act...

> SP13...In terms of taking a strike it would be illegal. Ahh, the reason it would be illegal is the certification order for ahh, for service employees union is region wide, is region specific and they would have to, under the Trade Union Act have to take a strike vote for the entire region to have ahh, [union name] members be able to walk out.

With reference to the Freedom of Information Act...

> SP1...And it's very obvious that that will be, we'll probably be able to release the CEO's salary and the senior executives in a range model or something of that nature. But it was pointed out to us very clearly under the Freedom of Information Act that information is to be made public and we find that if we release it I think in a more regular time it's released and it's done and it's gone and it's over.

It is not surprising that the Board would have an in-house lawyer in attendance to assist them with regulatory issues.

> SP40... I also wanted to mention that [name of an in house lawyer] is here as well if there are any questions related to property tax exemption or discussions with the solicitor's office, or the issue of the Regional Health Authorities Act as well s/he can respond to that.

Finally, even though the regulations are in place, what actually happens may not always be aligned with these regulations, as this speaker suggests in expressing disagreement with government action or perhaps inaction.

> SP13... The regulations under the Labour Relations Act obviously has no relevance. And the Regional Health Authorities Act obviously has no relevance. So how anybody could commit anything to writing in the future with the government and expect it to have any meaning is beyond me.

Among numerous other pieces of legislation covered by provincial legislation are acts related to specific health occupational groups, prescription drug reimbursement plans, standards for various health facilities, and employment and safety standards.

In addition to emerging legislation relating to health information and privacy, there are older 'Evidence Acts' that make provisions for the staff persons to disclose certain types of medical and health information to management Boards or committees and not in other legal proceedings. This type of act covers reporting to quality assurance committees and the report provided to the Board in the previous chapter. Many of the provincial acts are harmonized with corresponding federal acts such as the Canadian Evidence Act though harmonization between jurisdictional levels is a challenge.

7.3 Board rules

The rules that organize Board work are not explicitly detailed under the Regional Health Authorities Act, though the Act does explicitly grant the Board jurisdiction over how it conducts its affairs.

> **Powers of regional health boards**
> A regional health board may provide services, and for that purpose may:...
> (f) subject to this Act and the regulations, make bylaws and rules governing the activities and affairs of the regional health board (The Regional Health Authorities Act).

Once determined by the Board, the bylaws and rules are made explicit and legally binding through approval by the Minister of Health. As the Bylaw states under Article 6 Powers and Responsibilities of the Board:

> 6.01 The affairs of the Corporation shall be conducted by the Board. In conducting such affairs, the Board shall have all the powers prescribed in the Act and any other applicable legislation

> and regulations thereunder. The Board shall determine the policies and procedures and assume responsibilities for guiding the affairs of the Corporation (General Bylaws of the Members of the Board of the StarCity Regional Health Board Corporation).

Board members are oriented to their job by the Board Bylaws which specify the 'duties' of Board members:

> Every member, in exercising their powers and in performing their duties, shall:
> (a) act in the best interests of all the residents of the Health Region and act honestly and in good faith with a view to the best interests of the Corporation, and
> (b) exercise the care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances and comply with the Act and the Regulations and any other applicable legislation, and
> (c) comply with the Act, the General Bylaws and the Board's Policies and Procedures (General Bylaws of the Members of the Board of the StarCity Regional Health Board Corporation).

The Chair of the Board plays a special role in orchestrating the work of the Board. (See Chapter 6, Section 6.2). The Bylaws also specify the duties of the Chair:

> The Chair shall call and preside at all meetings of the Board, and shall be an ex-officio member of all Committees. The Chair shall carry out such other duties as may be assigned by the Board and function in accordance with the Board's Policies and Procedures...The Chair shall determine the order of business to be followed and otherwise regulate the meetings (General Bylaws of the Members of the Board of the StarCity Regional Health Board Corporation).

The Bylaws also include a partial job description for the Chief Executive Officer (CEO), including duties of the CEO in direct service to the Board, the relationship of the CEO to the Board and specific duties.

> The Chief Executive Officer or designate, shall be the Secretary. The Secretary shall maintain the minutes of all meetings of the Board and any committees thereof, maintain all correspondence to and from the Board and maintain custody of all minutes, records and documents of the Board....
> 8.01 The board shall hire a Chief Executive Officer who shall be responsible to the board for the overall management and leadership

> of the Corporations, subject only to such policies which may be adopted, directed or issued by the Board. The Board shall evaluate the performance of the Chief Executive Officer on an annual and ongoing basis.
> 8.02 Without restricting the generality of the foregoing, the CEO shall have the following duties:
> To observe and enforce all legislation and regulations governing or pertaining to the Corporation and the Agencies under the Board's control, the requirements of applicable accreditation agencies, and all motions and General Bylaws passed by the Board; To be responsible for such other duties and accountabilities as are necessary for the efficient and effective management of the Corporation, as are normally associated with the position of Chief Executive Officer and which may be required pursuant to the Act and regulations thereunder, and any other applicable legislation or regulations (General Bylaws of the Members of the Board of the StarCity Regional Health Board Corporation).

Chapter 6 revealed that the Board's works includes receiving and accepting, perhaps with amendment, the reports of Committees. The Bylaws also describe Committees of the Board.

> The Board shall establish all committees required by law.
> Board committees may be created by the Board from time to time as may be necessary. The Board motion creating a standing or special committee shall designate its reporting relationship, membership, duties and powers. Where the Board motion does not specify membership, the Chair may appoint Members and non-members to the standing or special committees.
> The activities of all standing Board committees shall be delineated by the Board and a standing committee shall continue in existence until such time as the Board passes a motion to dissolve the standing committee. The activities of special Board committees shall be limited to the accomplishment of the task for which it was created, and the special committee shall stand discharged upon completion of such task.
> A majority of the Members of any committee established pursuant to this Article shall constitute a Quorum of such committee (General Bylaws of the Members of the Board of the StarCity Regional Health Board Corporation).

The General Bylaws of the Board specifically cover the separate bylaws for the Medical and Dental staff that practice under the Regional Health Authority.

> 10.01 The Board shall recommend to the Minister the enactment of the Medical-Dental Staff Bylaws for the StarCity Regional Health Board Corporation.
> 10.02 The Board shall appoint Medical-Dental Staff in accordance with the provisions of the appropriate Medical-Dental Staff in accordance with the provisions of the appropriate Medical-Dental Staff Bylaws.
> 10.03 The Board shall appoint a Chief of Staff and Deputy Chief of Staff, if required, pursuant to the Medical-Dental Staff Bylaws and any motion passed by the Board (General Bylaws of the Members of the Board of the StarCity Regional Health Board Corporation).

Like The Regional Health Authorities Act, the General Bylaws of the Board also provide a section for interpreting terms, meeting procedures such as voting ("All motions duly moved and seconded at any meeting of the Board or any of the committees thereof shall be decided by a majority of voted"), special meetings, conflict of interest, confidentiality, indemnification and release, execution of documents and finance (see Chapter 6, Section 6.5).

7.4 Rules of Order

The strong organizing function played by the rules of order on how work is done in the Boardroom was revealed in Chapter 6, Section 6.2. The anomaly of check in was also made visible. In the following section, these are traced to relations outside the Boardroom. The puzzle of the anomaly, the value to the Board of less structured meeting opening and the dominant ruling practice is thereby revealed.

7.4.1 Aboriginal rules: Check-in:

> It introduced some humanity into the deliberations
> (Board member rising to the defence of Check-in)

The Board's use of a check-in procedure was identified as a departure from the rules of order in Chapter6, Section 6.9. How this came to be part of the Board's meeting structure is revealed when it is skipped during a meeting at which the much anticipated government budget is being presented and discussed.

> SP20: Mr. Chairman I note that we passed by the check in. Are we going to forego that again this meeting? You're worried about time I know, but it seems that we're always worried about time. And I'm willing to forego it. It doesn't matter. But I think check in is a valuable time and I hope we won't make a habit of always omitting it.
>
> SP1: Has it been cast in stone that check in is an automatic acceptance of this board all the time. Is that the rule? I thought it was somewhat optional and somewhat not. But has it been a board decree that we should always have check in.
>
> SP20: Well we took a decision when one of our Aboriginal members suggested it and we got in the habit of doing it. And I have always found it a useful thing myself. I don't know if we took a policy decision on it. But, it introduced some humanity into the deliberations.
>
> SP18: My recollection is that we decided to do it.
>
> SP1: Shall we discuss it at the retreat?
>
> SP20: Good idea.
>
> SP1: Ahh, okay...

The Board continued with check in. I had an opportunity to check in myself when I observed one of their meetings in 2001. I briefly explained the research and thanked them for their participation. It felt good to have an opportunity to express this though otherwise attending as an observer only.

I was aware of the aboriginal tradition of passing a 'talking stick', which was passed around a circle. Each person would have their opportunity to speak when the stick came to them. The stone worked like that. Further investigation revealed an aboriginal writer's description of traditional governance practices.

> The head of the clan sat in the middle of the other clan leaders. The leader's place was in front of the fire, their placement indicating they would have the final word. The leader listened as each of the other clan heads gave their version of events followed by their suggestions on what could be done to resolve the immediate dilemma.

> 'The fire is in danger of being snuffed out,' said the speaker. 'It is our duty to step in and make an uncomfortable decision. We will instruct the Carriers what to do.'
>
> In even tones, soft but firm, the Talking Stick—the speaker's sceptre—made the rounds of the council. Once everyone had spoken, the chosen head for the day stood up to address the assembly (Metatawabin, 2002).

The inclusion of a traditional (but modified) aboriginal governance practice into the Board's 'rules' provides a contrast and reminder that alternative governance forms exist and that current practices can evolve or change. Starting Board meetings with having each person in a circle checking in with the group is valued by the Board member who rises to a defence of the practice, because 'it introduced some humanity into the deliberations'. The rules of order this Board uses evolved from British ruling practices as the following section explicates.

7.4.2 Canadian rules: Bourinot

The visible process the Board uses to make decisions is revealed in Chapter 6 – making and voting on motions. This finding was investigated further and in the board orientation package a one-page sheet was found with the title Bourinot's Rules of Order (see Appendix C: Bourinot's Rules of Order). The sheet provides basic principles and some key rules. The rules provided are not complete but relate to points that are less well known. For those with experience in business meetings the procedures are familiar and apparently it was not seen as necessary to include a basic set of rules in the orientation package. In using rules of order the Board is following well-established governance traditions evolved in western cultures over many centuries.

In tracing the evolution of rules of order back in time, it becomes apparent that Board meetings are hooked into discourses that prescribe group decision-making processes. The Board uses Bourinot's Rules. Like 'Roberts Rules of Order', the US guide to parliamentary procedures initially published in 1896, Bourinot's Rules of Order were first published around 1894, when it was found that the British equivalent was not adequate for

Canadian parliamentary purposes (Bourinot, 1963; Robert et al., 2000). The original title was "A Manual on the Practices and Usages of the House Of Commons of Canada and on the Procedure at Public Assemblies, Including Meetings of Shareholders."

The standard decision making conventions used by this Board are in widespread use in a variety of corporate and not-for-profit organizations. These conventions include a prescribed way of calling the meeting to order, obtaining consent to speak and acknowledging speakers, bringing motions forward, amending motions and voting. The long list of editions and their revision from the late 1800's to the present demonstrates a stable and slowly changing set of rules. In using rules of order then the Board is part of ideological and discoursive practices of governance in widespread use in North America and Britian. One of the important purposes this type of textual-mediation serves, besides keeping a meeting in order, is legitimating that due process has been followed (see Chapter 7, Section 7.1).

7.5 The Carver policy governance model

An administrator, presumably the CEO, cautions a Board member that they are 'moving into an area of operations that quite frankly I would prefer you did not' (see Chapter 5, Section 5.8.3). What is not observable is that this Board follows a governance model which advises that the Board develop and monitor against policy objectives rather than attempt to co-manage 'operations' with administration. In interviews with the Board Chair and others I learned that this Board follows a 'Carver' model of governance but also I learned that it was not strictly 'Carver' but a 'modified Carver' approach. One of the VP's reported that:

> [T]his board chair is much less adherent to [the Carver] model. There are attempts all the time to pull the board back from day to day operations ... all the time (Vice President of StarCity Health Region).

Who or what is Carver? John Carver is a prominent consultant to US nonprofit and public governing boards. He lists the Canadian Hospital Association among others as a

client. He developed and widely promoted his policy governance model throughout the 1990s in books, booklets, newsletters, videos and audiotapes beginning with the seminal 1990 "Boards that make a difference" (Carver, 1990, 1997). This is his description of its origin in the mid 1970s.

> Like many managers, my own training was in a professional discipline rather than in management. As a CEO, I worked for years learning how to do what I was already paid to do.... As my skills as a manager grew, I became increasingly aware of the shaky foundation upon which management rests: the determination of purpose, which is largely a product of governance. Increasingly schooled as administrators, we worked towards ends haphazardly established as if we were introducing computer guidance into a Conestoga wagon. I was driven to discover what could bring governance into the new age (Carver, 1997, p. xiii-xiv).

The model was then developed from Carver's experience as a consultant and educator. He expresses gratitude to the first Board that 'adopted an untested governance method' (Carver, 1997). The Carver model is promoted to Board members with testimonial type stories illustrating successful application of the approach rather than empirical demonstrations of effectiveness.

The central governance problem that Carver sets out to address is as follows...

> Most public and nonprofit CEOs expect, as part of their job obligation, to 'stage manage' board meetings so their boards will not wander aimlessly or go out of control. Such a game of seemingly necessary manipulations carries a cost that the fragile balance of leadership can ill afford. For this reason alone, governing boards must modernize the process of governance. A modern approach to governing will enable a part time, possibly inexpert group of persons *to lead.* They have neither the time nor the ability to control every action, circumstance, goal, and decision. And if perchance they did have both time and ability, the organization would slow to a halt as they carried out their task. The most expensive resource of public and non-profit organizations, the staff, would be significantly wasted as the official second-guessing process ground on. Boards caught in the trap of being staff better than staff, as well as boards bewildered by unending details or confused by technical complexities, cannot lead...[T]he secret to the new governance lies

> in policy-making, but policy making as a more finely crafted sort (Carver, 1997, p. 24-25).

The Carver Policy Governance model directs Boards to develop policy in four areas: Ends (needs to be met); Executive Limitations (principles that limit the actions that the executive and staff can take without consultation); Board-Executive Relationship (delegation and assessment of power) and Board Process (representation of 'ownership' and strategic leadership) (Carver, 1997).

7.5.1 Board processes

Once the governance model the Board follows is revealed, how it orchestrates this Board's work of policy making becomes more visible. In the early stages of its work as a Board, the senior administrative team, under the direction of the Board engages in a strategic planning exercise. This is a key part of Board process. An executive member describes how this work was accomplished:

> Our major responsibility is to help the board to be strategic... I see us as strong partners, not top down... It might sound like we control the board but that isn't the case. Our board is made up of people who don't work in the system. They ask us for that leadership (Vice President Operations of StarCity Health Region).

