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The reciprocal dynamics of organizing and sense-making in the implementation of major public-sector reforms

Abstract: Drawing on a longitudinal study from the early years of implementation of health-care networks in Quebec, this article describes how public-sector managers deal with complex challenges when both organizational structures and organizational strategies are radically transformed simultaneously. The new organizations studied had to completely re-shuffle roles and responsibilities of their management teams while making sense of their new mandate of developing a population-focused approach to health problems – all the time maintaining day-to-day operations. The four health-care networks studied proceeded somewhat differently to meet these reciprocal challenges. The study reveals the importance of balancing organizing initiatives (focused on structures) with “sense-making” initiatives (focused on strategies), of developing capacities for sense-making through the creation of key “sense-maker/sense-giver” positions whose occupants are able to ensure that conceptual activities engage people working at different levels, even as organizational structures are in flux, and of mobilizing external constraints and influences as opportunities and resources in sense-making and organizing.

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Sommaire : Se fondant sur une étude longitudinale des premières années de la mise en œuvre des réseaux de soins de santé au Québec, cet article décrit la manière dont les gestionnaires du secteur public font face à des défis complexes, alors que les structures et les stratégies organisationnelles sont radicalement transformées simultanément. Les nouveaux organismes étudiés ont dû complètement remanier les rôles et les responsabilités de leurs équipes de gestion et comprendre leur nouveau mandat d'élaborer une approche axée sur la population pour ce qui est des problèmes de santé, tout en maintenant leurs activités au jour le jour. Les quatre réseaux de soins de santé étudiés ont travaillé à relever ces défis réciproques d'une manière assez différente. L'étude révèle l'importance de trouver un équilibre entre les initiatives consistant à organiser (axées sur les structures) et les initiatives consistant à interpréter les faits (axées sur les stratégies) ; de perfectionner les capacités à interpréter les faits grâce à la création de postes clés d'« interpréteurs de faits », dont les titulaires veilleraient à ce que des activités conceptuelles fassent intervenir les gens travaillant à différents niveaux même lorsque les structures organisationnelles fluctuent continuellement ; et enfin de tirer parti des contraintes et influences externes comme autant d'occasions et de ressources pour interpréter et organiser les faits.

This article examines a key issue in contemporary public administration: the challenge of implementing large-scale reform in public delivery systems (Peters and Savoie 1998; Rocher 2008; Exworthy and Powell 2004; Denis 2008). The managerialist approach to public-sector reform has emphasized the need for accountability to increase the performance of public services. While this is an important issue, it is crucial to look beyond this and to examine the distinctive work of public agents and the roles they play in reform (Pollitt 1998; Peters 1998). It is well recognized now that central government agencies do not and cannot exert direct control over all aspects of reform (Rhodes 1997; Exworthy and Powell 2004) and that reforms in the public sector operate in a context of multilevel governance where policies are reformulated and adapted by people at various levels. This article examines the processes involved in the implementation of an ambitious reform in a public health-care system of one Canadian province, namely Quebec. It analyses the interaction between the structural imperatives of the reform and the dynamics of conceptualizing and implementing change from the viewpoint of those who are at the centre of this process – the senior management teams of the delivery organizations.

Organizational restructuring that radically re-defines organizational boundaries and missions is a topic that has attracted considerable attention in the study of private-sector organizations (Volberda and Lewin 2003; Pettigrew et al. 2003). Public organizations in various sectors such as health and education (Denis et al. 1999; Wallace and Pocklington 2002) face similar pressures for radical restructuring. Reforms that recreate new organizations out of older ones are particularly interesting because they engage managers

simultaneously in intensive organizing and “sense-making” activities whose complexity have often been underestimated.

In this article, we define “organizing” activities as those associated with changes in organizational structures – that is, the redefinition of internal roles and responsibilities and the establishment of policies, routines and information flows. We define “sense-making” activities as those associated with attempts to understand and define organizational strategies – that is, the nature of the organization’s mission and mandate, including which programs it should be implementing and how it should be changing the way it delivers services. Thus, while organizing activities are associated with concrete, immediate and visible structural change, sense-making activities are conceptual, abstract and interpretive, though often critical to determining future activity. Our article explores how, in the context of major reform, sense-making activities contribute to organizing and, inversely, how organizing constrains or enables sense-making. More specifically, we analyse how a mandated large-scale change – the implementation of local health networks in the Quebec health-care system – creates cognitive disorder (Balogun and Johnson 2004) among managers and professionals and stimulates various patterns of sense-making and organizing activities.

Conceptual background

Based on the work of Karl Weick and colleagues on sense-making in organizations (1979, 1995, 2005), we suggest that attempts to radically transform organizations generate disruptions in expectations and routines, producing situations of ambiguity among organization members. Situations of ambiguity can be seen as the engine that drives the emergence of new forms of organizing (Eisenberg 2006). The ambiguity associated with structural reforms will tend to be greater when change initiatives involve the bridging of various organizations or changes in organizational boundaries, as in a merger.

In a situation of organizational ambiguity, actors will develop various strategies to gain a better understanding of other actors and organizations, of the nature of their current and future relationships, and of the context of restructuring. Interactions and communications are central to the sense-making activities of organizational members and may culminate in more convergent interpretations regarding proper courses of action. The interplay between sense-making activities and organizing activities needs to be explored. Recently, P.W.L. Vlaar and colleagues (2006) suggested that formalization may nourish and foster sense-making activities (at least up to a certain point) and may help in developing congruence in the context of interorganizational relationships.

The study examines various pathways used by organizations to orchestrate sense-making and organizing in practice. While investments in

sense-making can generate rich interpretations of issues and alternative courses of action, they may not always be conducive to substantive change. Conversely, investments in organizing may provide an impression of “being structured” and of achieving change, but they may also create rigidity and block further attempts to bring about changes in sense-making. In addition, rich sense-making will be insufficient on its own if sense-giving activities are not performed to spread understandings beyond a small group (Maitlis and Lawrence 2007; Gioia and Chittipeddi 1991).

