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Professional regulation, profession-state relations and the pandemic response: Australia, Canada, and the UK compared

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ABSTRACT

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The COVID-19 pandemic provoked a surge in demand for health services. To help meet this demand, governments and health profession regulators implemented regulatory policy change to enhance professional availability and flexibility. Some nations may have been better positioned to make such changes due to their systems of healthcare profession regulation. More specifically, countries like Australia and the United Kingdom with their national regulatory structures could be more adaptable than Canada with its provincial system of regulation. To determine if this is the case, and guided by Abbott's (1988, 2005) ecological approach, we conducted a policy analysis. We find few differences in regulatory policy changes in terms of what was done, with the exception of scope of practice changes, which were implemented in Canadian provinces, but were not necessary in Australia and the United Kingdom. Instead, in the latter two countries practitioners were asked to bear responsibility for their own scopes. Additional content analysis of medical journals explored what professionals thought about policy responses, finding that Australian professionals were more positive than others. Moreover, government responses were regarded more favourably when they were perceived to be collaborative. Although there is little evidence that one regulatory system is better than another in facilitating crisis responses, regulatory structures do shape the nature of regulatory policy change.

1. Introduction

When the COVID-19 pandemic hit their shores, nations had to pivot quickly to ensure they had sufficient healthcare personnel and resources ready to meet the looming crisis. Despite preparedness plans and experience with previous epidemics, many nations appeared illprepared in terms of resources, supplies, and effective policies (Kavanagh and Singh, 2020). Governments responded with a slew of policy edicts, regulations, and sometimes new legislation. Many new policies impacted the healthcare professional workforce, altering how and where they worked, and how that work was regulated.

Some nations may have been better positioned than others to make workforce changes because of their systems of professional healthcare regulation. Professional regulation varies cross-nationally, even among nations that are culturally and socially similar (Leslie et al., 2021). In nations like Australia, Canada and the United Kingdom, professional regulation has until recently been characterized by exclusive scopes of practice, and inter-professional tensions surrounding jurisdictions or scopes of practice. Precisely who did what, and under whose supervision, was hotly contested (Abbott, 1988; Kelner et al., 2004). In Western contexts, healthcare professional regulation has also been traditionally organized in siloes, with a separate regulator for every profession. Such regulatory practices were criticized for being cumbersome, inflexible, and vulnerable to special interests (Carlton, 2017; Saks, 2015). In response, several nations implemented legislative changes to encourage more flexibility in professional divisions of labour, establish overlapping scopes of practice, and reduce the number of healthcare professional regulators. Such changes have been made – to varying extents – in each of Australia, the United Kingdom, and Canada. One might expect that those regions with more flexible scopes of practice and national regulation – Australia and the United Kingdom – would mount a more successful regulatory response to healthcare crises, as a result. Was this the case during the COVID-19 pandemic?

In this article, we explore how systems of healthcare professional regulation impacted regulatory responses during the first wave of the COVID-19 pandemic. Did the presence of national-level health profession regulators in the UK and Australia lead to a faster, better coordinated pandemic response than in Canada, with its system of provincial

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regulation? To answer this question we analyse policy changes implemented by governments and regulators. To provide additional context, we also examine statements made by medical professionals about their governments' policy response. We contend that analysing the pandemic response cross-nationally provides an opportunity to consider the impact of professional regulation structures, as well as collaboration between professional and state leaders, on policy outcomes.

2. Professional regulation

Many healthcare occupations are regulated by government statute to ensure that practitioners have the competence, guidance, and oversight to provide services safely to the public. The number of healthcare professions regulated and how they are regulated varies across context. Until fairly recently, the dominant mode of regulation for traditional professions like medicine, pharmacy, nursing, and others in Anglo-American countries was statutory self-regulation (Adams, 2018; Carlton, 2017; Saks, 2015). Specific forms of regulation - and the terminology used to describe them - vary across context, but statutory self-regulation has typically entailed the passing of legislation empowering bodies composed predominantly of professionals to govern themselves (with varying degrees of state oversight and public participation), establish practice standards and competency requirements, and oversee practitioner discipline (Adams, 2018; Leslie et al., 2018; Saks, 2015). Systems of statutory self-regulation first became entrenched in several Anglo-American countries in the late nineteenth and early twentieth centuries.

Several scholars have characterized professional self-regulation as the product of a regulatory bargain between professions and the state, whereby the latter granted privileges to professionals in return for their commitment to use their powers in the public interest (Macdonald, 1995). The regulative bargain in some national contexts was also economic: governments gained economic savings from statutory self-regulation when professionals bore the cost of regulation themselves (Adams, 2017), granting them autonomy in exchange. Whether any such bargain actually occurred can be questioned, but the concept is useful as it highlights how states and professions are partners in regulation. Professional regulation both reflects and governs professions' relationships with the state, as well as professionals' relationships with their patients/clients, and to a lesser extent, others in their workplaces (coworkers, employers).

