

Scientific Contribution

Organizing the public health-clinical health interface: Theoretical bases

Michèle St-Pierre*, Daniel Reinharz¹ and Jacques-Bernard Gauthier²

*Faculté des sciences de l'administration, Département de management, Pavillon Palasis-Prince, Université Laval, Québec, Canada G1K 7P4 (*author for correspondence: Phone: (418)-6562131, 4804; Fax: (418)-6562624; E-mail: Michele.St-Pierre@mng.ulaval.ca); ¹Département de médecine sociale et préventive, Université Laval et Direction régionale de la santé publique de Québec; ²Département des sciences administratives, Université du Québec en Outaouais*

Abstract. This article addresses the issue of the interface between public health and clinical health within the context of the search for networking approaches geared to a more integrated delivery of health services. The articulation of an operative interface is complicated by the fact that the definition of networking modalities involves complex intra- and interdisciplinary and intra- and interorganizational systems across which a new transversal dynamics of intervention practices and exchanges between service structures must be established. A better understanding of the situation is reached by shedding light on the rationale underlying the organizational methods that form the bases of the interface between these two sectors of activity. The Quebec experience demonstrates that neither the structural-functionalist approach, which emphasizes remodelling establishment structures and functions as determinants of integration, nor the structural-constructivist approach, which prioritizes distinct fields of practice in public health and clinical health, adequately serves the purpose of networking and integration. Consequently, a theoretical reframing is imperative. In this regard, structuration theory, which fosters the simultaneous study of methods of inter-structure coordination and inter-actor cooperation, paves the way for a better understanding of the situation and, in turn, to the emergence of new integration possibilities.

Key words: health care network, organizational network, organizational theory, public health, systems interface

Organizing the public health–clinical health interface: theoretical bases

Like many of its counterparts in the Western World, the Canadian healthcare system is presently undergoing major changes. More and more, authorities are turning towards networking approaches in which the various healthcare services are to be provided in a more integrative manner in order to better meet the growing needs of patients and the general public. Historically, however, clinical health and public health services have for the most part been delivered by separate organizational components that have evolved rather autonomously. Indeed, clinical health has focused on service users and centered its activities on curative and rehabilitational dimensions, while public health has directed its attention at the population as a whole and its subgroups, particularly the more vulnerable segments, in the interest of disease prevention and health promotion and protection.

Despite the fact that their respective services have essentially evolved along parallel tracks, public health and clinical health have a mutual interest in collaborating with one another. Evidence of this can be found, for example, in the new *modus operandi* in medicine, which places emphasis on the determinants of health and seeks more and more to turn clinicians, particularly family physicians, into the hub for the full range of services required by patients, from prevention to curative care and rehabilitation. Similarly, clinical health services provide public health with a terrain of action that lends itself quite naturally to the development and implementation of coordinated prevention and promotion services, as well as screening efforts for social problems (Hulscher et al., 2004).

Many experts (Elster and Callan, 2002; Shi et al., 2002) believe that, when successful, this collaboration between clinical and public health activities can render the healthcare system more efficient and effective, while fostering greater social justice by diminishing epidemiological disparities.

This is why the interface between public health services and clinical health services has in recent years become a major concern in healthcare reform. However, despite the relevance of emphasizing such collaboration and despite the success obtained so far in this respect, the fact remains that the articulation of an actual interface is still no easy task. This is because the definition of the organizational modalities that tie the delivery of care more closely to public health involves complex intra- and interdisciplinary, intra- and interorganizational, and intra- and intersectoral systems across which a new transversal dynamics must be established respecting intervention practices and exchanges between service structures.

Seizing this dynamics requires, however, going beyond normative approaches intended to implement new organizational models and evaluate results without first putting into perspective the bases on which actors, disciplines and organizational structures interact. Within this context, it seemed to us that revisiting the modes of organization and the practices specific to public health and clinical health in the light of their underlying theoretical bases would help to re-examine the grounds on which these two sectors of activity are actually interlaced. It might then be possible to reconsider the ways of doing things and, thereafter, open new avenues of reflection in the interest of meeting the imperatives of liaising more adequately. This is of utmost importance when organizations are interconnected in a network.

To this end, we will first consider the notions of public health and clinical health from the point of view of the course and development of illness in order to see how the two notions are components of a single whole. Then, we will scrutinize attempts at interlinking the two sectors, in the aim of determining the degree to which they are complementary and identifying the organizational pitfalls of the past. Second, we will consider the ways of thinking underlying the organization of public health and of clinical health in order to understand why there continues to exist such definite boundaries around a fair number of activities. Third and last, we will examine new network organizational modalities and their requirements with a view to determining the utility of developing a theoretical perspective to better account for the dynamics of integration now being considered.

