

Professional Regulation and Change in Times of Crisis: Differing Opportunities Within and Across Ecologies

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Abstract

This paper analyses the impact of the COVID-19 pandemic crisis on professional regulatory change in two Canadian provinces, drawing on ecological theory. The dataset, constructed using web-scraping techniques, includes all laws and by-law modifications concerning regulated professions enacted during the first 18 months of the pandemic in Quebec and British Columbia. Data show that the crisis prompted regulatory changes but that the impact and nature of these changes varied depending on the structure of the ecology of professional regulation in each province. Furthermore, crisis-related concerns were more likely to induce or accelerate durable changes if they intersected with pre-existing, ongoing professional projects. Our findings have implications for theorizing crisis-related regulatory change and demonstrate the value of a comparative approach to studying professional ecologies and state-profession interfaces.

Keywords

Professional regulation, COVID-19, ecologies, change, Canada.

Introduction

The COVID-19 pandemic affected work and employment globally, altering work content, availability, workloads, and location, as well as the health risks associated with working (Fana et al., 2022; St-Denis, 2020). Particular attention has been paid to the impact of the pandemic on health professionals like nurses and doctors in hospital settings, emphasizing high work demands, burnout and strain (Dos Santos, 2023; Lavoie-Tremblay et al., 2022), and crises in the healthcare system generally (Denis et al., 2021). Outside of hospitals, research has explored the expansion of remote work and virtual practice, as well as financial precarity and work stoppages experienced by those in private practice (Brondani et al., 2021; Hedden et al., 2023). Research has also noted shifting scopes of practice for health professionals during the pandemic (Adams & Wannamaker, 2022; Bowman, 2021). Less attention has been paid to the impact of the pandemic on professionals practising outside the health sphere. Nonetheless, they, too, experienced changes to the conditions, content, and location of their work (Fore & Stevenson, 2023). Many of these pandemic-induced changes to work are temporary, but some could be more permanent, and hence they deserve more attention.

In Canada — where regulated professions are governed at the provincial level — these changes to professional work necessitated alterations to policy and regulations because professionals' scopes of practice are usually detailed in legislation and regulations. Canada is more likely to experience such alterations than countries like Australia and the United Kingdom, where professionals' scopes of practice are less often specified in legislation (Adams & Wannamaker, 2022; Leslie et al., 2018). Canadian provincial governments seeking to make more efficient use of the healthcare labour force during the pandemic altered scopes of practice through a variety of orders, by-laws, and regulations. Non-health-regulated professions were also affected. The pandemic prompted additional alterations to rules around telework and virtual practice, continuing competence and entry-to-practice, and, in some professions, facilitation of inter-provincial mobility (Myles et al., 2023). These pandemic-induced changes brought challenges for professional workers, but also opportunities to expand scopes of practice, and alter modes of service delivery.

All told, Canadian provincial governments passed hundreds of orders, regulations, by-laws, and pieces of legislation altering professional regulation and professional practice during the first 18 months of the COVID-19 pandemic (Canadian Institute for Health Information [CIHI], 2022). These policy changes impacted who performed certain tasks and how tasks were to be performed. Although many of these orders and by-laws were intended as a temporary response to the pandemic crisis, some are leading to longer-lasting changes. Exactly what changes were made and how they were made varied across provinces, as each has its own professional system. In this paper, we draw on ecological theory to shed light on these inter-provincial differences in both responses to the crisis and in the opportunities presented to professional groups to expand their authority and scope of practice. We focus on two Canadian provinces with different regulatory structures — Quebec and British Columbia (BC)

— to understand the changes made to the work of regulated professionals during the opening 18 months of the pandemic (2020-2021). Through our analysis, we seek to understand: (1) what changes were implemented to scopes of practice and professional work in both provinces; (2) how these changes differed across the two provinces with their distinct regulatory structures (ecologies); and (3) whether some professions were able to seize the opportunity provided by the pandemic to further a professional project. Through these analyses, we shed light on how the nature of ecologies, and the relationship between professions and the state, shape ecological change. In this way, we suggest hypotheses, indicators, and methodological strategies to advance the use of a comparative lens in research on the regulation of professions and to explore the impact of crises on the redistribution of opportunities in regulated professions' ecologies.

Ecological theories of professions

According to ecological theories of professions, professions exist in a system or ecology wherein professionals jockey for space and authority over a jurisdiction or field of practice with other professionals (Abbott, 1988; Liu & Emirbayer, 2016). Professional groups advance claims to stakeholders in linked ecologies, especially the state ecology, to lay claim to a space or jurisdiction and win legislation granting them market privileges (Abbott, 2005). Advancing claims to jurisdiction involves “boundary work” — generally defined as a process whereby one group distinguishes itself from another (Liu, 2015, 2018; Lamont & Molnar, 2002). When professionals conflict with others over who does what, they advance a claim to having superior knowledge, training, and expertise which they assert enables them to provide safer, more effective, and more efficient services than others. Although Abbott (1988) emphasises conflict among professions over space (jurisdiction) within the profession's ecology, more recent research highlights that collaboration is also central within the system (Liu, 2018; Noordegraaf, 2020). Whether by choice or by force, inter-professional collaboration results in the sharing of a jurisdiction (Abbott, 1988). Collaboration provides some stability within the profession's ecology, although ongoing boundary work can produce tension.