Politicians, consumers and others became dissatisfied with these regulatory bargains with opposition erupting in the 1960s and 1970s and intensifying in the early 2000s. Systems of professional selfregulation were questioned by civil rights activists, patients and consumers, policymakers and others, who argued self-regulation was prone to abuse of privilege, ineffective, and outdated (Allsop and Saks, 2002; Carlton, 2017; Nancarrow, 2015). Political movements, including neo-liberalism and populism with their associated anti-expert sentiments, furthered this trend as political leaders endeavored to undermine the authority of experts, who sometimes challenge their agendas, policies and claims (Carlton, 2017; Eyal, 2019; Waring et al., 2010). Within healthcare, concern for escalating costs - particularly in countries with publicly-funded healthcare (combined with private insurance for extended coverage) like Australia, Canada and the United Kingdom spurred rationalization (a concern for efficiency and doing more with less), which encouraged changes in the healthcare professional workforce, including substituting high-paid professional workers with health workers who could be paid less (Nancarrow, 2015). In this manner a confluence of interests and concerns spurred regulatory change, leading to a decline in professional self-regulation. These processes played out differently across region, but the overarching trends and their impacts are similar.

2.1. Australia

Traditionally, Australia's healthcare professions were regulated by state-level registration boards. These boards were staffed predominantly by professionals, and had a close relationship with government health departments (in some cases being subsidized and serviced by a state department of health: Carlton, 2017). This form of self-regulation has been characterized as "peer review" since these entities were not always autonomous, but they were tasked with registering practitioners, as well as dealing with complaints and discipline (Carlton, 2005). Some health professions were granted a protected title - exclusive rights to use a professional designation - but not exclusive rights to practice. The number of professions regulated by statute varied from one state to the next (Carlton, 2005). This system came to be seen as a barrier to health system reform, mobility, and a source of workforce shortages in the late 1990s and early 2000s (Carlton, 2017; Pacey et al., 2016; Leslie et al., 2018). Critics also identified a lack of transparency and accountability (Carlton, 2005). Concerns about the effectiveness and efficiency of Australian healthcare, in a context of neo-liberal reform, were also relevant. Healthcare is (partially) publicly funded and organized with input from all levels of government; many healthcare services (like oral, optical health) are covered under private insurance only. Reforms of healthcare professional regulation have been intertwined with efforts to reform the healthcare system broadly, with the goal of increasing efficiency, cost-effectiveness, and standardization (Carlton, 2017).

In 2010, Australia nationalized professional regulation, introducing more standardization, oversight, and accountability for health professions. Currently there are 15 national health profession boards (several governing more than one profession) whose regulatory work is supported by an administrative body, The Australian health practitioner regulation agency (Ahpra). Membership on the boards is by appointment, with both professional and public representation. The work of these boards is funded through registration fees. National, state and territorial government officials provide some oversight. Although there may be some small variations in the regulation of health professions across state, the national scheme applies to all regulated health professions in Australia. Professionals in this system are not self-regulating in the traditional sense, but professionals have retained a strong voice on national boards (Carlton, 2017). One of the goals of the regulatory change was to improve workforce flexibility. As a result, scopes of practice in this regulatory scheme are flexible, variable, and not clearly defined (Leslie et al., 2021; Pacev et al., 2016). These changes altered the relationships between professions and the state, creating regulators that are autonomous and arms-length from the state, but still subject to government oversight.

2.2. United Kingdom

Since the late-nineteenth and early twentieth centuries, many health professions in the United Kingdom have been self-regulating: national profession-specific councils, made up predominantly of representatives of that profession, governed practice, professional conduct, and set standards. Few UK health professions had exclusive scopes of practice; others possessed a restricted title (Price, 2002). Through self-regulation, professional regulators enjoyed considerable autonomy. Public and government discontent with professional self-regulation grew in the late twentieth century, but initial reform efforts were minor – for example adding some public members to regulatory councils (Allsop and Saks, 2002; Saks, 2015).

Dissatisfaction with self-regulation came to a head in the early 2000s with a series of scandals that cast doubt on the ability (and willingness) of professional regulatory bodies – especially the General Medical Council – to discipline practitioners effectively and govern in the public interest. These events, combined with ongoing efforts to reform the UK's National Health Service (NHS) to enhance efficiency, as well as anti-expert sentiments in government, spurred professional regulatory

change (Allsop and Saks, 2002; Saks, 2015; Waring et al., 2010). The result was a substantial overhaul to establish a new regulatory system where professionals' voice and authority remained present but muted (Saks, 2015; Waring et al., 2010). In this new system, public members were placed in key positions on regulatory councils and professional oversight bodies (the Professional Standards Authority) to ensure regulation prioritized public protection. Some have called this 'stake-holder regulation' to distinguish it from self-regulation (Allsop and Saks, 2002).

At time of writing, all regulated professions are governed under ten distinct councils, but there is discussion about reducing this number (Department of health & social care, 2021). These councils have similar functions, but are not identical. For example, some regulate single professions, while others regulate multiple. Moreover, scopes of practice are more flexible for some professions than others (Leslie et al., 2021). The focus of regulation has shifted somewhat to prioritize protecting the public from professional malpractice and diminished competence.