[T]hese new organizations were faced with a highly complex task: to simultaneously re-align their structures and their strategic roles while maintaining ongoing services

Two research questions will be explored in this article: First, how do public-sector organizations and managers react and deal with major destabilization and ambiguity? Second, how do they use sense-making and organizing activities to balance continuity and strategic change? After summarizing the methodology, we describe the nature of the public-sector reform examined. We then present key aspects of the dynamics of sense-making and organizing observed in four case studies of the implementation of Health and Social Services Centres (HSSCs) and their local networks. As described below, the HSSCs are a new organizational form created through the merger of existing organizations operating in the same geographical territory.

Methodology

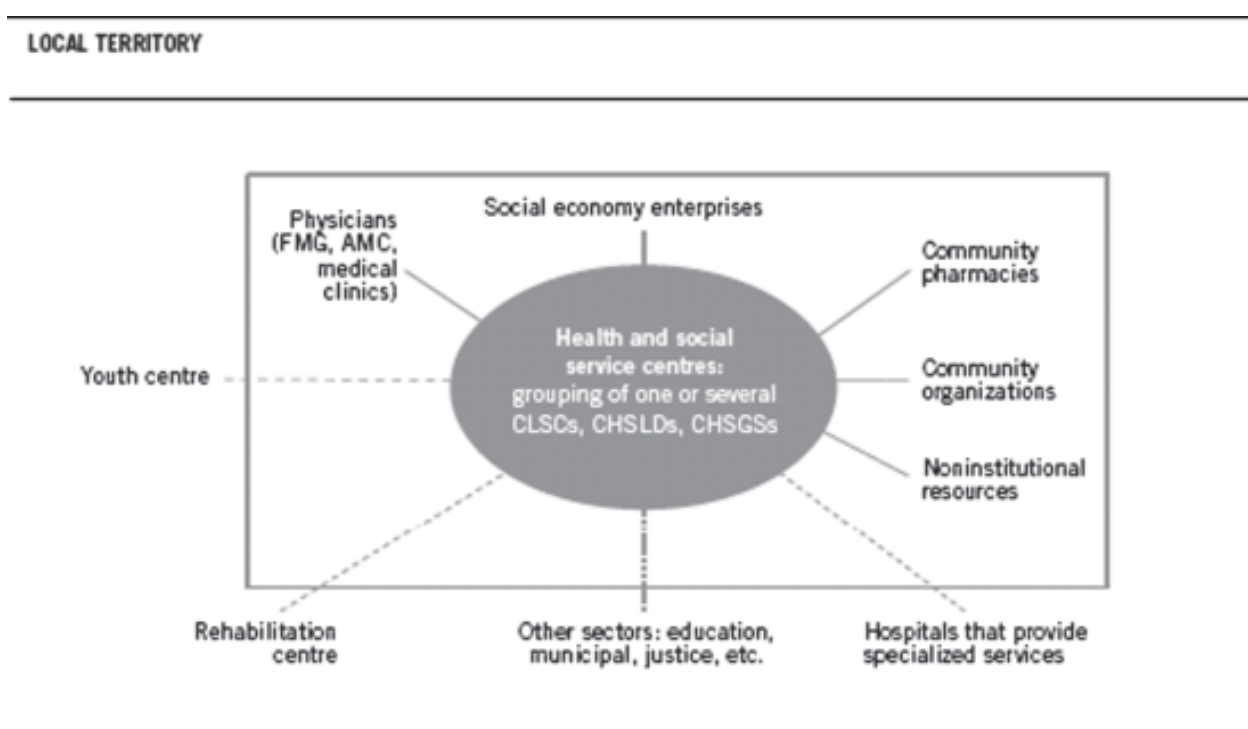
We conducted an in-depth longitudinal, retrospective and prospective case study of four emerging local health networks in the Quebec health-care system between 2004 and 2007. The four cases were sampled from the entire population of ninety-five local networks to allow comparison of different degrees of complexity. Specifically, two cases included an acute-care hospital within their formal organization while two did not. The inclusion of a hospital within the HSSC is an important determinant of the capacity of this new organization to implement desirable changes, including integration of care (World Health Organization 1996). Yet, this may make the change process itself more complex because organizations with widely differing values and modes of functioning need to be accommodated. The data collected include real-time observations of top management meetings in each organization, as well as a total of fifty-eight interviews with managers, professionals and key stakeholders. Data analysis involved developing a detailed case history for each case to obtain a clear picture of the main processes involved in the implementation and to identify key actors within the organization and its

environment. We then performed cross-case analysis, looking at convergence and divergence among cases. Finally, the case history was validated with the management teams in each organization. We report here on the progress accomplished from 2004 to 2007 in the creation and implementation of the new organizations and their networks. The four cases are described, focusing on key moments in sense-making and organizing activities and examining their evolution and orchestration through time.

The nature of the structural and conceptual change

Figure 1 (taken from a regional health agency document) illustrates the nature of the structural change studied in this article. The new Health and Social Service Centres (HSSCs), shown at the centre of the figure, were created through the merger of several organizations operating on the same well-defined geographical territory – CLSCs (community clinics offering home care and social services), CHSLDs (long-term care), and CHSGSs (community general hospitals). These new HSSCs were in turn required to develop contractual agreements with other providers inside or outside their territory that offer services needed by the local population (e.g., voluntary agencies, medical clinics, tertiary-care hospitals) to create local health and social services networks.

