Understanding the Impact of Intergovernmental Relations on Public Health: Lessons from Reform Initiatives in the Blood System and Health Surveillance

KUMANAN WILSON
Department of Medicine, University of Toronto, Toronto, Ontario
Institute of Intergovernmental Relations, School of Policy Studies, Queen's University, Kingston, Ontario
Toronto General Research Institute, Toronto, Ontario

JENNIFER MCCREA-LOGIE
Toronto General Research Institute

HARVEY LAZAR
Institute of Intergovernmental Relations

Introduction

After years of examining the structure and nature of intergovernmental relations in a variety of social policy sectors, the attention of the Canadian public and decisionmakers has now turned to the mechanisms by which governments interact to develop *public health* policy. This focus on governance in public health has largely been precipitated by the emergence of several new infectious threats including West Nile virus, Bovine Spongiform Encephalopathy (BSE) and Severe Acute Respiratory Syndrome (SARS). The nature and effectiveness of the multi-governmental response to the SARS outbreak, in particular, has accelerated discussions on the need for either major legislative or structural reform of the public health system (Health Canada 2003; Wharry 2003). Recently, the National Advisory Committee on SARS provided several recommendations on public health reform, including the development of a Canadian agency for public health (Health Canada. National Advisory Committee on SARS 2003). This report focused attention on the dysfunctional nature of intergovernmental relations in public health and the serious negative consequences to which these relationships could lead. However, in considering the various alternatives to addressing this situation, the committee and policymakers in general have little literature to draw upon as the majority of governance research in health has focused on our health-care system, specifically that part of the system that deals with medical and hospital insurance (Romanow 2002). The absence of research on federalism in public health is somewhat surprising given that the nature of many public health activities has a substantial intergovernmental component.

In this article we hope to partially remedy the

supranational governments must coordinate their approaches to public health challenges to ensure they are effectively managed.

The importance of intergovernmental relations in public health clearly emerged during the international response to the SARS outbreak. In commenting on this response Dr. David Heymann,

included in the model. While public health policy development mainly occurs at federal and provincial/territorial levels, actual policy implementation is largely a local responsibility. The inclusion of a third order of government in the federalism model increases the number of potential intergovernmental combinations threefold. While the previously described federal-provincial/territorial relationships may exist, there may also be similar forms of relationships between provincial/territorial and local governments. For example, a *disentangled provincial-local* relationship describes a situation where provincial and local governments act largely independently of one another. A *provincial-local hierarchical* relationship describes a situation where a province coerces the local governments into acting in a specific manner. This is likely to be the most common form of relationship that exists between provincial and local jurisdictions since the provinces have complete legislative control over them. A *provincial-local collaborative* relationship may also exist where the province works in a non-coercive manner with the local governments to develop or to implement policy. The nature of provincial-local relationships has come under increased scrutiny largely as a consequence of the provinces downloading responsibilities to the local level and reducing funding as the federal and provincial governments seek to address their deficit and debt concerns.

A variety of federal-local relationships may also exist in public health. The relationships can again be *disentangled, federal-local unilateral* or *collaborative*. Interest in federal-local relationships is increasing as the local governments begin looking to the federal government for revenue to compensate for their own limited revenue-generating power and recent reductions in provincial funding (Sgro 2002). However, these relationships have to be carefully designed so as not to violate provincial jurisdiction. They are most likely to develop on a collaborative or contract basis in which all orders of government see the need for direct federal involvement at a local level.

In addition to the vertical intergovernmental relationships we have described, horizontal relationships between members within an order of government may also exist. A confederal relationship between provinces, referred to as *interprovincial collaboration,* has been proposed as an alternative to federal involvement in provincial public policy arenas. In this form of relationship provinces and/or territories would work together, either in regions or nationally, to establish agreements to govern the management of policy areas (Courchene 1997). Similarly, a *confederal* relationship may exist between local governments that could cross provincial/territorial borders. In this form of relationship, local governments work together to establish policy, sometimes under the guidance of a national organization. Table 1 summarizes the various types of intergovernmental relations that may occur in public health.