2.3. Canada

Healthcare professional regulation occurs on a provincial level in Canada, in line with the Canadian constitution. Structures of professional self-regulation in healthcare date back to the mid-to late-nineteenth century in Canada. Although structures vary across province (and profession), typically licensed or registered professional practitioners are incorporated into a 'college' or association, and are governed by a board consisting of professionals elected by their peers and members of the public appointed by the government. Professionals enjoy not only exclusive rights to use certain titles, but often the right to perform specified restricted acts (or a specified scope of practice). Exactly which healthcare professions are regulated varies from one province to the next. Some regulators govern multiple professions, and there appears to be a trend towards regulator amalgamation (BC Steering Committee, 2020; Alberta, 2020); more typically, regulatory colleges govern one or two professions only. Professionals can practice in the province in which they are registered; their ability to practice in other provinces is typically limited (although this can vary too). As in Australia and the United Kingdom, some professional services (medical, nursing) are covered by public health insurance plans, while others (such as oral healthcare) are covered, at least in part, by private insurance plans.

Canada's system of professional regulation has undergone many changes in the last 50 years, with regulation being completely restructured in Quebec in the early 1970s and other provinces enhancing state oversight, and public participation on regulatory boards. Workforce flexibility has been enhanced through legislation allowing overlapping scopes of practice, but these scopes are typically specified in legislation. In most cases, regulatory change has been incremental (Oetter and Johanson, 2017), and self-regulation has persisted until time of writing (legislation to change this is pending in British Columbia). Although professional regulators work with government ministries, and are supervised by them, they remain distinct from the state and are self-funding. Change to regulatory structures is ongoing, with recent changes intended to achieve more accountability, transparency, and oversight (Leslie et al., 2018; BC Steering Committee, 2020).

Some in Canada see the prevailing systems of healthcare professional regulation as outdated, and they look to the UK and Australia for evidence of best practices. Regulatory change in several provinces is under development (Alberta, 2020; BC Steering Committee, 2020). Exploring international responses to the COVID-19 pandemic provides an opportunity to reflect on regulatory best practices.

3. Theorizing regulation, policy, and change

Scholars theorizing healthcare regulatory and policy change have emphasized how multiple stakeholders shape the process. For instance, Alford (1975) described policy change in healthcare as the result of the interplay between "structural interests": professionals seeking monopoly, managers eager to rationalize, and members of the community. His argument has been criticized for not taking into account a variety of interests and social-historical context (Checkland et al., 2009); however, others have expanded this work to highlight not only healthcare managers and professionals, but also state actors (including politicians and bureaucrats) and other stakeholders. Among the most influential of these is Donald Light's (1991, 1995) concept of countervailing powers. In Light's own words (1991, p. 500), the "concept of countervailing power points to a historical dynamic that begins with one party accumulating such power that it prompts other parties to muster their forces and attempt to control the first." Thus, while historically dominant professions in Anglo-American countries may have acquired significant social and cultural authority, by the late twentieth century, a variety of political, social, economic, consumer and occupational groups had mobilized to counter their dominance, and enhance their own power and influence. Over time, power dynamics between and among various stakeholders alter, as groups mobilize resources and jockey for influence. Policy outcomes are shaped by these dynamics, and the balance of power among stakeholders. The voice of dominant professions has waned over time, while the influence of other stakeholders in policy formation, from politicians and bureaucrats to healthcare leaders and consumers, has grown.

The concept of countervailing powers is valuable in highlighting how shifting power relations among multiple stakeholders shape policy outcomes, but it remains largely descriptive. To theorize the processes at work more extensively, Abbott's (1988, 2005) ecological approach is useful. Abbott (1988) has argued that professions exist in a system or ecology, and within this ecology they are continually jockeying for jurisdiction - defined as a profession's authority within an area of work. In their drive for autonomy, authority, and market privileges - benefits that come with control over a jurisdiction - professional leaders campaign, attempting to win over various stakeholders (state leaders, the public, employers and co-workers) (Abbott, 1988). While Abbott argues that interprofessional conflict over jurisdiction is endemic to the professions ecology, more recent writers highlight collaboration and inter-professional alliances (Lahey, 2013; Malcolm and Scott, 2011). Collaboration has increased over time with growing emphasis on interprofessional healthcare teams, and state actors' diminished tolerance for inter-professional conflict (Regan et al., 2015). Nonetheless, power differentials within and across professions remain.

The professions ecology is linked with, and even overlaps with, other ecologies. Abbott (2005) highlights two —the state and universities — but there are others, including the healthcare system. Professional regulatory outcomes are shaped by events, relationships and concerns within and across ecologies (Abbott, 2005; Adams, 2018). Actors within an ecology (ie. professionals in the professions ecology; bureaucrats and politicians in the state ecology) may disagree on policy directions. Whose point of view prevails can depend on a variety of factors including power dynamics and social-historical context; however, it is in those moments where the interests of stakeholders across ecologies align that change is most likely (Abbott, 2005). That is, regulatory change often addresses concerns arising in both ecologies, as well as the interests of multiple stakeholders.

