PROFESSIONAL REGULATION AND INTERPROFESSIONAL COLLABORATION IN OCCUPATIONAL THERAPY

MODELS OF HEALTH PROFESSION REGULATION AND THEIR INFLUENCE ON INTERPROFESSIONAL COLLABORATION: AN EXPLORATION OF THE PROFESSON OF OCCUPATIONAL THERAPY

By LYNDA A. VAN DREUMEL, B.Sc., B.Sc.O.T., M.Sc., M.B.A.

A Thesis Submitted to the School of Graduate Studies in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy

McMaster University DOCTOR OF PHILOSOPHY (2023) Hamilton, Ontario

(Business Administration)

TITLE: Models of health profession regulation and their influence on interprofessional collaboration: An exploration of the profession of Occupational Therapy

AUTHOR: Lynda A. van Dreumel, B.Sc.(University of Guelph), B.Sc.O.T.(University of Toronto), M.Sc.(University of Guelph), M.B.A.(McMaster University)

SUPERVISOR: Dr. Glen E. Randall

NUMBER OF PAGES: xiii, 199

Lay Abstract

Interprofessional collaboration, an important enabler of high-quality care, involves a team-based approach to treatment where health professionals from separate disciplines develop cohesive cultures and collaborative behaviours. The goal of this dissertation was to describe how health profession regulatory models influence interprofessional collaboration (IPC) for Occupational Therapists in Ontario through three interrelated studies – a scoping review, comparative case study, and institutional ethnography. This dissertation proposes a framework for describing the characteristics of health profession regulatory models, recommends how multi-profession models of health profession regulation can influence consistency in IPC expectations across professions, and identifies provincial and health profession regulator policies that enable and create barriers to IPC. This paper concludes that IPC has not been a sufficient priority within contemporary regulatory frameworks and therefore it serves as an important area for future policy development, particularly as governments embark on regulatory reform.

Abstract

Despite a growing body of research examining how micro (individual and team) level and meso (organizational) level factors impact interprofessional collaboration (IPC) for health professions (HP), researchers are only beginning to identify how macro (government and regulator) level policies influence IPC. The objective of this dissertation was to explore and describe how health profession regulatory models influence interprofessional collaboration for Occupational Therapists (OTs) and specifically to examine how macro level regulatory policies may impact interprofessional collaboration for OTs in Ontario. First, a scoping review was completed (Study 1) to explore the characteristics of HP regulatory models and organize and describe the different HP regulatory model characteristics. One of the identified characteristics was the *degree of regulatory collaboration* between professions that existed in the regulatory model. This characteristic was further explored in Study 2 using case study methodology to compare how degree of regulatory collaboration might impact how OT regulators communicate IPC expectations in their regulatory policies in two different models – Ontario's single profession model and England's multi-profession model. And finally, Study 3 was an institutional ethnography that focused on the OT experiences in Ontario's single profession model to understand how macro level HP regulatory policies shape IPC at the point of care. Taken together, the three studies in this dissertation clarify one way in which a model of HP regulation with regulator collaboration can influence consistency in IPC expectations for all professions using common IPC standards that are shared across multiple professions. Additionally, this dissertation identified that policy makers should also consider how provincial funding policies can

serve as barriers for health professionals to participate in collaborative processes and move toward integrated funding polices that incentivize collaboration. Finally, provincial policy makers, regulators, and university education programs should continue to emphasize the socialization of IPC in the development of professional cultures during clinical training programs as well as in the workplace through continued professional development and competency in IPC. Overall, IPC has not been a sufficient priority within either type of regulatory framework studied in this dissertation and therefore it serves as an important area for policy development as governments embark on HP regulatory reform.

Acknowledgements

"The secret of getting ahead is getting started. The secret of getting started is breaking your complex overwhelming tasks into small manageable tasks and starting on the first one."

(Mark Twain)

I am grateful to my supervisor, Dr. Glen Randall, for his support, advice, and mentorship during these many years. Our conversations usually ended with Glen sharing advice similar to the Twain quotation above. Some of the time I took this advice, and most of the time I had to hear it again and again before it registered. Regardless, Glen continued to motivate and encourage me that I could do this. I think this speaks to his student-centredness and supportive approach to supervision, and I consider myself fortunate that Glen agreed to be my supervisor.

I would also like to thank my supervisory committee, Dr Tracey Adams and Dr. Jenna Evans. Their suggestions, probing questions, expertise, patience, and kindness helped me find, and then cross, the finish line.

This work would not be possible without the involvement of many Occupational Therapists who took their time to share their experiences and thoughts with me. I am continually amazed by the generous and collaborative nature of my Occupational Therapy colleagues. I am a proud member of this profession; a profession that has been an important part of my self-identity and guided the way I view the world for over 20 years.

To all of my DeGroote PhD student colleagues, Health Management faculty members, and everyone else trying to keep their research moving forward throughout a pandemic and in the middle of complex lives: I am fortunate to be surrounded by so many insightful and inspirational people. And I owe a special thank you to my PhD partner in crime, Jenn Green, who is the best group member, research partner, project manager, and friend anyone could ask for.

To my parents, family, and friends who asked over the years, “Have you finished your PhD?” … I can now say that I have, and you are free to ask me anything about it.

And finally, this PhD would not have been completed without the support that Terry and Finn provided, as well as their valiant efforts to leave me alone in my office without interruption. They didn’t doubt that I could do this, even though I had my own doubts over the last many years, and it was their unwavering confidence in me that kept me going. Terry and Finn, I love you both.