Public health and clinical health: two separate yet inseparable visions

Public health and clinical health are two notions that, although often opposed, are in actual fact

inextricably linked. Public health looks at health in the broad sense of the term, that is, as man's capacity to control his physical and social environment (Adam and Herzlich, 1994, p. 7), which necessarily means taking into account the multiple determinants of health for the population as a whole and for the subpopulations at risk in particular. In short, it constitutes a collective approach to health. Clinical health, for its part, focuses on the biological aspects of health and the curative model of disease (Grémy, 1997), which brings it essentially to look after consumers of care and services. In short, it constitutes an individual approach to health. It is not surprising, then, that the two sectors developed concomitantly and along parallel lines over time.

Public health and clinical health over the years

However, both the story of the major epidemics of infectious diseases past (smallpox, measles) and present (AIDS, SARS) and the current proliferation of such complaints as cancer and chronic diseases lead us more and more to conclude that the boundaries between the collective vision and the individual vision are not so clear-cut after all.

At the time of the epidemics of yesteryear, as whole communities were affected, the measures taken to combat contagion were primarily of a collective nature. Health problems were exacerbated above all by abject social conditions, hunger, the cold and poverty. Later, as the administration of cities improved and the economy surged with industrialization, hygiene became a public responsibility and the very first large-scale sanitary measures were developed. The new socio-economic conditions combined with the efforts deployed to protect against contagion made it possible then to stave off epidemics and, by the same token, allay major collective fears.

Meanwhile, clinical medicine developed with the discovery of the etiology of many diseases and, thereafter, with the development of rational diagnostic techniques that, in turn, made the production of more effective treatments possible. Numerous technical advances, such as X-rays, the introduction of antibiotics and the advent of corticosteroids, subsequently placed individual clinical intervention front and center. This situation, combined from the end of the 19th century to the beginning of the 20th century with the desire to curb numerous infectious diseases such as tuberculosis (even though they no longer constituted a public threat to the same degree as did the old epidemics), also contributed to change how we react to collective diseases. Hence-

forth, laws and institutions based on the prevention of disease would make public hygiene concerns cohabit with clinical considerations under development at the time.

Then, over the course of the 20th century, the notion of “maladie-services médicaux-thérapeutique” (Foucault, 1979), that is, the idea of countering disease with medico-therapeutic services, gradually gained the upper hand on public health. The organization of curative care became the focal point around which developed an increasingly sophisticated hospital infrastructure. At the same time, various specialized professional corps began to organize: general practitioners, medical specialists, and nurses.

But just when it was thought that clinical medicine had brought to heel the diseases of long ago and the terror of contagion that they struck, new fears emerged on a large scale. With the new communicable diseases, such as AIDS or more recently SARS, and the prevalence of chronic diseases, whose etiology includes factors related to lifestyle, disease has once again become a collective matter, but without losing any of its individual dimension. In other words, disease has come to belong as much to the public domain as to the private space that is the doctor-patient-relationship (Adam and Herzlich, 1994).

However, although the fight against infectious diseases has over the course of history led public health and clinical health to cohabit in a space where it has been possible for surveillance, control and treatment mechanisms to be relatively complementary, the same cannot be said for chronic diseases. Because the very nature of the latter requires going beyond the mere mobilization of resources when acute events occur, the cohabitation between public health and clinical health in this case necessitates a tight intertwining of current practices. In this regard, it has been shown that practices geared to prevention and promotion of a healthy lifestyle have a large influence on the course of such diseases as diabetes, cardiovascular complaints, and cancer (Hawk and Lippman, 2000).

This epidemiological shift, which came about within the declining economic context of the late 20th century, has placed the collective and individual visions face to face and contributed to redefine the concept of health. The aim was to make the leap from the treatment of disease to a global conception of health erected on the notions of individual vitality and well-being defined within a given environment (Pampalon, 1994). Consequently, health today is conceived as the dynamic balance between the individual and his life setting.

Because health services now have a twofold purpose, that is, curative and preventive, and cover as much hygiene, diet, and physical exercise as screening for diseases, public health and clinical health institutions are being pushed to reorganize in order to better integrate one another's concerns.

Difficulties of organizational integration

Interest in ensuring a more continuous interface between public health and clinical health has translated into the adoption of various organizational strategies apt to better harmonize the collective and individual visions of health. Whether the goal is, on the one hand, to improve the state of health of the population and reduce differences in health status between its constituent subgroups or, on the other, to increase the efficacy of clinical treatments and improve the health of individuals, all these objectives must, according to the Collège des médecins du Québec (1998), be pursued more and more in a collaborative manner by the various health professionals in order to bring individual and collective concerns and interventions closer together.

However, not all the efforts deployed to articulate a more effective interconnection have produced intended results. Whether it be for lack of time to seek and recognize the existence of complementarities, or for lack of will to adapt practice to the requirements of the interface or, more simply, out of ignorance or for lack of information on what each sector can contribute to the other to help it achieve its own objectives in terms of the health and well-being of the target population, the interconnection has in actual fact often proved to be of little functionality (Richardson et al., 2002). This general lack of familiarity between the sectors has even had repercussions on the Quebec Public Health Act (Quebec National Assembly, 2001) and, by extension, on the recent Quebec Public Health Program (Massé and Gilbert, 2003), which, although it constitutes a rare example of political will to sanction the central role of public health as a tool for maintaining and improving the health of the population, gives no indication on how to bring about or strengthen the interface between the activities of public health and those of clinical health. It is not surprising to observe, then, that patients are not cared for in an optimal fashion; this is evidenced by the high levels of avoidable morbidity for numerous pathologies, including obesity (Visscher and Seidell, 2001) and mental disorders (van Hout et al., 2000). The dysfunction in the clinical health-public health interface has also led to unacceptable inter-territorial inequali-

ties that translate, in epidemiological terms, into differential prevalence rates for avoidable diseases (Sutton, 2002).