Figure 1. Schematic Representation of the Health and Social Services Centres (HSSCs)



Source: Quebec, Agence de développement de réseaux locaux de services de santé et de services sociaux 2004: 6

Table 1 illustrates the conceptual changes associated with these structural changes. As can be seen, the proposal involves a move from what is labelled a “service-based” to a “population-based” approach. The new HSSCs are being asked not only to provide services to those who request them but more broadly to become responsible for the health status and needs of the population in their geographical territory. This is a radical change in

Table 1. *Changing Conceptualization of the Health-Care System*

	<i>Care system based on the needs of service users</i>	<i>Care system based on a populational approach</i>
Responsibility	Individuals who use services	Population of the local territory, regardless of whether they use the services
Mission	Improve the health of the individuals who use the care, when they need it	Improve the health of the territory’s population in the medium and long term
Service offer	Emphasis on diagnostic and services	Emphasis on a continuum of care, from prevention to rehabilitation
Actors involved	Professionals and system managers, with their respective expertise	Care providers in the system and actors in the milieu, such as the population, the school and municipal environments, doctors with private practices, community organizations, all with their respective knowledge and perspectives
Practices	Use of meaningful data and practice guides for the individuals using the services Process-based management	Use of meaningful data in terms of effectiveness for the population Making the population’s health problems a priority, taking into account the effective interventions available and the consequences of resource allocation (efficiency) Defining target groups, showing a concern for inequalities (at-risk and special groups) Managing the use of services, including comprehensive, ongoing and personalized case management Integrating the various levels of care (primary care, specialized care, etc.) Health results-based management Intersectoral work to act for health

Table 1. (Continued).

	<i>Care system based on the needs of service users</i>	<i>Care system based on a populational approach</i>
Main indicators	<p>Interest is focused on the numerator, in this case, those consulting.</p> <p>Process indicators are preferred. For example, with regard to service production, the question is how many people a screening program reaches.</p> <p>Available resources and services are measured, as are waiting lists.</p>	<p>Interest is focused on the relationship between the numerator and the denominator, in this case, the clientele and the population.</p> <p>Result indicators are added to process indicators. For example, with regard to health production, interest is focused on decreasing the incidence of a given disease.</p> <p>The state of health and well-being of the population is measured, as well as the determining factors of health and the gap between needs and the services provided.</p>

Adapted from: Derose and Petitti, 2003: *Measuring quality of care and performance from a population health care perspective*. Ann. Rev. Public Health 2003. 24: 363–84; and from Garr, Rhyne and Kukulka, 1993: *Incorporating a Community-Oriented Approach in Primary Care*. American Family Physician 1993: 47 (8): 169–1702.

Source: Quebec, Agence de développement de réseaux locaux de services de santé et de services sociaux 2004: 7

focus, whose origins lie in broader institutional trends that have permeated thinking around health-care reform in Canada and around the world for the past twenty years or more (Shortell et al. 1996; Hayes and Dunn 1998). The “population health” perspective, disseminated notably by the Canadian Institutes for Advanced Research in the 1990s (Evans, Barer, and Marmor 1994) and widely adopted since then, suggests that the key determinants of health lie beyond initiatives aimed at “curing illness” and that resources need to be invested in “nurturing health.” Overall, Figure 1 and Table 1 indicate a change in “organizational archetype” – that is, a radical shift in both structure and interpretive schemes (Greenwood and Hinings 1988, 1993).

The changes described in this article clearly created a situation of significant cognitive and structural ambiguity within the Health and Social Service Centres. A new structure had to be developed to manage the newly created centres, necessarily involving the re-shuffling of management positions and the displacement of managers to new roles. At the same time, the management teams had to make sense of their new mandate: what exactly did it mean to move from a service-based to a population-based responsibility? Table 2 provides some quotations from each of the four CEOs in our sample

Table 2. CEOs' Perceptions of Structural and Conceptual Challenges in the Four HSSCs

	<i>Structural challenge: Merging and re-organizing multiple organizational units</i>	<i>Conceptual challenge: Integrating the population-based mandate</i>
<i>HSSC1</i>	"It's very easy to get lost in the organization, the internal part But if we only do that, we may have a great internal organization but we won't fulfil the major part of our population-based responsibility."	"But the population responsibility . . . there's a lot of work to be done. What does that mean? How far do we go? I don't know. That remains to be defined."
<i>HSSC2</i>	"The challenge we have is that it is two organizations that operated as silos But we have no slack resources There's no room to manoeuvre and the cultures are very different."	"I see our main mission as bringing health services close to the population. But population health in general . . . that's pretty vague . . . I have difficulty prioritizing, because everything is a priority."
<i>HSSC3</i>	"With the creation of the HSSCs, peoples' reference points disappeared. These reference points are often the boss – or the priorities they might have."	"On the 'population responsibility' mandate, there are very, very few people in the organization who will carry that. You cannot expect the nurse or social worker or the doctor to work with a population-based approach."
<i>HSSC4</i>	"Just putting the structure in place, that takes two years There's so much to do that all our energies are invested in that."	"The particular challenge is that we all have to develop a population-based mindset, and we have our work cut out for us with that at every level."

HSSCs to illustrate how some of the structural and conceptual challenges were perceived.

In summary, these new organizations were faced with a highly complex task: to simultaneously re-align their structures and their strategic roles while maintaining ongoing services. The following sections of the article will first describe the initial conditions that affected the positioning of the four organizations with respect to this task and will then elaborate on the key themes emerging from our analysis of how they simultaneously and reciprocally invested in organizing and sense-making activities.

Case histories

To obtain a clearer picture of the interactive dynamics between organizing and sense-making, we develop case histories of the four organizations according to the following major themes: historical antecedents; the composition of the executive team at the creation of the HSSCs and changes

through time; the designation and role of what we call “sense-makers-in-chief”; the role of external agencies and consultants in sense-making activities; and, finally, the resulting dynamics between organizing and sense-making and its influence on strategic change and stability.¹

Historical antecedents

Each of the HSSCs had a different history, and this clearly affected the complexity of the structural and conceptual challenges it faced and, at the same time, the resources it could draw on in its organizing and sense-making efforts. Critical antecedents include the number and type of organizations that were combined to create the new organizations and how these organizations had been previously configured. Table 3 shows a comparison of the four sites according to levels of internal and external complexity.