The Board approves and directs policy making at the highest level. However, as Board discussion and approval of the spiritual care strategic plan illustrates (Chapter 6, Section 6.5), the work of formulating actual policy is worked out by staff in consultation with others, for approval by the Board. Management has a planning cycle to which uncertainties can be referred. In the example of the provincial heart centre, the Board refers a proposal to the planning cycle (see Chapter 6, Section 6.6.2).

Board processes also include their adoption of rules of order and Board policies and procedures as laid out in their bylaws (see Chapter 7, Section 7.3).

7.5.2 Board 'Ends'

This Board would appear to be following Carver's advice and has laid out the Board 'Ends' – those broad goals that the Board is targeting. The strategic planning documents that are the result of this initial planning exercise lay out the following goals:

- Healthy community – To improve population health status
- Healthy workplace – To improve well-being, interdependence and respect for all health care and service providers
- Healthy operations – To be a sustainable, integrated and interdependent organization.

These 'Ends' become the foundation of an organizational performance evaluation framework. The administrative leadership then formulates indicators. Once developed, the indicators (as 'found' in operating information) are reported back to the Board as part of the quality reporting mechanism. This fulfills a key accountability mechanism for senior executives of the health region.

The Board executive implemented a balanced score card approach to performance evaluation of functional units within the organization. This met the needs of accreditation (CCHSA, 1996). It was also intended to produce information useful for everyday management and internal accountability. Here is how the balanced scorecard is introduced to the staff who are to develop departmental versions.

> If our vision statement describes our future state, and our mission statement describes our purpose or our reason for being, then our aproach to measuring quality performance through the Balanced Scorecard tells us how close we are to achieving our vision and mission.

Once this exercise was complete, every department made a brief presentation to the Board.

> Every year we get a kick at the can and we present our score card in 15 minutes… (Interview with StarCity Manager).

Little feedback to departments resulted apparently. The work of the Board is therefore in insuring that processes are in place to evaluate performance versus doing the work of management in developing strategies to resolve quality issues. Managers report

difficulties in getting the information they need for the scorecard as well as to meet increasing service demands with fewer resources.

> The uniqueness of what we've done is by taking research, utilization management, health information and population health and bringing it into one unit for strategic planning. It it proves...What we're building is a more comprehensive set of data for broad planning for the board and senior levels. And health information manager. We're adding a third level... (Vice President of StarCity Health Region).

As this Vice President reports the region is engaged in a massive and ongoing process within the region to develop more useful information resources for management and governance purposes.

7.5.3 Board-executive relationship

A number of people interviewed told me: "The Board has only one employee: The CEO". The Board is a 'policy board' not a 'management board'. This follows from the use of the Carver model that the Board holds as an ideal — refraining from 'managing' or 'micromanaging' the organization. From the perspective of a Board member, the CEO manages the health region and the Board 'manages' the CEO. The Board is thereby barred from direct involvement in the day-to-day operations of the health region and from attempting to oversee the myriad work activities of over 10,000 staff members and 600 doctors.

So when a Board member asks whether a screening process would help the client representative to deal with the high volume of calls, s/he is warned that that s/he is moving into an area of 'operations' that the management "would prefer you did not" (see Chapter 6, Section 6.8.3). The Board member does not continue with her/is line of inquiry. 'Operations' are understood by Board members to be the realm of management, not governance. Yet there may be times when it is appropriate for a Board member to ask questions that might reveal gaps in organizational performance as a result of poor management.

Though Boards have ultimate responsibility for operations, they do not have the time, expertise, and information to 'manage' operational level problems. The Board Chair admits the Board does not strictly follow the Carver model but a 'modified' Carver approach. For example, though the CEO is the only employee who is regularly present at meetings, the Board has found it useful to have many of the senior administrative team on hand to present topics under their portfolio and to respond more directly to questions during discussion. Carver originally described the relationship as:

> The relationship between the CEO and any individual board member is collegial, not hierarchical. As the CEO is accountable on to the full board and as no board member has authority individually, supportive peers is true for the CEO and Board chairperson as well. They are not hierarchically related, because to be so would shift the CEO function to the chairperson (Carver 1997, p. 116).

This seems to be a contradiction in the rule that Carver establishes regarding the separation of policy and management responsibility. Also, although management of the health region appears in every way to be exemplary, it seems inappropriate that a Board member is warned away from inquiring into the solution for obvious gaps in performance. Is not the management then effectively protected from operational scrutiny? The regional Health Board cannot attempt to be a management board but how can the members adequately ensure that management is managing operations effectively when their queries about operations are deflected through an invoking of the policy of being responsible for 'policy' not 'management'?

The Board's work is also to 'review' the performance of the CEO. This large task is done under the guidance of a Board committee. The review follows from a four section accountability agreement. Broad task accountabilities includes items like the following:

> To ensure that citizen-centredness is considered first and foremost when examining processes, establishing or reviewing programs and services (excerpt from accountability agreement of the CEO of StarCity Health Region).

The review also includes 'behavioural accountabilities':

> To continue to foster the interdependent relationship with the Board through providing advice and recommendations to the Board as well as any other support needed in order for the Board to fulfil its responsibilities (excerpt from accountability agreement of the CEO of StarCity Health Region).

A section on results asked that specific measurable ways to evaluate the CEOs outcomes be detailed. For example:

> Identification of common and consistently reported quality indicators at all levels of the organization in order to create a system to measure the health of the community, of operations and the health of the workplace. Measure: That such indicators are agreed to and measuring mechanisms established by the end of the review period (excerpt from accountability agreement of the CEO of StarCity Health Region).

The CEO also pledges a general commitment to development by pledging to learn everyday and mentor others. Under the final section 'commitment of support' the support to be provided by the Board is identified as follows.

> I need the StarCity Board to continue to:
> 1) Give me respect, trust and freedom to manage and oversee the day-to-day operations of the organization…
> 5) Do their best to be emissaries of the community so the public will understand the plan and feel actively involved through consultation in health and the direction of the health care system (excerpt from accountability agreement of the CEO of StarCity Health Region).

The review process involves interviewing many people within as well as outside the organization. A report on CEO performance is then presented to the Board.

This conundrum of the relationship between CEO and the Board is at the centre of Board decision-making with respect to its information use. Senior administration 'filters' information for the Board. Yet it is the performance of these same executives that the Board is mandated to oversee because the executives have administrative control over day-to-day operation of the organization. The CEO has overall responsibility for the organization and heads up the senior management team. The senior administrative team has executive decision making authority to oversee day-to-day operations and make managerial decisions for the departments under them.

> …I have the responsibility under the Act to define priorities and be able to feed them directly to the board, ah, which gives more, well,

> in a university setting you'd say academic freedom, in this case it is more of almost a conscience role that you play without any filtering of that information by, ah, senior administration...(from interview with Medical Vice President).

This excerpt confirms that the 'filtering' of information by senior management may be problematical. The role of the two medical administrators as reporting to the CEO and reporting independently to the Board would seem to be a safeguard ensuring that information about poor health outcomes resulting from poor organizational performance will not be withheld from the Board.

The rationale for delegating management of operations to the CEO and providing this key administrator with the autonomy to carry out the complex work the job entails would appear to be sound. Yet there may be a downside and there are other governance models that do not prescribe such an extensive 'hands off' approach. Recent scandals in US corporate governance have highlighted the need for governance reform in that country. Considerable work is being done in the US to examine the merits of different governance models. The policy governance models used by regional health boards should not be exempt from scrutiny given the importance of health care.

Part of the solution to governance concerns is thought to be better information and accountability mechanisms. The motivation to developing organizations that are transparent, at least to its governors, would provide impetus to develop and make available comprehensive information about the organizations' performance in relation to a region's health profile. Currently, information that is complete, accurate and comprehensible is not readily available. The problem of information and how it is worked up for the Board will be the focus of Chapter 8.

7.6 Good people, good relationships and trust

In pursuing the potential conflict of interest that the StarCity health region administration has in supplying the Board with information on which the performance of the region (and by extention their own performance) would be evaluated, I asked the Board

Chair and CEO about this puzzling aspect of Board/administration relations. Consistent with the Carver model but outside the meeting transcripts I had access to, the Chair of the Board described the Board's work in selecting the CEO, forming a good working relationship with them and reviewing their performance comprehensively.

The timing of these interviews was sensitive as corporate governance practices were coming under increasing scrutiny of shareholders and the public following the bankrupcy of Enron in the US. The failure of Enron's Board of Directors to stop questionable financial reporting practices were implicated (Arnold & de Lange, 2004; National Association of Corporate Directors, 2004). In discussing the Enron scandal the Chair of the Board offered his opinion that there would 'strictly speaking' be no way for the Board to know if a clever and dishonest CEO were to provide them with false information. The best the Board could do in her/is opinion was to hire the best people they could find. The confidence of the StarCity Chair in the CEO was based on their personal relationship. The Board Chair 'knew' the CEO and senior management team were trustworthy because of their knowledge of their character, their reputation in the health care community, their trackrecord in management, and how they handled situations. The Chair did not expect the internal audit to be able to detect the type of fraud that was at the root of the Enron scandel. Furthermore, the Board knew the difficulties that the administration was faced with in managing with little control over many resource and labour contingencies.

The Board has many important types of knowledge that are not obtained from the information systems. Here is one crucial area where 'trust' seems to trump accountability through textual reporting mechanisms. As important as accountability processes are, if what the Chair is saying is true, the CEO could be providing the Board with inaccurate or incomplete information and current mechanisms would not catch that. On the other hand, perhaps the human ability to judge the integrity and skill of managers is something that is not easily replicated technologically and therefore should be retained by acknowledging and supporting these key relationships.

StarCity health region is a place with strong community ties. Many people in the region take pride in what they were able to achieve in health care in advance of many parts

of the country. They also credit bold leaders. One of these leaders tells the story of how he had approved funding, without extensive consultation, to two doctors, for innovative treatment facilities. The reason was apparently simple:

> [W]ith my close personal knowledge of both men and my complete faith in their integrity, my permission did not seem to me to be a gamble at all (former government official).[12]

The Board similarly relies on relationships of trust among people that have been developed over time and through knowing their senior administrators and medical leaders as people. These social relations including the extensive community relations that guide how they work together. They are an important, though invisible, way that work is orchestrated. In particular, I was struck at how synergistic the work of the Chair of the Board and the CEO was. This pair at the pinnacle of the Board/Executive interface and their coordinated efforts were essential to managing the Board work of governance and the administration's mandate to carry out the planning and day to day operations of the health region.

7.7 Board relations with medicine

The Board's limited discussion before approval of the recommendations of the Medical Advisory Committee revealed that clinical governance has largely been delegated to doctors (see Chapter 6, Section 6.4.2.2). Provincial and regional regulatory mechanisms as well as StarCity Health Regional bylaws subordinate the physicians practising within health region facilities to Board and yet the governance structures in fact seem to be parallel:

> In conformity with The Hospital Standards Act, The Housing and Special Care Homes Act, and other applicable legislation of the Province of [name of province], and with the General Bylaws of the Board of Directors of the StarCity Regional Health Board (SRHB) Corporation, the medical and dental staff of the StarCity Regional Health Board Corporation organize themselves in accordance with these Bylaws and the Rules & Regulations (Medical-Dental Staff Bylaws, StarCity Regional Health Board Corporation).

[12] I keep the source in confidence to preserve the identity of the region.

Part of the provincial regulation of medicine organizes the accountability of physicians regionally through two Vice Presidents on the senior executive team. These are medical doctors who report to the Board of the StarCity Regional Health Region as well as its CEO. The Chief of Medical Staff has responsibility for the medical care and the medical health officer for public health as well as a diverse portfolio. The Medical Health Officer and Vice President explains these dual responsibilities:

> As administrator I have departments like Decision Support and Public Health reporting to me and so if the board has questions around data that they need from the Decision Support department or if they have questions about how the services or programs are being run in either of those departments, as VP I would answer them but that would be usually at the direction of my CEO. And if I'm in a meeting with the CEO and the Board asks a question, the CEO would defer to the VP usually to answer the detail about that question.
>
> As MHO through the Board, ah, the Boards is responsible for enforcing the Public Health Act and part of that includes monitoring the health status of the population. An ah, they hire me as MHO to enforce that act for them as the delegated authority for them. As such I report directly to the Board on those activities, on the Act, so the production of the health status report. I do that for the organization as a whole through Decision Support and Public Health. But reporting on it and report on any issues of population health significance is my duty as MHO to report those directly to the Board...
>
> That direct access is important for both the MHO and then on the other side of the medical house, the Chief of Staff has the same reporting relationship for the other medical staff (from interview with the Medical Health Officer/Vice President)

As these passages illustrate, health care organizations differ from other types in the degree of regulatory authority and autonomy accorded to professional groups. The privileged position locates physicians differently from other professional staff and administrators. Physicians, their administrative representatives, and their clinical governance structures parallel the CEO, senior executive team and regional health board. This explicates how the actual oversight of quality of care by the Board is difficult to achieve. This local

accomplishment of social relations is ruled through the web-like institutionalized ruling relations textually mediated through regulatory mechanisms, medical training, special funding arrangements and the taken-for-granted nature of these arrangements by the public and within health care.

The arrangement by which both the chief of staff of n physicians practising within the regional health system and the medical health officer are reporting to the same governing structure brings clinical and public health medicine much closer together than when hospitals were stand alone entities and both were competing for funds independently.

Whether the rationale behind these regionalized govenence structures is supported by evidence is debated. An Ontario document claimed that regionalization is not 'a magic bullet' to solve all the problems of the health care system (Ontario Hospital Association, 2002). That was before the SARS outbreak nearly closed that province and cost millions (Dwosh et al., 2003). The lack of a regional infrastructure is now being considered as one of the factors that led to difficulties in information sharing and which is therefore responsible in part for delays in handling the SARS crisis (The National Advisory Committee on SARS and Public Health, 2003). Integration of public health was not a feature of the health system before regionalization. Public health and hospital-based medicine were not integrated. Within the current structure, it is possible to have data about flu outbreaks handled in a whole system approach, so that data on outbreak patterns leads to a public health response designed to decrease outbreaks through immunization: for example, orchestrating the systems response to an outbreak through better bed management (Gray, 2000). In addition, health care governance is complicated by the special status of professional staff who are governed by their own discourse, supported by licensing organizations, educational institutions and legislation. Regions also have to meet the expectations of accrediting bodies.

As this dissertation focuses on the work of the regional health board, clinical governance is not explicated further as it takes place outside of that formal structure. Yet as health boards and their administration are required to make choices that affect the availability of health care infrastructure required by physicians to practice, further analysis demonstrates how doctors are drawn into closer relationship with the health region. See

Chapter 8 on the textual mediation of decision making. In particular, as the evidence on population health status becomes available to the prioritization processes of the region, the health care system that traditionally has 'known' about health of the population and health care needs through physician representatives have other sources.

