Governing health regions / Informing board members

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Abstract

Governing boards of Canadian regional health authorities report deficiencies and dissatisfaction with the information available for decision making. Given the importance of health personally and politically the potential impact of deficits is great. The ultimate goal of this study is the improvement of decision support for the governing boards of regionalized and vertically integrated health care systems. My immediate purpose is to understand how board members use information in decision making. This is required to both model the current communication and information use in decision processes, as well as, to design technology solutions congruent with these. Institutional ethnography was explored as a way of doing systematic inquiry as a preliminary step in the design process. This paper provides a methodological demonstration. Ethnographic fieldwork was conducted with one regional health board. Standard ethnographic data collection methods (observation, key informant interviews, meeting transcripts and documentation) generated data that were analysed using a framework and method developed by Canadian social theorist Dorothy Smith. Taking the standpoint of the decision-maker and tracing information links to locations removed in time and space from the decision-making environments permits a roadmap of knowledge construction to emerge. Preliminary findings confirm that a sequential linear decision making process is not in evidence. The Board relies on the knowledge and contacts of board members to become concisely informed from sources external to the organization. More extensive information infrastructure is in the planning stages to support the Board but much analysis is currently ad hoc. A rich model of the dynamic interplay of work processes, professional discourses, institutional complexes and various knowledge practices, beliefs and ideologies is made visible. The insights gained in this investigation will be used as a basis for developing strategies to improve the effective use of information and communication technologies for decision support.

1. Introduction

Designers of information and communication technology (ICT) systems are perplexed when users do not make effective use of newly available system capacity as envisioned [1]. Health services researchers are puzzled when their findings are not taken up in forums where health policy is decided [2]. Auditing bodies increasingly look to ways to improve the accountability of health care systems through better performance measurement because of perceived or actual deficiencies [3]. Surveys of regional health boards uniformly report deficiencies and dissatisfaction with the information available to board members for decision-making [4, 5]. There are many indications that Board functioning can be improved by harnessing ICT capacities but because the relevant processes are poorly understood, improvement strategies lack a solid basis.

To resolve this gap in understanding, the primary objective of the analysis described in this report was to understand how board members use information in decision making including modeling or mapping current practices. As part of a larger research agenda this is seen as a preliminary step towards the ultimate goal of improving decision support systems for governing boards of regionalized and vertically integrated health care systems.

As debates about health care reform continue, the informational bases of the decisions that determine what services are available are coming under increasing scrutiny. Concurrently the evidence based medicine movement and movements such as the Cochrane Collaboration illustrate an alternate paradigm for decision making at managerial and policy making levels in health care [6]. 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 [7].
In Canada, provincial governments administer the publicly funded health care system within federal guidelines. All provinces but one have instituted regional governance structures. Prior to regionalization freestanding hospitals were governed and managed separately from other health organizations within the same geographical regions. Now both hospital and community based services (with the notable exception of physician services) are united under one governance structure and function as large vertically and horizontally integrated systems of health care delivery.

Health care decision making entails a complexity absent from other industries that rely on profit and loss statements to evaluate their performance. Consider for example, the types of information that may come into play when a regional health board makes a decision to continue to fund or close a residential treatment centre. Financial or program specific performance indicators may be more or less available and formalized depending on the state of information system development and analysis. Research evidence on the effectiveness of day versus residential programs on health outcomes may be considered. Professional, managerial, occupational, patient and public stakeholders may contribute information formally or informally to shape the decision in their interests. The personal knowledge of decision-makers themselves obtained from many sources and experiences is brought to bear on the decision making process. Of the multiple and pervasive information elements, interactions and relationships that may be brought to bear comparatively little empirical basis of understandings exists about how they do or should come together to determine the optimal configuration of health services.

Health informaticians seek to support decision-making at all levels of the health care system by designing ICT strategies that make high quality data and information available reliably and affordably. One of the puzzles is how to dovetail information flow in relation to the corresponding cognitive and material work processes. While some industries such as banking or air transportation have developed widely used decision support systems this may be because the structured decisions supported are more amenable to automation. Employing ICT for decision support has proved to be more challenging in health industries. Centering the design of information systems on technology not organizational requirements has been implicated in the slow uptake of ICT by the health sector [8].