As can be seen, both HSSC1 and HSSC2 have a less complex merger to manage than the other two because they do not include a hospital and have fewer employees. Although HSSC2 incorporates fewer organizations than HSSC1 (one CLSC and one nursing home group), it nevertheless has a more complex external environment than HSSC2 due to the numerous other organizations with whom it must negotiate relationships in order to meet the needs of its population. HSSC1 is also seen to be advantaged by its academic affiliation and its prior successful involvement in a research project experimenting with new forms of care delivery for the frail elderly.

[I]t appears that the composition of the executive team reflects key and powerful missions involved in the HSSC and sends clear signals in favour of continuity and the preservation of the respective identities

Of the HSSCs with hospitals, the internal complexity of HSSC3 is considerably higher than that of HSSC4, since it involves more sites and a hospital more strongly focused on specialized care. Other than these clear structural differences, each organization has its own distinct history, which suggests greater or lesser structural and conceptual compatibility with the proposed reorganization. For example, it is interesting to note that for HSSC4, the inclusion of a hospital was seen as strongly favourable to change because of a previous history of collaboration and a relatively self-contained community. In contrast, for HSSC3, the dominance of the hospital was seen as potentially problematic. Indeed, for HSSC3, the merger represented a serious managerial and clinical challenge because of the initial opposition and mistrust among the different organizations regarding the merger, the variations in managerial cultures, and their strong attachment to respective identities and autonomy.

Table 3. *Internal and External Complexity of the Changes among the Four HSSCs*

	<i>Region 1</i>	<i>Region 2</i>
<i>Without hospital</i>	<p><i>HSSC1</i> <i>Moderate internal complexity</i></p> <ul style="list-style-type: none"> - three former organizations, seven sites - no hospital - approx. 2,000 employees <p><i>Moderate external complexity</i></p> <ul style="list-style-type: none"> - must negotiate linkages with teaching hospital - previous successful experience with interorganizational collaboration - previous involvement in research and teaching 	<p><i>HSSC2</i> <i>Lowest internal complexity</i></p> <ul style="list-style-type: none"> - two former organizations, five sites - no hospital - less than 1,000 employees <p><i>High external complexity</i></p> <ul style="list-style-type: none"> - highly politicized environment - need to negotiate with several hospitals - twenty different municipalities
<i>With hospital</i>	<p><i>HSSC4</i> <i>High internal complexity</i></p> <ul style="list-style-type: none"> - six former organizations, eleven sites - includes a hospital - approx. 3,500 employees <p><i>Lower external complexity</i></p> <ul style="list-style-type: none"> - more autonomous than other HSSCs - strong prior linkages with community - centre of gravity weighted towards acute care, but prior linkages to community provide a base to build on. Some continuity possible. 	<p><i>HSSC3</i> <i>Highest internal complexity</i></p> <ul style="list-style-type: none"> - six former organizations, seventeen sites - includes a hospital - approx. 4,000 employees <p><i>High external complexity</i></p> <ul style="list-style-type: none"> - one regional university hospital nearby - linkage with community strong in CLSCs but weak in hospital. For most services, the future linkage with the community will have to include the regional university hospital.

[O]ne way all of our sample organizations dealt with the simultaneous ambiguity surrounding the organization's strategy and structure was to develop an initial structure that included positions specifically dedicated to "sense-making" – that is, concerned with defining the organization's strategic direction

Executive team composition

Having established the diversity of starting positions for the HSSCs in terms of degrees of complexity, we now examine the first key "organizing" decision they had to take – the composition of the executive team and how this

Table 4. *Executive Team Composition: Continuity to Achieve Change?*

	<i>Region 1</i>	<i>Region 2</i>
<i>Without hospital</i>	<i>HSSC1</i> CEO from outside; fourteen out of nineteen directors come from organizations involved in the merger.	<i>HSSC2</i> CEO from outside; six out of eight directors come from organizations involved in the merger.
<i>With hospital</i>	<i>HSSC4</i> CEO from outsider; nine out of fifteen directors come from organizations involved in the merger.	<i>HSSC3</i> CEO from outsider; twelve out of fifteen directors come from organizations involved in the merger.

decision might influence subsequent organizing and sense-making activities. In fact, while all four CEOs of the new organizations were recruited from outside (from other CLSCs in the province), all four HSSCs (see Table 4) recruited a majority of their remaining executive team members internally – that is, from the original organizations involved in the merger. The reasons for this continuity were in some cases related to financial constraints and shortages of some type of managers and, in other cases, to the desire to preserve expertise within the organization. A predominance of people with primary care experience (i.e., from CLSCs) is observed for the two HSSCs that do not include a hospital (HSSC1 and HSSC2). It is clear that in this context, the community health mission predominates over the long-term care mission in the constitution of the executive team. When the HSSC includes a hospital in its structure (HSSC3 and HSSC4), the hospital mission is well represented in the executive team, especially for key positions regarding the organization of clinical production.

Thus it appears that the composition of the executive team reflects key and powerful missions involved in the HSSC and sends clear signals in favour of continuity and the preservation of the respective identities. At first sight then, the new structures seem designed to ensure stability rather than to promote novel sense-making. While the CEOs played an important role in shaping the evolution of the newly created organizations, we observed that three of the four CEOs (all except HSSC3) chose to work mainly in continuity and to organize a working structure before attempting to bring about major change. It is also worth noting that the CEO that placed most initial emphasis on sense-making initiatives prior to investment in organizing encountered the most difficulties.