7.8 Community stakeholder relations

The RHA Board can be seen as part of a complex of relations forming the ruling apparatus of health care. Here the talk of the Board is mapped to the stakeholders they consider in discussing a motion regarding a non-routine matter. Table 7 provides excerpts from the talk that reveal the numerous stakeholders the Board considers important to address in relation to the proposal. The discussion, put forward by a voluntary community board that has no legislated authority within the system, is regarding a provincial heart centre (see Chapter 6, Section 6.6.2). Figure 10 depicts the stakeholders in relation to the Board. The institutional complexes include those predominately related to the health care system.

These passages allude to the conflict between provincial heart centre advocates and the Board's ruling imperative. The RHA board has the regulatory mandate to provide services in the region, while the heart centre does not, because it is a voluntary and not statutory community board. The regulations, which cover this type of board generally, do not extend to the governance or provision of health care services. To meet the Canada Health Act, health services require public administration, so the heart centre board requires the support of the established regulatory apparatus to achieve its aim of establishing a heart centre in this province. This is essential to understanding the concern about the way the heart centre proposal fits within existing ruling relations and service provision infrastructures. It would appear that the plan of the heart centre board to be involved in the 'direction and scope of cardiac care' is not supported by the ruling apparatuses in place, even though the proponents have been successful in generating 'political and lay enthusiasm'.

Table 7:

How stakeholders are brought into Board discussion

Stakeholder	Examples of how stakeholders are brought into discussion
Provincial Ministry of Health	SP 15: In general, a response from the ministry has been that the concept is meritorious; there are good ideas present.
Government/Politicians	SP 11: And they have found a supportive ear within government, at the level of the Premier and at the level of the last two ministers of health
College of Medicine	SP 21: Ahh, the College of Medicine is supportive of the concepts ...
University Community	SP 15: The heart centre board has encountered considerable difficulties in that proposal within the university community
Heart and Stroke Foundation	SP 18: I will be voting against the motion. Because I believe that if they do not have the support of very key players like the Heart and Stroke Foundation and the support of the university community for applied research then there's got to be some reasons that we don't know about.
Other Health Regions	There is clearly also on the part of the Ministry of Health that if this is going to develop that at some point it have a provincial focus and that specifically, [named] Health Region be brought into the equation.
Physicians	SP 17: I see it driven by private clinicians
Researchers	SP 21: Nor have the researchers that you find in the many documents, still actually ever met.
Community	SP 21: [T]he people in this [heart health centre] Board who represent a tremendous enthusiasm from the community

As the Board debates the controversial introduction of a provincial heart health centre, the awareness of one Board member, about their legislated mandate to rule, is implicit (see Chapter 6, Section 6.6.2).

> SP 18:... I'm ahh, concerned that Provincial Ministry of Health has actually assigned a liason person which gives this organization a status and a credibility beyond ahm, without the approval of this board.

Along the same theme, an administrator adds:

> SP 15: I think the challenge here would be to harness both the political and the lay enthusiasm and at the same time harness it within our current structure and governance arrangements. Ahh, the board of the heart centre has up to now taken a position that they do not wish to see themselves as solely a fundraising agency. But in fact wish to have some involvement in terms of ahh, direction and scope of cardiac care....

Even a board member who is supportive of the heart centre concept acknowledges that:

> SP 20: Those concerns of governance are important concerns...

The ideological shift that opens the board to consideration of a proposal from outside the authorized health care delivery system is demonstrated by this proposal for a provincial heart centre. Ideology is the dominant set of beliefs about what is valued. Canada is seeing an ideological shift regarding private/public provision of health care. If a bid such as the one proposed by the voluntary community board were to be adopted by the mandated governors of the health region, it would signal the success of a new kind of lobbying. This voluntary community board has had some success in mobilizing government, clinician and public support for their preferred solution to the challenges of health care. Whereas this analysis did not verify the private interests of clinician on the voluntary community board, some board members allude to them. This analysis has therefore revealed the potential for private interests to gain access to and perhaps future control over pubic health policy making in an era in which private ownership of facilities may be increasingly allowed. It is an example of how private interests could become part of the ruling relations of health care policy making at the level of the regional governance and thereby partake in the orchestration of governance.

The extensive discussion the Board has on the positions of various other organizations within the province demonstrates that the social relations can be explicated

through IE as the intricate webs of activities and interactions through which the everyday lives of people in a society are orchestrated. Although the reason for the extensive polling and reporting of other organizations is not explicitly stated the Board has a need to know the positions of other potential supporters of the heart centre proposal to be able to position itself.

7.9 Ethical framework

The board's concerns about a committee recommendation allocating funds to one group educating the community on family planning where countered with reference to Board's mission and values ("So long as in a general sense it's consistent with the board's mission and values, the committee feels comfortable in bringing the recommendation forward.") (see Section 6.4.2). This reference led to the uncovering of the following vision, mission and values statements.

Table 8:

StarCity health region vision, mission, values and workplace philosophy statements

Vision	Working together to improve health
Mission	As an integrated health region, in partnership with others, we will achieve a health community through health promotion, quality services and delivery, education and research supported by a healthy workplace and healthy operations
Values	Compassion, respect, trust, integrity and accountability
Workplace philosophy	In keeping with our values, with every action we take as individuals and as an organization we: show respect, value learning and growth, build trust, promote meaningful participation, practice open communication, support appropriate decision making, foster innovation

In looking back to the Board decision to fund the family planning poster presented in section 6.4.2, the themes of partnership, respect, education and promoting participation may have been evoked to override concerns that balanced information would not be provided.

The Board's discussion appealed to the concept of non-discrimination ("So it would be fair to say Dr. [name] that say, were Planned Parenthood to come forward with a similar proposal to promote other options for family planning that we would probably support that too?"; "That's what I'm saying"). In searching for ethical principles such as 'justice', 'beneficence', 'non-maleficence', or 'fidelity' that weren't explicitly covered in the statements, I found a document titled 'An Ethical Framework for Decision-Making for the Proper Allocation of Resources' in the Board orientation package.

Rather than reviewing ethical principles that are often found in frameworks that govern health care professionals, this framework was aimed at fiscal accountability. The stated purpose of this framework was 'to ensure that the demands of health care provide the values whereby the dollar needs are ascertained.' Rather than providing 'a recipe or a blueprint' the ethical framework 'seeks to ensure that the right questions are asked and then satisfactory answers are supplied'. The resulting analysis was three-fold:

1) 'any unit responsible for the use of health care funds must clearly know what is being asked of it (purpose or mandate)'...
2) 'the unit must understand how it is to fulfil this mandate (the mission and operative values)'...
3) 'the unit's activities must be understood as an efficient, ethical accomplishment of the mission and mandate.'

It is clearly important to ensure that funds are used efficiently to accomplish the mission of health care. These principles, however, do not address all the ethical implications of supplying health information on family planning, as considered, for example, by academic bioethicists (Kluge, 1999). Though the Board finds principles that are used to override their concerns, their discussion illustrates how ethical principles come into decision making. The principle of non-discrimination or fairness has entered the discussion despite not being a

formal part of the Board statements or its reference material. This highlights both an opportunity for improvement and illustrates how the traditional concern with fiscal accountability comes into decision making as a value.

In addition, the region uses a series of 'touchstone' elements that it attempts to apply to all decisions worked up by the senior management team for the Board. The elements were derived from the definition of quality of CCHSA (see also Chapter 3, Section 3.3). StarCity chose 'acceptability', 'accessibility', 'appropriateness', 'competance', 'continuity', 'effectiveness', 'efficiency' and 'risk/safety'. None of the transcripted meetings actually contains any discussion of the StarCity 'touchstone' criteria directly. And it is not immediately clear how these elements might be used to support 'non discrimination' or 'fairness' as in the family planning poster decision. The effectiveness and risk/safety elements seem not to have been activated.

7.10 Religious hospitals and the health region

In the discussion of the strategic plan for spiritual care there were mysterious references to another Board (see Chapter 6, Section 6.5). In discussions of future public board meetings the announcement of a change in ownership is mentioned (see Chapter 6, Section 6.3). These references are puzzling because the formation of the health region put the Boards of previously stand alone organizations under one regional health authority Board. Tracing these references outward from the board meeting I found that the first hospital in StarCity had been started by a religious group that had continued to play a major role in administering and governing the hospital to the present day.

Though public funds were increasingly used to finance ongoing operations, the religious hospital leadership with community support continued to desire a hand in governing and managing the hospital. Being the legal owner of the real-estate and real property, the region has carefully co-ordinated management with the hospital as it became subsumed within the larger heath region. The religious hospital has continued to have an independent board thus the need for the StarCity regional health board to approve a spiritual care plan that was also being approved by the board of the religious hospital. The

announcement that is anticipated to take place in a public board meeting, refers to the transfer of the religious hospital ownership from a religious group to a not for profit corporation that retains ownership, sponsorship and strong affiliation with the religious group.

The spiritual care plan of the religious group running the hospital would be examined against the published standards of spiritual care developed within Canada by the Catholic Health Association of Canada (CHAC) and the Canadian Association for Pastoral Practice and Education (CAPPE). The purpose of these standards is to 'guide health care organizations in the maintenance and development of their spiritual and religious care services within the continuum of care' (CHAC and CAPPE, 2000). These standards are envisioned as becoming part of the accreditation process for Canadian health care organizations. Included are standards for governance and administration including that the mission, budget and operation of the health care organization support spiritual and religious care, that there be budget, personnel and physical space for spiritual care as well as standards for the personnel, care process, accountability and evaluation (CHAC and CAPPE, 2000).

As this section of the analysis demonstrates, the institutional ruling relations of health care include religious institutions. From colonial times to the present, religious groups started and operated many of the hospitals and regionalization has necessitated their increasing integration with government administered services. In the daily work of the region's health board, we see them organized to accommodate this sole surviving independent board, have its approval for the spiritual care plan and approve funding of family planning posters though there is concern about the provision of balanced information (see Chapter 6, Section 6.4.2).

7.11 Chapter summary

The analysis in this chapter has explicated how board members' decisions are socially organized, directed and constrained by the ruling relations that they are part of. The analysis makes visible how the structure and processes for making decisions has largely been predetermined. That they are widespread and interconnected practices is uncovered. The

taken-for-granted understanding of these relations by Board members is also apparent from how they were not explicitly discussed in Board discussions. The puzzles and obscure references examined in Chapter 6 are explicated. Though the ruling relations were not transparent in the day to day work of governance, this analysis is proof of concept of the power of institutional ethnography to reveal how the actual governance decision making is organized by institutional relations.

The governance work of Boards is revealed as part of larger interconnected institutional practices of government, health administration, law, health professions and labour. The legislative and companion legal frameworks organizing the work of the Board have been made visible. These have been crafted and modified over long periods by governments. The roots of institutional ruling relations in historical timeframes are seen in that Board meetings follow rules developed for parliaments. Boards were created to ensure the interest of owners prevailed in the management of for profit corporations. The blend of practices derived from corporate and parliamentary relations organizes governance work procedurally within an extensively regulated legal framework. This is revealed by the texts that create the board and give it its mandate, authority and to a certain extent instructions on what they must do. These texts also specify the texts that the board must produce including reports on the health status and service delivery in the region, as well as audited reports on its fiscal management. The Board creates its own bylaws and enters into contractual agreements with other entities and individuals.

At the start of meetings, this board usually follows an aboriginal custom of passing a rock to each individual at which point they 'check-in' and provide a personal greeting to the group (see section 7.4.1). This provides a reminder that the way decisions are made it this setting are a social creation – it could be done some other way. Changing these pratices could represent major reform.

The practices are also informed by discourse about what consitutes good governance. This is primarily supplied in this Board by the Carver model, which is based on a separation of policy making and management. This policy governance model organizes the work of the Board in fundamental ways. The Board does not entirely adhere to the model,

yet it is employed to keep the Board from scrutinizing too carefully how management is addressing the day to day problems of health care.

The Board authorizes strategic vision, mission, values and goal statements. The region is working towards developing a reporting structure to measure progress on goals overall and departmentally. The intent is to develop a reporting system that will allow the Board to monitor the performance of the organization using a panel of indicators. External auditors scrutinize CEO and financial performance and similarily present the board with reports. In this virtual world of reports, quality in health care appears largely at the board level in textual and numerical representations. The exception to this is the privileged reporting status of medical chief of staff and medical health officer who can report quality concerns directly.

By delegating direct oversight of management or operational performance, the Board attempts to monitor the performance of the region through indicators made possible through increasingly sophisticated information system support. The Board's work is in determining vision, mission, goals and objectives. Performance review is then a matter of reviewing the extent to which targets are met – in theory. In practice there are limitations in the data and the ability of the organization to respond to rising demand and limited resources. The quality indicators do not eliminate the need for shrewd strategic management. There is no gold standard and there are limited resources, so not all worthy objectives can be accomplished. Health outcome information is lacking. This will be further explicated in Chapter 8.

The virtual world of reporting is new and not entirely relied upon. The Board also relies on their ability to ascertain the integrity and compentency of the CEO and other advisors. In this they are following strong local traditions of building ongoing relationships of trust based track records of accomplishment. Relations with 'medicine' as an institution is a challenge absent from other forms of public service. In this system it is met through a system of clinical governance that is authorized by the Board but in which the Board does not appear to effectively participate in formulating policy.

In this chapter, ideological shifts are revealed in the bid by the lobbying of a group, perhaps backed by private clinican and financial interests to champion a provincial heart centre. Though this group has no authority within the system it appears as a not-for-profit charitable operation with considerable community and political backing. The role of the Board in identifying the interests and perspective of many other 'stakeholders' is thereby revealed.

Tracing the values that underly those decisions leads to various value statements including an ethical framework based on efficient utilization of resources. Quality elements are also documented in the board materials and yet these are not explicitly considered in the transcribed meetings examined. The bioethical implications of many decisions as they would be analysed by an ethicist therefore do not inform the board decisions except as they are variously incorporated into the ethical frameworks individuals bring into the Boardroom.

CHAPTER 8:
TEXTUAL MEDIATION OF DECISION MAKING: WHAT THE BOARD KNOWS ABOUT HEALTH AND HEALTH CARE QUALITY

> We start off our mission, improving the health of the region. By assessing the health status and I couldn't tell you quite frankly where we are with that. I don't know. And I don't know if all of the other board members know. What are the main issues in our region and how are we finding that out. Because that's one of our obligations isn't it. An annual progress report of the health status of the region. And I just don't have a very good feel of that myself. I don't know if everybody else does but...(board member speaking to the Board).

The Board has a mandate to assess and improve health status in the region, yet at least one Board member states, 'frankly', that they don't know – even about the 'main issues and how we are finding that out'. This chapter will make transparent how the work of informing the Board, and the Board's work of being informed about health and health outcomes, is socially organized. I demonstrate that current governance structures are in the process of reform to accommodate traditional governance concerns and accommodate new ones. This has implications for how Board decision-making work is supported.

This Board, at this historic point in its development, is actively developing information resources not previously available. Therein lies an opportunity to examine how new information resources are being created for the Board. The texts relaying health relevant information will be examined more closely. How health related information is worked up for the Board will be explicated by examining the work practices that produce these, both by staff of the health region and by external organizations.