States are not simply third-party arbiters within the professions ecology, but rather, in Abbott's (2005) ecological theory, the state system is an ecology itself and one that is linked with the professions ecology. The linkage between state and professions ecologies is an important one, as the state can recognise claims to a jurisdiction within the system of professions, impacting professional divisions of labour and authority within the system. The state system can also benefit from the professions ecology and may exchange or share information, personnel or resources with it, bolstering parties' own efforts to secure space or legitimacy in the state system (Adams, 2018; Liu, 2015). Abbott (2005) argues that regulatory outcomes typically achieve some goals within both the state and professions ecologies, and may result from an alliance among actors across ecologies. Moreover, issues can emerge that provide “dual rewards” or opportunities for stakeholders in both ecologies. Abbott refers to such is-

sues as “hinges”. Although the professions and state ecologies are analytically distinct, in reality, these ecologies can overlap (Adams, 2018). Overlap occurs when ecologies share personnel (such as when professionals serve in government and state offices and state actors participate in professional regulation) and when interactions among actors across ecologies shape outcomes in both ecologies (Liu, 2015). “Hinges” also contribute to overlap. The overlap between professions and state ecologies is particularly evident in the area of professional regulation, which involves state actors and professional groups collaboratively establishing through legislation a framework to determine who is competent to practice professions safely and to hold professional workers accountable for their actions.

Beginning in the 1970s, a new ecology began emerging in the space where the professions and state ecologies overlap in Canada (Adams, 2024): an ecology of professional regulation. Key actors in this ecology of regulation include professionals and members of the public serving on regulatory bodies and the state actors working in offices and departments that collaborate with and oversee regulatory bodies’ activities. Activity within ecologies of professional regulation is structured according to legislation passed within the state ecology, and it has implications for actors in the professions ecology. As in other ecologies, groups within the ecology of professional regulation jockey for jurisdiction, credibility and authority: some professional regulators are more influential than others, and there is often tension between state actors and professional regulators. The structure and boundaries of this ecology of professional regulation differ across regions. In Canada, Quebec is unique in having a single ecology encompassing all regulated professional groups because of the nature of regulatory legislation in that province. In some other provinces, there is a single legislative framework for health profession regulation (such as in British Columbia), and other regulatory frameworks apply to other professions; here, there may be multiple ecologies of professional regulation.

For Abbott (1988, 2005) and other advocates of an ecological approach (Blok et al., 2019; Liu, 2015, 2018; Liu & Emirbayer, 2016), ecologies are spatial and interactive. Individuals and groups within an ecology are embedded within a particular social-historical landscape, and within that ecology, their boundary work involves contests over space. One advantage of this focus on space and interactions is that it draws attention to the activities of actors and groups within particular social-historical settings. Indeed, ecological theory draws our attention to state and professional actors and how their interactions shape legislative outcomes and the provision of expert services within and across social-historical contexts. Nevertheless, there has been a dearth of empirical research comparing the nature or structure of ecologies — and the linkages or overlap between them — across locale. To elaborate, the structure of the ecology of professional regulation is quite different across regulatory regimes. There are different regulatory bodies regulating different professional groups in each. They interact with different state offices and actors within their respective ecologies of professional regulation. Whether these differences in regulatory structures shape interactions and outcomes within and across ecologies is unknown. That is, we lack understanding about how ecologies differ

generally and how differences in the structures of the ecologies of professional regulation specifically impact the course of social change. Ecological theory has tended to focus on interactions among actors within an ecology, but it has not fully considered the relevance of the structure and make-up of such interacting ecologies in shaping outcomes.

One limitation of ecological theory is that change within and across ecologies is somewhat under-theorized. Since ecological theory focuses on space, Abbott's (1988) discussions of ecological change focus on social trends that create or eliminate jurisdictions (task areas). Technological change, for example, may create new task areas, as it eliminates others. Another source of change concerns actors' boundary work as they battle for space within the ecology (Liu, 2018). The generation of new knowledge may also help a group advance a jurisdictional claim and strengthen its boundary-making (Abbott, 1988, p. 96). Any change impacting one profession necessarily impacts others as it creates ripple effects throughout the ecology. Change in one ecology can also be spurred by developments in a linked (or overlapping) ecology (Abbott, 2005). A change in government priorities, for instance, can have implications for professional regulation, potentially favouring some professionals more than others or reducing professional influence more generally.