Naming “sense-makers-in-chief”

We pointed out previously that the HSSCs face three main challenges: 1) creating a new unified organization based on the integration of various missions; 2) developing a new approach to deliver care and services through

Table 5. *Sense-makers-in-Chief*

	<i>Region 1</i>	<i>Region 2</i>
<i>Without hospital</i>	<p><i>HSSC1: Grassroots sense-making</i> <i>Director of quality</i></p> <p>“All my assignments have a horizontal impact on the organization, so this impacts on every activity in the organization. I care about quality of services, quality of professional practices, about the performance of the organization.”</p>	<p><i>HSSC2: Grassroots sense-making</i> <i>Director of clinical programs</i></p> <p>“He is another big piece since he has a clear vision of the clinical project . . . and he had already developed significant links with stakeholders of all shapes and sizes through previous work.”</p>
<i>With hospital</i>	<p><i>HSSC4: Managed sense-making</i> <i>Director of program development</i></p> <p>“Perhaps the time has come for him to do a tour to inform people about the change – about the meaning of the change. People need to understand better. We have to do more . . . give concrete examples.”</p>	<p><i>HSSC3: Disjointed sense-making</i> <i>Special adviser</i></p> <p>“I see problems, I see major mistakes. And obviously, all the hospital culture that is very refractory to strategies that are not hospital-focused has reacted negatively.”</p>

local health networks; and 3) implementing a population-based approach. The implementation of these changes is associated with a need for intense sense-making activities. Although the management team as a whole tended to reflect continuity, and while three out of four CEOs tended to reflect this initially in their own activities, each HSSC “organized” to ensure that some form of sense-making would be a priority for at least one individual in the team. Specifically, one way all of our sample organizations dealt with the simultaneous ambiguity surrounding the organization’s strategy and structure was to develop an initial structure that included positions specifically dedicated to “sense-making” – that is, concerned with defining the organization’s strategic direction. We have labelled these positions “sense-makers-in-chief,” although, of course, the true titles were different and indeed quite varied. Our analysis suggests that exactly who was assigned to play this role and how they chose to operationalize it could have an impact on the nature of sense-making within the management team and the extent to which sense-making diffused both within the organization and outside it. Table 5 provides illustrative quotations concerning these roles.

HSSC1: Grassroots sense-making

In HSSC1, a person who plays a very active role in sense-making is the “director of quality.” This person has extensive experience in one of the organizations and solid operational knowledge of all the missions (primary care, long-term care, hospital, etc.). His mandate gives him the levers to be

closely involved in all strategic and operational projects, and he sits on numerous committees. This individual is also involved in all forums, where partners are invited to discuss issues with the organization's management, and he designs the content and processes of these activities. He contributes actively to sense-making and sense-giving by maintaining tight links with the CEO, with whom he shares common discourse, and by being involved in all activities where the discourse may be repeated and discussed with managers and professionals.

HSSC2: Grassroots sense-making

In HSSC2, a relatively small organization, a key position is the post of "director of clinical programs." This is occupied by a person who has long experience in a similar role in the primary-care organization that is part of the merger. He received the mandate of planning the development of clinical programs in the organization and with external partners. He uses his detailed knowledge of the environment to frame a perspective for the development of the clinical programs. He also participates in external training programs to become an expert in evidence-based decision-making. Thus, in HSSC2, the responsibilities for sense-making activities are mainly delegated to the director of clinical programs, who through this position and experience can connect easily with organizational members internally and with partners externally.

HSSC3: Disjointed sense-making

The evolution of HSSC3 reveals a complex pattern of sense-making roles and activities. Initially, the founding CEO hired, as mentioned earlier, a "special adviser" in charge of creating the new strategy. The concentration of sense-making activities within this key position did not promote acceptance of the new strategy across the organization. The adviser proposed acquiring a university affiliation and developed an ambitious project to get the population more involved and responsible for their health. He worked closely with the CEO but in a very affirmative and distant way from key constituents. He left in 2006. Meanwhile, to compensate for this conceptual style of management, the CEO recruited an associate director of clinical programs known for his deep knowledge of hospital and program management. After the departure of the CEO in spring 2006, this person became interim CEO and played a critical role in subsequent sense-making, this time more connected to operations.

HSSC4: Managed sense-making

The CEO of HSSC4 delegated key sense-making activities to the "director of program development," an integrative position with the mandate of conceiving and planning new clinical plans while the rest of the organization

was consolidating the new structure. This person was also active in developing linkages with partners. The first version of the clinical plan was developed internally and then submitted to a broad consultation. In contrast to the "sense-makers-in-chief" from HSSC1 and HSSC2, this individual was initially less centrally involved in mobilizing groups of employees and partners. The deputy CEO also played a crucial role in this process by working with the managers in charge of specific clinical programs to ensure that a broad vision was developed and shared. Thus, two people have played critical roles in sense-making activities, with one (the director of program development) playing a predominant conceptual role.

In summary, in the context of strategic change and ambiguity, the organizations devolved to key positions and people a central role in sense-making activities. While the CEOs are busy keeping in touch with external networks and managing the interface with regional health authorities and the Ministry of Health, key structural positions have been created with a mandate for defining a new strategy for the emerging organizations and, in particular, to explore the implications of the population-based approach. We labelled this key staff (not line) position "sense-maker-in-chief" to refer to his or her predominant role in shaping strategic change, at least conceptually. While the creation of such positions has its advantages, there is a need to ensure that sense-making activities are at some point connected with key organizational processes to move to a stage of implementation. Considerable energy has been placed on this in HSSC1, but the task is very demanding. The small size of HSSC2 may represent a favourable context to ensure that sense-making will be connected along the way with organizing. In HSSC3, we observed a period of detachment, followed by an attempt to re-connect sense-making with organizing. In HSSC4, the connection between the sense-maker-in-chief and the deputy CEO (a line role) is crucial to ensure that emerging plans are connected to the rest of the organization.