The fact that this information is systematically generated means, in institutional ethnographic terms, that it is socially organized, that people are active in determining its design, format and sources. Once again, the issue arises as to the origin of and the authority carried in this work. Is there being built into this information the interests that the Board represents? If so, how? If not, how can that be altered? Ruling relations will be traced out,

from the organization to these widespread practices. The advantages of the IE approach over an input – processing – output analysis is thereby explicated.

8.1 Reports produced by the region

8.1.1 On health status

The Board member quoted at the beginning of this chapter refers to a Government requirement that health regions produce an annual health status report. The ruling relations that the Board is entwined in with government, and how these are mediated by legislation, are made explicit in Chapter 7, Section 7.2 – Creating A Board and Mandating its work. The excerpt is taken from a Board discussion intended to generate themes for an upcoming public meeting (Chapter 6, Section 6.3). An administrator agrees that although the report had not been completed, the 'public' will be made aware that this reporting is in progress and provided with some details on the methodology. The report is therefore destined to play an active role in a dialogue between the public and the Regional Health Board.

The 200-page report on health status and the determinants became available later. The report compiles comprehensive demographic data including population projections, a First Nations profile, household family structure, and dependency ratios (working population/children and seniors). Table 9 presents the framework used by the anonymous health region to report health status information on the health region.[13] Each dimension of the framework has data or indicators that are based on methods from a wide range of interdisciplinary practices.

[13] To disguise the identity of the health region and staff the reference of this document is not provided.

Table 9:

Framework for health status reporting

Social environment	*Physical environment*	*Morbidity and mortality*
• Income • Poverty • Food security • Cost of living • Employment • Education • Children not in school • Culture and language	• Housing • Air quality • Water quality	• All cause mortality • Life expectancy • Leading causes of death • Premature death • Hospital separations • Leading cause of hospital separations
Chronic disease	*Injury prevention*	*Behaviour and health*
• Ischemic heart disease • Stroke, lung cancer • Diabetes • Asthma • Chronic lung disease • Pneumonia and influenza • Breast cancer • Prostate cancer • Colorectal cancer • Other preventable cancers • Cancer screening	• Injury related deaths and hospitalizations • Accidental falls • Motor vehicle injuries • Bicycling injuries • Homicide and purposely inflicted injury • Crime statistics	• Self reported health status • smoking • Alcohol • Physical activity
Family health	*Mental health*	*Infectious diseases*
• Reproductive health • Teenage birth rates • Low birth weight • Infant mortality and morbidity • Child, • Adolescent, • Young adult, adult and senior health	• Measures • Happiness • Social support • Suicide • Hospitalizations • Mortality rates	• Vaccine preventable diseases • Measures • Pertussis • Haemophilus influenza (B) • Hepatitis Type B/C • Immunization coverage • Sexually transmitted diseases • Blood-borne infections • AIDS/HIV • Enteric infections • Emerging issues

The author's perspective on the limitations of the available data and its intended use is presented in the following paragraph.

> It is difficult to present a complete picture of the health status of a population. The World Health Organization defines health as a positive concept that signifies more than the absence of illness or disease, but a complete state of physical, mental and social well being. Data are not often available on the positive aspects of population well being. This situation is gradually being addressed by the development of cross-sectional and longitudinal studies on population health and determinants, such as the National Population Health Survey and the soon to be released Canadian Community Health Survey. In order to do comparisons over time, more traditional indicators of death or illness must be used. However, the authors have attempted to examine the physical and social conditions in which residents live, in order to better understand the factors that impact on their lives and health. The authors hope that the information can be used by government, health organizations, practitioners, and the general public to make decisions on health policy and programming. Production of future reports using the same indicators will allow StarCity Health Region to assess the effectiveness of interventions on population health status and social and physical health determinants.[14]

This paragraph reinforces the intended use of this information in policy making. It also illustrates that this report is hooked into a discourse on population health status and health promotion that is not only national (National Population Health Survey) but international (World Health Organization). Many academic disciplines have contributed to creation of the methodology including public health, epidemiology, economics and sociology. Advances in computer science and informatics have facilitated the data processing required.

Research staff that prepared this report required certain related skills and training. A doctor trained as a medical health officer led this team. They used a rigorous and documented methodology to develop the framework and indicators. The framework was borrowed in part from the Canadian Institute for Health Information and Statistics Canada

[14] To disguise the identity of the health region and staff the reference of this document is not provided.

framework reviewed in Chapter 3, Section 3.5.1 (CIHI, 1999). Another provincial report was also an influence.[15] It is part of larger efforts described as follows:

> Canada spends $80 billion each year on health care services. We need better information to know what health outcomes are being achieved with this money and to enable better planning. To this end, the federal government recently allocated more than $300 million for the development of health information. These funds are being used to enhance the health surveillance capabilities of Health Canada and to fund the Health Information Roadmap Initiative, a joint project of the Canadian Institute for Health Information and Statistics Canada.
>
> The roadmap initiative will attempt to answer 2 questions: How healthy is the Canadian population? and How well is the health care system performing? The health indicators to support this process were selected at a national consensus conference held in May 1999 (CIHI, 1999)and are clustered in 4 domains: health status, nonmedical determinants of health, performance of the health care system, and characteristics of the community and health care system (Millar, 2000, p. 1823).

The Health Indicators Project (HIP) was one of 38 projects that make up the CIHI Roadmap Initiative (CIHI, 1999). At the end of the conference, a number of health status indicators had been confirmed as ready for use by those invited to the meeting. None of the 'health system performance' indicators were so identified. These were among those identified as requiring further review for feasibility, comparability, data availability or changes in definition.

Though reform is underway it is not yet far enough along to be producing the information that is required. Here is how this effort originated and is being strategically advanced by organizations involved in Canadian health information.

8.1.1.1 Origins

The CIHI health indicators project is part of current Federal government approaches to policy development. CIHI itself is federally chartered and therefore maintains an

[15] The reference and province is also omitted to conceal the identity of the health region investigated.

independence from government and a not-for-profit status. CIHI's mission is to help a wide variety of Canadian stakeholders 'make sound health decisions based on quality health information'. It brings programs, functions and activities from a number of distinct government and non-government organizations under one roof. CIHI lists its core functions as:

1. Identifying health information needs and priorities;
2. Collecting, processing and maintaining data for a comprehensive and growing number of health databases and registries;
3. Setting national standards for financial, statistical and clinical data as well as standards for health informatics/telematics; and
4. Producing and disseminating value-added analysis.

Documentation on the Roadmap Initiative (RI) traces its origin to efforts undertaken early in 1998 when the Federal Minister of Health's Advisory Council on Health Infostructure, CIHI and Statistics Canada collaborated to identify Canada's health information needs. To involve all the key stakeholders, over 500 interviews were conducted and over 300 participants brought together through a conference on health infostructure. The RI documentation includes the claim that: 'the foundation of effective reporting of health information is sound research and analysis' (CIHI, 1999). CIHI views the RI as a means of applying the analytical expertise that has been developed in Canadian research centres to the development of a pan Canadian infrastructure. The Canadian Population Health Initiative (CPHI) is cited as the cornerstone of the RI research and analysis efforts. The CPHI is itself another of the projects enveloped under CIHI's RI. The National Forum on Health, a body appointed in 1994 to advise the federal government and to consult and communicate with the Canadian public on matters of health and health care, is cited as the source of recommendations (reported in 1997), on which the CPHI initiated action.

The researchers at StarCity were following a well-worn path, therefore, in the development of indicators on health status. They used a variety of data sources including provincial population data sets provided by the provincial health ministry, provincial vital statistics, hospital system claims data (CIHI), census information from Statistics Canada, the Adult Health Survey, The National Population Health Survey, Urban Air Monitoring Program, Environmental Services, Cancer Agency and Communicable and Sexually

Transmitted Disease Database. Much of the work of developing the report was concerned with obtaining the data specifically for people living in the region. Therefore, all databases required that functionality. Though the health status indicator report was developed in the region, indicators were identified, standardized for purposes of comparability and presented to 63 Canadian health regions by CIHI for the subset of confirmed indicators based on the consensus conference (Millar, 2000).

Canadians have long been active in developing a discourse on health promotion. The federal government put forward a population health perspective in a landmark white paper in the early 70s, which was internationally acclaimed (Lalonde, 1974). An empirical basis for determinants and a framework were presented in a 1994 seminal work on health determinants (Evans et al., 1994).

Population health discourse had not been previously integrated into health care policy making about health care service delivery. Public health and clinical medicine competed for funding against each other at the level of the provincial health ministries. Regionalization has combined the leadership of clinical medicine and public health, by having both report to a Board that governs the administration of a local delivery system and is responsible for both public health and health service delivery. Before regionalization, each facility had its own governance structure. Acute care hospitals tended to consume the largest share of the provincial budget and have the greatest say over disposition of funds. They were not oriented to a population health/health promotion framework. This has long been recognized as contributing to an expensive and unsustainable system (Rachlis & Kushner, 1989). When acute care systems dominate, then these expensive services are inappropriately used, for instance, when less resource-intensive long-term, home or chronic disease management services are not made available. Those hospital boards did not deal with population health mandates. These were dealt with by public health, with a much smaller service delivery mandate. Regionalization was intended, in part, to provide a governance structure that would have the incentive to use resources to create a more integrated delivery system responsive to local needs (Crichton, 2000).

This analysis has traced the talk in the Boardroom about an information need – to know about the health status of a region – to the work done by staff to compile the information. It has been linked to discourse on population health from academic research communities and ongoing provincial, national and international government policy formulation efforts. Introduction of this type of information into the Boardroom is a new development. Indeed, at the time Board transcripts were obtained, this Board had not yet had access to this type of comprehensive information. In that sense, they were operating 'in the dark'. Or, as I shall argue, on the basis of common sense knowledge.

This Board member explains the difficulty of Board members in understanding the information they are provided with:

> Our board members fall into three categories I guess. There are some that have the um … and very few – the business acumen – ah more have the um medical background ah skills – nurses ex nurses things like that – and then there is the the community at large member who is not slotted into those two slots. So the provincial auditor general had gone out and said well, is your financial information adequate? My background is that I'm a chartered accountant, eh was a chartered accountant, so I've felt all along that the financial information was completely adequate but probably the majority of board members hadn't business acumen found it somewhat confusing so they said it was not adequate. It is the just the same if you flip it around and put me and throw a whole bunch of medical terms and nursing terms at me. I have to struggle with that (from interview with Board member).

Board members struggle to interpret the health information that they receive. Health status reports are newly available at the Board level for this region. It is being produced using a rigorous process by researchers under the direction of a public health officer by methods drawn from academic disciplines and supported by national and provincial discourse and data collection infrastructure. From an academic perspective, there is much work involved in interpreting it particularly for those without a background in health or health services research. As scientific health information becomes available this raises questions about the skills and abilities of Board members to appraise its quality and applicability to their decision-making processes.

8.1.2 On organizational performance

> SP 10:...I know that you have tried to do your best. But the system is falling apart. And I think that this is a graphic illustration of what's happening which is wrong. There are fewer OR's, there are fewer anaesthetists, there are people who are waiting longer for everything that should be done in a reasonable period of time. Primarily because we are allocating fewer resources to what needs to be done. And the need actually is there. And I do not know what the solution is other than the fact that it has to be at the political level (board member addressing the administrator presenting a quality report on access to health services).
>
> SP 15: I think you, ahh, you know, I'm not sure whether the system is falling apart. Certainly we have waiting problems, ahh, I think it's also necessary to bear in mind that overall over the past decade if you look provincially and, in fact, at StarCity, the volumes have actually increased. So we're actually doing more work than we did before. So what's happening we're having more people put on the waiting list at an increasingly rapid rate. So it's to some extent if one believes that that is a measure of capacity then we are obviously at capacity and exceeding it. Ahh, to what extent the waiting list represents valid information in that sense of course is one of the huge debates that's going on (administrator responding).

The Board also needs to know about the performance of the health care system. As the above exchange illustrates, there are various interpretations as to the problems with the health care system and consequently the solution. The board member (SP 10) represents a 'more money' position, the administrator, 'better information/management' (Walker, 1996; McDonald, 1998).

The high number of Canadian organizations that have proposed performance evaluation frameworks for health systems are an indication of the level of activity in 'better information/management'. These were reviewed in Chapter 3. Government funding levels for the Canadian Institute for Health Information, Roadmap Initiative and more recently, Health Infoway, are further indications that the demands of the better information/management experts are being met with increased allocation of resources (Canada Health Infoway, 2002).

In Canada, there are competing performance evaluation frameworks/indicators and none has become a national standard. An interview with the CEO of the StarCity Regional Health Board revealed the predicament that the large numbers of groups at the national and provincial levels with overlapping and conflicting sets of dimensions and indicators and the lack of coordination in this effort presents. In particular, the Ontario Hospital Association, though not mentioned directly by senior administrators, stands out. In the only province that is not regionalized, this organization has put considerable resources into developing scorecard indicators for hospitals (see Chapter 3).

Health organizations also need to meet accreditation standards to demonstrate the quality of their services to their funders (provincial ministries of health) and clients. The Canadian Council on Health Services Accreditation (CCHSA) has been developing accreditation programs to monitor the performance of health organizations since 1958 (http://www.cchsa.ca). It has only the power to grant or withhold accreditation status.

CCHSA is part of an international quality improvement discourse (Gault, 1998). Quality management frameworks, of which there are many, have their origins in industrial process analysis and control. Deming's work on 'improvement knowledge' was an important source of theoretical support (Deming, 1993). A contemporary US leader of this movement in health care is Donald Berwick (Berwick, 1993).

The discussion between board member and administrator above was part of a Board discussion of a quality report submitted to them by management staff. As with the health status report above, the quality report is worked up by staff trained in utilization review and quality improvement methodology under the direction of a VP with quality reporting in his/er portfolio. This person also happens to hold the public health portfolio on the Board, and the role evolved to include informatics more generally. The methodologies of internal organizational performance review have some similar roots in Epidemiology, particularly hospital Epidemiology, which traditionally has been concerned with infection control. Infection control practices are also hooked into the discourse on quality management practices.

There is a third important relation – to strategic management approaches. The charts which provide performance indicators are derived from the statement of major goals obtained from the original Board/Management strategic planning exercise that set the overall policy direction of the region. The available indicators now in use have been matched to these goals.

Four charts were provided at the meeting at which the Quality Report was presented each providing one to three pages of detailed information about the pertinent category. The specific board goals are:

- 'Caring for Providers – Health care and service providers are respected, supported, safe and effective in their work';
- 'Quality and Access – People obtain the quality health services they need';
- 'Value: Use of health resources provides maximum value for the investments made', and
- 'Health: Individual and community quality of life and health improvement'.

Table 10 is an example of the summary sheets included in the Board information package. The 'talk' that follows is part of the discussion about this table.