While this theoretical perspective acknowledges multiple stakeholders, it has highlighted the significance of both professional and state actors to professional regulatory change. For Abbott (1988, 2005), professional and state ecologies are not static, but rather continually in flux, as a result of both internal and external forces prompting change. The COVID-19 pandemic was an external driver of change that strongly impacted multiple linked ecologies, including the professions, the state, and the healthcare system. The pandemic caused a health crisis, and a surge in demand for healthcare services that required adjustments of policy and practice by state leaders and bureaucrats, healthcare institutions, and professional bodies. Policy responses differed across country, as did outcomes (Kavanagh and Singh, 2020). Some countries

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consulted with experts and engaged stakeholders more than others (Ibid). We can understand such policy variations from an ecological perspective by considering the role of key stakeholders in linked ecologies, including politicians and professionals. When considering changes in professional regulation during the pandemic, Abbott's ecological approach suggests that regulatory policy change would be mediated by prevailing structures of professional regulation, and state-profession relations – or in Abbott's terms the structure of the state and professions ecologies, and the linkage between these ecologies (and others linked with them).

This paper explores how health professional regulatory structures, and the link between state actors and professional leaders, shaped regulatory changes made at the state and professional level during the first wave of the COVID-19 pandemic in Australia, the United Kingdom and Canada. Our research questions are as follows: 1) Did healthcare professional regulators and governments respond differently to the COVID-19 pandemic across the three countries? (2) Did national-level professional regulations in the UK and Australia lead to a more effective pandemic response than in Canada, with its system of provincial professional regulation? (3) How did professionals view these pandemic policy responses?

4. Methods

To understand regulatory policy changes during the pandemic, we conducted a policy analysis. That is, we analysed policies and regulations pertaining to the health professional workforce in each country, paying particular attention to who was entitled to practice, where, and what they were entitled to do (given the centrality of these aspects within healthcare professional regulation). The policies we examined included regulatory guidance, government orders, by-laws and legislative changes during the first wave of the COVID-19 pandemic. We identified regulatory changes impacting healthcare professionals, by profession, and compared across region: Australia, the United Kingdom, and the Canadian provinces of Alberta, British Columbia, Ontario and Quebec. Preliminary analysis revealed that regulatory changes made early in the pandemic impacted most health professions, but some were affected more than others, including medicine and nursing. Subsequently, we analysed the timing of changes in these two professions, to identify any regional differences.

To augment this analysis, and to understand professionals' views concerning the pandemic response, we conducted a content analysis of medical profession journal articles, from March 2020 (the month the WHO declared COVID-19 a pandemic) to August 31, 2020. Many regulatory changes were implemented in the opening weeks and months of the pandemic, but our August end-date allows us to encompass the first wave in its entirety in the countries of interest.

4.1. Policy data collection and analysis

To access policies and regulations, we scoured government and professional regulator websites in all three countries. In Canada, the database of health workforce changes compiled by the Canadian Institute for Health Information (Canadian Institute for Health Information [CIHI], 2021) was a primary source of information, but provincial healthcare regulator guidance was also reviewed. In all contexts, our focus was on policies respecting the professional health workforce, including who could practice and what they were empowered to do. We tracked what changes were made, and when (in reference to the 100th COVID-19 case nationally), across region.

Policy analysis allows us to track changes in regulatory policy, but not professional responses to those changes. To explore professional reactions to policy change, we conducted a thematic content analysis of medical journal publications.

4.2. Thematic content analysis

In our thematic content analysis of medical journal publications, we focused on professionals' published opinions on their governments' policy responses. For our publication analysis, we reviewed issues of prominent and highly read medical journals, the Lancet, the Medical Journal of Australia (MJA) and the Canadian Medical Association Journal (CMAJ), published between March 2020 and the end of August 2020, collecting all articles touching on the pandemic, and professional and government policy responses. This data extraction yielded 103 journal articles (Lancet - 55; MJA - 23, CMAJ-25). Subsequently, we read the articles closely to identify those that directly commented on pandemic policies (state and profession) and whether state policies were informed by advice from professionals (N = 68; 36 in the Lancet, 13 MJA, 19 CMAJ). We created a database in excel for publications extracted from all three journals to record the articles' main argument, attitudes expressed towards government policy responses, as well as the codes resulting from our thematic analysis.

Thematic analysis entailed both open and deductive coding. Deductively, we assessed whether articles were positive, negative, or advisory (recommending policy action without judgement) in their comments on pandemic policies. Inductively, we analysed the comments to identify emergent themes: collaboration, communication, sciencebased policy, politics, and broader healthcare policies. Coding was done by hand, and entailed multiple readings, and a movement from initial open coding to more focused and categorical coding. We explored how these themes (collaboration, communication) were linked with positive or negative attitudes towards policies.

Unfortunately, lack of access to parallel national journals for other professions limited our journal analysis to medicine. We did, however, analyse web statements published by other professions (analysis not presented here), which expressed similar concerns with policy. Therefore, we believe this content analysis is useful in providing insights into professionals' responses to policies enacted. Our analyses are limited in other ways as well, including the focus on four provinces in Canada rather than all ten. Moreover, our analyses focus on state and profession stakeholders, but pay no attention to other key stakeholders like healthcare institutions and consumers. Here we follow Abbott (2005) in focusing on the state and profession relations, but we acknowledge the presence of other stakeholders.