Seeking sense from external agencies and gurus

Two main external inputs into sense-making have been identified: the role of external agencies (regional health authorities, Ministry of Health) and the role of experts and gurus (university experts, consultants). Very often these two sources of sense-making overlap, where consultants or university professors participate in public events (e.g., colloquia) organized by the Ministry of Health or regional agencies.

External agencies with authority over the HSSCs play a critical role in shaping sense-making. For example, the Ministry of Health organized in January 2005 a full-day colloquium for the executive teams of all the HSSCs of the province to present their perspective on the current reform. The min-

istry also organized a series of forums with CEOs of HSSCs around key management issues under the responsibility of a very well-known consultant who has also intervened internally within the HSSCs (see below) on many occasions.

The HSSCs receive their resources and mandates from regional agencies, who in both of the regions studied took a particularly active role in orienting the HSSCs' organizing and sense-making activities. In turn, the regional agencies themselves were under pressure from central government. For example, the delivery of so-called "clinical plans" from each HSSC was a government-defined requirement. In addition, each HSSC had to sign a performance contract with the regional agency that included a long list of performance indicators that certainly affected priorities in the HSSCs.

The regional agencies also attempted to play a "helping" role by providing resources for the HSSCs to assist them in their sense-making activities. For example, Region A developed a user-friendly quantitative database tool enabling the HSSCs to undertake in-depth analyses of their territories. Region B developed a "knowledge platform" that included updated literature as well as decision tools to assist the HSSCs in selecting their action targets for a range of different service lines. Both regions organized regular meetings among the CEOs and other managers at different levels to discuss shared concerns. They also invited consultants and organized training activities (including, in the case of Region A, visits to other countries). Professional associations such as the Association of Health Care Organizations also intervened in shaping sense-making by publishing a guide for the development of clinical plans and organizing annual colloquia to discuss issues associated with the changes.

These activities clearly constrained, structured and nourished sense-making in the HSSCs. Managers from all the HSSCs welcomed assistance, but chafed at the numerous demands that seemed to be placed on them. HSSC1 was very active in taking advantage of all opportunities offered by the environment (e.g., creating a medical clinic). This organization wanted to be seen as a leader in the implementation of change. HSSC2 interacted a good deal with the regional agency around the fixing of budgetary issues and around authorization for some developments. It also got involved in projects in primary care that became significant in the regional agenda. HSSC3 was initially very active with the regional agency participating in panels and public events with members of the executive team of the regional agency. However, with time, it was forced to re-orient towards a much more internal focus, where the discourse about the conceptual dimensions of the reform seemed less present. HSSC4 focused strongly on the consolidation of its structure (i.e., organizing) but was attentive to key initiatives of regional agencies and participated actively in the project of creating a new model for private medical clinics.

In addition, all the HSSCs also relied on external consultants or what might be termed “sense-gurus” to help them understand the new organizational role as well as to cope with its managerial challenges. The creation of the HSSCs gave rise to a huge demand for expertise, filled partly by consulting firms, partly by training firms, and partly by academics. Consultants were drawn in to assist in a wide variety of different ways. A very well-known consultant with some international exposure had been mobilized within both regions and all HSSCs to discuss models of organizing care such as integrated delivery system, program design and strategies for aligning physicians with the objectives and functioning of the system. Consultants on change management have also been involved in all the HSSCs we studied.

Overall, each HSSC is involved in sense-making activities that transcend its own organizational boundaries. Some of this involvement is more coercive in the sense that HSSCs have to participate in regional agency and Ministry of Health activities. The roles of external agencies, experts and consultants in regard to sense-making can be qualified as one of creating a common discourse around the population health approach and of helping HSSCs in some key areas for sense-making and organizing such as in the integration of various missions and the linkages between HSSCs and private medical clinics.

In the next section, we draw all our observations together, summarize the dominant patterns observed, and relate them to the previous literature on sense-making and organizing.

Discussion: the reciprocal dynamics of sense-making and organizing under ambiguity

We initially asked two questions that are related to the management of strategic change in a context of ambiguity. How do organizations and actors react to and deal with major destabilization and ambiguity? And how do they use sense-making and organizing activities to balance continuity and strategic change within major restructuring operations? The problem we explore in this article is similar to the one explored by J. Balogun and G. Johnson in their study of the process of schemata transformation by middle managers in a context of strategic change in a large company. In their study, the authors note that middle managers “have the challenge of grasping a change they did not design and negotiating the details with others equally removed from the strategic decision-making” (2004: 543). While our study focuses more on top management teams and professionals in leadership situations, the HSSCs also had to make sense of and implement a mandated change designed by external authorities. This change implies three specific challenges for HSSCs that are the sources of major cognitive and structural

disorder: 1) to merge previously distinct health-care organizations into a single and functional entity; 2) to develop local networks with partners in their environment (medical clinics, community organizations, etc.); and 3) to adopt and implement an innovative perspective for intervention, namely the population health approach.

Despite a propensity to invest more in organizing, there is a need to rapidly catch up with rich sense-making and sense-giving activities to infuse these new emerging structures with new meanings

However, the specific content of these broad change issues and the process by which a satisfactory implementation will be achieved are largely unspecified. HSSCs have to invest locally in sense-making and organizing activities to give meaning to and implement this strategic change. Recently, S. Davenport and S. Leitch suggested that ambiguity can be an asset to support the involvement of stakeholders in a change process and to stimulate progression of change. They “contend that strategic ambiguity can empower stakeholders by opening space for the co-creation of meaning within organizational discourse” (2005: 1603). A similar point has been made by Karl Weick (1995) in relation to the role of ambiguity in stimulating involvement and improvisation among concerned actors and organizations. Weick (1995) and Vlaar and his colleagues (2006) also suggested that an appropriate level of formalization may support organizational members in their attempt to deal with situations of ambiguity. This study looks at the process by which organizations go about meeting the double challenge of re-thinking their strategic orientation (sense-making) and adapting their structures (organizing) in a context of ambiguity. We will discuss three lessons that we learned from this study for the management of major strategic change in a context of high ambiguity.