Table of Contents

List of Tables, Figures, and Appendices

Chapter 4 – How Institutions Shape Interprofessional Collaboration for Occupational Therapists in Ontario: An Institutional Ethnography

List of all Abbreviations and Symbols

AB	Alberta
AHP	Allied Health Profession
AHPRA	Australian Health Practitioner Regulation Agency
BC	British Columbia
CAOT	Canadian Association of Occupational Therapists
CIHC	Canadian Interprofessional Health Collaborative
COTO	College of Occupational Therapists of Ontario
COVID-19	Coronavirus Disease 2019
HCPC	Health and Care Professions Council
HIREB	Hamilton Integrated Research Ethics Board
HP	Health Professional
HPCAA	Health Practitioners Competence Assurance Act
HPOA	Health Professions and Occupations Act
HPRAC	Health Professions Regulatory Advisory Council
HPRO	Health Profession Regulators of Ontario
IE	Institutional Ethnography
IFM	Integrated Funding Models

IPC	Interprofessional Collaboration
NICF	National Interprofessional Competency Framework
NL	Newfoundland
OECD	Organization for Economic Cooperation and Development
ON	Ontario
OT	Occupational Therapist
PRISMA-ScR	Preferred Reporting Items for Systematic Reviews and Meta-Analyses – Scoping Review
PSA	Professional Standards Authority
RHPA	Regulated Health Professions Act
RHPN	Regulated Health Professions Network
SK	Saskatchewan
UK	United Kingdom
USA	United States of America
WHO	World Health Organization

Declaration of Academic Achievement

This dissertation is comprised of three original research studies. The research question and methodological design for each of the studies was conceptualized by me with input and advice from my supervisor, Dr. Glen Randall, and my committee members, Dr. Tracey Adams and Dr. Jenna Evans. I independently collected, analyzed, and interpreted the data and authored the first draft of all three studies. I received feedback on my first draft from my supervisor and committee members and incorporated their advice.

Chapter 1

Introduction

Introduction

This dissertation is structured using three original research studies to address an overarching research question exploring the topics of health profession regulation and interprofessional collaboration in health care, highlighting the profession of Occupational Therapy as an example. The introductory chapter provides an overview of professional regulation and interprofessional collaboration and identifies salient gaps in knowledge on the topics. In this first chapter, the specific research questions are presented and situated within the overarching research question and the theoretical framework of institutionalism. Three original research studies are presented in chapters two, three, and four. Each study addresses a facet of the overarching research question and contributes to filling in the identified knowledge gaps. The final chapter concludes with an overview of how each research study addresses the overarching research question, integrates the new knowledge gained through this inquiry, and suggests future directions for research.

Background and Context

In Ontario, the regulatory colleges for health professions (HP) have a legislative obligation to collaborate on matters of shared controlled acts as well as the incorporation of interprofessional collaboration (IPC) in quality assurance programs (Government of Ontario, 2009). There is an explicit link between quality of interprofessional collaboration and health system outcomes – that is, the promotion of professional cultures that support collaboration and the presence of supportive institutions are key enablers to support local and system-wide improvement (Baker & Dennis, 2011). High-quality care results from the effective interactions of health care

teams; and teams are influenced by policies at the organizational level and the system level (Baker et al., 2008). As policy makers contemplate improving the quality of patient care, it is imperative that they take a multi-level approach to address barriers to improvement that may exist within the broader context of the health system (Baker & Denis, 2011; Baker et al., 2008).

Interprofessional collaboration, an important enabler of high-quality care, involves a team-based approach to treatment where health care professionals from separate disciplines develop cohesive cultures and collaborative behaviours (D'amour & Oandasan, 2005). Inherent in the work of these interprofessional teams is the requirement to communicate, collaborate and coordinate care processes to ensure safe and effective patient care (Gittell et al., 2013).

Progress in achieving collaboration and interprofessional activity at the level of the health professional regulatory colleges in Ontario (macro level environment) is uncertain. Regan et al. (2015) found that there was an absence of formal frameworks addressing interprofessional collaboration at the regulatory college level; and college staff identified legislative issues, scope protection by different professions, and poor knowledge about the scope of other health professions as barriers to achieving interprofessional collaboration at the regulatory level.

Regulators have themselves identified the importance in evolving professional behaviours and attitudes to support the development of interprofessional collaboration in the health system (Wilkie & Tozountzouris, 2017). However, survey respondents from an Ontario health professional regulatory college reported difficulty identifying aspects of interprofessionalism that could be shared across other

professions (Wilkie & Tozountzouris, 2017). Exploring these challenges may be important to enable regulators to develop a coordinated approach to interprofessional frameworks that can be shared across different professions. Moreover, ways of promoting and shaping interprofessional collaboration at the regulatory level may indeed be required to shift front line care from siloed thinking to interprofessional care across the health system.

To date, the literature has mainly focused on health professional education as the critical means for developing interprofessional collaboration (Bainbridge et al., 2010; Bridges et al., 2011; Schmitt et al., 2011). The evidence linking the delivery of interprofessional training and subsequent quality of interprofessional care in the workplace is inconclusive (Hammick et al., 2007; Reeves et al., 2008; Reeves et al., 2013). Moreover, studies have shown that interprofessional care is a complex process requiring processes of interprofessional socialization, including the development of collaborative attitudes and values (D'Amour et al., 2005). Educating different health professionals together may be necessary but not sufficient to develop interprofessional care behaviours (D'amour et al., 2005; King et al., 2010; Orchard et al., 2012). At present, there is a paucity of research examining the role of health profession regulatory policy at the macro level in shaping interprofessional care.