Table 10:

Board Quality Report

Board Quality Report Date: [date]					
Board Goals:		Quality and Access – People obtain the quality they need			
Reporting Period: (Quarterly)		July to September			
Theme:		Healthy Community/Healthy Operations			
Priority:		Access to quality services			
Outcome:		Appropriate access to quality services, i.e: right time, right place, right provider, right cost			
Indicators		[Yr 1/Yr 2][16] Quarterly YTD	[Yr 1/Yr 2] Quarterly YTD	Target	Variance Analysis
Average Days Wait for Admission:					
(Hospital 1)					
Inpatient Elective surgery	Longest	138/138	223/223		Significant (Hospital 1)
(Active cases)	Shortest	18/18	25/23		Theatre closures.
	Median	60/51	71/93	180	
Inpatient Cancer Surgery	Longest	23/23	11/13		
(Active cases)	Shortest	1/1	5/2		
	Median	10/10	8/7	21	
(Hospital 2)					
Inpatient Elective surgery	Longest	287/287	325/338		At (Hospital 2) gyne,
(Active cases)	Shortest	101/101	189/179		ortho & urology all
	Median	205/197	308/304	180	>300 days.
Inpatient Cancer Surgery	Longest	17/17	13/14		
(Active cases)	Shortest	12/8	9/9		
	Median	17/16	12/13	21	
(Hospital 3)					
Inpatient Elective surgery	Longest	249/259	384/384		
(Active cases)	Shortest	134/123	28/28		At (Hospital 3) general
	Median	188/178	250/238	180	>300 days
Inpatient Cancer Surgery	Longest	20/20	14/15		
(Active cases)	Shortest	2/2	10/9		
	Median	16/16	12/12	21	

[16] The numbers in these two columns represent 'average days wait for admission'. The time interval is based on the first two quarters of the current year to date (YTD). The first column compares average days wait for admission of two years previous with those of one year previous. In the second column, the previous year is compared with the current year.

The following long passage represents the Board (SP 3, 10, 11, 17, 18, 20) attempting to interpret the statistics provided by the administrators (SP 11, 14, 15, 19). The Board also gives the administration feedback so that they are presented with information in a way useful for governance purposes. The administration then comes under pressure to provide information to the Board that better meets their needs. We see then the circumstance that the people who have no authority prepared the numbers and the people who have authority cannot get at the numbers directly.

> SP20: I know that's all it says. But when we hear then that there are some specific areas within that that are still at an unacceptable rate, I guess I would like as a board member to know those areas, I would ask for more specific information.
> SP11: Okay.
> SP20: Breakdown, simply because if it's likely to be an issue I think we should be aware of it. And if it's hidden in an overall general rate that looks good then I don't think that's its information that is of a very good quality indicator for us.
> SP11: Okay.

A repeated request that information not be 'hidden' in the overall rates, is the concern of the above Board member, while the following is concerned about 'averages' as well as the effect on the numbers of patients changing categories as their health deteriorates.

> SP1: SP10. Then SP17.
> SP10: Chairman there is another interpretation that could be taken on the fact that our proportion of emergency, urgent, vis a vis elective is increasing. That interpretation is that we are allowing people to wait so long that problems that could have been dealt with on an elective basis has now deteriorated to a point where it has become an urgent or emergency problem. And that is one thing that one should keep in mind when one looks at these numbers. The second thing that I would like to emphasize again is the question of the averages because there are some services throughout the region where the occupancy rate is basically pushing 100%. And again, the third thing that also mitigates these numbers is there has been a major paradigm shift in the practice of medicine and that is toward the practice of ambulatory care provision. And even though the services are going up, these numbers have had the benefit of a lot of pressure taken away from the system toward the

provision of care on an ambulatory basis and yet we're strained
SP1: SP17.

SP17: I guess what was going through my mind is a couple of things to follow up on. When you're looking at things that are rolled up in the average across, what's really useful, I think as a board person and probably senior management, are those that vary from the norm, from the medium. So that if you have, you know, occupancy rates that are running at about 83%, which ones are significantly in excessive of. That would be very helpful. I guess my...

SP11: I'd like to stop you there. You're not just talking about variance from the norm because at that point you are talking about plus or minus, you're talking about all of them. You're talking, if I understand correctly what you're saying is a significant variance.

SP17: Significant variance. I mean plus or minus five percent, or whatever is considered, I mean you're the people who know that so much is significant. I think I remember that when we hit about, what was it, 89 or 90 percent last summer in occupancy it started to be a really critical issue.

SP17: I guess my next question had to do with the increase in costs and I mean it's total operating, direct costs and OR case and it's the year to date and the quarterly. And it looks like it's an increase of 11, almost 12 percent. I was wondering what we could attribute that to. How much is that contributing to our inability to, as SP10 has pointed out, deliver the level of service. And I heard somebody passingly mention that we have some problems with our, is it anesthesiologist or anesthesist.
SP17: Twelve percent is a fair chunk of change.

SP14: Ahm, they're all put into the total operating room direct costs are the salary costs as well as the supply costs and so the increase in orientation costs plus etc. are in there as well as increases in supplies. So that would be, those would be kind of the two reasons for that. The second part about anaesthetists...

SP17: I thought somebody said that we don't have enough or

SP19: Right now we're okay. But earlier this year and in late 1997 we were having problems.

SP17: So we're back to a level that we want it to be at?

SP19: Not quite. And we still have some difficulty, particularly with the [hospital name] site in terms of having adequate numbers to work here.

SP11: Just let me try to put this in its simplest form. The surgical volumes are down. Costs are up. Patient days are up, so a few of these. Those are the kinds of indicators. When we start tracking, going back, and salary costs and things like that, overtime costs, WCB costs, we look into those things. We go into them in a little more detail, those key indicators that indicate whether we're tracking on target, or...

SP3: Well, just a question about the home care weighted units of service. It's down by about five thousand for this quarter and I'm just wondering if anybody had attributed that difference and why that difference is as it is. In terms of visits, that's pretty significant you know.

SP15: There has been a concerned effort I guess to try to ahh, fine tune our criteria on which we process for home care which had been in that steady growth period of about nine percent a year. Ahh, so I know some of the changes are the differences in that criteria. If we get service by acute care, how long they get the service for, ahh, those kinds of things ahh, so that's general terms. I can get you more, possibly more specific...

The summary statistics for hospital admissions, length of stay and discharges are then summarized.

SP18: Could you remind me what the admission standards are for high, low and medium?
SP15: Ahh.
SP18: We had asked for those to be put in the target last meeting.
SP15: Yeah. I think that's, we may need to make a lot of changes to, we had talked about some other ways of showing ? admission. Ahh, high priority is less than thirty days, ahh, medium priority is thirty to forty five days and forty five to ninety days for low priority.

SP1: What does the percentages mean?
SP15: The number of people admitted who are categorized in those areas, who had been admitted within those time frames.
SP1: So you met your priorities 81 percent of the time, is that right?
SP15: Yeah.
SP1: And the nineteens are waiting for two years?
SP15: (Laughs). No. The median time in general to admission is around twenty days. So it's not a long time, there are various reasons there are fluctuations, but overall people do get admitted fairly quickly.
SP19: If there are no further questions I will move on to the final page. Ahh, which ahh, concerns healthy workplace ahh, and the data there again is in the case of section a is an anualized comparison and the case of sections b and c represent quarterly and year to date comparisons.
SP18: I get all mixed up with, sorry, I get all mixed up with the WCB because they increase their premiums and I don't know whether they increase their surcharge rate or what but when I see a single number for surcharge it has no significance except I know it's supposed to be zero.
SP13: I think these performance indicators, through the chair, really need to be worked on because they don't really tell the whole...
SP18: Well I need to know a five year history, how long we've been in a surcharge position, for how many employees and that kind of thing.
SP11: And as you heard SP13 commit, he's quite prepared to have a look at healthy workplace indicators and bring forward those recommendations so ...
SP20: I'm saying that I appreciate the efforts that are being made and we need to further refine these and if we're making progress. I just want to go back to my earlier question. All I was looking for in that one number were the exceptions on the negative side that would likely to be causing us concern. That's what I was really looking for.
SP14a: We'll make sure it's there next time.
SP20: It was said better my first attempt.
SP18: No, it's really... very pleased to get this.

The dialogue between presenters of the quality report and Board members who have reviewed that data, reveals much about the Board's work in monitoring the health region's performance. Again, there is asymmetry in the source of information. The administration is working up and presenting information upon which their performance is judged. In addition, as much of the information is technical and unfamiliar, the Board appears not to have the expertise with which to evaluate its quality, interpret it or relate it to ongoing improvement efforts.

This passage from the Board meeting also belies the budgeting constraints under which the health region operates. One of the senior executives describes it as follows:

> Or, you know, about 80% of our budget is people, it's human resources... [The government says] cut: 'you aren't going to get as much money next year. We want you to do more volume. We want you do a whole bunch of things better and more of them. But you must live within this budget and you are not allowed to cut. You are not allowed to do any lay-offs – not allowed to restrict access to any programs.' So you get all the time these mixed messages and you understand why it is one of the greatest conflicts in out board decision making. You are not allowed to bring forward a deficit budget. But here is all the rules about what it is you cannot do in order to achieve a balanced budget (Vice President StarCity Health Region).

Discussion of the waiting lists in particular, reveals the fundamental challenge in the public system of having a budget allocated by an external entity, with uncertainty from year to year about the exact size of the budget as well as increasing market prices and increasing demands for services.

8.1.3 Basing allocation on system performance evidence

While the legislation has provided the basic structure within which governance occurs, the authority of regional health board is not completely delegated as one of the senior executive of StarCity Health Region reveals:

> ... I'll give you an example of where the conflict would arise and where our board would be very frustrated. Two or three years ago when I had responsibility for surgery services care group across the region, we were in a budget crunch. Our region was told, you have to cut 5%... whatever, I can't remember. And each of the care groups was asked to put forward a proposal as to how to cut. Well, in surgery services, we looked at the information available to us that said in this region we do a much, much higher proportion of joint replacements, knees and hips, than practically anywhere else in Canada in similar jurisdiction even allowing for our population base, you know, elderly people, all of those other factors. So when we brought forward our plan for cutting back, we said, we should reduce the number of these operations that we do. That makes sense. You are informed by the data. You have evidence. And the government comes back and says 'absolutely not'. 'Our biggest political problem is the waiting list for elective surgery, for joint replacements in this province. And we would like to see you do more of these, not less.' Um, in order to reduce the waiting lists, um, never mind the discussion about the fact that they don't give us enough money to do that, you know, uh, that we're constrained – well there is a number of constraints about why we can't do more of them and bring the waiting list down. But you can see how...So who is accountable here? And who is using what information to make decisions and how one kind of piece of information trumps another? ...which in this particular case is the evidence is right there before you, here is a perfectly logical plan, but the way you are going to operate isn't based on that. The way you are going to operate based on a whole other set of criteria which is the government's thing... (Vice President StarCity Health Region).

8.1.4 On departmental performance

The Board work, as represented in the available transcript series, does not refer to internal departmental review. Interviews revealed that the health region had undergone a process of developing 'report cards' for each department. They used a balanced score card approach. Here is one of the scorecards developed for the department of clinical informatics.

Table 11:

Balanced scorecard for the clinical informatics department

Patient/Client/Resident Perspective	**Learning Organization/Innovation Perspective**
▪ Patient/Client/Resident Perspective Surveys ▪ Patient Satisfaction surveys ▪ Patient, Physician & other Customers complaints ▪ Satisfaction with Waiting Periods ▪ Satisfaction with Turnaround Times ▪ Evaluation of process change ▪ Customer satisfaction	▪ % of managers attending workshops, conferences per year ▪ % of staff attending educational support ▪ Amount of support for Project Management skills
Internal Process Perspective	**Financial Perspective**
▪ Performance indicators ▪ Data quality & comprehensiveness of the Enterprise Master Person Index ▪ Data quality & inclusiveness of the Enterprise Registration process ▪ Completeness of information available for patient care ▪ Consistency and accuracy of inpatient, day surgery, emergency abstracting & coding ▪ Effectiveness and efficiency of Enterprise Dictation & Transcription ▪ Comprehensiveness of Policy Development for Health Information ▪ Appropriateness of Release of Information ▪ Regional Cost-benefit of clinical information systems development and implementations ▪ Ease of Access to authorized Patient Information ▪ Reduction in non-compliance to legislation ▪ Effective Data Standards	▪ Budget to actual variance ▪ Variance of patient volumes to budgeted FTE's and benchmarks ▪ Use of overtime related to workload patterns ▪ Use of vacation time compared to backlog

This approach more closely matched the Balanced Scorecard approach put forward by Kaplan and Norton (Kaplan & Norton, 1996) (see Section 2.5.1). It also served the purpose of demonstrating to accreditation surveyors that the region had a formal approach for monitoring and improving performance in each area; therefore, it met with quality improvement standards. Each department produced their own scorecard and set of indicators. The indicators were ones that they would use for day-to-day management and improvement. Comparable indicator information from similar departments in other regions was sought and presented in the scorecards to provide benchmark information – how the department compared against best practice anywhere.

Within the health region, the department of Decision Analysis and Support provided training in how to develop the scorecard and indicators. This was accompanied by training booklets, workshops and direct staff support to managers of departments. Several informants reported that it was useful for the managers to go through the exercise. It was useful for accreditation. Each department presented to the Board, and the reports were well received with little useful feedback generated.

Board members said they found the process was useful for informing them about what was happening within the region. Not everyone involved saw things the same way. One interviewee commented that he/she wasn't sure the process was successful. Though there was no negative feedback it wasn't clear they had sufficient experience to evaluate the presentations they were receiving.

> So that they just need to see these reports and have access to them and see them as needed but it doesn't become part of their set of mandating presentations on an ongoing basis and that is the kind of back and forth and to and fro you have to have with the board. We've done a little bit of that now ... for the quality because the score card was a new thing. Uh, it was decided that the first year they would see them all and then we'd have to go back and have a discussion with them to say 'OK, Do you want to see these on an ongoing basis or are you comfortable now that that is a process that will work and now we work on rolling that up to you' and that discussion has to happen (Vice President of StarCity Health Region).

As the governance level of health care increasingly looks at health service permance and health outcomes rather than more traditional reporting on fiscal accountability, a new set

of issues arise as to the background that Board members need to use information better. This is being done to some extent by the provicial and national organizations. Tutorials and conferences provide this type of service to board members. This analysis has identified this as an opportunity which would require further analysis and development to determine its feasibility.

8.2 Building provincial and national infrastructure

There are a number of provincial research organizations in the province in which the StarCity region is situated. One is specifically mandated to do health services research relevant to the province. Though an 'arms length' organization, the centre director and staff are connected to university and other health and health care related organizations. I interviewed staff there and asked whether they presented their research synthesis to governing boards. They believed their research went to the Board via provincial experts working, not for the research organization, but within the health care system. They sought to identify, build a network and involve leaders throughout the system and thereby influence the administrative and clinical leaders to use research rather than provide research or presentations to Boards directly.