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 unexplored capability within health care 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 [9]. 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. More sophisticated decision support capabilities integrating database, modeling and knowledge elements are still more futuristic. 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 [10]. This is important for governing boards with newfound responsibilities for access to and quality of services in addition to traditional fiscal management.

Advances in communication technologies such as web-enabled applications and wireless capabilities are also opening up new potential 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 listserve, 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 or adoption.

Research and development efforts 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 widespread consequences. 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 Johnathan Lomas in highlighting this problem was influential in Canada. He wrote a paper subtitled “Beyond the sound of one hand clapping” [2] which refers to the two solitudes of researchers and decision makers:

“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... significant progress may come from a better understanding of each side of the constraints and possibilities of research and decision-making” [2].

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.

Various approaches have been developed which examine the what people do at work. A number of these are undertaken using a social constructivist perspective. In seeking an approach to examine the work of governing boards, exemplary methods were examined to determine the merits and potential drawbacks of each.

Qualitative researchers using cultural analysis investigate governing boards to discover how shared meanings are negotiated, shared and maintained (11). For example, within management sciences the findings of cultural analysis may be related back to agency theory which postulates 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 (12). Using a grounded theory approach a board could be examined to discover theory of lived experience of governance in the absence of such a theory (13). These two approaches have no way of revealing how the macro and micro come together in work processes. Critical ethnographers reveal the larger social and historical forces that may be constraining governance practices. This approach does not however indicate how the resulting insights can be used to change work practices.

Institutional ethnographers uncover what people actually do and how events (such as decision making) are orchestrated through ruling social relations and increasingly mediated by texts. Overlooked by other research approaches is how authoritative texts organize knowledge work and how technology in turn is implicated in enabling the mediating or active character of such texts. People make decisions, drawing to them the knowledge resources that they know to use – in order to be seen as competent. Board members are thus guided and constrained by a variety of forms of knowledge (that they consult as institutional texts, experts and expertise, and so on). This “work” is the focus of inquiry in IE. IE allows governance level decision making in all its complexity to be understood as embedded in both the organizational and environmental realities but moreover to retain its essential character as an everyday work process. Governance can therefore be examined as work and be made amenable to improvement efforts.

1.2. Institutional Ethnography

Institutional ethnography (IE) [11-14] provides the analytic method, theoretical orientation and philosophical paradigm for the type of in-depth analysis I have chosen to address the complex and nonlinear 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 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’ [13], 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 including
decision making. Thus it is grounded in careful ethnographic observation and interviewing. Its analytic procedures rely on the notion of the everyday being socially organized and interconnected. The local being organized by the extra-local through what Smith calls social relations.

Institution as a concept in IE refers to ‘the varied and interconnected practices of management, administration, government, law, finance, education, business and the professions’ [15]. The central task in an IE analysis is to describe the social and institutional relations shaping everyday experiences. This 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. 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) from micro to macro on work practices thereby overcoming a classic restriction in the social sciences of locating a study in one area. Research in the social sciences overcomes this problem by theorizing the relations between sites but a critique of many qualitative approaches to research is that they remain unable to produce findings that can be generalized. IE is different in this way. It overcomes this problem by explicating how translocal ruling relations enter into everyday work processes thereby making the links between geographically separate and asynchronous practices explicit.

IE is particularly useful in discovering empirically the invisible and unconscious ways in which human work is orchestrated by texts (20). As texts are being transmitted via information systems rather than paper-based processes this feature is attractive from a decision support design perspective. IE has been applied by researchers to trace translocal social organization from a standpoint in everyday work practices thereby making the links between geographically separate and asynchronous practices explicit.

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. Smith argues that this enforces an exclusion of the interests and concerns of subjects – but these are exactly what would be useful for designers of ICT systems.