However, change may be provoked by events external to any single ecology (or others linked with it), like wars, shifts in public values, or global crises. The impact of such changes is rarely uniform: some segments within an ecology may benefit more than others, altering the resources professions can draw on in their battles over space (and legitimacy, remuneration, and so on). The COVID-19 pandemic was one global event that strongly impacted both professions ecologies and state ecologies around the world (Adams & Wannamaker, 2022). Its impact on the ecology of professional regulation, however, remains to be explored.

Our research addresses a limitation in ecological theory and gaps in previous research. We examine whether the structure and nature of the ecology of professional regulation shaped the manner in which the external crisis of the pandemic generated change within the professions ecologies through a comparative case study of British Columbia and Quebec, Canada. We focus on policies implemented during the first 18 months of the COVID-19 pandemic in these two provinces to change who does what in the professions ecology. Our focus is on changes to professionals' work, specifically, their scope of practice and how they do their work. We also consider whether some professions were able to advance their professional projects and expand their jurisdictions within the professions ecology during the crisis. Accordingly, our research questions are as follows:

- 1) What changes were made in the two provinces? How did the changes differ across the two provinces, with their distinct regulatory structures (ecologies)?
- 2) Did the pandemic create opportunities for some groups to advance their scopes of practice? What conditions affect which groups can take advantage of these opportunities?

Before providing details about the study and our data, we first describe the two regulatory contexts.

Quebec

The ecology of professional regulation in Quebec — referred to in that province as the “professional system” — is tightly integrated. The ecology consists of all self-regulating professions governed by a single framework law, the *Professional Code*, adopted in 1973. They are accountable to a single (state) oversight body, the “Office des professions du Québec”. Some professions (such as optometrists and architects) are also governed by separate pieces of legislation, which may be specific to that profession or cover an entire sector (e.g., different health laws affect the work of psychologists or speech-language pathologists), but even in such cases, these laws refer to (are embedded within) the Professional Code. Most often, legislative changes affecting specific professions or sectors are made through direct amendments to the Professional Code: the latest is the *Act to amend the Professional Code and other provisions* (Quebec, 2020a), which affected both the general governance of professional colleges, the distribution of authorised acts in dentistry, and the delegation of controlled acts in architecture.

The health sector differs slightly in that, from 1998 to 2009, it served as a test bed for a series of reforms intended to extend to the entire regulated professional system. These reforms include the introduction of the concept of “reserved acts”, more focused than the former “exclusive fields” established in 1973 and more apt to be shared by several professions. Reforms also include the concept of multi-professional colleges and a more formal process regarding the demands of groups who wish to join the professional system. All these reforms were implemented through laws amending the Professional Code and specifically aimed at the health sector, primarily the *Act to amend the Professional Code and other provisions as regards the health sector* (2002, regarding “physical health”) and the *Act to amend the Professional Code and other provisions in the field of mental health and human relations* (2009). To this day, these laws, and especially the regulations stemming from them, remain the main channels for changing the rules regarding the health professions. Changes to the reserved acts or their interpretation require the approval of the *Office des Professions, as do changes concerning training (whether initial or continuing) or admission to the profession* for locally or internationally trained candidates.

Despite reforms, the Quebec professional system remains centralised. There are 55 regulated professions governed by 46 professional colleges, all reporting to the Office des professions and governed under the Professional Code and, in some cases, legislation related to the Code. As a result, “the professional system includes approximately 900 regulations, the largest volume in the Quebec government” (Quebec Interprofessional Council [QIC], 2021), with all changes going through the Office.

There are signs that both the state system and professional regulators are willing to reduce this political and administrative traffic, although without questioning the integrated nature of the system. The main sign is the creation in 2017 of a "Commissioner for Admission to Professions" position to oversee the admissions processes of the 46 colleges. Another indication is the mobilisation of professional colleges, especially since 2019, who deplore how cumbersome and slow the regulatory process is. Finally, the routine of always having the same minister (traditionally the Minister of Justice) be in charge of overseeing the professions was broken in the summer of 2020: the assignment was given to the Minister of Higher Education in 2020-2022 and to the President of the Treasury Board in 2022, in part for contingent reasons but also because of a new recognition of the impact of professional system issues on health sector policy and on the public sector in general.

British Columbia

The ecology of professional regulation is less integrated in British Columbia. Indeed, it may be more appropriate to refer to ecologies plural, as professions are regulated under several pieces of legislation. Until recently, most professions in BC were self-regulating, and legislation recognised a regulatory body (called a society, association, or college) governed by a board composed of elected professionals and appointed public members, subject to general oversight from a government ministry office. Health professions have been governed by regulations under the *Health Professions Amendment Act* (British Columbia, 2003). Legislation passed in November 2018 and implemented in February 2021 brought several professions in the building and resources sector together under one *Professional Governance Act*. This legislation governs engineers and geoscientists, professional foresters, applied science technicians and technologists, applied biologists, agrologists, and, most recently, architects. These professions continue to be self-regulating, but the framework of the act has brought more standardisation to their activities and processes and subjects them all to the oversight of the Office of the Superintendent of Professional Governance, which is housed in the Office of the Attorney General.