Provincial organizations may have national counterparts – for example the Canadian Coordinating Office of Health Technology Assessment provides assessments that may overlap or supplement work done provincially (Kazanjian, 2004). This research information does not have as direct a conduit into the policy-making forum of the regional health boards.

I have traced the work of national organizations in developing performance evaluation frameworks and population health indicators, and information more generally has been traced outward from its traces in the boardroom. The work of Board members is to passivly receive rather than actively pull to them the information they need to truly acscertain the performance of their organization against the background of population health status and need. Whereas in the boardroom, Board members provide feedback to the expert presenting them with data, the responsiveness of these local requests depends on the ability of the larger efforts controlled by extensive ruling relations to respond.

Within the organization, the managers that are designing the data infrastructure see the data requirements of the organization like a pyramid. At the bottom is the day-to-day activity that provides data at the operational level. Next is the tactical level is informed by the short and medium term trends summarized for management. The strategic top of the pyramid is a narrow pinnacle with apparently very little data. This reveals the dearth of data-based information that the board has with which to guide the system.

> Um but also if you took all the indicators that all the care groups use and reported all of them forward it just becomes a sea of data so rather going back to the board as a first set and saying 'how do you judge a quality health care system and what data do you need to assure yourself that something is being done, um what do you use to monitor the system. And it may be that it is more as we would suggest more population level data that they need to set those broad priorities. And if they see that there is a whole quality monitoring process that is in place that is being monitored then is that enough assurance for them that due process is being followed? (Vice President of StarCity Health Region).

This is one of the broad challenges. It does not completely address the most fundamental question of the Board member raised ("What are the main issues in our region and how are we finding that out?").

One more provincial effort remains to be mentioned – provincial collaboration to establish a health information infrastructure. The vision within the province of having all providers (and maybe patients) connected electronically, whether they are in a hospital, health centre, home (private home or care facility), physicians' office or emergency response site, has attracted the resources of both the province and federal funding agencies. This kind of connectivity implies standards that would permit information exchange. The foundation of this is data architecture defining terms and specifying how data is to be entered or translated so that the accuracy and meaning of the data is preserved. There is a recognition that this task is too large to be undertaken within the region or perhaps even the province. Pan national coordination with provincial efforts limited to pieces that can be transferred to other provinces may further remove these efforts away from local needs though this remains to be determined (Canada Health Infoway, 2002).

8.3 Auditors

> [T]he ministry is allocating resources across the health care system without the benefit of essential cost and performance information. Instead, the ministry allocates resources based on historical spending levels (Office of the Auditor General of British Columbia, 2002).

Not to be overlooked in this examination of how information is worked up for Boards, is the role of auditors, both provincial and national. The Autitor General of British Columbia, in a report on regional health board accountability structures, appears critical of the information available to funders. As the above quote indicates, provincial auditors, like their counterparts in other countries, are moving from enforcement of accounting standards to performance accoutability (Wholey, 1997).

While I was conducting interviews with staff within StarCity health region, it was suggested by the senior administrators that I should take time to talk with a consultant who happened to be the former provincial auditor general. S/he was now working within the region on a special project to help them develop ways of evaluating programs. The principles of the project are well-established program evaluation principles whereby outcomes are measured according to the objectives of the program (Wholey, 1997). The basic question following this approach is whether the program meet the objective within available resources. StarCity health region is moving to adopt these principles and demonstrate compliance. The missing piece in health care is health outcomes. Without knowing what the actual effect of expenditure on health outcomes, the available measures or indicators are intermediate measures that may not adequately steer the system towards clinical effectiveness.

National organizations like CCAF-FCVI (formerly *Canadian Comprehensive Auditing Foundation—La Fondation canadienne pour la vérification integrée*) are active in providing support and education to provincial infrastructures across the country (www.ccaf-fcvi.com, accessed November, 2004). The organization explains that they are expanding their role to include more comprehensive evaluation of performance. What is not well demonstrated scientifically is how this method of evaluating performance improves population health status as well as

resource use. Will the regional boards be better informed by this type of information and therefore better able to take action?

8.4 Chapter summary

The information that the Board needs and wants is not readily available. This is not a local failure. As this analysis demonstrates, the region's staff and organizations outside the health region are actively in the process of developing information that has been absent to date. This analysis maps these social relations internally as well as externally, to provincial and national organizations that make up the institutional web of ruling relations orchestrating the information that is available to regional health boards.

Information on health status and health service performance is new to governance because the focus has traditionally been on ensuring fiscal accountability – ensuring that the financial resources of the organization are being managed well. In the private sector, performance of the organization is assessed by looking at profits. In the public sector, the gold standard of success has been keeping within budget.

Accounting and auditing methodology is an important foundation for judging adequacy of performance in this era of accountability. In public organizations, auditing of accounting practices has been supplemented by program evaluation methodology to ascertain how well programs are performing against their own objectives. This fits in with the Board's work of setting objectives and measuring performance against them.

Yet, measuring the health of populations, and changes in health that can be attributed to services, is the science of epidemiologists. Therefore health service methods are actively being employed to develop performance indicators that will provide valid and accurate measures of health over time. These are being promoted by public health officers, university-based programs that provide training, and national public health policy organizations. This is very new though – no Canadian health region has measured success in terms of health outcomes to date.

Health quality improvement practices, which are also data driven, are contributing to the development of health information through accreditation standards as well as

management practices (see also Chapter 3, Section 3.4). Health regions juggle the often-conflicting performance requirements that these different and prescriptive approaches present.

I demonstrate that current governance structures are in the process of reform to accommodate traditional governance concerns and accommodate new ones. This has implications for how Board decision-making work is supported. The work of governing health care is changing and this has important implications for those sitting on the Boards of health regions. If they are currently unprepared to interpret the reports they get, the demands on them will increase significantly as the text-based approach to governance intensifies.

CHAPTER 9:
IMPLICATIONS OF FINDINGS FROM AN INFORMATICS AND GOVERNANCE PERSPECTIVE

Is governance work in health care amenable to decision support? In this final summary chapter, the analysis presented in Chapters 6 to 8 is used as a basis for addressing this question. It is my contention that the actualities of the governance work practices made visible through fieldwork observations can: 1) guide information and communication technology (ICT) design for this one Board; 2) provide a systematic approach to address local design problems specific to governance work in like settings; 3) identify widespread practices ruling governance work more generally; and 4) support the skills and confidence of Board members in using information on health and health system performance to improve health. The implications of these findings for governance practice in health care are addressed. First the problematic that provided the starting point for investigation is revisited.

9.1 The problematic revisited

At the outset of this doctoral research program I addressed the problematic of how regional health boards are organized to make decisions and in particular how it is that population health concerns are taken up or not by members of regional health authority Boards. This institutional ethnographic analysis has made visible some previously submerged aspects of governance work processes. I have shown that the dynamic interplay of institutional practices orchestrates Board work.

Analysis presented in Chapters 6 to 8 confirmed that this Board was institutionally organized to make decisions in a way that absolved them from having to use research or operational evidence extensively in their deliberations. Longstanding governance practices developed to ensure accountability for resource management were found to be in dynamic tension with those emerging to ensure population health.

Governance discourse advising on the separation of operational management and policy development instructs board members as to how to avoid micro management

decisions; and so, as we saw, a Board member is warned away from a line of enquiry that could inform them of the operational impact of a decision. Legislation empowers Boards and removes power from them as regions merge. Shifts in dominant ideology require Boards to consider the privatization of services currently provided by their staff members.

9.1.1 The Institutional Ethnographic analysis: What does it have to do with informatics?

Texts such as performance reports mediate Board policymaking. Other texts mediate meeting work practices by organizing when people talk and what they talk about. Health information science aims to support not only work processes but decisions through the application of information and communication technology. Basing design on an empirical analysis that captures the features of actual work processes may result in fewer failures because of user rejection. Failure to understand a domain is a major cause for rejection of ICT products by users.

What have we learned about the work of regional health boards through this IE analysis? Texts, such as agendas, minutes and budgets, as well as more customized decision support templates organize the content of information and coordinate its flow in relation to decision-making cycles. The Board depends on the CEO and senior administration to orchestrate the work processes necessary to inform them and yet the CEO is accountable to the Board, with a stake in how the performance of the organization is perceived. Decision support units mine information from administrative databases created for billing purposes. Expert advisors are research conduits. The challenge therefore is how to ensure that the people informing the board and developing the information resources are making the choices that present the most accurate virtual reality of the state of the system in the public's interest as it is the public that the Board, its administration and health care providers are authorized to represent. How can decision support tools be designed to remedy the current deficiencies? How can Board members be better supported to use these tools?

In addition to the textual mediation of standardized planning, budgeting and accounting practices, this Board and its staff are developing new health-related information

resources. The development of a report on the health status of the region, and a performance evaluation framework, represent new resources. They focus the Board's attention on health and delivery system goals and aligning these, in addition to cost control. This unprecedented focus on health information at governance levels is hooked into widespread institutional mechanisms, including the legislation that mandates new reporting content and professional discourse on population health arising from the academic disciplines of epidemiology and economics, as well as performance measurement arising from management science, quality management, program evaluation and auditing practices. How Boards are informed is emerging as a complex and dynamic working model of institutional practices. This might be useful as an empirical base for designing communication and information technology support for governance work including decision making.

9.1.2 The implications for design, of what happens at meetings

The advantage of the IE approach for supporting work practices is that it does not presume that users and designers are able to articulate their requirement for decision support in terms that could be taken as a starting point for developing ICT strategies. Likewise, approaches that start with a technological solution may be based on false assumptions about what is needed. The Board's work is accomplished in and as talk. Boards rely on verbal information provided in face-to-face presentations and discussion periods among Board members, the CEO and other invited staff and guests. Communication technologies that facilitate the exchange of audiovisual information may enhance these functions. These would include devices for amplifying, recording, storing or transmitting multimedia information. Videoconferencing could connect presenters or board members at a distance who are otherwise unable to attend meetings. It could also, to some extent, bridge asynchronicity – board members can be freed to perform tasks at different times and places rather than simultaneously.

Boards make decisions that represent formal endorsement of policies or processes that have been previously 'worked up' for the Board/region. Boards use rules of order,

which prescribe a way of working through a list or agenda of predetermined items for discussion. Many of the item discussed have related decisions like the acceptance of a report or recommendation. The agenda for the meeting is therefore clearly an important tool for organizing the work of the Board.

The explication of the use of texts-based tools (i.e., adenda) and procedures (i.e., rules of order) by institutional ethnography makes them accessible for inclusion into the design of decision support strategies. This might include applications such as groupware -- software that facilitates group processes such as decision-making (Lasome & Xiao, 2001; Chen et al., 2003). The reference manual on rules of order could also be provided online for example or in a personal digital assistant format. Groupware templates could incorporate these rules. People could be provided with more thorough training in rules of order.

The Board uses texts that mediate the accomplishment of their work in the boardroom. In advance of board meetings, the Board is presented with a hard copy package of information that contains the agenda for the upcoming meeting, the minutes of the last meeting and information related to agenda items. Paper-based minutes and information packages require minutes (created on computers) to be printed and distributed to Board members. Board members then carry hard copies of texts to and from meetings. In addition, these documents become the formal representation of the Board's work. The documents are used, in turn, by staff for direction and by external agencies as part of accountability mechanisms. ICT might have a role in information collection and distribution.

A paperless environment can be envisioned in which board members log on to password-protected secure web sites. There they could download meeting and other relevant text, audio or multimedia files to personal and lightweight portable computers. Electronic documents could provide extended functionality, such as routine submissions of corrections and concerns. Documents could be linked to background or to more detailed information to facilitate Board members' understanding of complex organizational data. These observations of the actualities of board work provide an embodied and therefore user-centred perspective on work related information flow that is complementary to the perspective of more standardized systems analysis.

ICT solutions aligned with actual practice include those supporting the transformation of primarily paper-based practices to electronic versions with enhanced functionality including the ability to access, distribute, modify, and store electronic documents and tools asynchronously from multiple locations. Without adaptation, decision support tools and information resources designed for managers of the system may be of limited applicability to regional health boards. The type of coordinated policy implementation that is part of the work of governance would not be supported by classic IS strategies such as the creation of a specialized database, though it might be fruitful to consider technologies that facilitate group collaboration.

This analysis of how a regional health board accomplishes decisions could be useful for ICT design, because it is grounded in the actualities of governing work. The Board does not directly make decisions supported by modeling or knowledge-based tools, though they may adopt the recommendations of advisors who do. Sophisticated decision support tools such as those designed for quantifying the outcomes of decision alternatives do not have a place in governance work that discourages concerns with detail in its deliberations. Developing the information infrastructure in ways that make the information relevant to high level policy making available to the policy making process will rely on performance evaluation frameworks and indicators that are in early stages of development. ICT strategies that support the transition to an electronic rather than paper-based environment may prove useful to enable sophisticated support tools with increased functionality such as the ability to drill down into data, to make additional information on the algorithms, data definitions or calculations available for ease of review and understanding. More interactive decisions support tools would permit managers and Board members to search for information from internal and external resources and pull these into a decision making framework, for example.

Whereas this analysis has focused on the implications of governance work that are observable in meeting practices, the next section will examine more closely how the explication of widespread ruling practices that span many locations and time periods may inform decision support.

9.1.3 The implications of ruling relations for ICT design

Institutional ruling relations orchestrate governance work translocally and therefore have important implications for ICT design. An understanding of how the web of institutionalized ruling practices orchestrates governance practices can provide designers with a blueprint of how people take action mediated by texts. The blueprint of how governance work is actively constructed provides the essential empirical basis for the design of decision support tools. The blueprint of the domain decribes how the work is done and therefore makes the work accessible for support. Institutional practices are widespread because local practices are hooking into and orchestrated by ruling relations that are pervasive. Understanding the ruling relations of one Board will provide designers with insight into, not only the practices of that board, but of all boards that are hooked into the same ruling practices.

The local 'governing board' can be thought of as patterns of practices that are based on a prototypical or model set of practices that the local practice is 'ruled' by. These practices are thought of as institutionalized because they become part of the way people in organizations habitually do the work of making and authorizing strategic decisions and having these acceptable within the current requirements of governments, the legal system, management sciences, health professions, education and individuals needing health care. Governing boards have standard characteristics, features and practices that have been constructed over long periods of time. Still governance work in the setting of regionalized health care systems, was still in a relatively early stage of implementation as my research was conducted. Governments and regions were inexperienced as they worked to configure the larger and more integrated systems of care delivery and introduce or meet new requirements to oversee not only fiscal but also other management responsiblities including quality of care.

The board is part of a web like ruling apparatus in Smith's way of thinking about institutional ruling relations (1990). Board practices have features of both ruled and ruler. The Board has a legislated authority to rule. Governing boards such as this are legally charged with the responsibility to make the organization accountable for the fulfilment of its mandate and its use of public funds. Board roles and responsibilities are generally delineated

and codified in a series of texts that include the establishment of documentation (charters, constitutions) and by-laws (articles, operating rules). These are legal documents, required by legislation and public funding bodies. They specify how Board members are recruited, oriented and removed for example. Their purpose is to structure adequate accountability structures, to ensure that the Board fulfils its public mandate and does not abuse its special status and powers. The policies that the board develops become part of the Board's governance structure. This Board and its policies thereby rule health care provision within the health region.