Limitations of the Framework

The understanding of any complex system has to begin with a basic breakdown of its properties, which this framework provides. By doing so it allows for an evaluation of the different sets of intergovernmental arrangements to determine where trade-offs in policy outcomes are occurring. There are, however, limitations to forcing complex policy-making systems into a specific model. In particular it should be recognized that within a specific policy area the nature of the intergovernmental relationships could be variable at a given point in time or across time. For example, at a given point in time, the relationship of the federal government with some provinces may be viewed as hierarchical, if the provinces need to be coerced into following federal policy, while the relationship with other provinces may be viewed as collaborative, if they are in agreement with the federal policy direction. Similarly, the form of federalism could change as the policy process evolves. A collaborative approach may be employed at the early stages to establish widespread agreement while the actual implementation may utilize a hierarchical approach. It is also important to draw a distinction between theoretical intergovernmental

arrangements and the practicalities of the implementation of these arrangements. As an example, potential hierarchical arrangements may exist in which the federal government has the ability to coerce provincial cooperation. However, the reality of the policy environment would be such that actual utilization of such powers could be so damaging to other policy initiatives that they would never be employed.

Application of the F

was the largest public health crisis this country had faced. Thousands of individuals became infected with HIV and tens of thousands were infected with hepatitis C (Krever 1997*b*). The blood system was heavily criticized for the decision-making process that led to the transfusion transmission of infections. The criticisms led to a large-scale inquiry into the blood system led by Justice Horace Krever as well as criminal charges against some of the blood-system actors (Krever 1997*a*; Picard 2002). The Krever Inquiry provided several recommendations on how a new blood system should function to protect against such a tragedy happening again. In response to the interim report of the Krever Inquiry, federal/provincial/territorial ministers met to design a new blood system based on the report's recommendations.

The Krever Inquiry had repercussions not only in the blood system but also throughout all of public health. Justice Krever clearly illustrated the problems of unclear roles and responsibilities in public health by stating:

> responsibility for the blood system is fragmented … the various functions integral to the supply of blood, such as regulation, funding and planning, are undertaken by different stakeholders. The respective functions, authority and accountability of each party are not well defined … This lack of definition may affect accountability within the system, and ultimately its safety (Krever 1997*c*, 1023).

This observation highlighted the interrelated nature between public health governance and the effectiveness of public health policies.

Six years have now passed since blood-system reform measures were implemented and many important observations can be made about the success of these initiatives. These observations present an excellent learning opportunity for policymakers who are considering major public health reform in Canada that would alter the intergovernmental nature of public health policy-making. Previously conducted studies provided insights into decision-making in the blood system in the pre- and post-Krever era with respect to management of infectious risks as well as the impact of changing financial structure on delivery of blood services (Wilson *et al*. 2001; Wilson *et al*. 2003). These analyses involved over 70 taped-transcribed interviews with key stakeholders in the blood system as well as a full review of key related documents. Both of these studies have provided important insights into the relevance of intergovernmental relations in public health and an opportunity to provide lessons for public health policymakers considering public health reform. Based on the information obtained from these studies we are able to characterize the sets of intergovernmental relationships that exist in the Canadian blood system and determine their effectiveness.

Structure and Allocation of Responsibilities in the Blood System

The federal, provincial/territorial, and local orders of government have distinct but interrelated roles in the current blood system.[3] The federal government is responsible for regulating the safety of the blood supply and the provincial/territorial governments for funding and ensuring the effective delivery of blood services. While the existence, roles, and responsibilities of these two orders of government are fairly clear, it is more difficult to identify whether local government exists in the blood system and, if so, what form it takes. Ostensibly, the local governments are the regional blood operators. These, however, are linked in a cross-provincial collaborative manner under the governance of a national not-for-profit organization, the Canadian Blood Services. Canadian Blood Services is the national operator of the blood system and was created through a memorandum of understanding between the federal/provincial/territorial governments. The agency is responsible for collecting, testing, manufacturing, distributing, purchasing, and supplying blood products to all provinces except Quebec. Héma-Québec is the operator of the blood system in Quebec and performs much of the same functions

as the Canadian Blood Services, but solely for that province. It is at the regional level that much of the operational function of the blood system occurs, including the delivery of blood products to hospitals. The regional blood agencies, however, have limited decision-making power in the area of blood safety. For the purposes of this analysis we will refer to the operators as representatives of local governance in the blood system.