Recently, new legislation to govern BC health professions has been passed (but at the time of writing, not enacted). In 2020, there were 25 healthcare professions governed by 20 regulatory colleges under the 2003 Health Professions Act (HPA) (the number of regulators dropped to 18 in 2021 following some amalgamations). Each college was empowered to govern many aspects of practice, including registration, professional conduct and discipline, under the oversight of the Ministry of Health. The Act itself is very general; many details, including which professions are governed under the act and what their scopes of practice are, are detailed in regulations and by-laws under the Act. This legislation was designed to be flexible — regulation change is much easier to implement than legislative change — but with so many colleges and everything from public appointments to by-law changes requiring ministerial review, it is considered cumbersome. For these and other reasons, the Ministry of Health in British Columbia pursued a “modernisation” project, passing new legislation to reduce the number

of regulatory colleges to six, increase public representation on regulatory bodies, eliminate self-regulation by decreasing professionals' participation on regulatory bodies, increase oversight by establishing a Health Professions Review Board, and change disciplinary processes (British Columbia Steering Committee on Modernization of Health Professional Regulation, 2020).

Several other professions in the province — including lawyers, accountants, land surveyors, social workers and veterinarians — are regulated under separate acts. Regulatory oversight has been assigned to various government ministries (including the Office of the Attorney General, the Ministry of Forests, Lands, Natural Resource Operations and Rural Development, Ministry of Agriculture, Food and Fisheries).

Overall, in 2021, professional regulators in British Columbia were governed under numerous pieces of legislation and overseen by separate government ministries and offices. Thus, the ecology of professional regulation in British Columbia is less co-ordinated than in Quebec and may be best characterised as several linked ecologies rather than a single ecology. State-profession relations are complex and variable.

Methodology

This paper relies on the analysis of laws and by-law modifications concerning regulated professions enacted from March 4, 2020, to November 11, 2021, in the provinces of Quebec and British Columbia. Data were taken from a broader project that included three distinct datasets: regulatory change (laws and by-laws), media discourse, and professional bodies' output, all of which were intended to serve different research purposes. The analysis we present here is based solely on the regulations dataset, which is the most appropriate for a comparative analysis of the ecologies of professional regulation across province and state-profession relations.

This dataset was constructed by applying web scraping techniques to the public electronic libraries, giving access to all laws and bylaws of Quebec and British Columbia. For Quebec, the data collection was based on a set of 3327 documents taken from the Gazette officielle du Québec¹, exported in "PDF" and "txt" format and then queried. For British Columbia, data was collected on a set of 2141 documents from the BC Laws library, queried via the Civix Server API² and then exported in PDF and txt format after identification. For British Columbia, given the online format of directives, the search was augmented by the manual collection of 48 public health-related documents: all the "Office of the Provincial Health Officer Orders" (45 documents) and all the "Medical Health Officer Orders" (three documents) issued during

¹ *Gazette officielle. Part 2: Laws and Regulations*, <https://www.publicationsduquebec.gouv.qc.ca/en/gazette-officielle/gazette-officielle-du-quebec/part-2-laws-and-regulations/>

² <https://www.bclaws.gov.bc.ca/civix/template/complete/api/index.html>

the review period. For both provinces, the search included all regulatory changes that occurred during the review period.

Data collection was done in two steps. The first step was an automated collection using the R programming language (version 4.0.4)³. This sweep included all documents containing direct reference to a professional regulatory body (e.g. “Chartered Professional Accountants of British Columbia”) or reference to a reserved professional designation (e.g. “professional accountant”). These two types of mentions were classified separately. This collection allowed us to isolate 597 documents in Quebec and 244 documents in British Columbia. The second step was a human evaluation of the selected documents in order to reject irrelevant documents (due to typos or ambiguous search terms). After this cleaning process, the final dataset includes 280 documents from Quebec and 195 documents from British Columbia.⁴ Despite varied document formats, both provinces underwent the same procedure, ensuring the collected data represent the entirety of regulatory documents mentioning professional regulatory bodies or reserved professional designations within the complete regulatory landscape of each province. The remaining documentary differences are, therefore, indicators of the distinct ways in which the two provinces utilise regulatory pathways to impact regulated professions.

The data were interpreted using a neo-institutionalist lens (Powell & Bromley, 2015; Rizza, 2008) and a propositional analysis method, which allows both the thematic comparison of documents and their recombination into a series of defined episodes that can be properly contextualised (Drisko & Maschi, 2016; Née & Véniard, 2012).

Each selected regulatory change was coded in a 17-entry grid. Besides general information (which occupations are affected, in which industry), the most important items for this paper were to determine: if the legislator explicitly linked this regulatory change with the pandemic crisis; whether or not this regulatory change built on a pre-pandemic issue; whether the document referred upfront to professional orders or legislation (e.g. Professional Code or Health Professions Act) or rather its effect on professional regulation was incidental; whether the regulatory change affected the content of the work, the admission of professionals, training or the governance of professional colleges. Finally, the identification of co-occurrences al-

³ Data collection was done using the packages “tidyverse” (1.3.0), “data.table” (1.14.0), “here” (1.0.1), xlsx (0.6.5) and uuid (1.0.1). The extraction of the text was done using the packages “pdftools” (2.3.1) and “tabulizers” (0.2.2).