Figure 1. The organization of the everyday working world by people, actions and texts

3. Methods

An inquiry in IE starts with a problematic in everyday working life. The problematic to be explored in this study is: What knowledge does underpin regional health board decisions? Somehow Board members make decisions that stand as ‘adequate’. 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. The study this paper is based on, attempts to show how they actually do that work, using the knowledge they formally or informally acquire, including advice, commonsense background knowledge, personal or official understandings of responsibilities and decision making processes. The current communication and information use patterns of one regional health board were mapped and related to their decision-making processes.

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 $300 million to meet the needs for health services of a population of approximately $300,000. Transcripts of audio taped meetings, related documentation, non-participant observations and key informant interviews were analyzed. Interviews were conducted 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.

Three consecutive closed monthly meetings of the board, which occurred in 1999, were taped, transcribed and analysed using Ethnograph™ software.

4. Findings

The anonymous health region that provided the setting of this study ranks amongst the highest nationally in annual health report cared performance measures. My data offers a look at the regional health setting of this study ranks amongst the highest nationally in annual health report cared performance measures. My data offers a look at the regional health information infrastructure for the board were also interviewed.

4.1 Governance decision making processes

Transcripts of Board meetings reveal that linear sequential decision making processes are not in evidence at this level of governance. Rather the people, their actions, and texts that make up the visible organization of the everyday work of governance (Figure 1) are orchestrated in largely invisible ways by ruling relations that extend beyond the boardroom.. Decisions are most clearly identified in the form of motions. Motions to accept the recommendations of the chair of a committee, for example, are the form in which the decision of this board are typically formulated. The corresponding committee reports reveal little of the work that has gone into developing recommendations for board approval. It is rare within the formal deliberations of the Board that specific chunks of information can be identified as they might appear in an information system. Nor can they be traced to a source, linked to a specific function in a decision in a way that would clarify the impact the information has had.

Coding and classifying much of the transcript as information is of limited usefulness in understanding how it happens the way that it does. Formal systematic information flows are not easily identifiable. Therefore information requirements are not easily obtainable from the talk. Nevertheless, an intense information exchange process is revealed that is often ad hoc and in relation to potentially contentious issues for the health region in relation to other governmental or community groups. One example of this is a debate related to changes in the organization of ambulance services. A change in organization that was initiated by other government funded and governed service organizations resulted in potentially dangerous practices from the perspective of the region’s emergency department personnel. There arose for the Board a need to endorse the actions of the CEO to communicate this concern across other community organizations and work towards a collaborative solution. Another example is the Boards discussion of the effort of a voluntary community organization to raise funds to support a provincial center dedicated to technologically advanced care for the medical disorders of one particular body system. The information needs related to a debate by the Board of the merits of this proposal are clearly non-routine and ad hoc in nature.

Board debates and ultimately decisions may relate to the mandated authority and responsibilities of the board to govern in matters of health and health care. With regards to emergency services this required Board members to ensure any threat to health through delayed access to services was responded to appropriately and effectively. In the case of the community group pressing for a new type of delivery center, while their vision had been developed outside the jurisdiction of the regional health authority, nevertheless it would have far reaching effects on existing service delivery systems.

In the ensuing debates, I observed how its social organization influences Board action. The regional health board members are organized by the regulatory structures that provide them with authority and a mandate. This particular Board was created legislatively through an act of the provincial parliament, as are all provincial authorities. The relevant Act establishes regions and boards including how board members will be appointed and the activities and powers of the Boards. The boards are granted the power to provide health care services, which private corporations are not allowed to do in this state financed system.

Boards are granted powers to assess needs, make plans, coordinate services among providers, promote health, evaluate services and cooperate with government bodies for the purposes of providing regionalized services. They are required to make bylaws and rules to govern the board affairs. The board is 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. Board members are responsible for acting in the best
interests of the residents of the region and complying with regulations and the provincial health minister.