The federal government's primary responsibility in the blood system is to protect the safety of the blood supply. The responsibility for regulating the blood system occurs at Health Canada in the Biologics and Genetics Directorate. Both Canadian Blood Services and Héma-Québec are bound by federal regulations. The federal government derives formal legislative authority over the area of blood safety through the *Food and Drugs Act*. The act gives the federal government legislative authority over a wide range of areas concerning drugs, primarily concerned with protection of individuals from harm. Under the act a drug is considered to be "any substance or mixture of substances manufactured, sold or represented for use in the diagnosis, treatment, mitigation or prevention of a disease, disorder or abnormal physical state, or its symptoms, in human beings or animals." Under Schedule D of the act, blood and blood derivatives are specifically identified as being drugs. The federal government has obtained the authority to pass this legislation from section 91(27) of the *Constitution Act* which provides the government with power over criminal law.

donations.[4] Other nations' blood safety practices also indirectly influence Canadian blood policy by setting international standards that Canada may be expected to meet.[5]

The Form of Federalism in the Blood System

The federal, provincial/territorial governments, and operators must work together to provide a coordinated, comprehensive approach to blood safety. The relationship between the three orders of government is, as a consequence, interdependent. Agenda-set-

operator. If the federal government fails to enforce these regulations concerned individuals could bring an action to attempt to force the federal government to carry out its mandates and enforce the regulations. The provinces might also be held liable for knowingly violating federal safety standards, if such actions are viewed as negligent and result in harm to individuals. It would be more challenging for the operator to be able to insist provinces/territories pay the cost of non-federally mandated safety measures. However, the moral and political pressure on the provinces/territories to fund these measures would be substantial in a high profile area such as blood safety, which has previously suffered through a public health tragedy. Ultimately, responsibility would lie with the board of directors to draw public attention to the failure of the provinces/territories to fund a safety measure that they believe would be necessary.

Impact of Form of Federalism on Development of Blood Policy

To determine the impact of the form of federalism on development of blood safety policy we again modify evaluation criteria previously developed by Lazar and McIntosh (1998, 4). These criteria examine the impact of a form of intergovernmental relationship on the domains of policy effectiveness (health outcomes and efficiency), democracy, and federalism.

Policy Effectiveness. The current governance regime has produced a blood system that has improved the protection of the health of Canadians by enhancing the safety of the blood supply, which was the primary objective of structural reform. The coordination of activities of regional blood systems by a central operator and the clear allocation of regulatory authority to the federal government has reduced the likelihood of gaps occurring in the execution of blood safety activities. The blood system is also able to respond rapidly to new infectious challenges because the operators are empowered to introduce safety measures without the approval of the provinces/territories or the federal government. However, perhaps the most important quality of governance in the current blood system that improves safety is the separation of funding responsibilities from decisions to improve the safety of the blood supply. This system has allowed Canada to introduce safety measures, such as universal leukoreduction of the blood supply and nucleic acid amplification testing for hepatitis C, in advance of other nations.

While the current organizational structure protects the safety of the blood supply it does so partially at the expense of efficiency, defined as the amount of outcome produced for a given input of resources. The current system does have some economies-of-scale advantages with activity centralized in two operators. However, this benefit is offset by the negative impact on efficiency of separation of funding responsibility from the authority to introduce safety regulations. This separation of functions has led to the introduction of safety measures that have been considered highly cost-ineffective (van Hulst *et al.* 2002).[6] There is no financial disincentive for the federal government to introduce safety measures with comparatively poor cost-effectiveness ratios. However, there are substantial political and legal disincentives for not doing so (Weinberg *et* al. 2002). Another consequence of such an incentive structure is the potential for money to be diverted to protect the blood supply from infectious risks from other initiatives to improve safety; for example, reducing transfusion reactions, which do not have as high a public profile.

Respect for Principles of Democracy. The current organization of the blood system has had a positive impact upon principles of democracy, although challenges still exist in this area. While the technical nature of many blood safety initiatives makes them somewhat inaccessible to the general public, high volume blood users actively participate in decision-making due to their vested interest in the safety of the blood supply. The participation of these groups, and the absence of the general public in decision-making, creates pressure for the blood system to introduce measures that protect the blood supply and its safety, regardless of cost. Hence, resources may

be diverted from other policy sectors in order to maintain the blood system. As a consequence, the blood system would be viewed as being more favourable to the rights of minorities rather than the rights of majorities.

transparency. It also creates the potential for long-term conflict to exist between the provinces/territories and the federal government due to the fact that the provinces/territories have to pay the increasing costs of transfusion services that result from federal regulations. Tables 3 and 4 summarize the allocation of roles and responsibilities across orders of government in the Canadian blood system and the effectiveness of the set of intergovernmental arrangements.