Adequate information is essential to the Board's successful fulfilment of its mandate. The texts providing information to the Board and thereby mediating their work, represent the work of someone else, usually staff. Staff in a regional decision support department obtained information from databases under the direction of managers and this can be used to inform Board work. Staff have access to privileged internal accounts of the health region and know the limitations of datasets and particular types of analyses. The meaning of the quantitative information is not transparent to Board members who struggle to understand how to interpret it. Rolling up operational data is not adequate for all governance needs. There is both incentive and opportunity for the information architecture of the organization and the analyses to be constructed to meet governance in addition to management and clinical requirements. An ICT strategy which provides sufficient detail on data sources, analysis, limitations, and valid interpretation, is needed as health region governors and managers and department leaders struggle to make new health information and knowledge resources active in decision making.

Board members need assurance that the information they are provided with is accurate, complete and comprehensive. Performance review of the CEO is therefore an important process. If the board adopted a governance model that did not restrict its involvement in 'operations', there might be greater opportunities for the Board to access administrative datasets outside the realms of the standardized reporting requirements.

Mapping local practices to their social organization by institutional practices can identify mismatches at the point where what is institutionally prescribed is at odds with local

requirements. For instance, this region was not allowed to reduce costs by increasing the waiting time for an elective procedure though they were doing more of these than 'practically anywhere else in the country' because of the politicization of joint replacement surgery. While these mismatches might be difficult to change, they are particularly important to recognize in a time of rapid change and reform. The perpetuation of practices that are not optimal may simply be due to their taken-for-granted nature. There may be innovative best practices that are supported empirically and that would be a more suitable basis for practice but that are not in conformity with current ruling relations. This is particularly important for designers of information and communication technology solutions because 'hard wiring' obsolete textual practices into computerized form creates a de facto standard, thereby reducing flexibility and perpetuating archaic practices.

Health governance is anomalous as compared to other types of public governance. The authority of the Board in clinical governance is less than that of other administrative areas. The autonomy of professional staff, particularly fee-for-service physicians, precludes integration. Indeed there is a separate clinical governance structure, largely under the authority of physicians, with nominal reporting to the regional health Board.

The regional health board also has responsibility for both public health and service delivery. Herein lies an unprecedented opportunity to bring the two together in local policy making settings. For clinical governance there is less developed and standardized governance practices and by extention even less ICT support than exists for administrative governance. Both types of governance warrant support, and opportunities may exist for better integration. As the health infrastructure is developed, it is increasingly possible for the health of the general population, as well as patient populations, to be monitored. The experience in acquiring this type of data through integrated system design and feeding it back into policy, operational and clinical decisions is in its infancy. The clear health and economic crisis precipitated by the SARS crisis makes this type of informational resource increasingly necessary to support the rapid and coordinated decision making and action essential for effective response (The National Advisory Committee on SARS and Public Health, 2003). Given the information intensive requirements of clinical care and the potential for better

information to impact care and health outcomes the opportunity for alignment and further development is great. While design of ICT support is foundational, strategic organizational leadership is essential to obtain the type of integration of clinical and administrative practices throughout the health care system that is envisioned.

9.1.4 The implications of textual mediation

Texts play an active role in orchestrating Board work. Board work, in turn, actively orchestrates work throughout the health system. The same texts may be taken up by external agencies as part of accountability mechanisms. Highly technically evolved texts, such as health status and performance evaluation reports, are activated as the Board considers strategies for guiding the health region and monitoring the success of their policies. Performance scorecards are being used by management to better understand trends over time, and to communicate this better to the Board and other external stakeholders. There is some evidence in this analysis of indicators actively mediating the allocation of resources to reduce waiting times. Reports prepared for the Board could also be made available to the public and become part of a dialogue between the Board and the public. Currently the primary venue for Board/community interaction is at public Board meetings.

Decision support staff work practices are orchestrated by discourse on analytic methods from disciplines such as informatics, epidemiology, sociology and economics. The use of a denominator representing the population served by the region is relatively new and permits comparison with other regions and widening of the analysis beyond current service users. The new integrated approach permits system managers and Board members to know about the health of the people they serve, and the impact of the services they deliver, in an enhanced way and in a way that is comparable to other health regions. Provincial cancer agencies had population-based datasets with some crude health outcome data, but population rates of service use and health status has been largely lacking or disconnected from routine use in managing and governing the health system.

Population based reporting has not yet been developed to the point where the system can actively monitor current service use, health status and the impact of clinical

interventions. This is only starting to occur in relation to flu season, bed use and immunization campaigns. SARS has increased awareness of the problem and the need for more comprehensive and integrated information systems (The National Advisory Committee on SARS and Public Health, 2003).

To date what people could 'know' would depend on their location and need. Managers would know primarily about the group of people who were using various services but not the population more generally. Providers would know about the patients they served. Health regions are being challenged to orient more to the needs of the population at large to be strategic and not just basing future activities on the experience of the individuals currently receiving services. To guide the organization, Board members and senior managers need to keep the needs of the population and the whole organization in view and this requires aggregated information. This Board had just been through a couple of rounds of looking at performance indicators. It can be anticipated that, as management and the Board become more experienced in reading these reports, this type of information will play an increasing role in mediating health reform through greater rationalization of resources. Development of this aspect of information systems would seem to warrant prioritization given the magnitude of the challenges in reforming health care to be sustainable and effective.

At the point of policy making, the health care region that is the setting of this investigation is becoming responsive to the information it has collected. The vision is that population based and therefore comparable performance indicators can increasingly be used to guide the health system towards more efficient and effective resource and clinical management strategies. It is becoming an adage in informatics that what is needed is 'the right information in the right hands at the right time to support health care decision making' (Health Chief Information Officer Council, 2003). Decision-making occurs throughout the health system. Translating this adage to the policy making level, there is an opportunity to bring the information (about health outcomes in addition to institutional accountability concerns) to the right hands (regional health board members) at the right time (as they make policy decisions that guide the health system strategically).

The tools to collect, store, retrieve and analyze data, and thereby to bring health outcome data to the policy making process, were previously unavailable. These tools are now being built. The policy making mechanisms, however, were built around governance models that were not configured for the enterprise of ensuring accountability for the health of populations and the translation of new understandings of the effects of health and health service delivery policies on population health.

What are the implications for ICT design of the immaturity of governance practices and their limited capacity to translate health outcome 'knowledge' into policy making? First, the opportunity can be seized to develop the rapidly evolving the information infrastructure in a way that would be useful for the highest levels of strategic planning in the region. The information architecture that structures how data are collected, stored and accessed needs to be flexible enough to grow, and standardized enough to be useful for many users, from the point of care to the boardroom. The work that is being done to develop the information infrastructure has the potential to transform of health care governance – the system will be steered, not only by concern for adequate resource allocation, but by the ability of resources to create a positive impact on human health.

The crucial pieces that remain to be built are systems that provide valid measurement of health status. Health status indicators can direct the system to better meet health needs. This would permit the system to understand the health impact of its resource and service configuration decisions. Available performance evaluation indicators, such as the amount of time spent on a wait list, are surrogate measures for the more important health outcome that measure how the health of individuals and populations are impacted by the activities and resources expended in health care delivery. Indicators like waiting times and their interpretation are influenced by many things like consumer demands, physician preferences, availability of the service delivery infrastructure which may in turn be determined by the strength of a political lobby. In non-urgent cases there should be an acceptable 'wait time' within which the public system is still deemed to be performing up to standards. How this is determined is the type of crucial piece of information that has not been developed. Health outcomes are things patients would be aware of as health states – many of these states, like

pain, are important to patients but not as easy to measure as rare catastrophic states like death. The time spent on a wait list does not tell policy makers about the changes in health status that occur as people go on and off lists. The assumption is that health status stays the same or worsens but does not improve until the service is delivered. The data to support these assumptions are incomplete. The development of ways of tracing health outcomes would allow the health delivery system to 'know' and act on this knowledge.

The map of work practices that emerges from an institutional ethnographic analysis can be used to support the development of reporting formats that would present the performance indicators in a standard and graphically appropriate format. Teleconferencing technologies could be used to link Board members or advisors who are unable to be physically present at meetings, and thus better support distance participation. Groupware could assist the Board to adopt less traditional types of decision making. This could be done by first matching current practices and then introducing and evaluating innovative decision-making, performance review and strategic policy making functions.

Considerable further design work is necessary to develop, evaluate, refine and implement these and other feasible alternative ICT strategies for enhanced governance decision support. Information infrastructure may need to be developed or enhanced in any given local setting. Strategies like digital dashboards require considerable investment of resources to find solutions that have expanded functionality and are acceptable to Board members, meet security requirements and are flexible enough to be used in multiple governance settings. To find out which ICT strategies are acceptable implies a collaborative design practice and change management strategy. The expanded understanding of work practices facilitates the generation of an expanded range of options based on empirical findings.

The governance model a board uses filters the information reaching board members. This analysis revealed how the Carver Model was envoked to steer board members away from questions about operations that could be fruitful. Likewise, pain and many other types of suffering do not make it to the policy making level of regional health boards. Neither do most forms of scientific evidence of clinical effectiveness that could provide estimates of the

consequences of care or lack of care. Impacts on clients, such as out of pocket expenses or burden on caregivers owing to alterations in care provision (to gain efficiencies, for instance) are similarly invisible. The processes of categorization and aggregation that make up the standards for reporting and presenting performance indicators 'sanitizes' them by removing details that would convey their meaning in compelling 'human' terms. Gone are the soft but important qualitative data on how people experience their health and services. The standard way of collecting information on patient experience is with satisfaction surveys. Even these have been constructed to give managers the information *they* need (Rankin, 2003) not necessarily what patients want to communicate or governing Boards need to recieve. Though the choice of governance model may not be within the scope of informatics practice, an understanding of how a domain practice model constrains or enhances information retrieval and use is a foundational insight for informatics practice. It can be anticipated on the basis of an empirical understanding of work practices that incongruence between practice patterns and the design of work support may precipitate difficulties for the users.

I have shown that explicating how the Board 'knows' about the health of the people in the region and the performance of the health care managers and staff responsible for executing the Board's policies has important implications for designers of information and communication system support. In order to support the existing knowledge work without essentially changing it, designers would need to understand and work within the institutional ruling relations and the textually mediated process these prescribe. Therefore, they would have to work within the institutional environment to be supported.

While the existing indicators could be arranged dashboard style, the current paper-based equivalent plays a relatively small role in Board deliberations. The board may actually benefit more from communication support than decision support in general and information intensive performance evaluation tools in particular as they can be observed to spend considerable time endeavouring to inform themselves of various stakeholder positions and developments in health care reform.

It is also noteable what is absent from meetings of the Board. Performance evaluation methods are analogous to classic sociological research methods and measures that

are critiqued as floating free of any actuality—"A universe of discursive objects are created in which people, their doings, and time and locale disappear" (Smith, 2001, p. 165). The electronic information and communication systems that designers build are, in effect, creating a 'virtual' world made up of the record of events related to health or care episodes. In this way, the lived experiences of health care providers and patients are transformed into 'objects' or 'objective' accounts. As Board members meet, there is little of the daily work of doctors and nurses on the wards or patients and their families in their homes; there is little of angry families berating staff; there is little of the effects of budget cutbacks on people's activities and health status. It is likely that this actuality is important to understand to optimize health and health care delivery and therefore to govern the system. Developing means of supporting governing boards to know about this actuality, implies more sophisticated decision support than has currently been envisioned, and which parallels efforts in sociology to recover this standpoint for social advancement using methods like institutional ethnography.

9.2 A governance knowledge map for ICT design

The following map makes the 'taken-for-granted' accessible for those designing ICT solutions for governance work. Information and communication technology decision support designers rely on systematic tools for organizing analysis. Table 12 presents a map based on this analysis, which provides designers with a format for structuring their assessment of the current ICT status of an organization and a springboard for designing support.

Table 12:

ICT opportunities arising from institutional practices

Institutional Practices	**ICT Opportunities**
Paper-based information dissemination and exchange regarding • Legislated mandate and duties • Industry regulations • Board policy & procedures • Rules of order • Governance model	Web-based electronic resources and tools
Textual mediation of meetings • Non-public • public • Committee	Groupware for meeting support providing • Electronic agendas, minutes, reports • Teleconferencing capabilities • Audio support
Strategic planning framework • Vision, mission • Goals, objectives • Ethical frameworks	Systems to support the explicit and transparent strategic framework development including meeting, facilitator and participant support
Ideological practices	Monitoring pubic opinion on, for example, private public partnerships, health reform
Collaboration with stakeholders Community input/accountability	Communication support. • Support of forums for explicit stakeholder input • Development of systems to support the accountability of regional health board members to the public
Aligning organizational processes with accreditation auditing standards Creating a learning organization Creating ICT infrastructure Alignment of ICT infrastructure with strategic vision	Support for reviewers, auditors, accreditors • Automated data collection and review Support for the collaborative development of ICT strategies, resources, applications and implementation strategies Configure existing systems to explicitly provide appropriate governance decision support resources Training systems
Develop and empower decision support units Database development • Measuring/reporting on health status Analytical support Training	Support systems for internal analysts to better obtaining and applying information from administrative databases and external datasets including population health oriented and health services research Access to interdisciplinary training and educational resources, i.e., epidemiology, economic, sociology, policy, management sciences

Table 12: (Cont'd)

ICT opportunities arising from institutional practices

Institutional Practices	**ICT Opportunities**
Measuring/reporting on performance • Compared to strategic objectives • Compared to departmental objectives • Compared to industry benchmarks	Developing analysis that aggregates information to regional level Documented accountability mechanisms Monitoring the development of standards Monitoring organizational responsiveness to changing needs, keeping them to standards and yet responsive to changing needs Incorporation of information into a digital dashboard
Measuring/reporting staff performance • Chief executive officer Developing staff performance review policy	Automate data collection and review Support for reviewers
Measuring/reporting quality review • Media • Client • Risk	Increase reporting functionality in electronic versus paper-based media Incorporation of information into a digital dashboard Develop new methods for 'knowing about' the subjective experience of healthcare recipients and other stakeholders
Measuring/reporting • Financial performance • Accounting • Budget cycle	Work of developing and applying standards Increase reporting functionality in electronic versus paper-based media Incorporation of information into a digital dashboard
Clinical governance	Support for Knowledge translation • Alignment with the research • Alignment with operations • Alignment with regional strategy Incorporation of information into a digital dashboard

The map provided in Table 12 presents an analysis of the work domain that includes an understanding of: 1) the local accomplishment of Board work based on Chapter 5 analysis; 2) translocal ruling relations based on Chapter 6 analysis; and 3) textual mediation of Board work based on Chapter 7 analysis.