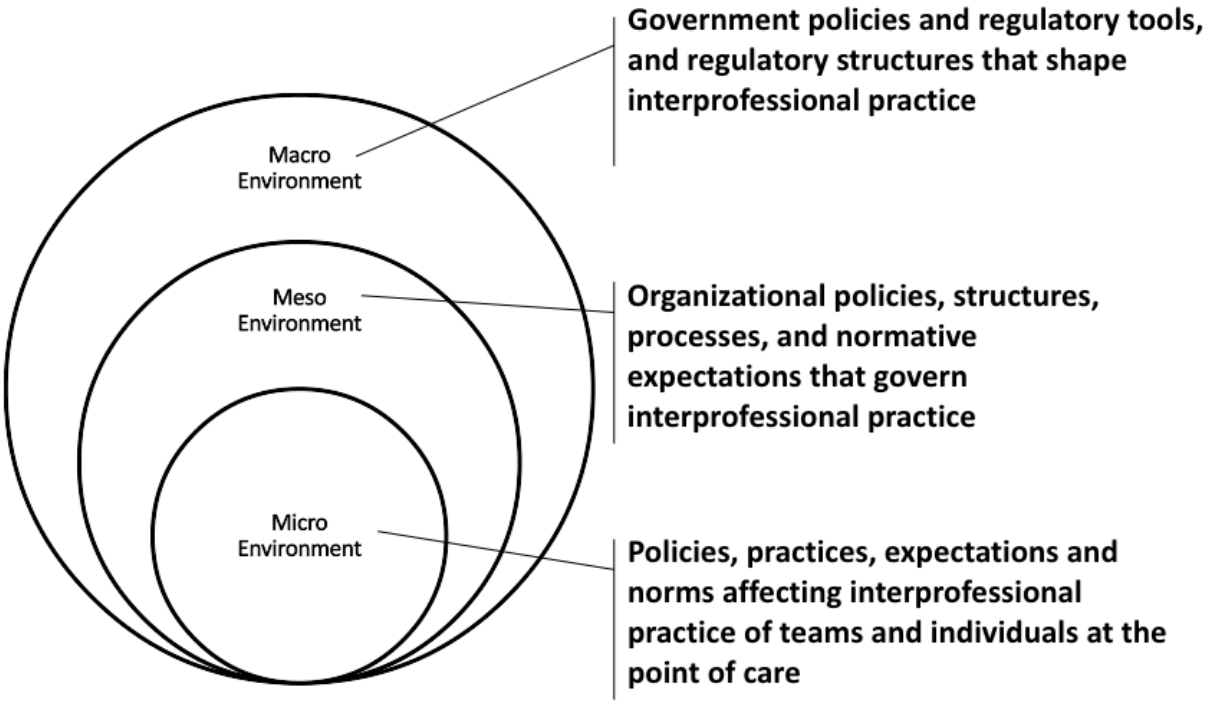


Figure 1.1 Macro, Meso, and Micro Level Influences on Interprofessional Collaboration

Professions

Definitions of *profession* often refer to a particular occupation with status and specific privileges that include recognition, legitimization, increased income, and political and professional power (Abbot & Meerabeau, 1998; Adams, 2010; Aldridge, 2008). Professions can achieve this power or dominance through social closure by controlling and protecting the scope of their work and market position when legal regulatory measures are in place that exclude outsiders from joining the profession (Larson, 1977; Parry & Parry, 1976; Saks, 2012). Moreover, differences in scope and know*ledge* between professions result in professional autonomy and may enable professional dominance. According to Abbott (1988), state regulation of professions involves permitting each profession authority of a jurisdiction or scope, and the profession is

linked to other professions through a system of professions, where jurisdictional boundaries are constantly negotiated. For instance, Friedson (1970) suggested that the medical profession achieved dominance over other health professions by protecting or developing a monopoly over physician knowledge and scope.

Evetts (2003) has proposed that definitions of profession can be classified into two categories: professions as a normative value system, and professions as a controlling ideology. Normative definitions take a functional approach and specify that professions have distinctive knowledge and expertise (Saks, 2010; Saks, 2012). Brante (2011) adds that a profession's scientific knowledge is a mechanism that confers status and power. Ideological definitions use a neo-Weberian lens and interpret professions to control an occupation through control of production of knowledge, work, and resources (Friedson, 1970). This concept of profession from the perspective of the members of the profession exemplifies goals of control and power, however other stakeholders external to the profession may have different interests and goals in establishing professions and regulating them. Accordingly, is important to note that a profession's power comes primarily from the state, and the state itself will have its own interests in regulating and/or delegating power to the profession based on its own agenda or policy goals (Adams and Saks, 2018).

Professional Regulation and Public Interest

According to Arrow (1963), the state's interest in regulating health care professions is to protect the public interest and this is necessary for the following reasons:

- An imbalance of power between health care professional and patient exists in the form of **informational asymmetry**, where the health care professional holds additional training and specialized knowledge about the illness or condition and proposed treatments that the patient does not, despite thorough and transparent communication processes.
- There is uncertainty and **imperfect information** around illness and treatment efficacy, thus placing patients in a position where they must make decisions about their care while also navigating risk and uncertainty.
- Persons seeking health care may be experiencing various degrees of **vulnerability** given the nature of their illness or condition, the stressful nature of their care experience, and urgent decisions that may be required.

Taken together, one might assume that, from the state's perspective, health professions must be regulated to protect the public from potential or actual harm when seeking health care and/or engaging within the health care system. However, there are debates about what is in the public interest, the perception of which can vary depending on political and social context, time, and stakeholder values and priorities (Adams, 2022). For example, the state may define public interest in terms of efficiency and cost-savings, transparency and accountability to the public, practitioner competence, and risk management to name a few (Adams, 2022).

Regulators of health professions have a mandate of public protection and are responsible for managing three broad categories of regulation: restrictive processes (entry to professional practice), reactive processes (professional conduct), and

proactive processes (competence) (Wilkie & Tzountzouris, 2017). Recent reforms to models of health profession regulation in three countries (Canada, England, Australia) have focused on improving health system quality through an increased emphasis on primacy of public interest, increased independence in health profession disciplinary procedures, and facilitation of increased collaboration between the professions (Leslie et al., 2018). It is this link between health profession regulatory institutions and interprofessional collaboration that merits further exploration, particularly because recent health profession regulatory reform England and British Columbia, Canada involve changing regulatory structures to combine or integrate the regulation of multiple professions under one regulatory body.