Federalism

disadvantages. Health surveillance has been undergoing reform in an attempt to address a series of concerns, including unclear roles and responsibilities, the presence of important gaps in health surveillance and the lack of a coordinated national approach to health surveillance. We have previously described the nature and impact of federalism on these reform initiatives (Wilson 2001). This analysis specifically focused on the relationship between the federal and provincial governments in their efforts to develop the National Health Surveillance Infostructure (NHSI), a component of the Network for Health Surveillance in Canada. All orders of government recognized the dangers of a fragmented approach to health surveillance and the need to rectify this problem. The NHSI was intended to be an Internet-based network/infrastructure designed to build capacity to help coordinate health surveillance activities across the country. In developing the NHSI, governments moved from a previous disentangled approach toward health surveillance toward a more collaborative approach. The collaborative approach to surveillance reform was initially successful and, in a comparatively brief period of time, Ottawa and the provinces were able to work together to develop a design and proceed with implementation of pilots. While the NHSI was federally conceived, Ottawa's choice of embarking upon a collaborative approach to the negotiations was instrumental in ensuring provincial cooperation, particularly at a time when there was intergovernmental acrimony surrounding the interpretation of the *Canada Health Act* and the reductions in health-care funding associated with the Canadian Health and Social Transfer. The initial success of the collaborative approach was attributed to the relatively low-profile nature of health surveillance, which was at the time one of the least contentious federal/provincial areas.

At the conclusion of our study we identified potential obstacles to the eventual full implementation of the health surveillance system. These included developing agreements on data-sharing, standardization of data, and distribution of funding responsibilities. In particular, for a coordinated surveillance system to succeed local public health agencies must collect similar surveillance data of a standard quality to allow for the sharing of this data. This would produce substantial costs at the local level. Difficulties in agreeing on how these costs would be distributed across orders of government were viewed as an important obstacle in the establishment of a successful surveillance system. Since the completion of our analysis, full implementation of the plan for health surveillance reform has not occurred. The lack of a national approach to health surveillance was identified on two separate occasions by the auditor general as a point of serious concern. In 1999, the auditor general stated that federal, provincial/territorial, and local governments needed to establish partnerships, develop agreements on data-sharing and clearly outline roles and responsibilities for governing health surveillance activities. The report identified serious gaps in health surveillance and stated that the federal government needed to take a leadership role in ensuring that health surveillance reform takes place (Office of the Auditor General of Canada 1999). In 2002, the auditor general's report indicated that only limited progress had been made on addressing many of these concerns. It specifically stated that few data-sharing agreements existed between governments and there were no agreements to ensure common standards on data-collection activities (Office of the Auditor General of Canada 2002). Ongoing problems in health surveillance governance have also been highlighted by the response to the SARS outbreak. During the outbreak there was concern about the inability of different organizations to share information due to inconsistencies in the standards for data-collection (Abraham and Priest 2003).

Lessons for Public Health Governance Reform Derived from the Experiences of the Blood System and Health Surveillance

Health surveillance and blood safety share many features in common. Both domains are highly

technical and of little public interest until the emergence of a problem in the system. The emergence of problems in either field has the potential to have a large-scale adverse impact on the health of the population. Because of these similarities, the two public health areas lend themselves well to comparison. Based on such a comparison, the following preliminary observations can be made regarding the effectiveness of different intergovernmental regimes in public health. Collaborative approaches appear to be successful in designing and rapidly developing widespread consensus on reform. The plan for a

protect against unfunded mandates in the Canadian context. While in the short term such measures may be perceived as impeding reform, in the long term they may protect against intergovernmental conflict, thus allowing for the long-term viability of the public health programs. In addition to such measures, other structural changes may need to be introduced to address intergovernmental conflict in a timely manner. These include the creation of independent dispute-resolution mechanisms as well as the development of interfaces that allow for effective communication between the different orders of government. These bodies are best established prior to the introduction of a public health program rather than waiting until after the need for them arises.