Why does a certain separation between the sectors persist in spite of the shared acknowledgement of the benefits to be had from interlocking the two and, especially, in spite of the efforts deployed to date in this regard? It is by considering the manner in which health services have been organized over time and the theoretical bases underpinning this organization that this question can be answered.

Theoretical bases of the organization of public health and clinical health

Although the history of disease ultimately demonstrates that public health and clinical health are connected by a relationship of complementarity, the organization of healthcare services has more often been centered on the differences between the two sectors than on the ties. As the exacerbation of these differences often poses a barrier to the closer cooperation that the new network modes of organization aim to achieve, it seemed important to examine the grounds of this situation. Consequently, we will scrutinize the rationale underlying the organization of public health and clinical health in order to highlight how two sectors defined by specific institutions and practices have been and can conceivably be intertwined.

Public health and clinical health as functions

Over the course of the evolution of disease management in the 20th century, public health and clinical health have gradually operated under distinct functions. On the one hand, public health has been attributed the functions of epidemiology, control of the environment and specific settings, and health protection and promotion; on the other hand, clinical health has essentially focused on the function referred to by Foucault (1979) as “maladie-services médicaux-thérapeutique” (disease-medico-therapeutic-services). This functional division arose from a rationale that gave precedence to a medico-technical model centered on the utilization of healthcare services (Evans, 1984), thereby consecrating the implementation of a structure with two faces: one dedicated to curative care and one to what falls under public/community health.

Although Quebec has since the early 1970s distinguished itself from the other Canadian provinces with respect to the organization of public

health by laying particular emphasis on a global and integrated approach, the fact remains that the principal focus of concern has been more the implementation of organizational structures than integration per se. This is because the structures were expected to bring about the desired integration through the distribution of functions to be performed. It is, by the way, precisely on this basis that the era of reorganization and reform was undertaken in most of the industrialized countries.

With the social affairs reform of 1970, the Quebec healthcare system was gradually reconfigured to integrate the healthcare sector and the social services sector into a single network. The objective was to provide a full line of continuous and complementary services (including prevention) within the framework of a structural decentralization. In this context, most of the public health functions were assigned to new bodies, namely, community health departments (DSCs). The services to be provided by these within existing hospital centers comprised surveillance of the health status of the population, control of epidemics, evaluation of the results of interventions, and development of prevention programs. These new functions were supposed to foster the concretization of a better interface between public health and clinical health despite the fact that public health was not valorized as a discipline in medical settings (Bergeron and Gagnon, 2003). As for the function of direct delivery of preventive services, this was eventually attributed to the new local community services centers (CLSCs), after being unevenly developed and inadequately supported across the Quebec territory.

In 1990, another structural reorganization was undertaken in order to re-establish the verticality of the public health function within the system (Turgeon and Anctil, 1994). Regional public health directorates were formed within the new regional health boards (to replace the old regional health and social services councils) for the purpose of managing each of the regional public health programs. Their functions then revolved around public health protection and awareness and came to be perceived as specialized services intended to support regional health and social services activities.

In 1998, public health functions were once again updated with, among other things, the creation of a new provincial structure – the Institut national de santé publique (Quebec National Public Health Institute) – for the purpose of articulating more coherent and better coordinated actions by making better use of the expertise held in the large urban centers in particular.

By and large, this string of reforms consisted in creating or modifying organizational authorities and in redefining their respective functions according to rational models that made it possible to consider the healthcare system as a vast integrated whole pursuing major health objectives and fulfilling important administrative functions (Bergeron and Gagnon, 1994). The organizational interfaces seemed each time to have to emerge quite naturally from the new structural complex created. This way of looking at things rested on a structural-functionalist approach supported, among others, by the theory of action developed by Parsons (1937) and Parsons and Shils (2001), one of the key theoreticians of contemporary sociology, who has had a major influence on this entire current of thought.