⁴ The proportion of rejected documents is higher (317/517) for Quebec because it was used as a first test, leading to improved collection operations and a lower rejection rate (49/244) for BC. Of the 195 documents analysed in BC, 30 had been among those identified manually. To our knowledge, the separate disclosure of regulatory documents by BC’s Public Health Officer is a unique case in this province, so that the legislative databases of the two provinces remain comparable, both being composed of a search encompassing all regulatory documents produced by the provincial legislature during this period.

lowed us to determine propositional clusters and thus to reconstruct a series of defined episodes linking multiple documents to a common context (e.g. the reform of the correctional system in Quebec). Documenting these contexts was made possible by complementary documentary searches and, in the case of Quebec, by consultation with representatives of the Quebec Interprofessional Council, a body representing professional colleges.

These various indicators make it possible to analyse shifts in the ecology of professional regulation and the professions ecology, including the following: the use of regulatory changes to alter professionals' scopes of practice and how they do their work; the relationship between these regulatory changes and pre-existing professional projects; whether or not they were related to the pandemic crisis, including whether the changes related to the crisis were truly new issues or the continuation of pre-existing issues. The choice to compare Quebec and British Columbia is justified by both the similarities and the differences between the two provinces. In terms of similarities, both professional systems are of comparable size, share several legal features, and were already considering significant reforms prior to the pandemic. The comparable size and traits underscore the significance of Quebec's centralised ecology of professional regulation in contrast to British Columbia's less centralised system.

By comparing the two provinces, we can address our research questions and shed light on the impact of the pandemic crisis on specific professional projects in health care. In so doing, the study has both theoretical and methodological significance: it not only nuances ecological theory but it also demonstrates how a few indicators can be used to characterise the differences between the ecologies of professional regulation in two provinces.

Findings

Part A: What changes were made, and how did the changes differ across provinces?

By analysing all laws and by-law modifications concerning regulated professions enacted from March 4, 2020, to November 11, 2021, by Quebec and British Columbia, we explored how professional work changed during the pandemic and how the changes varied across provinces (and ecologies of professional regulation). Table 1 presents the number of modifications in each province impacting regulated professions in the healthcare sector and regulated professions not in health. The table also provides insight into the regulatory dynamics by categorising documents explicitly referencing a professional regulatory body (college, order, association) and those with explicit reference to legislation governing the professional ecology (e.g., Health Professions Act or Code des professions). These two categories, while not mutually exclusive, serve as indicators of the professional regulatory ecology, revealing aspects such as the diversity of regulatory pathways employed and whether changes affecting professionals necessitate, or not, engagement with specific legislation, state bodies, or professional colleges.

Table 1

Laws and by-laws modifications concerning regulated professions in Quebec and British Columbia, March 4, 2020, to November 11, 2021

	Total number of documents (March 2020 to Nov. 2021)	Number of documents referencing a professional regulatory body	Number of documents referencing legislation governing the professional system
Québec	280	156 (56% of total)	125 (45% of total)
<i>Qc – healthcare only</i>	145 (52% of total)	73	71
British Columbia	195	167 (86% of total)	126 (65% of total)
<i>BC – healthcare only</i>	144 (74% of total)	134	110

These basic indicators highlight major differences in regulatory practices within the two provinces, with their distinct ecologies of professional regulation. Quebec produced significantly more regulatory activity, in part because this activity extended more widely to sectors other than health: the healthcare sector accounted for only 52% of Quebec documents, compared with 74% in British Columbia. In Quebec, regulation of professions requires more interaction between the state and professions ecologies. Quebec's regulatory activities also take more varied forms: in British Columbia, the vast majority of by-laws, especially relating to healthcare, contained a direct reference to a professional college (167 out of 195, or 86%) and often to a piece of legislation like the HPA (126 out of 195, or 65%), while such references were much less systematic in Quebec (56% and 45%, respectively). These variations have a number of implications, not least methodological, since they affect data collection and interpretation. For example, collecting regulatory texts based solely on references to regulatory bodies or specific laws would yield incomplete data, with the degree of incompleteness and induced biases varying across regimes. Therefore, a comprehensive collection should also encompass references to reserved professional designations, as done here. Conversely, such an inclusive collection furnishes efficient indicators for promptly discerning key features of a given ecology of professional regulation and laying a valid foundation for comparison.

Other indicators (Table 2) describe the content of the regulatory activities. These give more information about the influence of the pandemic crisis on the regulation of professions. We look at three indicators here.