Regulation and Regulatory Frameworks

The regulation of professions has been loosely defined in the literature. Broad definitions indicate that regulation involves governmental influence or control over the activities and behaviour of a target population by setting rules and holding to account (Beaupert et al., 2014; Davies, 2004; Koop & Lodge, 2015).

Regulation can be conceptualized as a continuum that represents degrees of relative autonomy from government control (Ogus, 2000). At one end of the spectrum, there is full government regulation of a profession, whereas at the other end is the relative absence of government control. Between full government control and no government control is the concept of “self-regulation” where the state establishes an agency relationship with the profession and delegates authority to regulate their members on behalf of the state (Tuohy, 2003; Tuohy, 2013). Self-regulatory models can vary based on a number of characteristics. For example, some models specify that

self-regulation requires that at least 51% of the profession's governing body is comprised of its own members (Epps, 2011; in Downie, Caulfield & Flood). A salient example of a "self-regulatory" model that does not fit this "51% definition" is that of the Health Care Professions Council (HCPC) in the United Kingdom where 50% of the governing body membership is made of members of its own profession.

Additionally, within the literature describing self-regulation, there is no consensus on how to classify various characteristics of self-regulatory models. For example, Black (1996; 2001) has classified self-regulation into four categories (mandated, sanctioned, coerced, and voluntary) based on the nature of the driving force behind the regulatory body's origin (from government legislated to absence of state involvement). Black also identifies other variables that are important when classifying models of self-regulation: proportion of members of the profession versus public; structure of the model; who enforces the regulatory framework; and types of regulations and rules. Priest (1998) uses similar variables to classify five different self-regulatory models: regulatory, supervised, firm-defined, statutory, and voluntary. Alderson and Montesano (2003) organize regulation into modes that identify how to qualify for practice (i.e., certification, licensure, etc.) and describe institutional structures by which the profession is regulated, including self-regulation to direct state control, similar to Black's approach. It is also important to note that in real practice, self-regulatory models may exhibit more complexity than what is represented in the typologies offered thus far.

Adams (2000, 2009a, 2009b) has also identified important aspects of self-regulation that might shape regulatory models:

- Context in which self-regulatory framework is developed (urbanization/population distribution, receptivity of legislators, public pressure and preferences);
- Characteristics of the organizations and professionals involved (gender, social class, political power, access to resources); and
- Content of regulatory framework and legislation (degree of autonomy and authority over profession, control over their regulatory body by-laws).

Current Gaps in the Literature

With the continued emphasis on interprofessional collaboration and quality outcomes in health care system, and the prevalence of self-regulation as the prime model for health professional regulation in the Canadian context, there exists some important gaps in our knowledge about regulatory models and how macro level regulatory policy may shape interprofessional collaboration. More specifically, the following gaps have been identified:

1. There is a lack of consensus in the literature on how to describe different variations of regulatory form and although many researchers have created their own typologies with conceptual overlap, there is a need to consolidate this information into one model. A consolidated model or framework would enable policy makers and researchers to describe, categorize, compare, and evaluate health profession regulatory models between jurisdictions to gain a better understanding about the impact of macro level regulatory policies on health care delivery and quality outcomes.

2. Health care is in an evolving regulatory environment where governments change regulatory structures and policies for many reasons, whether it is to improve quality of care, protect the public, address provider incompetence, or rationalize resources or a combination thereof. Nonetheless, researchers have started to identify that macro level policies may serve as a barrier to integrated care and interprofessional collaboration (Bourgeault & Grignon, 2013; Lahey & Currie, 2005; Leslie et al., 2018; Penney & Wainwright, 2017; Regan et al., 2015) and it has been noted that the "landscape of legislated silos [between health professions is] making functional engagement across professional boundaries difficult" (Lahey & Fierlbeck, 2016, p.212). Policy researchers need to examine more explicit institutional differences in health profession regulatory models across different jurisdictions to examine if differences in health professional regulatory models have an influence on behaviours associated with interprofessional collaboration in health professionals. If the policy goal of regulatory reform is to ensure public protection by mandating interprofessional practice, then it is important to explore if in fact macro level policies have the potential to impact practice at the point of care (micro level).

Overarching Research Question and Research Objectives:

This dissertation addresses the gaps in the literature by asking the following overarching research question:

How do models of health profession regulation influence interprofessional collaboration by Occupational Therapists?

The profession of Occupational Therapy was selected to explore for the following reasons:

- Due to the nature of their scope of practice and role as an allied health professional, Occupational Therapists are primarily situated in multi-disciplinary teams within the health system and would have relevant context for the exploration of interprofessional practice.
- Across the two selected regulatory jurisdictions of Ontario and England, Occupational Therapists are regulated by their own college in Ontario (single profession regulator); and they are regulated together with other allied health professions in England (multi-profession regulator). This allows for a comparison between two different regulatory structures.

The dissertation addresses the following research objectives to answer the overarching research question:

(1) To explore how health profession regulatory models have been described in the literature and identify gaps between our theoretical understanding of health professional regulatory models and real-world health professional regulatory structures, policies, and function. (Study 1)

(2) To identify and propose considerations for an emerging model that captures the complexity of health professional regulatory models. (Study 1)

(3) To examine and compare macro level influences and regulatory policy instruments in two different types of health profession regulatory models and

their impact on interprofessional collaboration for Occupational Therapists. (Study 2)

(4) To explore how macro level institutional influences can shape interprofessional collaboration at the point of care (micro level) for Occupational Therapists. (Study 3)

Overview of the Three Studies, their Associated Methods, and their Connection to the Primary Research Question

Study 1: How are health professions regulated and what are the characteristics of models of health profession regulation?