It is on the basis of the three properties of what Parsons referred to as a system of action that we can understand what our ways of doing things rest on: (1) structure, (2) function, and (3) process. (1) Applied to the universe of organizations, structures are the units of the social system that an organization constitutes; they are the institutionalized models that per se present a certain stability and that exercise control over the actions of individuals. In fact, structures are what normalize action or allow action to take shape through roles, formalized values and norms. It follows that structure is what makes the integration of public health and clinical health interveners possible. From this perspective, the interface issue can be formulated in terms of the definition and redefinition of structural interdependencies based on the collaborative obligations that are inevitably created. (2) Parsons also indicated that, for structures to hold up, activities must be shaped by orientations, goals and means apt to foster an adequate response both to the constraints and exigencies of the environment and to the internal integration or coordination of the structures' constituent parties. Functions are at the root of the division between public health and clinical health activities. This property asserts itself, in practice, through the articulation of different mandates that must complement one another in order to ensure the functioning of the system as a whole. Evidence of this lies, for example, in how program design and implementation activities were separated in Quebec in 1970: Design was the exclusive preserve of the DSCs, while implementation, which is by rule complementary to design, was left to the CLSCs. The same could be said when a certain specialization of public health activities was consecrated with the creation of regional public health boards in the 1990s. As we can see, the notion of function

is rather instrumental in that it presents complementarity as something that exists more or less outside of the individuals who actually give life to the structural links created. The notion of social system that emerges, then, is that of a living organism that must make it possible to bring actors to act in accordance with the desired whole. (3) Process, for its part, can be viewed as the rules that allow the system to evolve. This is why in healthcare great emphasis is placed on norms, policies and the various federal and provincial laws that serve as parameters for the structural dynamics underlying the modes of operating.

In sum, it is evident that the emphasis placed on structures and functions to produce the required interface between public health and clinical health has not yielded the desired results. Moreover, according to Deschênes, Brunet, Boudreau and Marcoux (cited in Gagnon and Bergeron, 1999), this emphasis failed even to ensure the accountability, integration and coordination of activities, not to mention collaboration among the professionals concerned. By limiting ourselves often to pointing out how actions betray structures or to looking for means to make the structures imposed on actors *work*, we leave little room for considering the changes that the actors themselves bring about in their current practices. Thus, the interconnections and collaboration that come about through action are not easily discernable, despite the desire often reiterated by governments to seek a better integration of public health and clinical health practices.

Public health and clinical health as fields

At a time when the incessant overhauling of organizational structures is being questioned more and more in a context marked increasingly by relations of negotiation and consultation, the structural-functionalist approach seems less and less adequate to allow us to meet the imperatives of integration. Consequently, in the aim of gaining a better perspective on the dynamics that are created between the different organizational structures and the multiform action of the actors, public health and clinical health are now viewed as fields, that is, as institutionalized social practices (Gagnon and Bergeron, 1999). This second source of theoretical inspiration has as its focal point the differences between public health and clinical health in terms of intervention practices. The former enacts, at least in the province of Quebec, interventions geared to protection, health education, mass screening, the promotion of service delivery to vulnerable popu-

lations, and program evaluation – all of which are centered on specific domains, such as infectious diseases, cardiovascular diseases, health and safety in the workplace, and environmental health. The field of clinical health, instead, is generally associated with curative care practices in a defined institutional context, which encompasses private medical offices, CLSCs and hospitals.

Introduced by Bourdieu (1980, 1987, 1994), this notion of fields has sought to be associated above all with the study of structural relations in society, that is, of relationships of power, rather than with the study of structures per se without consideration for the actors themselves. Under this framework, the focus is on what delineates each field by distinguishing what constitutes their borders, given that inequalities spring, according to Bourdieu, from the structural correspondence between the fields. The concerns that emerge have less to do with inter-field integration and more with the construction of a field – that is, of a set of objective relations between hierarchized positions – and its emancipation from other fields. Relations are viewed from the angle of the legitimation conferred by the attribution of resources (capital in the broad sense of the term) apt to position the field in the social whole. The central issue in this perspective is to clearly define a field's target of intervention, to integrate to it a delineated body of knowledge, and to award a place and sufficient resources to this field to ensure its lasting social legitimacy (Gagnon and Bergeron, 1999).

Hence, under the influence of this structural approach, as was the case for the structural-functional approach, public health is viewed through the fact that the health problems affecting the population, or a segment thereof, are managed according to a logic geared to the collective good, whereas clinical health concerns more specifically a more individual type of intervention. Meanwhile, professional practices are constructed, contrary to the first approach, according to disciplines, schools and methods in order to define the role and the place of the producers of knowledge. Relations among these producers are sorted out by laying particular emphasis on the dominating structures and authorities prevailing in the healthcare system. This is what is referred to as the structural-constructivist perspective.

In other words, this way of conceiving public health and clinical health stresses the distinction between interventions by depending on the structural forms constructed by the actors in each field to lay the foundations of a certain legitimation within the healthcare system. A shift in the ways of

doing things is operated relative to the previous approach: The focus has turned from the reorganization of structures as determinants of integration to the organization of institutionalized professional practices.