The following passage from the meeting transcript reveals one board member’s insight into the orchestration needed between organizations to implement a high profile report pertaining to the local medical college. They indicate an attempt by the Board to create a change that would be favorable from the perspective of the health region. The region depends on the medical workforce including students and the attractiveness to physicians of association with a medical school and so matters pertaining to the medical school are of interest to the Board though it is not directly responsible.

“[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 … Report.”

Later as part of the same discussion another board members reveals that the relations between the government and board may not be strictly of ruler and governed but, as the following comments by a Board member indicate, the Board is attempting to shape decisions at the level of government.

“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.”

These comments provide a hint of the web like institutional ruling relation the IE framework seeks to make visible. The type of coordinated policy implementation that is part of the work of governance would not be supported by classic IS strategies though it might be fruitful to consider technologies that facilitate group collaboration.

4.2. Textual-mediation

There are many ways that governance is a textually mediated social process. Rules of order persistently and powerfully organize the work of governance level decision making and these are extensively textually mediated. ICT designers seeking to support this level of decision making would need to understand and work within the structuring of the process that these provide. For example, standard items on the agenda would include ‘Approval of Agenda’ and ‘Approval of Minutes’ and ‘New Business’ and ‘Old Business’. Once the agenda is set it needs to be covered in the allotted time or be brought forward as ‘Old business’. The board meets in closed ‘in camera’ sessions about once a month for about 3 hours. Time constraints play a significant part in organizing the decision making process.

The structuring of the meeting and decision process by rules of order provides a number of ways of textually mediating the work of governance and thereby constraining it to a conventional format that is tightly and centrally controlled. The standard decision making conventions used by this board are in widespread use in a variety of corporate and not-for-profit organizations. These include a prescribed way of calling the meeting to order, obtaining and assigning the floor, bring motions forward, amending motions and voting. The formal proceedings outlined and promulgated in the classic Robert’s Rules of Order [17] were initially published in 1876 to bring some order into the chaos of the competing conventions of the time. The long list of editions and their revision from 1876 to the present demonstrates a stable and slowly changing set of rules. 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.

The board policy manual is authoritatively organized and is another instance of a textually mediated means of setting the boundaries of action for the Board. ICT solutions design would need to be congruent with these. Though fairly standard in many respects the board’s policy manual is more customized to the particular circumstances of the organization than, for example, the Rules of Order. The development of organizational policies for the region is mandated by legislation. They are arrived at through board deliberations and are an important component of this exemplary Board’s work. This Board for example has developed statements of its Vision, Mission, Goals and Objectives. These are a means of communicating the business of the health region throughout the organization as well as externally and therein lie an opportunity for ICT enhancements to have a widespread impact.

This board is influenced by the training available to its members available organized and developed by the provincial association of health organizations that exists to orient and provide a forum for board members. Governance models shaped by prevailing trends (and related discourse) influence this training. This board, for example, has adopted a ‘modified’ Carver Model [18] that directs the board to formulate policy and leave the operations to the senior staff. A Board member is warned away from a line of enquiry that could inform them of the operational impact of a decision with the statement “Are we getting into
management now?” after which the board member does not pursue that line of questioning. The Carver model identifies management concerns as being not the proper focus of Board attention. Generally the use of the Carver model implies that the Board is a ‘Policy Board’ i.e. focuses its attention on developing policy and monitoring the success of the organization in achieving its broad objectives rather than a ‘Management Board’ concerned with the day to day running of the organization.

The decision support implied by policy as opposed to management needs would appear to be an uncharted area for this Board. A senior manager reports that they need more direction from the board as to whether they want information rolled up or different types of information. In this time of transition Board members realize that desired information is often not available or only with significant opportunity costs.

Board members concede their dependence on the CEO senior managers of the Health Region for information. The Board chair and CEO together with a senior leadership group have a coordinated role in managing the agenda and information directed to board members. This process would not seem to be easily amenable to standardized decision support given the ad hoc requirements of the health region to respond to external contingencies and that the information requirements are generally outside the domain of evidence based medicine. The governance structure itself became standard practice in western corporations as a result of the need to protect the interests of owners from managers acting in their own and not the corporate best interest [19]. For this Board the ‘owners’ are the government and the public. The recent Enron scandal has highlighted the importance, potential frailty and need to revisit the adequacy of this model. This also reveals an opportunity for technology enhanced auditing systems.