Table 2

Content of laws and by-laws modifications concerning regulated professions in Quebec and British Columbia, March 4, 2020, to November 11, 2021

	1 Link with pandemic	2 Affecting the performance of a restricted task at work	3 Restricted task + Link with pandemic	4 Affecting licensing	5 Licensing + Link with pandemic
Québec (n=280)	71	146	39	72	18
<i>Qc – healthcare only</i>	53 (75%)	79 (54%)	29 (74%)	49 (68%)	18 (100%)
BC (n=195)	39	41	33	6	5
<i>BC – healthcare only</i>	35 (90%)	36 (88%)	29 (88%)	5 (83%)	5 (100%)

In column 1, we classify each law or by-law modification as related or unrelated to the pandemic. Pandemic-related regulatory modifications weigh roughly the same in both datasets (25% for Quebec and 20% for British Columbia) and, not surprisingly, are mainly concerned with the healthcare sector. But, as in the rest of the corpus, this focus on healthcare was more exclusive in British Columbia (90% of pandemic-related regulations) than in Quebec (75%), where legislators have used more "pandemic regulations" in other sectors, such as notarial and land-related activities. The impact of the pandemic in Quebec, therefore, was felt more throughout the professions ecology, but in BC it was felt primarily within the ecology of health profession regulation.

In columns 2 and 3, we indicated whether a regulatory modification affected a particular profession's rights to perform a restricted task at work (e.g. prescribing medication, interpreting an X-ray, vaccinating) and, if so, whether or not this change was related to the pandemic. Regulatory changes concerning restricted work tasks are of strategic importance for professional projects. Apart from the pandemic, they are approached very differently in Quebec and British Columbia. In Quebec, no less than 52% of all regulatory activities relating to professions (146 out of 280) affected work tasks in a variety of sectors, compared with only 21% (41 out of 195) in British Columbia, where this was predominantly limited to healthcare. Pandemic-related measures were more similar, although they appear to have been a mostly crisis-specific response within healthcare in British Columbia (29 out of 33, or 88%, were healthcare-related); this was less the case in Quebec (29 out of 39, or 74%). These figures provide an additional indicator of structural differences between the ecologies of professional regulation in the two provinces (column 2) while suggesting that the crisis appears to have a standardising effect on regulatory practices, albeit only to a certain extent (column 3).

In columns 4 and 5, we indicated whether a change affected admission to a profession and, if so, whether or not this change was related to the pandemic (e.g. a fast-track prompted by the state of crisis). This type of regulatory change was far less frequent than the previous one (26% of Quebec documents and 3% of British Columbia documents), but it was strongly stimulated by the pandemic crisis, and exclusively in the healthcare sector: 100% of licensing modifications linked to the pandemic focused on healthcare in both provinces. Here again, it appeared as a crisis-specific innovation in British Columbia, and in Quebec as a more familiar tool (see Column 4) whose use was only amplified by the crisis.

Overall, the tables reveal that, during the review period, regulatory change impacted a more diverse range of professions in Quebec, but predominantly health professions in BC. This appears to reflect the nature of the ecology of professional regulation in each province. In Quebec, with its singular ecology, the impact of the pandemic was felt in a wider range of professions, while in BC, it was felt primarily within the ecology of health profession regulation. Moreover, Quebec made more changes during the pandemic, and the province also made more changes that seem less related to the pandemic but rather reflect issues raised prior to the pandemic. This difference may reflect the broader observation that the Quebec ecology of professional regulation requires greater interaction between professions and the state, and the various pieces within the ecology are highly integrated. This is expressed in the data by the number of regulatory changes produced by the state, in the variety of sectors concerned, and in the types of interventions since Quebec's regulatory changes more routinely affect work tasks and admission. Finally, the data show that these differences are partially smoothed out when regulatory measures concern the pandemic, but only up to a point, as contextual particularities also appear in measures aimed at the pandemic crisis.

Part B: Pandemic-spurred opportunities for health professional projects.

In our next stage of analysis, we took a closer look at a series of defined episodes, reflecting interactions between professions and the state over professional work tasks and licensing. Episodes were constructed by first selecting documents affecting reserved work tasks or licensing, then grouping these documents based on the professions involved and whether or not documents were related to the pandemic crisis. The overall picture, all sectors included, is in line with the results discussed above. Looking more closely at health professions alone, we can see that some professions were able to take advantage of an opportunity provided by the pandemic to alter their scope of practice or licensing in some manner. We identified nine different episodes in Quebec (involving a total of 42 documents) and six episodes in British Columbia involving a total of 28 documents (see Table 3). Of these episodes, six in Quebec and six in BC involved health professions experiencing alterations of their list of restricted tasks (an alteration of their scopes of practice) linked with the pandemic. In each province, five of these episodes advanced a professional project already in progress or altered the scope of practice of an existing health profession. From this, we conclude that the pandemic crisis

has accelerated specific professional projects that were already underway, especially towards greater delegation of reserved acts to non-medical regulated health professions.