5. Findings

5.1. Policy analysis

All three nations implemented regulatory change and revised policies concerning the work of regulated healthcare professions during the first wave of the COVID-19 pandemic, with the goal of increasing workforce capacity and flexibility. These changes were often initiated in tandem with public health measures such as testing and tracing programs, lockdowns and restrictions on gatherings and mobility. Table 1 presents an overview of key changes across profession and region. Some changes made affected all professions, while others were directed at specific professions - most commonly medicine, nursing, and pharmacy. Changes that were common across country include policies to mobilize recent retirees and those not in active practice into clinical roles. This was particularly the case for medicine and nursing, but depending on the locale, temporary registers were created for some allied health professions as well (PSA, 2021). New policies were also implemented for trainees: either to address changes to education, training, and entry-to-practice exams during the pandemic, or mobilize trainees for clinical roles (or both). The UK went further than the other two nations in providing opportunities for senior students to join the fight against COVID-19.

The impact of the pandemic differed during the first wave across professions, as demands on medical doctors, nurses, and some others

Table 1

Summary of professional regulation changes by professional group and region.

	Australia	Canada (4 provinces)	United Kingdom
Nursing	* Pandemic response sub-register estab- lished for recently retired	 * mobilize those who had recently left practice. * Expanded powers to various classes of nurses: testing, vaccines, prescription-writing, death investigations; long-term care authority. 	 * temporary register for recently retired, overseas- trained nurses. * reassignment from non-clinical roles to clinical encouraged. * mobilization of (senior and other) students
Pharmacy	 * Increased community care role * Pandemic response sub-register established for recently retired. * streamlined, altered registration for overseas registrants, interns, new 	 Clarification, expansion of powers re writing, delivering prescriptions; increased community care role. temporary register COVID testing, vaccines. 	 * Increased community care role * temporary register for recently retired. * adjustments to continuing professional development reporting requirements.
Medicine	 Guidance about scope of practice published; encourages physicians to "know [their] limits" streamlined registration for overseas registrants Pandemic response sub-register estab- lished for recently retired 	 New guidance, rules re virtual practice, assisted dying; Changes re involvement in long-term care. Temporary register established for those who had recently left practice. 	 * Guidance re practising outside scope: "use professional judgement" * Guidance re discipline for those practising outside scope. * Temporary register for recently retired (up to 6 years ago). * Mobilization of trainees and some refugee, overseas MD's
Oral Health	 Closure of offices in first wave; some practice restrictions clarification that practitioners responsible for own scope or risk discipline. scope of practice guidance provided to help practitioners make informed individual decisions about what they do. 	 Closure of offices in first wave; some practice restrictions. In some locales, dental professionals involved in COVID-19 testing; invited to volunteer in other capacities. 	 * Some closure of offices in first wave; financial difficulties * Taking on some new roles in NHS (including vaccines). * Oral health professionals have a scope of practice, but this is intended as a guideline, and they should ensure they are competent to do tasks they undertake.
Allied and Complementary Health	 * Some closure of practice; altering how practice is conducted for some. * Telehealth expanded. * Midwives moving into some nursing roles. * some inclusion, new training for expanded hospital roles (physio) 	 * Some practitioners advised to close offices in first wave; * Telehealth expanded. * temporary register * Guidance on safe practice. * Involvement in COVID-19 testing. 	 * Exempt from national closures, but limitations lead to some closures. * virtual care, treatment. * temporary register for several allied health professionals. * mobilization of (senior) students. * Some scope changes (individual level)
All/Several	 * Pandemic response sub-register established for recently retired (initially for 4 professions, then 8). * adjustments to continuing professional development modes and requirements. * streamlined, altered registration for registrants from overseas * scopes flexible. Use judgement. 	 Mobility restrictions (within locale); easing of mobility barriers between provinces. In-person practical exams cancelled and alternative arrangements made (temp registration often). move of conduct hearings to virtual Restrictions on in-person practice, and encour- agement of virtual practice. temporary registers. 	 * Temporary registers * mobility restrictions * adjustments to continuing professional development modes and requirements for some * move of conduct hearings to virtual

increased, and the available workforce was expanded, while some other professions like oral health care practitioners, chiropractors and others, experienced practice closures and diminished opportunities to practice. New policies respecting telehealth were implemented in some contexts, especially Canada (which had fewer policies pre-pandemic), as more healthcare services especially among family physicians, oral and mental health providers, and other allied and complementary health practitioners moved online.

Many of the changes implemented were similar across country, with some variations that seem to reflect case counts and healthcare demand. More specifically, Australia with its small first wave implemented fewer policy changes than the UK with its high case counts. Parallel differences are evident within Canada, as provinces harder hit initially, such as Quebec, introduced more sweeping changes than those with lower case counts (British Columbia).