Carver advises that the Chief Executive Officer (CEO) is the Board’s only employee [18] and this was relayed to the researcher in interviews with both board members and senior managers. Board members conveyed that an important part of the Board’s role is to ensure the reliability of this important lynchpin position. Interviews with Board members reveal an elaborate performance evaluation mechanism is in place to assess the CEO performance. This is an area that may benefit from communication support rather than IT support as a number of people within and outside the organization need to be canvassed to ensure the CEO actions are in the interest of the organization. Board members emphasized the importance of recruiting trustworthy individuals into senior positions due to the difficulty of detecting deception through the evaluation mechanism in place.

Customized decision support templates were found to organize the content of information and coordinate its flow in relation to decision-making cycles. Although it was not explicit in the ‘talk’ in the boardroom or in information packages a senior manager revealed that there are a series of ‘touchstone’ principles that have been formulated within the region and in use for many years. They relate to the ‘quality elements’ of acceptability, accessibility, appropriateness, competence, continuity, effectiveness, efficiency, and risk/safety. As these were contained in a paper-based form there may be an opportunity to design a useful electronic decision support tool incorporating the principles.

4.3. Mapping the informational bases of decisions

Sometimes the informational bases of decisions can be seen. For instance, when members cite their mandate as requiring certain action. Analysis of the ethnographic data makes visible a rich picture of the dynamic interplay of work processes with professional discourses, institutional complexes and dominant ideology (Figure 2). In Figure 2 the realms illustrated by the dotted outline are those that are obscure in the everyday work of governance. The importance of trans-local institutional influences to Board decision making processes is evident as the board seeks to understand the position of other key government and professional health organizations by seeking information that is not typically documented. Another example is discussion about the potential support of various government and non-government organizations for a community initiative that would impact on the health delivery in the region.

Extensive discussion related to the release of the provincial government’s annual budget is another example. The health region’s budget is derived from this government budget so the organizing power of the financial constraint is perennial. The organizational budget and related processes of the board and so Generating, approving and justifying the health regions budget and implied resource allocation to government, staff and the public is a central responsibility of the Board. An electronic presentation that permits board members to drill down independently to the level of detail according to interest and expertise can be envisioned. Given the importance of approving the budget and varying interests and expertise of board members and the limitations of paper based documents this may prove useful. Board members recognize that the trend towards reduced funding for health care will
likely continue and that this is a fundamental constraint on the policies they foresee as feasible.

A priority setting process by the Board based on population health status indicators represents both a new type of information available through advances in information technology and the first use of this type of information in a structure responsible for both population health status and health care delivery. The separation of public health and health delivery systems that was traditional in the Canadian context is being bridged in this health region. The public health officer of the region has senior management responsibilities with the region with responsibilities for both public health and health care delivery. The opportunities to further develop the information infrastructure for this purpose would appear to be fruitful. The suitability and related benefits of this type of structure for responding to public health threats such as those posed by terrorist attacks or SARS like epidemics could be substantial with a reduction in the time taken to process information made possible by targeted ICT applications.

Both health service researchers and health informaticians seek to improve the uptake of information in regional health planning. This board did not make direct use of information from administrative systems and research knowledge bases in their decision-making process. These types of resources could not readily meet the information Board members were relying on as support for action in the macro environment. Internal information resources would not be useful to assess the ever-changing discursive and institutional relations ruling the macro environment for example.

While high profile reports that would be pertinent to board members are increasingly available through the Internet they did not indicate that they accessed online information regularly. While email was used to contact some board members this was not universal and telephone and paper distribution were more in evidence. There would seem to be opportunity to make information easily accessible to Board members.