The first study (Chapter 2) uses scoping review methodology (Arskey & O'Malley, 2005; Leval et al., 2010; Colquohoun et al., 2014) and PRISMA-ScR reporting guidelines (Tricco et al., 2018) to develop a framework that captures characteristics and complexity of forms of health professional regulatory models to address research objectives #1 and #2. The study also establishes the foundation from which Study 2 and Study 3 were designed by identifying one characteristic of health professional self-regulatory model (degree of regulator collaboration) that was selected for deeper exploration of the impact of regulatory form on interprofessional practice.

Study 2: How might one characteristic of health profession regulatory model, degree of regulator collaboration, influence policy approaches on interprofessional collaboration for Occupational Therapists?

The second study (Chapter 3) uses case study methodology (Yin, 2013) to compare macro (governmental/regulatory) level policy approaches in two different regulatory

models for the profession of Occupational Therapy. Case comparison was based on the regulatory model characteristic of “degree to which regulatory model demonstrates regulator collaboration”. The case of Ontario, Canada exhibits low regulatory collaboration and is *primarily* a single profession regulatory model where 26 regulatory colleges regulate 29 distinct professions (Health Profession Regulators of Ontario [HPRO], 2023). Ontario was used as a case comparator to the England (UK) regulatory model which is considered a multi-profession regulatory model with 15 distinct professions, including Occupational Therapy, are grouped under one common regulator, the Health & Care Professions Council (Health & Care Professions Council [HCPC], 2023). This study addresses research objective #3 by examining how macro level regulatory policy, differences in regulatory structure, and interprofessional practice policy may differ for Occupational Therapists in two different regulatory environments.

Study 3: How do macro level policies on interprofessional collaboration shape Occupational Therapists’ interprofessional experiences when working within a jurisdiction with mainly single profession regulators such as Ontario?

The third study (Chapter 4) uses institutional ethnography (IE) (Rankin, 2017; Smith, 2006) to address research objective #4 and explore how macro level interprofessional practice policies are, or are not, identified by Occupational Therapists in Ontario and thus shape their daily work in interprofessional teams. In Ontario, Occupational Therapists are regulated under a single profession regulator and the methodology of IE enables an exploration of how ruling relations (institutions) originating from the macro level are embedded in OT’s everyday work environment to show how they shape interprofessional collaboration.

Theoretical Framework of the Dissertation

Institutionalism is the theoretical framework guiding inquiry in the three original studies. Institutions are defined as "the shared concepts used by humans in repetitive situations organized by rules, norms, and strategies" (Ostrom, 2007, p.23), involving not only formal structures and bureaucracies, but also legal and cultural forces that influence how individuals and groups determine courses of action. Thus, institutions influence the actions of policy actors by shaping how problems are interpreted and determining possible solutions and patterns of behaviour. This framework is relevant to the study of health profession regulatory policy because health profession regulation as an institution has a bureaucratic structure, rules, and policy instruments that will ultimately influence the behaviour of those they regulate.

Scott's model of three institutional pillars (2013) guided the formulation of the research questions as well as the collection of data and analysis of findings by enabling an exploration of the formal and informal rules that shape health professional behaviour, specifically:

- Regulative influences on behaviour: These are the formal and informal rules, monitoring and evaluative activities, as well as sanctioning activities that indicate what the health professional **must do** as part of their point of care work.
- Normative influences on behaviour: These are processes, activities, and behaviours that are generally accepted and obligatory within the team and social environment indicating what the health professional **ought to do** as part of their point of care work.

- Cultural-cognitive influences on behaviour: These comprise of symbolic systems, common schemas, frames and other shared symbols that guide the health professional in what they **want to do** as part of their point of care work.

Definitions

Although the key concepts related to the research questions are defined in different ways in the literature, for the purpose of this dissertation the following conceptual definitions will be used:

- Regulation: Defined broadly to include any organized and deliberate leveraging of institutional power or authority to effect changes in the behavior of health care professionals, usually through policies and legislation (Jacobson, 2001; Mello et al., 2005)
- Self-regulation: The most common form of health professional regulation, where the government establishes an agency relationship with the profession and delegates authority to oversee and manage elements of their members' activities (Aldridge, 2008; Black, 1996; Tuohy, 2003)
- Institutions: "Regulative, normative, and cultural-cognitive elements that, together with associated activities and resources, provide stability and meaning to social life." (Scott, 2013)
- Profession: A category of institution that gives "order, structure, and meaning to a distinctive area of social and economic life (the production of expertise)" (Muzio et al., 2013, p.705). [Note, this broad definition has been selected because it takes on an institutionalist perspective which is aligned with the overarching

research paradigm; and it unites the “control and power” definitions of professions with the more functionalist perspective of a profession that includes public protection]

- Interprofessional collaboration: A process of collaboration in health care teams where interdependent professionals organize collective action towards patient or client needs through processes of sharing, partnership, power, interdependency, communication and trust (D’Amour & Oandasan, 2005; D’Amour et al., 2005; Reeves et al., 2017).

References

Abbott, A. (1988). *The System of Professions*. University of Chicago Press.

Abbott, P., & Meerabeau, L. (Eds.). (1998). *The sociology of the caring professions*. Psychology Press.

Adams, T. L. (2022). What is the Public Interest in Professional Regulation? Canadian Regulatory Leaders' Views in a Context of Change. *Professions and Professionalism*, *12*(3).

Adams, T. L. (2000). *A Dentist and a Gentleman: Gender and the Rise of Dentistry in Ontario*. University of Toronto Press.

Adams, T. L. (2009a). The changing nature of professional regulation in Canada, 1867-1961. *Social Science History*, 217-243.

Adams, T. L. (2009b). Regulating professions in Canada: Interprovincial differences across five provinces. *Journal of Canadian Studies*, *43*(3), 194-221.