Within this context, issues regarding professional authority and influence often come to occupy a central place in organizational action, more so than do bilateral exchanges between sectors of activity. Evidence of this can be found in the emphasis placed on medical power in constituting the fields of clinical health and public health. Although physician-clinicians realize, according to the Collège des médecins du Québec (1998), that they have a responsibility towards collectivities and not only towards individuals, it is from the point of view of their demand that doctors be recognized as the champions and coordinators of patient care for both the patient and the community that they perceive the interface for the various practices of the sector as a whole. Construction of the field of public health also seems to be predicated on a necessary broadening of medical leadership, which seems to demand that physicians diversify their competencies through the acquisition of cross-sectional knowledge apt to allow them to integrate the epidemiological, social and environmental mandates under a single hat (McPherson, 2001). As we can see, the structural-constructivist approach leads us to observe that the structuring of the public health-clinical health interface is articulated around one group's capacity to take advantage of its relationship of power relative to other groups in order to obtain the necessary resources apt to ensure the legitimacy it desires.

Networking strategies used

Over the past few years, many of the networking strategies that have been attempted fall under this approach. The most evident of these, to be sure, was one that made use of financial incentives. These incentives have often been employed more to persuade actors to modify their behavior than to foster exchanges between groups. For example, they have been utilized to incite clinicians to vaccinate (Wee et al., 2001) or to consult public health interveners in the aim of improving the quality of the services that they already provide their clientele (Lynch, 1998). Similarly, emphasis has been placed also on transmitting public health information to clinicians regarding prevention/promotion activities to include in their practice and on getting clinicians to contribute more

towards the medical response to populational needs. As part of this strategy, clinicians are invited to participate in continuous training activities, the elaboration of practice guides, service utilization reviews and the promotion of a better utilization of information technologies (Cameron et al., 2000; Chaix-Couturier et al., 2000). Another networking strategy involved reconsidering the roles of clinicians to incite them to draw closer together, as desired. This is the strategy that prevailed in the case of support for the development of family medicine clinics (Wilkin et al., 2001) and of the redefinition of the division of responsibilities among the various healthcare professions (Freemantle, 2000). Lastly, another more radical strategic option consisted in implementing certain administrative control activities – prescription controls, medical referral controls – accompanied by eventual sanctions against practices non-compliant with the expected collaboration (Chaix-Couturier et al., 2000).

However, according to Davis et al. (Freemantle, 2000), these interventions do not seem to have produced the intended results in terms of bringing public health and clinical health closer together. The structural measures put forth were done so more to persuade and at times to force the field of clinical health to adopt the behaviors and concerns of the other field. As a result, the interface was marked by exchanges articulated around a struggle for capital (i.e., resources) aimed at ensuring a greater legitimation of the activities supported by a given field. In the end, the concept of interface became more a matter for the study of power relations than an avenue for resolving the problem of inter-field integration, that is, issues regarding coordination and collaboration.

This form of integration presents considerable limitations for anyone interested in networking between actors, on account of the little emphasis placed on interdisciplinarity (McPherson, 2001), community participation and the political action of different interest groups (Raphael, 1998). In fact, the wide diversity of positions and professional know-how, all community innovation efforts and all practices aimed at developing health policies end up being subjected to the domination that one group or the other manages to establish. Similarly, inter-field integration is seen from the point of view of a single field at a time, so that either public health orients clinical health and leads it to act in accordance with its requirements, as a function of the forces that the field can deploy, or clinical health strives to get public health to adhere to its own interests. It is not so much the dynamics of

reconciliation between public health and clinical health that are the subject of investigation under this perspective, but rather attempts by one field to get the other to espouse its imperatives.

Of the relevance of a theoretical reframing to deal with public health-clinical health networking

As we can see, giving precedence to organizational structures, either by favoring them by way of their function (structural-functionalist approach) or by articulating them on the basis of institutionalized social practices (structural-constructivist approach), has not fostered the integration of public health and clinical health activities. Indeed, placing the emphasis on the stability provided by structures as a determinant of the action of individuals or on the defense of fields of power as a fundamental element in the construction of institutionalized practices does not allow us to consider the closer ties that are forged in the course of action and that are necessary for the creation of an operational interface. These approaches, which are prescriptive and normative more than all else, are not conducive to a refined understanding of the dynamics of action underpinned by the interdisciplinary and interorganizational exchanges that occur or are likely to occur between public health and clinical health.

This situation is all the more critical in that we find ourselves today in an era of networks (Turgeon, 1999) and that networking strategies refer as much to relational networks as to organizational networks (Grémy, 1997) in order to better deal with the multidimensionality of problems. In other words, a network commands both the emergence of one or more groups that bind together on a voluntary basis around common objectives and the constitution of organizational modalities apt to ensure functionality and guarantee perennity. A network, then, implies a certain circularity between two indissociable aspects: structure and action. Consequently, it is no longer enough to consider the domination of structures or practices alone; instead, it is necessary also to take into account the diversity of medical, social, environmental and psychological dimensions and the voluntarism of the actors to create a sort of cooperation that cannot be imposed by decree. At last, the network appears as a socially and strategically constructed, organized entity (Grenier, 2003).