Balancing investments in organizing and investments in sense-making

If we consider the initiation of the change process, a first key question is where to invest first. The dilemma can be summarized as follows. In abstract terms, investments in sense-making before organizing can be conducive to more innovative ideas. The chances that almost immediate restructuring will reproduce deep patterns within the newly form organization seems rather high. However, organizational members need to identify with their new work context and to find a way to relate to novel ideas. Structure can become a privileged vector through which actors will be able to position themselves and to progressively discover the roles they can adopt in the transformation

Table 6. *Balancing Investments in Sense-making and Organizing*

	<i>Region 1</i>	<i>Region 2</i>
<i>Without hospital</i>	<p><i>HSSC1: Sense-making and organizing in synchrony</i> <i>"It's a changing document because our organizational plan and our clinical plan will evolve as we develop So we did it as best we could based on an analysis of the environment, and we created the beginnings of a business plan that will evolve continuously."</i></p>	<p><i>HSSC2: Initial focus on sense-making but forced to consolidate organizing first</i> <i>"We had created a temporary organizational chart thinking that when the clinical plan had been defined, it would be easier to see the kind of structure that we needed [But] the temporary organization creates instability and it is not ideal in a period of change."</i></p>
<i>With hospital</i>	<p><i>HSSC4: Organizing before sense-making</i> <i>"Just putting the structure in place – that takes two years There's so much to do that all our energies are taken up with that and it has to be done well We're happy as it gives us a solid base to move on to other things. We've already started doing other things, by the way."</i></p>	<p><i>HSSC3: Initial focus on sense-making but forced to consolidate organizing first</i> <i>"I had a strategy when I arrived that we would first define ourselves on the clinical side And then the organizational chart would be defined once we had identified our clinical priorities The problem with that was people were too insecure So in the last few weeks, I reversed the order of priorities."</i></p>

process. Actors at various levels of the organization can thus engage in practices that will shape strategic change (Rouleau 2005).

If sense-making is too detached from dominant interpretive schemes and power structures, sense-giving activities can be blocked and the transformative agenda may not reach the operating core

In the specific context of this case, the question is whether the HSSCs should first design their strategy and then develop a structure to fit that or settle first on a structure and rely on the new structure to generate a strategy. In this study, based on the data presented earlier, we observed different attempted sequences of sense-making and organizing activities reflected in Table 6. One organization (HSSC4) deliberately focused initially on the development of a functioning organizational structure, minimizing cognitive and human costs, and then progressively paying more attention to sense-making activities and to more innovative programs and actions.

Two organizations (HSSC2 and HSSC3) attempted to focus initially more on sense-making activities and to delay re-organizing their structure until clear strategic directions were adopted. In the case of HSSC2, pressures increased to formalize the organizational design due to insecurity among organizational members. In another case (HSSC3), developing tensions between proposed strategic innovations and one key structural component (the hospital) pushed for a refocusing of activities internally around efficiency gains in the existing structure. In other words, both of these organizations found themselves forced to switch their focus from sense-making to organizing. In HSSC1, organizing and sense-making seemed to work more in synchrony with synergistic investments on both sides of the equation.

Overall, these observations tend to emphasize the central role of structure in reducing ambiguity. Those organizations that appeared most preoccupied with allowing sense-making to take precedence over organizing found themselves drawn, under the pressures created by ongoing ambiguity of roles and positions, into using structure to stabilize their organizations and, perhaps in the process, limiting the potential for strategic change. Early establishment of structure favours a logic of continuity and marginal adjustments of pre-existing practices, at least in the short term. On the other hand, all these organizations re-modelled their structures along program lines, generating parallel lines of authority in some cases. Re-organizing thus initially produced greater security but also sent a message of change.

While the early emphasis on organizing seemed almost unavoidable to stabilize the organization and set direction, initial structures can be hard to adjust significantly once established. However, demands from external authorities may simultaneously represent constraints and disruptions but also offer potential for strategic change. They can counter-balance internal pressures for continuity in a situation where the working out of a new structure in a majority of cases channels the agency of executive team members towards more incremental change. Despite a propensity to invest more in organizing, there is a need to rapidly catch up with rich sense-making and sense-giving activities to infuse these new emerging structures with new meanings.

Generating capacities for sense-making and sense-giving in the midst of reorganizing

We initially suggested that sense-making activities are critical to achieving change and innovation in a context of high ambiguity. In our case, the HSSCs chose to formalize the function of sense-making by designating a position that we labelled “sense-maker-in-chief” within their structure. The identification of a person in charge of shaping the sense of the current

transformation appears to be a key organizing decision at the beginning of the process, ensuring that the conceptual dimension of the reform was not entirely neglected while the organizational structure is in flux. As we observed, the profile of these people seems to influence the nature of the sense that was progressively constructed and the circulation of this body of meanings across organizational levels and units. In two cases (HSSC1 and HSSC2), the sense-makers-in-chief had an in-depth knowledge and experience of the organization and could foster a sense of continuity by connecting the ambitions of the current transformation to historical antecedents and experiences. They seemed to play important roles in both sense-making and sense-giving activities.

Our observations suggest, as proposed by Weick (1995) and Vlaar and his colleagues (2006) that formalization can play a positive role in helping organizations dealing with ambiguous reality. However, relatively little attention has been paid to the formalization of a role such as the one we have described as “sense-maker-in-chief.” The formal attribution of a role may be an important enabling condition for leaders or key actors to engage in sense-making and sense-giving activities (Maitlis and Lawrence 2007).