Table 3

Episodes of regulatory activities affecting restricted professional tasks in Quebec and British Columbia, March 4, 2020, to November 11, 2021

	Total number of episodes affecting a restricted task at work	Restricted task + Link with pandemic	Task + Pandemic + Advance existing professional project
Québec – all sectors	16 episodes (involving 105 documents)	9 episodes (involving 55 documents)	n.a.
Québec – healthcare only	9 episodes (involving 54 documents)	6 episodes (involving 42 documents)	5 episodes
BC – all sectors	10 episodes (involving 36 documents)	7 episodes (involving 31 documents)	n.a.
BC – healthcare only	6 episodes (involving 28 documents)	6 episodes (involving 28 documents)	5 episodes

Certain changes were common to both provinces. In both, crisis policies accelerated reforms to scopes of practice that were already underway, concerning the prescribing and management of drugs, expanding the scope of practice of pharmacists and nurses. Both Quebec and British Columbia adopted emergency, pandemic-related measures for this purpose through various documents between May 2020 and December 2020. To be sure, the details were strongly influenced by the local context: in British Columbia, this reform was prompted by another crisis, the opioid crisis, and many of the new powers given to pharmacists and nurses were specifically aimed at prescribing and treating drugs for substance addiction (through regulations adopted from July 2020 to October 2020). In both provinces, however, the pandemic-related measures granted additional rights for pharmacists and nurses to prescribe, adjust or substitute drugs, often with the declared purpose of alleviating physicians' workload (through regulations adopted between March and December 2020). For example, a December 2020 Quebec by-law accelerated the adoption and expanded the scope of the already planned reform of pharmacists' work, invoking "1. the current COVID-19 pandemic is putting increased pressure on the healthcare system; 2. the urgent need to free certain professionals, notably family physicians, from certain services that can be provided in pharmacies" (Quebec, 2020b, p. 5169A). In British Columbia, from May to September 2020, opioid-related modifications that extended nurses' ability to order lab tests was also expanded due to the pandemic.

But some professional projects have been accelerated by the pandemic in just one province. In Quebec, the pandemic crisis justified accelerating the implementation of regulations concerning the professionalisation of psychosocial assessments in prisons, benefiting criminologists and psycho-educators — notably via a ministerial decree of April 2021 that linked this issue with the extension of pandemic emergency measures to mental health services (in other decrees of December 2020 and July 2021).

Secondly, broader measures, such as COVID testing or vaccination, although not initially targeting particular professions, nonetheless intersected with specific professional projects, depending on the situation. Similar situations were observed in both provinces. This is the case for midwives, to whom the crisis measures gave more extensive rights — in Quebec to prescribe certain drugs and tests (as of April 2020), in British Columbia to order certain laboratory tests (in documents from June 2020 to June 2021). In both cases, these reserved activities anticipate sustainable gains for the profession.

Other situations depended on local contexts. For example, paramedics in British Columbia gained the right to conduct COVID-testing, first in November 2020, with increased autonomy in May 2021. Conversely, Quebec paramedics never received this right: even though some local health authorities entrusted them with testing tasks during the summer of 2020, they expected a ministerial decree that never materialised. Quebec paramedic representatives protested because the right to COVID-testing would have advanced their long-standing demands for greater autonomy in front-line patient assessment. Similarly, respiratory therapists in Quebec had demanded in 2019 the right to vaccinate in order to strengthen their position in front-line practice. They, therefore, saw the pandemic crisis as an opportunity to renew their demand for the right to vaccinate, which they obtained by ministerial decree in December 2020. Once again, this situation appears specific to Quebec (Fardeau, 2023).

The mentioned episodes show how crisis measures can directly intersect with ongoing professional projects — whether the state system planned for it or not. These intersections stimulated the development of non-medical professions such as midwives, nurses, paramedics and pharmacists.

Conversely, other episodes suggest that crisis measures not aligned with underway professional projects can reinforce the status quo. The data include two subsets of episodes hinting at this direction. The first subset corresponds, in Table 3, to the single episodes in each province that affect tasks but not professional projects. They feature documents (ten in Quebec, five in BC) that were adopted to deploy emergency health measures, including by restricting access to places or services; they all designate only medical doctors with the authority to issue authorisations or certifications, replicating a default disposition common in many other regulatory texts. The second subset of episodes concerns the admission of foreign-trained professionals. Despite this being a prominent issue before and during the pandemic crisis, governments produced few regulations on the subject. In Quebec, although the crisis prompted

significant regulatory activity for the temporary licensing of students and retirees (13 pandemic-related documents from March 2020 to July 2021), it did not accelerate the licensing, even temporarily, of foreign-trained health professionals (zero pandemic-related documents). Similar dynamics occurred in British Columbia. This may suggest that global issues relating to the ecology of professional regulation as a whole, but without roots in pre-existing professional projects or in a specific professional ecology, did not inspire consequent modifications in times of crisis.