In this regard, a few studies conducted in the healthcare sector have distanced themselves from the structural-functionalist and structural-constructivist approaches by seeking to understand

how the actors' experiences are articulated in their *contextualized* daily activities and how organizations reproduce themselves in space and over time. Some of these studies have focused on the consideration given to the actors' competencies through the use that actors make of organizational rules and resources. The goal here was to understand how actors legitimated an organization's normative elements, which codes of signification were used, and how control of material aspects and coordination of activities were effected. This made it possible to explain: (1) how communications between medical specialists regarding data transmission are conducted in order to be able to foster the adoption of telemedicine (Lehoux et al., 2002); (2) how the priority granted to exchanging information with patients, rather than merely transferring it, empowers patients to take better care of themselves (Gravois and Garvin, 2003); and (3) how underprivileged groups refuse to take part in programs that they deem ill-adapted (Boyce, 2001). Other studies, instead, have examined practices rooted in a given context, that is, in a specific space and at a particular point in time, in order to shed light on: (1) how care utilization occurs and recurs as a function of past experiences and the geographical situation (Macintyre et al., 2002) – beyond structural explanations such as the social capital of individuals – such as defined by Bourdieu; (2) how medical practices change and how they adapt simultaneously to new administrative, economic and professional imperatives (Tousijn, 2002); (3) how the organization of first-line services can be influenced by a patient–doctor dynamic as a function of the utilization or non-utilization of traditional medical care (Tovey and Adams, 2001).

All these studies were based on the theory of structuration developed by Giddens (1971, 1979, 1987), a theory that seeks to bind action and structure together in an equitable fashion, without granting any sort of precedence whatsoever to one or the other and without any bias regarding the link that exists or should exist between the two in a given context. To this end, the theory affords a predominant position to the actor. The actor, according to Giddens, is capable of ensuring a reflexive control on his activity, that is, the actor demonstrates a competency that must be considered in its specific context of action. As a result, structures are considered through the rules and resources used by actors rather than through objectivized practices or organizational configurations. Thus, the theory of structuration owes its name to the mutual constitution of action and structure; neither is the cause of the other, they are

simply the two faces of a single social reality. Rules and resources are constraining throughout institutions; however, they are also empowering in that they allow the competent actor to act. Structures are at once the means and the result of action. This two-pronged principle of constraint and empowerment is referred to as the duality of structure.

In short, the theory of structuration proposes a theoretical reframing. Under this approach, the objective is no longer to analyze how structures and functions subordinate dynamics of action or to examine how the interface between the fields of public health and clinical health is structured in terms of relations of power. Instead, the aim is to understand how, in the course of their daily activities, actors of the public health sector and those of the clinical health sector are constrained but also empowered by elements of the organizational structure of their choosing or not, and how these actors manage, at the same time, to interact with other actors who all enjoy a form of power that serves to assert their transformative capacities, which vary from one actor to the next.

On this basis, the public health-clinical health interface could be grasped through different dimensions of the structure-action dynamic. Giddens proposed three such dimensions: political, legitimation-related and semantic. Aside from considering the predominance of structures and that of the relations of power of actors, Giddens invites us to explain what the object of the mediation between these two forces is through the resources that are engaged in the organizational dynamic. Thus, for the public health-clinical health issue, this political dimension falls within the set of authority resources that often place physicians front and center, without however making abstraction of the repercussions – be they intentional or not – on the other actors and on the forms that the organization takes. Similarly, material resources, such as money, goods and objects, serve as mediators as action gradually takes shape through structure and inversely. Giddens states that for actions to be structured, it is necessary to go beyond authority, power and influence, so that, as a whole, the actions can be legitimated and significant for the actors. In fact, these dimensions of legitimation and signification depend on the sanctions granted by the actors through the norms adopted and through the communications engaged upon on the basis of the information conveyed, which is interpreted differently from one actor to the next depending on the meaning that it holds for each. In other words, when developing networking strategies to interlink public health and clinical

health, arguing that the actors of the other field must adopt an approach, such as suggested by the structural-constructivist perspective, is not enough. Instead, these actors must also legitimate what needs to be done. Consequently, negotiations must inevitably be undertaken regarding the stakes and issues important to the actors.

Through the theoretical reframing that it allows, the theory of structuration paves the way towards a better understanding of the conditions that govern the continuity or dissolution of structures and practices, in such a way that the possibilities of integration can be highlighted (Rojot, 1998). The promises that this theory holds for the study of the public health-clinical health interface are interesting to consider on account of the fact that its aim is to arrive at a better understanding of the organizational modalities that are produced and reproduced based on the reality that is experienced by the actors, rather than seeking to predict what these might be. It is not a new model of intervention to adopt in order to prescribe a public health-clinical health network such as desired or decided by actors external to the field of study, but rather a conceptual tool apt to better foster the existing or possible networking between actors in a given situation.

Conclusion

Although public health and clinical health have cohabited for the longest time, it appears that the organizational networking between these two sectors of activity remains, in large part, to be articulated. In an effort to gain a better understanding of why such a situation continues to prevail despite the measures taken to knit closer ties, it emerged that it was necessary to identify the rationale that actually underpins the organizational modes at the root of the interface between these two sectors of activity. This is what this article has sought to do in order to make it possible to lay the tracks towards a mode of reflection that is more congruent with networking approaches, which are at the heart of current concerns.