The main area where policy changes differ is with respect to scopes of practice. Guidance and policy in all regions explored here emphasized the need for more flexibility with respect to who does what to cope with the healthcare crisis. In Canada, where most healthcare professions are closed and self-regulating with defined (if overlapping) scopes of practice, creating more flexibility required temporary orders and by-laws. For instance, new orders expanded who could give COVID-19 tests (without an order) to a wide range of health practitioners. Specific professions – especially nurses and pharmacists – experienced an expansion in what tasks they were empowered to do. British Columbia considered a public health order that would facilitate the expansion of

scopes of practice on an ad hoc basis, and suspend complaints and investigations in such instances (CDSBC, 2020). A similar order was passed in Ontario, but not until April 2021 (Canadian Institute for Health Information [CIHI], 2021).

In contrast, in Australia and the United Kingdom there were few instances where scopes of practice were formally altered because few regulated health professions in the UK, and none in Australia, have formal scopes of practice. Instead, it was common for regulatory guidance to warn practitioners that their scopes could change during the pandemic, and instruct them about their responsibilities. For instance, guidance from Australia's national boards contained the following advice:

use your professional judgement to assess risk, and to deliver safe care informed by any relevant guidance and the values and principles set out in professional standards and the codes of conduct for your profession. (Pharmacy Board, 2020).

Furthermore, professionals were told, "If there is a complaint about you during this time, the ... Board ... will take into account the extraordinary circumstances in which you are working and the heavy demands being made of you" (Ibid). Thus, professionals were told it was their responsibility to navigate employer and client demands concerning scope, while being warned that they could face discipline if they made mistakes while completing unfamiliar tasks. While this regulatory framework allowed for more flexible deployment of the healthcare labour force, health practitioners were left vulnerable: required to make on-the-fly judgements in the face of high work demands, and with the threat of punishment for errors.

Guidance from the UK was virtually identical, although practitioners were also warned to "practise in line with the best available evidence," "recognise and work within the limits of their competence" and also to obtain "appropriate indemnity arrangements relevant to their practice" (General Pharmacy Council, 2020). Guidance was clear that practitioners were on their own with respect to scope shifts: "Determining what is and what is not part of your scope of practice will be for you to decide using your professional judgement" (Health and Care Professions Council, 2021). In some cases, practitioners were provided with little guidance as to how to handle scope shifts, and these were treated as being variable case-by-case; some regulators provided more guidance and support than others (PSA, 2021). The threat of discipline for incorrect decisions was ever-present. While the NHS (2020) did urge supervisors to provide adequate training and supervision to professionals working in new areas, it also encouraged professionals to self-assess their competence and to self-discipline to stay within their limits

Thus, the regulatory structures in Australia and the United Kingdom clearly provided more labour market flexibility for the healthcare system, but in keeping with the neo-liberal tone of twenty-first century reforms, workers bore ultimate responsibility for their actions, even if those actions were directed by employers. Canada's system was less nimble, requiring legislative and policy change, but those changes impacted all practitioners in a region, and left less doubt about what they were empowered to do.

Although more sweeping legislative change was contemplated and planned in the Canadian provinces of Alberta and British Columbia, and consultations respecting regulatory change occurred later in the pandemic in the United Kingdom, no major legislative changes were implemented during the first wave.

Table 1 depicts what was done, and reveals few differences other than those respecting scope of practice. However, the impact of regulatory structure on the pandemic response may be reflected less in what changes were implemented, but rather how quickly. Table 2 summarizes the timing of some regulatory and workforce changes (for which clear dates were available) in reference to the 100th case of COVID-19 in each country, including the expansion of the medical and nursing workforce, policies respecting students and residents, as well as restrictions on employment in more than one health care setting. Some small variations in timing are evident.

As Table 2 shows, all regions created temporary registers for doctors and nurses early in pandemic, within a month of the 100th case in their nation. Canadian provinces were no slower to respond (and in some cases were faster). The timing of policies concerning medical students was also similar cross-nationally. The movement of care home workers was also restricted in each region, to limit the spread of the COVID-19 virus. Here there are some differences as some Canadian provinces established such policies in March and April; Quebec was an exception. Australia restricted care home worker mobility at the end of April 2020, with the UK following suit in May of 2020; enforcement was enhanced in the autumn of 2020. Overall, then, there were some differences evident across region and regulatory structure. Canadian provinces implemented change faster than, or around the same time as, the UK and Australia, but the lack of standardization meant that policy changes were made in different parts of the country at different times. While Canada's regulatory structure encouraged scope of practice changes, scope changes in the UK and Australia occurred at the workplace level, and might vary from one practitioner and context to the next. There is no evidence that Canada was less effective in its pandemic response despite its provincial regulatory structure, although the lack of standardization (and barriers to movement across province) was considered problematic.