While not all episodes or alterations to scope of practice intersected with pre-existing professional projects or significantly altered scopes of practice, the pandemic spurred opportunities for reform that some health professionals — like pharmacists and nurses — were able to benefit from through expanded jurisdictions. Moreover, opportunities varied across province. Pre-existing concerns in each province (the opioid crisis in BC, mental health in prisons in Quebec) shaped change, indicating that pre-existing conjuncture, by definition subject to important variations across local contexts, might be a decisive factor during a crisis. It is less clear that the structure of the ecology of professional regulation impacted opportunities in the health sphere, but it appears to have shaped opportunities outside healthcare, which were largely lacking in British Columbia, unlike Quebec.

Conclusion

This paper explored professional regulatory change during the COVID-19 pandemic in two Canadian provinces. Our research was informed by ecological theory and aimed to shed light on how the nature of an ecology of professional regulation impacts regulatory reform in response to crisis through a comparative study.

Our first research question asked what changes were made to professional regulation in the two provinces during the first 18 months of the pandemic and whether the nature of these changes appeared to be influenced by the distinct regulatory structures in each province. Our data analysis identified that many changes were made impacting professional regulation in each province, including changes to scopes of practice, work tasks, and entry to practice. More changes were made in Quebec generally, and this was particularly the case for professions outside of the health sphere. In British Columbia, fewer changes were made, and the vast majority of these changes impacted health professions. Following our analysis, this difference can be accounted for by the distinct ecologies of professional regulation in the two provinces. In Quebec, there is one tightly integrated ecology, encompassing all professions and requiring a great deal of co-ordination between state, professions and professional regulators. As Abbott (1988) has argued, a change to jurisdiction in one ecology can have ripple effects throughout that ecology. Here we see the impact of the pandemic crisis was felt throughout these ecologies, including outside of healthcare. In contrast, in British Columbia, there are multiple ecologies of professional regulation. The pandemic primarily led to changes

in the ecology of healthcare profession regulation, but not others. Data showed that the structural differences between the two regimes were partially smoothed out when regulatory measures related to the pandemic, but only up to a point, as contextual particularities also appear in measures aimed at the pandemic crisis.

Our second research question asked whether the pandemic created opportunities for some professional groups to expand their claims to jurisdiction and their scope of practice. To answer this question, we did follow-up analyses on specific episodes — clusters of changes that together affected and altered professions' "restricted tasks" or scopes. Again, there were fewer of these episodes affecting non-health professions in British Columbia than in Quebec. Looking just at healthcare episodes, we find that the pandemic provided an opportunity for several professions in each province to advance a professional project — many of which were begun prior to the pandemic. Professions like nursing and pharmacy were particularly advantaged in both provinces. Despite similarities across provinces, there were some differences as well, highlighting that context continues to matter. In this manner, the pandemic crisis accelerated the implementation of pre-existing reform projects, and, in the health sector, it has encouraged the delegation of reserved acts from the medical profession to other healthcare professions. The ecology of professional regulation shaped how these changes were implemented, even as many of the changes made were similar across provinces.

Importantly, none of the changes made altered the ecology of professional regulation or the division of labour between professions and the state within that ecology. However, change was already underway in BC, with the Professional Governance Act implemented during the pandemic and a new division of jurisdiction within the ecology of health profession regulation created through legislation (implementation in progress at the time of writing). In Quebec, the pandemic has spurred conversations about changing reserved acts and scopes of practice more broadly in the health sphere, but the ecology of professional regulation itself remained unchanged during the period of our study.

Although more work remains to be done to unpack regulatory change within Canada (and, comparatively, internationally), our current research makes the following contributions to ecological theory. First, our research highlights that the pandemic was a crisis that generated change within the ecology of professions (respecting who does what), but its impact on the structure of the ecology of professional regulation is less clear. Second, our research highlights that the impact of change varies depending on the nature and structure of the ecologies of professional regulation involved, as shown in our comparison between Quebec and British Columbia. The pandemic had a broader impact in Quebec since the ecology of professional regulation is more inclusive and state-profession relations are more integrative in that ecology. Finally, crises can create hinges — such as concerns about access to services — that impact both the state and professions ecologies, but not every group within an ecology will benefit equally: data suggest the hypothesis that crisis-related issues are more likely to induce or

speed up durable changes if they intersect with pre-existing and ongoing professional projects. On a methodological level, our research demonstrates that collecting data about regulatory changes provides a practical way to detect and characterise differences between different ecologies of professional regulation.

Acknowledgements

This research was supported by a grant from the Social Sciences and Humanities Research Council of Canada. We would like to thank Kevin Kaiser et Olivier Santerre from the Bureau d'initiatives numériques of the Centre interuniversitaire de recherche sur la science et la technologie (CIRST), as well as Bruna Moraes and Karolane Stébenne. We would also like to thank Marc Beaudoin from the Quebec Interprofessional Council for his insight and the reviewers and editor for their feedback.

Article history

Received: 25 Aug 2023

Accepted: 19 March 2024

Published: 20 May 2024

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