Adams, T. L. (2010). Profession: A useful concept for sociological analysis? *Canadian Review of Sociology/Revue canadienne de sociologie*, *47*(1), 49-70.

Adams, T. L., & Saks, M. (2018). Neo-weberianism and changing state-profession relations: The case of Canadian health care. *Sociologia, Problemas e Práticas*, (88), 61-77.

Alderson, D., & Montesano, D. (2003). Regulating, de-regulating and changing scope of practice in the health professions. A jurisdictional review. Ontario: Health Professions Regulatory Advisory Council. http://www.ramblemuse.com/mps/documents/HPRAC_2003_WhyRegulate_Ontario.pdf

Aldridge, S. (2008). The regulation of health professionals: an overview of the British

Columbia experience. *Journal of medical imaging and radiation sciences*, *39*(1), 4-10.

Arrow K. J. (1963). Uncertainty and the Welfare Economics of Medical Care. *American Economic Review,* 53(5), 941 – 973.

Arskey, H., & O'Malley, L. (2005). Scoping studies: towards a methodological framework. *International journal of social research methodology*, *8*(1), 19-32.

Bainbridge, L., Nasmith, L., Orchard, C., & Wood, V. (2010). Competencies for interprofessional collaboration. *Journal of Physical Therapy Education*, *24*(1), 6-11.

Baker, G.R., Denis, J.L., (2011). A Comparative Study of Three Transformative Healthcare Systems: Lessons for Canada. Canadian Health Services Research Foundation. Retrieved from http://www.cfhi-fcass.ca/sf-docs/default-source/commissioned-research-reports/Baker-Denis-EN.pdf?sfvrsn=0

Baker, G. R., MacIntosh-Murray, A., Porcellato, C., Dionne, L., Stelmacovich, K., & Born, K. (2008). Learning from high-performing systems: Quality by design. *High performing healthcare systems: Delivering quality by design*, 11-26.

Beaupert, F., Carney, T., Chiarella, M., Satchell, C., Walton, M., Bennett, B., & Kelly, P. (2014). Regulating healthcare complaints: a literature review. *International journal of health care quality assurance*, *27*(6), 505-518.

Black, J. (1996). Constitutionalising self-regulation. *The Modern Law Review*, *59*(1), 24-55.

Black, J. (2001). Decentring Regulation: Understanding the role of regulation and self-regulation in a 'post-regulatory' world. *Current legal problems*, *54*(1), 103.

Brante, T. (2011). Professions as science-based occupations. *Professions and Professionalism*, *1*(1).

Bourgeault, I. L., & Grignon, M. (2013). A comparison of the regulation of health professional boundaries across OECD countries. *The European Journal of Comparative Economics*, *10*(2), 199.

Bridges, D., Davidson, R. A., Soule Odegard, P., Maki, I. V., & Tomkowiak, J. (2011). Interprofessional collaboration: three best practice models of interprofessional education. *Medical education online*, *16*(1), 6035.

Colquhoun, H. L., Levac, D., O'Brien, K. K., Straus, S., Tricco, A. C., Perrier, L., Kastner, M., & Moher, D. (2014). Scoping reviews: time for clarity in definition, methods, and reporting. *Journal of clinical epidemiology*, *67*(12), 1291-1294.

D'Amour, D., & Oandasan, I. (2005). Interprofessionality as the field of interprofessional practice and interprofessional education: An emerging concept. *Journal of interprofessional care*, *19*(sup1), 8-20.

D'Amour, D., Ferrada-Videla, M., San Martin Rodriguez, L., & Beaulieu, M. D. (2005). The conceptual basis for interprofessional collaboration: core concepts and theoretical frameworks. *Journal of interprofessional care*, *19*(sup1),116-131.

Davies, C. (2004). Regulating the health care workforce: next steps for research. *Journal of health services research & policy*, *9*(1_suppl), 55-61.

Downie, J., Caulfield, T. & Flood C.M. (2011). Canadian Health Law and Policy, Fourth Edition. Lexis Nexis.

Evetts, J. (2003). The sociological analysis of professionalism: Occupational change in

the modern world. *International sociology*, *18*(2), 395-415.

Freidson, E. (1970). *The Profession of Medicine*. Mead and Company.

Gittell, J. H., Godfrey, M., & Thistlethwaite, J. (2013). Interprofessional collaborative practice and relational coordination: improving healthcare through relationships. *Journal of interprofessional care*, *27*(3), 210-213.

Hammick, M., Freeth, D., Koppel, I., Reeves, S., & Barr, H. (2007). A best evidence systematic review of interprofessional education: BEME Guide no. 9. *Medical teacher*, *29*(8), 735-751.

Health & Care Professions Council (HCPC). (2023). Regulating health and care professionals. Retrieved from https://www.hcpc-uk.org/

Health Profession Regulators of Ontario (HPRO). (2023). Quick facts about HPRO members. Retrieved from https://www.regulatedhealthprofessions.on.ca/#:~:text=Quick%20facts%20about%20HPRO%20members,400%2C000%20healthcare%20professionals%20in%20Ontario.

Jacobson, P. D. (2001). Regulating health care: from self-regulation to self-regulation?. *Journal of Health Politics, Policy and Law*, *26*(5), 1165-1177.

King, G., Shaw, L., Orchard, C. A., & Miller, S. (2010). The interprofessional socialization and valuing scale: A tool for evaluating the shift toward collaborative care approaches in health care settings. *Work*, *35*(1), 77-85.

Koop, C., & Lodge, M. (2017). What is regulation? An interdisciplinary concept analysis. *Regulation & Governance*, *11*(1), 95-108.

Lahey, W., & Currie, R. (2005). Regulatory and medico-legal barriers to

interprofessional practice. *Journal of Interprofessional Care*, *19*(sup1), 197-223.