5.2. Thematic content analysis

We analysed journal articles to examine how medical professionals, as key stakeholders in regulatory policy reform, responded to state (and regulator) policy changes impacting their work. We found that publications in the Medical Journal of Australia (MJA) were initially positive about their countries' pandemic response. In contrast, comments about the UK response in the Lancet were typically negative. In the pages of the CMAJ, commentators were rarely positive, but only sometimes negative, tending to adopt a more neutral, advisory response. Such findings could be taken as a simple reflection of COVID-19 outcomes. By the end of August, Australia had far fewer cases and deaths (965 cases, 10 deaths per million), than the United Kingdom (4782 cases, 610 deaths per million), and Canada (3295 cases, 240 deaths per million) (WHO, 2020). To some extent, these differing responses also reflect differences in journal mandates, as the Lancet has a critical social justice lens, unlike the MJA and CMAJ, and hence is predisposed to be more critical of policymakers.

Analysing the content of the articles, however, revealed themes related to collaboration and communication, across journals. Medical professionals were positive when they felt they had a voice in the policy response, and state leaders were willing to collaborate with them. As key stakeholders they wanted to be included in the policy response. They were particularly negative when they believed politicians and bureaucrats were not listening to professionals' scientific expertise.

Considering Australian publications, 7 of 13 articles published in the Medical Journal of Australia and commenting on the policy response were positive about the government's pandemic response. The remaining 6 provided policy advice. None published in this period were critical. Positive writers praised "the prudent public health response [that] has saved lives, protected health care capacity and continues to provide care to the most vulnerable" (Blecher et al., 2020). They lauded the "focused consultation with primary care stakeholder organisations" and the "early collaborative planning and ongoing two-way communication with the nation's primary care workers" which enabled "optimal frontline care while mitigating spread and protecting the ongoing health of the nation's most vulnerable citizens" (Desborough et al., 2020.) In this manner, Australia's COVID-19 response was not simply regarded as successful, but also collaborative, involving consultation with a wide range of health stakeholders. The articles providing advice often take a similar tone, advising the government to implement certain measures, or

Table 2	
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Timing of select changes in 2020.

Thing of select changes in 2020.									
	Australia	United Kingdom	Alberta	British Columbia	Ontario	Quebec			
100th case	March 10	March 2	March 11	March 11	March 11	March 11			
Mobilized retired and out of practice	April 1	March 19-April 2	March 16–19	March 16	March 23	March 15–27			
Mobilized medical students and new graduates	Moderate (April 24th)	March 26	Licensing exams temporarily waived Spring 2020						
Movement of care home workers restricted	April 30	Some limits May 15; more restrictions Sept 18	April 10	March 26	April 15	August 18			

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to work with professions to counter misinformation.

In contrast, the *Lancet* was vitriolic in its criticisms of the UK government response. Of 36 articles commenting on the UK government and its policies during the first wave, 25 were critical. An additional 11 were more neutral and provided advice for policymakers. Several articles criticized the UK government's poor leadership:

The UK response to the COVID-19 pandemic has been ill prepared, patchy, confused, and incompetent. From initial equivocations, to a series of policy U turns and conflicts with scientific advisers, to vague public health guidance, the UK's COVID-19 performance has fallen disastrously short and undoubtedly cost lives. (Lancet, 2020)

Much of the criticism centred on the government's failure to ensure policy was evidence-based:

The basic principles of public health and infectious disease control were ignored, for reasons that remain opaque. (Horton, 2020)

Professionals felt exploited, under-appreciated, and ignored. No articles published during this period were positive about the UK policy response. It was not simply that writers in the Lancet believed the state response to be unsuccessful, but they asserted that its failure reflected a lack of respect for professionals and a failure to invest in health care. Here, there was little evidence of collaboration and co-operation.

Both praise and condemnation were more muted in the Canadian Medical Association Journal. In fact, most articles were more advisory or mixed (11/19). The focus was less on detailing what had gone wrong or right, but providing some recommendations for future policy. Only three articles were positive. One, published early in the pandemic, noted how "Canada's public health leaders and politicians, some of whom have been fierce adversaries, appear to be working well together to deliver consistent messaging" (Patrick et al., 2020). This article also advised the government to be truthful and honest about the challenges ahead. Another early article encouraged people to remember that "decision makers and colleagues are doing their best as the situation changes from 1 h to the next" (Glauser, 2020). In general, there was a sense that being very critical was not going to be helpful at this time, so there was a tendency to focus on what could be done better, rather than critique government decision-making. Nonetheless, 5 of the articles advanced clear critiques of government handling of the pandemic, the tendency of some provinces to privilege the economy over health and well-being, and austerity measures that left the health system ill-prepared.

While the criticisms were somewhat muted in the CMAJ, it is also the case that very few articles praised the government response. Tellingly, the journal later published an article about whether it was helpful to be critical of the government response, concluding that while some physicians felt compelled by their professionalism to call out injustice, a more positive and advisory approach was likely best (Duong, 2021).

Overall, professionals in Australia found the government policy response more collaborative and effective. Their counterparts in Canada were more ambivalent. In the UK professionals were most critical about the government response and felt that communication was particularly poor. Moreover, many writers explicitly linked the degree of collaboration to pandemic outcomes. In their eyes, collaboration and communication between the state and professional leaders, as key stakeholders, was needed for an effective policy response.