Governments must also take measures to improve transparency in the public health policy-making process. The content of public health issues and the nature of intergovernmental decision-making tend to create the perception amongst the public that important decisions concerning the public health of Canadians are occurring behind closed doors. While this concern may not exist at the time decision-making is taking place, it could arise if problems emerge in the system, as was the case with the Canadian blood system. Some steps governments could take to improve transparency include publishing the transcripts of intergovernmental discussions on the Internet or allowing discussions to be open to the public. In addition to improving transparency, these steps may also facilitate decision-making by creating clearer accountability for decisions. This would allow the public to retrospectively identify why a decision was or was not made; who was primarily responsible; and to reduce scenarios in which one order of government blames the other for perceived failures in the policy-making process. Table 5 summarizes suggestions for public health governance reform that emerge out of a comparison of blood system reform to health surveillance reform.

In preparing its report on public health reform in the wake of the SARS outbreak the National Advisory Committee on SARS addressed the challenges of establishing effective intergovernmental relationships. The committee recommended a collaborative approach to developing a Canadian Agency for Public Health based on the recognition of the mutual interdependence of the different orders of government when it comes to developing and implementing public health policies. The proposed agency is to be at arm's length from government, although it would be federally financed and the Chief Public Health Office would report to the federal minister of health. The agency would provide funding on a project-by-

TABLE 5
Suggestions for Public Health Governance Reform

1. Initially utilize a collaborative multigovernmental approach to establish a plan for reform.
2. Establish federal-hierarchical approach to policy implementation either legislatively or through conditional-funding programs.
3. If a legislative approach is taken, ensure that a mechanism is introduced to protect against unfunded mandates.
4. Introduce an independent dispute-resolution mechanism and effective intergovernmental interfaces. Ensure such systems are transparent.
5. Consider establishing a national body, or several regional bodies, at arm's length from government. This body would coordinate local public health activities and would be independent from federal/provincial/territorial governments, except for having to meet regulatory requirements.
6. Develop rules by which interactions will occur with supranational bodies.

national blood service. The presence of a second operator has caused concern amongst some individuals in the blood system who believe that this results in a fragmentation of the transfusion service and the potential for two different standards of transfusion care to exist in Canada. Others argue that the presence of a second operator introduces checks and balances into the system and introduces a level of healthy competition. The smaller operator, Héma-Québec has also been viewed as having the ability to respond more quickly to transfusion-related emergencies which may arise, due to its smaller size (Wilson *et al*. 2001). However, the presence of more than one coordinating agency potentially results in a loss of economies-of-scale advantages. It also reintroduces the problem of developing agreements across agencies for coordination of activities, a necessity for many public health activities.

While it did not directly arise in our examinations of the blood system and health surveillance, another question that public health officials will have to address is how to develop agreements to govern interactions with supranational governments. Supranational governments will play an increasingly important role in public health due to the challenges created by public health threats crossing national borders (Kickbusch 2000). These governments have the potential to influence the development of policy at the national level. The federal government's decision to enter into international agreements could also have a direct impact upon the provinces/territories not participating in the discussions surrounding the agreement. In general, rules need to be established to govern the role of supranational governments in public health policy. Future applications of the model we have described need to identify how a supranational government fits into the public health intergovernmental spectrum.

Conclusion

Given the central importance of coordination in public health, the rapid development of public health technologies and the continued emergence of public health threats a more thorough understanding of the impact of intergovernmental relationships on public health is essential. In this article we have provided an initial step toward this goal, a framework for describing intergovernmental relationships in public health. We used this framework to describe governance in the blood system and evaluated the impact of the set of intergovernmental relationships on the domains of policy effectiveness, democracy, and federalism. We also demonstrated the value of drawing comparisons with other public health sectors, in this instance, health surveillance. The material presented here, however, is only a first step. More work needs to be done refining these analytic techniques and additional study of governance regimes in other public health sectors also needs to be conducted. There are many opportunities for such analyses as several national initiatives have been proposed or are in the process of development, including the National Immunization Strategy and the Centre for Emergency Preparedness and Response (Naus and Scheifele 2003; Health Canada 2002). By comprehensively and systematically examining the governance challenges of the past and the present, public health officials should be better prepared to address public health governance challenges in the future.

Notes

Blood safety case study research was conducted in conjunction with the University of Ottawa Centre for Transfusion Research and was funded by grants from the Canadian Institutes of Health Research.

Dr. Wilson is supported as a New Investigator by the Canadian Institutes of Health Research.

[1]In the original, methodology hierarchy referred to the ability of the federal government to exercise its influence in an area of exclusive provincial legislative jurisdiction through conditional funding programs. In the methodology we present here we restate hierarchy to refer to the ability of one order of government to coerce another order of government into actions either through legislation or attaching conditions to financial transfers.