In this regard, while the emphasis placed on the remodeling of the structures of establishments and on parallel functions as determinants of integration and the priority given to specific fields of practice have appeared limitative, the theory of structuration, instead, seems apt to sustain public health-clinical health networking. What this social theory provides is the conceptual tools necessary to go beyond a linear mode of thinking by allowing us to

study at once modes of coordination, which account for the articulation and dependence of tasks and activities, and modes of cooperation, which have to do with reciprocity and collaboration between actors.

On this basis, service planners, administrators and producers alike will be able to gain a better grasp of the various dimensions likely to have an impact on the changes to be made in order to foster a better interface between public health and clinical health. Indeed, instead of seeking to explain what needs to be changed in order to develop functional interfaces and how to do it, the emphasis can henceforth be placed on a better understanding of how to effect change in order to be able to build on the actual capacity that organizations have for change.

References

- Adam, P. and C. Herzlich: 1994, *Sociologie de la maladie et de la médecine*. Paris: Nathan Université, p. 127.
- Bergeron, P. and F. Gagnon: 1994, 'La prise en charge étatique de la santé', in: V. Lemieux, P. Bergeron, C. Bégin and G. Bélanger (eds.), *Le système de santé au Québec. Organisations, acteurs et enjeux*. Sainte-Foy (Québec): Les Presses de l'Université Laval, pp. 9–32.
- Bergeron, P. and F. Gagnon: 2003, 'La prise en charge étatique de la santé au Québec: émergence et transformations', in: V. Lemieux, P. Bergeron, C. Bégin and G. Bélanger (eds.), *Le système de santé au Québec. Organisations, acteurs et enjeux*. Sainte-Foy (Québec): Les Presses de l'Université Laval, pp. 7–33.
- Bourdieu, P.: 1980, *Le sens pratique*. Paris: Editions de minuit.
- Bourdieu, P.: 1987, *Choses dites*. Paris: Editions de minuit.
- Bourdieu, P.: 1994, *Raisons pratiques*. Paris: Editions du seuil.
- Boyce, W.F.: 2001, 'Disadvantaged Persons' Participation in health Promotion Projects: Some Structural Dimensions', *Social Science and Medicine* 52 (10), 1551–1564.
- Cameron, R., R. Walker, M. Gough and P. McDonald: 2000, 'Linking Public Health Science and Practice: An Example from the Canadian Heart Health Initiative', *International Journal of Health Care Quality Assurance* 13 (6/7), i–vii.
- Chaix-Couturier, C., I. Durand-Zaleski, D. Jolly and P. Durieux: 2000, 'Effects of Financial Incentives on Medical Practice: Result from a Systematic Review of Literature and Methodological Issues', *International Journal for Quality in Health Care* 12 (2), 133–142.
- Collège des médecins du Québec: 1998, 'Nouveaux défis professionnels pour le médecin des années 2000', *Rapport et recommandations de la Commission sur l'exercice de la médecine des années 2000 suivis des engagements du Collège des médecins du Québec*, p. 56.
- Elster, A. and C.M. Callan: 2002, 'Physician Roles in Medicine-Public Health Collaboration. Future Directions