Time will also play a crucial role. Changes in the operations of these professionally based organizations cannot be instantaneous in situations where extensive sense-making, sense-giving and reorganizing activities are needed

However, certain conditions need to be met to achieve the potential benefits of formalization. Sense-makers-in-chief must develop processes that increase the connection between sense-making and the history and daily life of the organization. A sense-maker may be very innovative and ambitious in his or her proposals but fail to connect with the rest of the organization (as in the case of HSSC3). Meanings need to be framed in a way that is anchored in organizational experiences and constraints, and processes need to be developed that will make possible the appropriation and adaptation of strategic change by the operating core of the organization.

Indeed, ultimately sense-making needs to be conceived of as a collective exercise (Denis, Lamothe, and Langley 2001), where sense-makers-in-chief develop cooperation with other organizational members to ensure the circulation of new meanings, the generation of opportunities for sense-making and sense-giving, and the legitimacy of leaders in this process (Maitlis and Lawrence 2007). In such a context, sense-giving appears as a necessary complement to sense-making activities. Sense-makers-in-chief can rely on various consultations, committees and working groups to stimulate com-

mitment and understanding of the nature of the change. Because of the need to translate grand reformative schemata into operational initiatives, we expect that the more sense-makers and sense-givers try to penetrate the clinical sphere, the more professionals in charge of operations will have to reconstruct meanings and re-design programs of action. At time of writing, we are seeing that some of the structural changes at the top are generating their own waves of ambiguity at lower levels, as roles are being re-negotiated on the ground.

Where organizations face high levels of internal tensions or complexity, the tendency is to focus inward and to assimilate sense-making activities into core missions and the existing power structure. While sense-making activities can be formalized and delegated to a specific person, this cannot be sustained in the medium term by ignoring dominant interpretive schemes (e.g., the hospital's perspective in HSSC3) (Greenwood and Hinings 1996). If sense-making is too detached from dominant interpretive schemes and power structures, sense-giving activities can be blocked and the transformative agenda may not reach the operating core. The institutional and power bases of sense-making activities need to be taken into account. Generated meanings have differential legitimacy and represent varying potential for action (Weick, Sutcliffe, and Obstfeld 2005).

Maintaining linkages with external demands and the environment

We also observed that in the highly institutionalized environment of the public sector and in a context of resource dependency, external authorities play critical roles in shaping transformation. By imposing priorities and by using contracts and other forms of incentives to ensure the involvement of organizations in various regional or national priorities and experiments, external authorities create convergence among targeted organizations. Organizations in this context have to work to construct their own strategic space. They do so by using external signals to gain legitimacy and by getting involved where they can in innovative projects. They also try to negotiate the pace by which desired changes will be implemented and to search for local adaptation. The connection with external environments enriches sense-making activities and may provide additional incentives for organizations engaged in the restructuring process.

Pressures to implement certain types of changes for tight deadlines also stimulate the mobilization of external experts and gurus. These experts appear early in the process and have a role in helping the organizations to make sense of mandated change, reducing ambiguity. They also intervene along the way to support the organization in translating pressures from higher authorities into manageable initiatives locally. By playing this role, they

become key actors in sense-giving processes within the organization, and also in transmitting learning and common conceptions across organizations within the field.

Finally, rich and complex processes such as those we observed do not necessarily produce large-scale changes in program delivery or professional practices in the short term. It is too early to assess the potential for significant change. Processes were put in place in all organizations we studied, and new structural designs were adopted in an attempt to re-orient the production of care and services. Explicit efforts to construct new bodies of meanings and to diffuse them across organizational levels and units were also realized. Among these organizing and sense-making activities, we observed four different patterns. These can be summarized by the following labels that characterize each of our four cases: "synchronized evolution," characterized by concurrent evolution of sense-making and organizing (HSSC1); "embedded externalization," where strategizing and organizing focused mainly on relations with key stakeholders and their expectations (HSSC2); "reactive conservatism" (HSSC3), where innovative strategizing clashed with in-depth organizing forces; and "constructive consolidation," characterized by the search for an evolving fit between organizing principles and sense-making (HSSC4). It is difficult to anticipate the next stage in the evolution of these organizations. They have all put in place organizational designs and invested in sense-making activities to support the appropriation of the reform. Three of our organizations explicitly built on their historical heritage and worked in continuity with their past, while the one that attempted to function differently was forced back into a more conservative mode.

Nevertheless, continuity and change may not necessarily work in contradiction or opposition in the process of implementing reforms. The abilities of the top management team in shaping meaning, in surfing on external pressures and opportunities, in identifying effective translators within their own organization, and in setting up opportunities to think about and experiment with mandated change can make a difference. Time will also play a crucial role. Changes in the operations of these professionally based organizations cannot be instantaneous in situations where extensive sense-making, sense-giving and reorganizing activities are needed.

Conclusions

What have we learned from this study of the management of strategic change in complex public-sector organizations? The study deals with professional or knowledge-based organizations, where actors in the operating core have expertise and exert influence through complex networks that reach beyond formal organizational boundaries. Such contexts are predominant in the contemporary economy, and the chances that ambitious restructurings will also be associated with high ambiguity is rather high

(Lowenthal and Revang 1998). In such contexts, ambiguity will never be fully resolved at the top, and consequently actors in charge of key operations have to find in their immediate work environment resources and opportunities to accommodate ambiguity and to engage in transformative practices. In addition, the equilibrium between sense-making and organizing activities cannot be achieved simply within the top management team. Managers, professionals and organizational members of the operating core play a key role in the synchronization of new organizational designs, such as program management with emerging visions, and perspectives such as the more population health focus that should guide production of care and services in the current reform. Proponents of reform in large public delivery systems need to recognize and be prepared for the complex and cascading sense-making and organizing challenges that are unleashed by major transformations like these.

Note

1 In some cases, the gender of protagonists has been disguised to preserve confidentiality.

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