The basic format can be used as a template to develop a worksheet to facilitate decision support analysis. A questionnaire or checklist may be a useful format for designers looking for opportunities to develop informatics solutions.

In summary, the following specific ICT strategies hold promise for supporting governance work. It is there for recommended that they be explored areas of support for governance work that:

1. Electronic resources and tools possibly web-based to replace current paper-based ones
2. Groupware for meeting and facilitator support including audio enhancement and teleconferencing
3. Systems to support the explicit and transparent population health oriented strategic framework development including the support of explicit stakeholder input, the monitoring of pubic opinion, the collaborative development of strategies, resources, applications and implementation strategies and the accountability of regional health board members to the public
4. Systems to support organizational review by auditors and accreditors including automated data collection and reporting
5. Support for explicit and transparent knowledge translation practices including support for mining information from internal administrative datasets as well as interdisciplinary resources e.g., epidemiology, economic, sociology, policy, management sciences and health services research
6. Configuration of systems to explicitly provide ICT and decision support resources tailored to the requirements of governance work

9.3 Social versus technical support

There are aspects of Board work that do not require support. The urban RHA Board analyzed did not make extensive use of information from administrative systems and research databases in their decision-making processes. On the other hand, Board members used their knowledge of the community, health care delivery system and its environmental influences, personal contacts and staff, to inform themselves about contextual factors considered relevant to the decision at hand.

This analysis has also revealed that the Board relies on their human capacities to develop relationships of trust to consider complex perspectives and arguments brought forward by a collective. These are currently best supported with minimal or no ICT support. Likewise the embodied knowledge that Board members bring to the table, including their

professional expertise and dedication to the interests of the public and particular vulnerable populations, is not easily substituted or supported electronically. Recognition and support for these exclusively human and social capacities would result in a sociotechnical system that leverages the strengths of both human and technological capacity.

Changes to practice imply the need for interactive design and change management strategy, as Board members' work practices would be altered quite substantially. Strong incentives for adopting new approaches including technology may be required by Board such as this one that rely on paper and face to face communication. A paperless or some other ICT strategy could change the work practices in unwanted ways. Therefore, this type of analysis does not guarantee that work practices will be changed for the better or the types of systems suggested by existing, if developed would be adopted by this or other Boards. On the other hand, attempting to improve or support governance work practices without understanding current work practices is much less supportable. People who are habituated to governance work likely take their routine work processes for granted, and may be unaware of how their actions are constrained institutionally. They may not think about how things could be done otherwise. While an understanding of how everyday work is organized in the setting of its local accomplishment is powerful, institutional ethnography can do more than provide this description.

9.3.1 Comparison with a systems analysis approach

The IE analysis provides different and, I argue, valuable information compared to a conventional systems analysis approach. Systems analysis has difficulty in mapping information flows that are not explicit and systematic. In complex working environments the simple input-process-output model cannot capture the complexity of interconnected ruling relations, separated in time and place from the local work setting and therefore invisible, yet powerfully orchestrating local work. In fact, analysing settings using system analytical forms that maps information flow may miss much of what goes on in governance work and thereby suppress much that might be known and used.

Institutional practices that are largely invisible can be explicated for fuller understanding and support of complex decision making. Points at which widespread practices leave traces in the actualities of local governance work provide the entry point for investigations further afield, including the regulatory, professional and organizational practices that orchestrate governance work. There is much about the translocal orchestration of governance work that cannot be adequately investigated by the analysis of the local accomplishment of governance. These include the legislative and legal frameworks mandating health regions, health care and governance practices, the governance model including standardized policy and procedures and managerial practices to information management as well as ideological orientations. Though often invisible in the local accomplishment of governance work they are crucial for understanding how it happens the way that it does.

9.4 Governance practice and policy revisited

The RHA Board is following well-established governance traditions that have evolved in western cultures over many centuries. We can see that the Board meetings are organized by discourses that prescribe group decision-making and information sharing processes. Whereas existing processes can be enhanced and supported by ICT strategies, there is also the possibility for ICT to interact within the institutional structures to support the sociotechnical system in evolving and transforming.

The recent scandals in corporate governance in the United States indicate that reform of governance structures is desirable. Current movement in Canada to have a federal Health Care Quality Council is intended to enhance reform efforts in Canada within existing structures. The need to enhance governance structures with improved monitoring and collaborative responses was highlighted recently during the SARS crisis. This research provides a detailed examination of how regional boards do their work and therefore how this work can be improved. Whereas my ultimate purpose has been to identify opportunities for ICT support other strategies are also suggested by this analysis. For example an

examination of the appropriateness of governance models and traditional parliamentary meeting procedures may be fruitful areas for further exploration.

9.5 Chapter summary

Is governance work in health care amenable to decision support? Regional Health Authority (RHA) Boards are responsible for the governance of large, vertically-integrated health care delivery systems. Emerging communication and information technologies may be helpful in providing them with accurate and up-to-date information to guide the system, as well as better means of sharing information. The ultimate goal of this study has been to generate results that can be used within a quality improvement process to improve the nature and quality of information and effective use of information systems for health care governance decisions. This analysis demonstrates that the application of IE to this research problematic and this dataset is feasible.

The following are key findings:

1. Communication technologies that facilitate the exchange of audiovisual information may enhance verbal exchanges at board meetings.
2. Rules of order can be incorporated into the design of decision support applications such as groupware to facilitate governance decision making.
3. ICT may be useful to facilitate information distribution among Board members and between Board members and support staff.
4. ICT may be useful to facilitate group collaboration on decision making and other governance tasks such as strategic policy making and planning.
5. ICT support may be useful to provide detail such as sources, analysis, limitations and appropriate interpretation pertaining to the information on which they are appraising the performanc of the organization and chief executive officer
6. Health outcome indicators that could demonstrate the impact of health services and resource use on health are missing and developing these could be prioritized.
7. Informing Boards about the actual experience of patients and staff with health care systems would require new ways of knowing about health and health systems in ways

that parallel similar efforts in sociology to recover this standpoint for social advancement. Developing these could be prioritized.

8. Changing governance practices with new ICT support implies a requirement for training support.

ICT solutions aligned with actual practice include those supporting the transformation of primarily paper-based practices to electronic versions with enhanced functionality, including the ability to access, distribute, modify and store electronic documents and tools asynchronously from multiple locations. Teleconferencing could connect presenters or board members at a distance, who are otherwise unable to attend meetings. Without adaptation decision support tools and information resources designed for managers of the system may be of limited applicability to governance practices. This list is not exhaustive. When the actualities of practice meet the ingenuity of design and enhanced technological capacity many more possibilities open up.

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APPENDIX A:

CONSENT FORM

University of Victoria

Office of the Vice-President, Research

Human Research Ethics Committee

Participant Consent Form

Information Resources for Regional Health Authorities

You are being invited to participate in a study entitled 'Information Resources for Regional Health Authorities' that is being conducted by Dr Jochen Moehr. Dr Moehr is a Professor in the School of Health Information Science at the University of Victoria. As a graduate student I, Carolyn J Green, am required to conduct this research as part of the requirements for a doctoral degree in Health Information Science. You may contact my supervisor, Dr Moehr, if you have further questions by phone at 250-721- 8581 or e-mail at jmoehr@uvic.ca or you can contact me directly at 250-472-4300 or cjgreen@uvic.ca.

HEALNet, a member of the federal Networks of Centres of Excellence Program, is funding this research. The purpose of this research project is to identify information resources relevant to regional health authorities in (Province) and relate this to the communication and information use patterns of regional health authorities. Research of this type is important because the potential impact of deficits in information available for regional governance of the health care system is great.

You are being asked to participate in this study as someone who is knowledgeable about communication and information resources available to inform regional governance of the health care system. If you agree to voluntarily participate in this research, your participation will include a taped interview and optionally an observation of your use of information and information systems or collection of relevant examples of information system documentation as available and considered appropriate by you. Interviews will be conducted by telephone or face to face at a place of your choosing, e.g., your place of work. Most interviews will be concluded in one hour or less.

Participation in this study may cause some inconvenience to you, including taking the time to schedule an convenient interview slot and review interview summary at a later date. There are no known or anticipated risks to you by participating in this research.

The potential benefits of your participation in this research include a greater understanding of the communication and information system resources currently available to regional health authorities and their use. This understanding will be used to improve decision processes at the level of regional health boards in this and other regions.

Your participation in this research is completely voluntary. If you do decide to participate, you may withdraw at any time without any consequences or any explanation. If you do withdraw from the study your data will be used in the analysis if you agree to this in writing.

This research may lead to a commercial product or service. The nature of this commercial use is related to information system design in either a consultative or product development capacity.

In terms of protecting your anonymity and confidentiality no personally identifying information will be collected.

Data contributed to the study by your participation will be secured on password protected workstations and accessed only by authorized researchers supervised by Dr Jochen Moehr. The tape recordings of the interviews will be disposed of within two years following completion of the analysis.

It is anticipated that the results of this study will be shared with others in presentations to your colleagues involved in using and designing regional health information and communication systems, in presentations at scholarly meetings, in published articles and in thesis, dissertation and class presentations.

In addition to being able to contact the graduate student researcher her supervisor at the above phone numbers, you may verify the ethical approval of this study, or raise any concerns you might have, by contacting the Associate Vice-President, Research at the University of Victoria (250-472-4632).

Other individuals that may be contacted regarding this study include the following HEALNet co-investigators with Dr Jochen Moehr of this research program: Professor Harley Dickinson of the University of Saskatchewan (Phone: 306 966 6930 or e-mail: dickinson@skyway.usask.ca) and Assistant Professor Carole Estabrooks of the University of Alberta (Phone: 780 492 3451 or e-mail carole.estabrooks@ualberta.ca).

Your signature below indicates that you understand the above conditions of participation in this study and that you have had the opportunity to have your questions answered by the researchers.

_____	_____	_____
Name of Participant	*Signature*	*Date*

A copy of this consent will be left with you, and a copy will be taken by the researcher.

APPENDIX B:
THE REGIONAL HEALTH AUTHORITIES ACT[1]

This appendix contains excerpts from the Regional Health Authorities Act used by the Board under investigation. The Act is in the legal language of regulations that is laborious and so only those excerpts that were marked by the original user of the Act are reproduced here. The Act covers the following areas: Short title and interpretation, Establishment of Health Regions and Boards, Amalgamations, Changes to Names, Orders, Activities and Powers of Board, Miscellaneous, Public Administrator, Regulations, Consequential Amendments.

SHORT TITLE AND INTERPRETATION
...Interpretation
2. In this Act: ...
(q) "**services**" means health services, home care services, social services or any prescribed services;...

....
ESTABLISHEMENT OF HEALTH REGIONS AND BOARDS...

StarCity Regional Health Board
12 (1) The StarCity Regional Health Board established pursuant to *The Crown Corporations Act* is continued as a regional health board under the name StarCity Regional Health Board.
(2) The StarCity Regional Health Board is deemed to have been established pursuant to section 5.
(3) The members of the StarCity Regional Health Board continue as the members of the StarCity Regional Health Board for the terms for which they were appointed to the StarCity Regional Health Board.
(4) The chairperson of the StarCity Regional Health Board continues as the chairperson of the StarCity Regional Health Board and is deemed to have been designated pursuant to subsection 6(5)...

[1] This text has been altered to mask the province and health region in which this research was conducted.

ACTIVITIES AND POWERS OF BOARDS

Regional health board a not-for-profit corporation

21 (1) A regional health board is a not-for-profit corporation.

(2) the activities and affairs of each regional health board shall be carried on without the purpose of gain for the members of the regional health Board, and any profits of other accretions to the regional health board shall be used in promoting its activities and affairs.

(3) Subject to section 22, the members of each regional health board shall serve without remuneration, and no member shall directly or indirectly receive any profit or personal financial benefit from the position of member....

26(1) A regional health board may provide services, and for that purpose may:

- periodically assess the health needs of the persons to whom the regional health board provides services;
- prepare and maintain a plan for the provision of services;
- co-ordinate the services that it provides with the services provided by other providers of services and with other related activities;
- promote and encourage health and wellness;
- periodically evaluate the services that it provides;
- co-operate with the Government of Canada an its agencies, the (provincial Government) and its agencies, the governments of other provinces and territories of Canada and their agencies, any other government organization, Indian bands and any other persons for the purpose of providing services;
- subject to this Act and the regulations, make bylaws and rules governing the activities and affairs of the regional health board;
- subject to section 28, purchase, lease or otherwise acquire real property;
- subject to section 28, sell, lease or otherwise dispose of real property when that real property is no longer required or when the regional health boar considers it desirable to do so;
- subject to section 28, purchase, lease or otherwise acquire personal property;
- subject to section 28, sell, lease or otherwise dispose of personal property when that personal property is no longer required or when the regional health boar considers it desirable to do so;
- accept grants, donations, gifts and bequests of real or personal property;
- subject to subsection (2), manage, invest and expend all moneys and manage all property that belongs to the regional health board;
- subject to section 28, construct, operate and manage facilities;

- provide funding:
  (i)subject to section 26.1, to other persons who provide services; or
  (ii) subject to the approval of the minister and to any regulations made for the purpose of this clause, to any other person;
- employ or engage the services of any person;
- provide superannuation and other benefits for its employees;
- enter into agreements with the Government of Canada or its agencies, the (provincial Government) or its agencies, the government of any other province or territory of Canada or its agencies, any other government organization, Indian bands or any other persons;
- subject to the regulations, determine the charger to be made for services provided by the regional health board;
- co-operate with persons who provide education or training to students of disciplines, occupations and professions that provide services;
- appoint committees to provide advice to the regional health board;
- exercise any other rights, powers and privileges that are necessary, incidental or conducive to the exercise of the powers conferred on the board by this Act.

(2) A regional health board may invest moneys only in those securities in which trustees are permitted to invest pursuant to *The Trustee Act.*

(3) In exercising the powers given to a regional health board pursuant to this Act:
each member of the regional health board shall act in the best interests of all of the residents of the health region (emphasis added by original owner of document with a large arrow); and
the regional health board shall:
(i) comply with the provisions of this Act, the regulations and any agreement between the regional health board and the minister pursuant to section 33; and
(ii) conduct its activities and affairs in a manner that is consistent with and that reflects the health policies, goals and priorities established by the minister.

APPENDIX C:
BOURINOT'S RULES OF ORDER

General Principles

Proper opportunity is afforded to all concerned for an expression of opinion.

Rights of minority are respected.

Clear decisions are reached.

Proceedings are governed by an assessment of the issues rather than by personality factors.

Motions

When properly (moved?) before the meeting a motion may be withdrawn by its mover and seconder only with the assent of the meeting as a whole.

A question once decided cannot be brought up again at the same sitting. If it should be necessary to rescind a motion that has been passed, notice of intention in writing can be given at one sitting and dealt with at the next sitting. Both motions decided in the affirmative and negative may be reconsidered.

If a motion is defeated it may not be re-introduced except in the form of a new proposal sufficiently varied in its terms to constitute a different questions, and the assembly itself may determine whether or not it does in fact constitute a new question.