Lahey, W., & Fierlbeck, K. (2016). Legislating collaborative self-regulation in Canada: A comparative policy analysis. *Journal of interprofessional care*, *30*(2), 211-216.

Larson, M.S. (1977). *The Rise of Professionalism*. University of California Press.

Leslie, K., Nelson, S., Deber, R., & Gilmour, J. (2018). Policy Tensions in Regulatory Reform: Changes to Regulation of Health Professions in Australia, the United Kingdom, and Ontario, Canada. *Journal of Nursing Regulation*, *8*(4), 32-42.

Levac, D., Colquhoun, H., & O'Brien, K. K. (2010). Scoping studies: advancing the methodology. *Implementation science*, *5*(1), 69.

Mello, M. M., Kelly, C. N., & Brennan, T. A. (2005). Fostering rational regulation of patient safety. *Journal of Health Politics, Policy and Law*, *30*(3), 375-426.

Muzio, D., Brock, D. M., & Suddaby, R. (2013). Professions and institutional change: Towards an institutionalist sociology of the professions. *Journal of management studies*, *50*(5), 699-721.

Ogus, A. (2000). Self-regulation. *Encyclopedia of law and economics*, *5*, 587-602.

Orchard, C. A., King, G. A., Khalili, H., & Bezzina, M. B. (2012). Assessment of Interprofessional Team Collaboration Scale (AITCS): development and testing of the instrument. *Journal of continuing education in the health professions*, *32*(1), 58-67.

Ostrom, E. (2007). Institutional Rational Choice: An Assessment of the Institutional Analysis and Development Framework in Sabatier, P. A. (2007). The need for better theories. *Theories of the policy process*, *2*, 3-17.

Parry, N. & Parry, J. (1976). The Rise of the Medical Profession. London: Croom Helm.

Penney, C., & Wainwright, A. (2017). Using Trends to Inform Regulatory Practices. *Healthcare Papers*, *16*(4), 40-43.

Priest, M. (1997). The privatization of regulation: five models of self-regulation. *Ottawa L. Rev.*, *29*, 233.

Rankin, J. (2017). Conducting analysis in institutional ethnography: Guidance and cautions. *International Journal of Qualitative Methods*, *16*(1), 1609406917734472.

Regan, S., Orchard, C., Khalili, H., Brunton, L., & Leslie, K. (2015). Legislating interprofessional collaboration: A policy analysis of health professions regulatory legislation in Ontario, Canada. *Journal of interprofessional care*, *29*(4), 359-364.

Reeves. S., Pelone, F., Harrison, R., Goldman, J., & Zwarenstein, M. (2017). Interprofessional collaboration to improve professional practice and healthcare outcomes. *Cochrane Database of Systematic Reviews*. (6). DOI: 10.1002/14651858.CD000072.pub3.

Reeves, S., Perrier, L., Goldman, J., Freeth, D., & Zwarenstein, M. (2013). Interprofessional education: effects on professional practice and healthcare outcomes (update). *The Cochrane Library*.

Reeves, S., Zwarenstein, M., Goldman, J., Barr, H., Freeth, D., Hammick, M., & Koppel, I. (2008). Interprofessional education: effects on professional practice and health care outcomes. *Cochrane Database Syst Rev*, *1*(1).

Saks, M. (2010). Analyzing the professions: the case for a neo-Weberian approach. *Comparative Sociology*, 9 (6), 887-915.

Saks, M. (2012). Defining a profession: the role of knowledge and expertise.

Professions and Professionalism, 2(1), 1-10.

Schmitt, M., Blue, A., Aschenbrener, C. A., & Viggiano, T. R. (2011). Core competencies for interprofessional collaborative practice: reforming health care by transforming health professionals' education. *Academic Medicine*, *86*(11), 1351.

Scott, W. R. (2013). *Institutions and organizations: Ideas, interests, and identities*. Sage.

Smith, D. E. (2005). *Institutional ethnography: A sociology for people*. Rowman Altamira.

Smith, D. E. (Ed.). (2006). *Institutional ethnography as practice*. Rowman & Littlefield.

Tricco, A. C., Lillie, E., Zarin, W., O'Brien, K. K., Colquhoun, H., Levac, D., & Straus, S. E. (2018). PRISMA extension for scoping reviews (PRISMA-ScR): checklist and explanation. *Annals of internal medicine*, *169*(7), 467-473.

Tuohy, C. H. (2003). Agency, contract, and governance: shifting shapes of accountability in the health care arena. *Journal of health politics, policy and law*, *28*(2-3), 195-216.

Tuohy, C. H. (2013). Models of professional regulation: institutionalizing an agency relationship. *Israel journal of health policy research*, *2*(1), 10.

Wilkie, K., & Tzountzouris, J. (2017). Regulatory Models and Model Behaviours. *HealthcarePapers*, *16*(4), 61-65.

Yin, R. K. (2018). *Case study research and applications*. Sage.

Chapter 2

Toward a Conceptual Framework of Health Profession Regulatory Models: A Scoping Review

Abstract

Background: As policy makers seek to achieve improvements in the health system to respond to changing system needs, we require a standard approach to describing health profession (HP) regulatory models. Without consistent terminology, it is difficult for policy makers and researchers to communicate model typologies clearly and efficiently and thus compare different models across jurisdictions. To address this gap in the literature, the research objectives of this study are to (1) explore how HPs are regulated and describe the characteristics of models of HP regulation; and (2) develop a preliminary framework that summarizes the characteristics of HP regulatory models

Method: A scoping review was conducted using Web of Science, Scopus, and Google Scholar following PRISMA-ScR guidelines. Documents were included in the study if they were published between 2005 and 2023, written in English, and described one or more different forms of health profession regulatory models. Included peer-reviewed and grey literature were analyzed for qualitative themes to identify a preliminary set of model characteristics.