6. Discussion

Healthcare professional regulation has undergone significant change in Australia, the United Kingdom and Canada over the last few decades, and in some regions further change appears imminent (BC Steering Committee, 2020; Department of health & social care, 2020; 2021). These changes have involved numerous stakeholders, including state actors like politicians, bureaucrats and professionals (including regulators, associations, and individuals) (Abbott, 2005; Carlton, 2017; Light, 1995). These changes often take years to implement and involve many consultations. In contrast, the COVID-19 pandemic prompted sudden policy change – some of which impacted the regulation of professions: specifically who could practice and what their practice entailed. In this paper we explored the nature of those regulatory policy changes in Australia, Canada, and the United Kingdom. We were particularly interested in whether the changes implemented differed by regulatory structure, and whether the national systems of regulation in the UK and Australia resulted in a more coordinated, effective response than in Canada where regulation occurs at a provincial level. Our analysis was informed by Abbott's (1988, 2005) ecological approach to professions, and particularly his argument that it is the link between the professions and state ecologies that shape the nature and direction of change. Consistent with Abbott we anticipated that policy responses would differ across country, because their systems of professional regulation differ.

Our analysis of government orders and professional regulator guidance found that many policies were similar with temporary registers established for practitioners who had recently left practice in professions like medicine and nursing, and accommodations made for students whose schooling was disrupted. Experiences did differ slightly across profession with medical doctors and nurses experiencing more policy change than oral health professions. Cross-nationally, the United Kingdom did more to incorporate senior students (in medicine, nursing) in the pandemic response in the first wave, while Australia and Canada did not. The main difference pertained to scopes of practice, with the Canadian provinces requiring legislative orders to expand scopes and create more flexibility concerning who did what. In contrast, in the UK and Australia, regulators published guidance warning their providers that scopes could change and urging them to make good decisions to avoid potential disciplinary action. The advantage of the latter system is its flexibility; however its downside is the lack of consistency, and the pressure on practitioners to make informed decisions in midst of a crisis, often in pressure-filled work contexts where time for reflection is limited. The Canadian system lacks nimbleness, but may protect professional workers from pressure to perform outside their scope, reducing mistakes, and the need for supplementary discipline.

With respect to timing of changes, the Canadian provinces examined here were not slower in implementing changes than their nationalsystem counterparts, but because the changes were made on a regional level, there was some variability in timing across region.

Our final research question considered how professionals responded to these changes, with a focus on the medical profession. Our thematic content analysis of medical journal articles revealed that medical professionals were more positive about the COVID-19 response in Australia, than in the United Kingdom or Canada. Australian changes appeared collaborative and evidence based. In contrast, UK professionals believed that government pandemic policy was not science and evidence-based, and that it did not take professionals' expertise into account; hence they were more negative. Indeed, they blamed negative pandemic outcomes in terms of death and case rates on leaders' poor policy choices and their failure to include professionals' in their planning.

What are we to make of these international differences? Light's (1995) work suggests that policy outcomes and regulatory systems reflect the balance of power among various stakeholders (including professions, the state, consumers and others). In a similar vein, Abbott (2005) sees regulatory outcomes as reflective of the link between state and profession ecologies (as well as power dynamics within and across the state and professions ecologies). Our findings suggest more collaboration between state leaders and professional leaders in Australia than in the United Kingdom, and underscore that professionals value being included in policy discussions relevant to them. The link between professions and state ecologies – or at least the extent to which the two can work collaboratively together – may shape policy outcomes.

Overall, these theories contribute to our understanding of international differences in regulatory policy. Light's concept (1995) of countervailing powers illuminates that policy is shaped by the power and activity of various stakeholders pursuing their interests in particular social-historical circumstances. Abbott's (1988, 2005) theory of linked ecologies similarly highlights the need to consider dynamics within the state and among professions, in addition to the interplay between stakeholders in shaping outcomes, to understand policy outcomes. In crisis situations there may be less stakeholder engagement, but prevailing relationships within and between linked ecologies, and existing regulatory systems and structures do shape policy decisions and outcomes.

As noted, this paper has several limitations, including its focus on policy changes in the first wave, consideration of only four provinces in Canada, and the content analysis was limited to three professional medical journals. Other stakeholders in policy change like consumers, hospitals and other healthcare workplaces, pharmacy chains, business owners, and others were not taken into account. Future research should explore a wider variety of stakeholders to better understand how policy change impacting healthcare professional regulation is made, and who is most influential in shaping regulatory outcomes. Changes at the workplace level respecting who does what are also highly relevant and worth examining more closely. Future research would benefit from looking at state-profession relations over the entire course of the pandemic and the post-pandemic period, as policies, practices, and relationships varied over time (the vaccine roll-out in Australia for example has been criticized). Moreover, there are signs of additional legislative changes on the horizon, in the United Kingdom and Canada at least. Whether and how changes made during the pandemic shape subsequent changes in professional regulation remain to be seen. Will policies implemented for the duration of the pandemic be extended, adapted, or eliminated? And how will these policies vary cross-nationally? These are areas to watch in the years to come.

CRediT authorship contribution statement

Tracey L. Adams: Conceptualization, Formal analysis, Funding acquisition, Investigation, Methodology. **Kaitlin Wannamaker:** Formal analysis, Investigation, Methodology.

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