- of the American Medical Association', *American Journal of Preventive Medicine* 22 (3), 211–213.
- Evans, R.G.: 1984, *Strained Mercy: The Economics of Canadian Health Care*. Toronto: Butterworths.
- Freemantle, N.: 2000, 'Implementation Strategies', *Family Practice* 17 (Suppl.1), S7–10.
- Foucault, M.: 1979, 'La politique de la santé au XVIII^e siècle', in: M. Foucault, B. Barrett-Kriegel, A. Thalamy, F. Béguin and B. Fortier (eds.), *Les machines à guérir (aux origines de l'hôpital moderne)*. Belgique: Mardaga, pp. 7–17.
- Gagnon, F. and P. Bergeron: 1999, 'Le champ contemporain de la santé publique', in: C. Bégin, P. Bergeron, P.-G. Forest and V. Lemieux (eds.), *Le système de santé québécois: un modèle en transformation*. Montreal: Les Presses de l'Université de Montréal.
- Giddens, A.: 1971, *Capitalism and Modern Social Theory*. Cambridge: Cambridge University Press.
- Giddens, A.: 1979, *Central Problems in Social Theory*. Berkeley, CA: University of California Press.
- Giddens, A.: 1987, *La constitution de la société* (trans. by M. Audet of *The Constitution of Society*, 1984). Paris: PUF.
- Gravois, L.R. and T. Garvin: 2003, 'Moving from Information Transfer to Information Exchange in Health and Health Care', *Social Science and Medicine* 56(3), 449–464.
- Grémy, F.: 1997, 'Filières et réseaux. Vers l'organisation et la coordination du système de soins', *Gestions Hospitalières* juin-juillet, 433–438.
- Grenier, C.: 2003, 'Rôle de l'objet intermédiaire pour mieux comprendre la structuration d'un réseau organisationnel et technologique d'acteurs – cas d'un réseau de soin', *Presentation at the colloquium of AIM – Association Information et Management*, Grenoble.
- Hawk, E.T. and S.M. Lippman: 2000, 'Primary Cancer Prevention Trials', *Hematology/Oncology Clinics of North America* 14(4), 809–830.
- Hulscher, M.E.J.L., M. Wensing, T. van der Weijden, and R. Grol: 2004, 'Interventions to Implement Prevention in Primary Care' (Cochrane Review), in: *The Cochrane Library*, Issue 2, Chichester, UK.
- Lehoux, P., C. Sicotte, J.L. Denis, M. Berg and A. Lacroix: 2002, 'The Theory of Use Behind Telemedicine: How Compatible with Physicians' Clinical Routine?', *Social Science and Medicine* 54(6), 889–904.
- Lynch, M.: 1998, 'Financial Incentives and Primary care Provision in Britain: Do General Practitioners Maximise their Income?', *Developments in Health Economics and Public Policy* 6, 191–210.
- Macintyre, S., A. Ellaway and S. Cummins: 2002, 'Place Effects on Health: How Can We Conceptualise, Operationalise and Measure Them?', *Social Science and Medicine* 55(1), 125–139.
- Massé, R. and L. Gilbert: 2003, *Quebec Public Health Program*, Quebec City: Direction générale de la santé publique, Ministère de la Santé et des Services sociaux.
- McPherson, K.: 2001, 'For and Against. Public Health does not Need to Be Led by Doctors', *BMJ* 322, 1593–1596.
- Pampalon, R.: 1994, 'La santé des Québécois et des Québécoises', in: V. Lemieux, P. Bergeron, C. Bégin and G. Bélanger (eds.), *Le système de santé au Québec. Organisations, acteurs et enjeux*, Sainte-Foy (Quebec): Les Presses de l'Université Laval, pp. 33–52.
- Parsons, T.: 1937, *The Structure of Social Action*. New York, NY: McGraw-Hill.
- Parsons, T. and E.A. Shils: 2001, *Toward a General Theory of Action*. New Brunswick, NJ: Transaction Publishers.
- Quebec National Assembly: 2001, *Public Health Act Bill 36 (2001, Chapter 60)*. Province of Quebec: Quebec, p. 45.
- Raphael, D.: 1998, 'Public Health Responses to Health Inequalities', *Canadian Journal of Public Health* 89(6), 380–381.
- Richardson, A., M. Sutherland, E. Wells, L. Toop and L. Plumridge: 2002, 'Factors Affecting General Practitioner Involvement in a Randomised Controlled Trial in Primary Care', *New Zealand Medical Journal* 115(1151), 153–155.
- Rojot, J.: 1998, 'La théorie de la structuration', *Revue de gestion des ressources humaines* 26–27, 5–20.
- Shi, L., B. Starfield, R. Politzer and J. Regan: 2002, 'Primary Care, Self-rated Health, and Reductions in Social Disparities in Health', *Health Services Research* 37 (3), 529–550.
- Sutton, M.: 2002, 'Vertical and Horizontal Aspects of Socio-economic Inequity in General Practitioner Contacts in Scotland', *Health Economics* 11(6), 537–549.
- Tousijn, W.: 2002, 'Medical Dominance in Italy: A Partial Decline', *Social Science and Medicine* 55(5), 733–741.
- Tovey, P. and J. Adams: 2001, 'Primary Care as Intersecting Social Worlds', *Social Science and Medicine* 52(5), 695–706.
- Turgeon, J. and H. Anctil: 1994, 'Le Ministère et le réseau public', in: V. Lemieux, P. Bergeron, C. Bégin and G. Bélanger (eds.), *Le système de santé au Québec. Organisations, acteurs et enjeux*. Sainte-Foy (Quebec): Les Presses de l'Université Laval, pp. 79–106.
- Turgeon, J.: 1999, 'Les réseaux intégrés : Un concept flou mais adapté à l'environnement virtuel de la prochaine décennie', *Presentation at the XXXV^e congrès-exposition de l'Association des hôpitaux du Québec*, Palais des Congrès de Montréal, 19–20 May.
- van Hout, H., M. Vernooij-Dassen, K. Bakker, M. Blom and R. Grol: 2000, 'General Practitioners on Dementia: Tasks, Practices and Obstacles', *Patient Education and Counseling* 39(2–3), 219–225.
- Visscher, T.L. and J.C. Seidell: 2001, 'The Public Health Impact of Obesity', *Annual Review of Public Health* 22, 355–75.
- Wee, C.C., R.S. Phillips, H.R. Burstin, E.F. Cook, A.L. Puopolo, T.A. Brennan and J.S. Haas: 2001, 'Influence of Financial Productivity Incentives on the use of Preventive Care', *American Journal of Medicine* 110(3), 181–187.
- Wilkin, D., S. Gillam and K. Smith: 2001, 'Tackling Organisational Change in the New NHS', *BMJ* 322 (7300), 1464–1467.