A better information infrastructure for operations is anticipated. The need for coordinated development efforts is revealed by a senior manager in the following summarization of a strategic plan under development:

“Under information systems, recognizing the need to...coordinate our information systems locally and at a provincial level with a variety of other organizations that are integrating into that pool. But having said that you will see later on we, ahh, are continuing in partnership with [the provincial association of health organizations] on the implementation of the province wide payroll human resource information system.”

Also proposed is an innovative new structure to try to bring together disparate sources of informations.

“Strategic health information and planning services...is a new department that will be structured within [the region] that will bring together utilization management services, research services, as well as the population health working group and the health status project. The vision of this particular new department will be to bring information and data from a variety of sources internal to [the region] as well as external to [the region]. To then take that information, analyze it and process it and turn it into useful knowledge that can be used by operational areas in their decision-making, planning and policy development.”

These informational resources, if in place, would presumably transform the types of information available for operations and governance but they were far from being realized when this study data was gathered. Interviews with staff revealed that labour intensive ad hoc analyses were the standard way that non-routine and typically non-financial information on internal operations were obtained for senior management and the board. Performance evaluation frameworks were being developed internally in the form of balanced score card reporting by department.

Figure 2. The organization of the everyday world of board members with layers of obscured ruling relations (dotted realms) made visible

4.4. Embodied information

Board members report and meeting transcripts reveal that they rely on expert advisors (who may also be staff
members) as conduits of information on research and internal performance. This would be compatible with a strategy of supporting knowledge brokers in performing this service for Boards. In addition the Board relies on the knowledge and contacts of board members to become concisely informed from sources external to the organization such as provincial government ministry departments and personnel, the provincial university, profession bodies, clinical leaders, non-for profit charitable institutions among others. This could not be easily emulated by decision support systems.

5. Discussion and Conclusion

While the content of Board decisions changes all the time and their methods of work shift as new players enter, new documents or documentary processes appear, it is my argument that the social organization of the regional health Board remains fairly constant. Given their stability many of the same relations of institution, discourse, ideology and everyday work practices would be expected to be continuing to shape the governance work conducted. I have sketched here, and my thesis will elaborate more fully, these relations which, while uniquely manifest in each jurisdiction, are nevertheless orchestrated similarly.

Our analysis suggests that what was needed for decision support is not necessarily a simplistic information system but communication support. This was not anticipated but is consistent with results obtained during an evaluation of the British Columbia Telehealth Program [20] which found that a widely appreciated feature was the ability to involve remote stakeholders in interviews of CEO candidates. This corroborates that institutional ethnography allows the researcher to gain an entry point to the activities and experiences of new environments, such as in our case boards, in a way that permits empirical discovery of what is going on, unconstrained by a research or design agenda. This then leads to insights which can be translated into ways of ITC support that would not have been identified were it not for institutional ethnography.

Though preliminary this analysis suggests that information need and use at the governance level is somewhat more complex than a cybernetic model would assume. The finding that the decision processes are not linear nor the problems routine or structured implies that these types of processes do not easily lend themselves to automated decision support systems involving integration of modeling and knowledge elements. The analysis demonstrates the inadequacy of current understandings and standard design methods that do not recognize translocal relations shaping board decision-making processes. The knowledge gained in this investigation will be used as a basis for developing strategies to improve the effective use of ICT for decision support. Potential opportunities identified in this paper require further work and evaluation before it is possible to demonstrate that the process can be effectively improved.

Though many decision support tools will not be useful in this setting other ICT enhancement are suggested. Paperless board proceedings can be envisioned which include electronic distribution of relevant documentation and enhanced functionality of the voluminous and almost completely paper-based system. The meetings themselves could benefit from things as simple as amplification so every board member is easily heard to advanced presentation and teleconferencing capabilities. Being able to more directly harness the information buried in the routinely collected data will have to await a time when the information infrastructure and retrieval mechanisms have been established. Health organization performance evaluation indicators in development promise to transform governance work as well as the management and operations of health regions as they provide health care systems with objective feedback on their output in a systematic way for the first time.

6. References