Results: Of the 32 papers included in the final analysis, 20 papers (62.5%) came from peer-reviewed journals and 12 documents (37.5%) were considered grey literature. Seven (35%) of the peer-reviewed articles were policy analyses, five (25%) were qualitative case studies, three (15%) were literature reviews, two (10%) were invited essays; and there was one (5%) rapid review synthesis, one (5%) historical analysis, and one (5%) scoping review. Only seven (22%) of the papers described the regulation of a specific profession: nursing (n=3), nursing and midwifery (n=1), dental surgeons

(n=1), orthotists/prosthetists (n=1), and medical laboratory technologists (n=1). The remaining 25 papers (78%) described regulatory structures for health profession regulators in general without focusing on one specific health profession. Thematic analysis revealed three main characteristics and eight sub-characteristics. These were source of statutory power (omnibus, umbrella, profession-specific legislation), autonomy over regulatory matters (delegation of power from state to authority, delegated components of regulation, stakeholder participation in governance), and regulatory collaboration (multi-professional models, legislated regulatory collaboration).

Conclusion: Using the HP regulatory model characteristics and sub-characteristics, we propose an approach to describing HP regulatory model features. However, this preliminary work is the first step in moving toward a framework and standard terminology for HP regulatory models. Engagement with policy experts and regulators on an international level will be required to reach a consensus framework. This work is an important step towards developing a common language for comparison of how regulatory reforms may impact health system policy goals and outcomes.

Introduction

Over the last few decades governments have contemplated and/or implemented policy reforms involving health profession (HP) regulatory models with the stated goals of increasing efficiency and sustainability of health systems and improving accountability and transparency to the public (Adams, 2020; Mahat et al., 2023). The trends in regulatory reform observed in the United Kingdom (UK), Australia, and New Zealand have included reducing the power and autonomy health professions have over their regulatory functions and increasing participation and oversight in regulatory matters by the state and the public (Adams, 2020; Adams 2022). More recently in Canada, the province of British Columbia (BC) has passed legislation to implement reforms to HP regulation, similar to those seen in the UK, in response to significant regulatory failures observed within the College of Dental Surgeons of British Columbia (Durcan et al., 2023).

Regulators themselves have identified the need to modernize HP regulatory frameworks to incorporate risk-based approaches to HP regulation, address the structural conflict of interest often criticized as inherent to self-regulation, and include collaborative regulatory approaches to enable interprofessional collaboration (Penney and Wainwright, 2017). Additionally, the recent strain placed on health care systems and health human resources as a result of the COVID-19 pandemic has highlighted the need to ensure that HP regulatory frameworks can exhibit agility and flexibility to enable workforce mobility and cross-jurisdictional virtual care (Leslie et al., 2023b). To engage in formal evaluation of how changes to HP regulatory models and frameworks may help or hinder governments and regulators in meeting their intended health system goals, we

first need to efficiently identify HP regulatory structures and frameworks across jurisdictions using standardized terminology to clearly describe the many different characteristics of regulatory models.

How have we historically described professional regulation?

Regulation can be conceptualized as a continuum that represents degrees of relative autonomy from government control (Ogus, 2000). At one end of the spectrum, there is full government regulation of a profession, whereas at the other end there is the relative absence of government control. Between full government regulation and absence of regulation is "self-regulation" where the state establishes an agency relationship with the profession and delegates authority to regulate their professional members on behalf of the state (Tuohy, 2003; Tuohy, 2013).

Within the literature describing regulation and self-regulation, there is no consensus on the categorization of existing regulatory models, nor is there consistency in terminology. For example, Black (1996; 2001) has classified self-regulation into four categories (mandated, sanctioned, coerced, and voluntary) based on the type of power behind the regulatory body's origin. Black also identified other characteristics that are important when classifying models of self-regulation including proportion of members of the profession versus public involved in decision making and oversight, structure of the regulatory model, who is responsible for enforcing the regulatory framework, and types of regulations and rules. Priest (1998) used a similar approach to classify five different self-regulatory models and called them:
regulatory, supervised, firm-defined, statutory, and voluntary. More recently, Benton et al. (2013) explored how nurses are regulated and described five typologies based on

the degree of government involvement in nursing regulation and related administrative structures, ranging from no regulation to fully regulated by the government. Although there exists overlap between the approaches to classification and terminology of Black, Priest, and Benton, we have yet to achieve consensus in terminology or typologies (Leslie et al., 2023a).

Why is it important to classify HP regulatory models?

Regulatory models, and more specifically self-regulatory models of health professions, have been criticized as hindering workforce mobility across jurisdictions and inadequately managing provider competence and misconduct (Adams, 2017). As policy makers seek to achieve improvements in the health system to respond to changing system needs, we require a standard approach to describing HP regulatory models. Without consistent terminology, it is difficult for governments and policy makers to communicate model typologies clearly and thus compare different models across jurisdictions. Moreover, this lack of consistency presents challenges for the evaluation of outcomes based on HP regulatory model characteristics or type. Therefore, a consolidated model or framework would enable policy makers and researchers to describe, categorize, compare, and evaluate HP regulatory models over time and/or between jurisdictions to understand if expected improvements to health system performance and patient safety are achieved through HP regulatory reform.

Study Objectives and Research Question

To address this gap in the literature, the research objectives of this study are to (1) explore and describe the characteristics of models of HP regulation; and (2) develop

a framework that summarizes the characteristics of HP regulatory models by answering the following research question:

How are health professions regulated and what are the characteristics of models of health profession regulation?

Method

Study Design

A scoping review methodology following the guidelines first described by Arskey and O'Malley (2005) and incorporating the subsequent framework enhancements provided by Levac et al. (2010) and Colquohoun et al. (2014) was developed to answer the research question. Scoping studies are relevant when a body of literature has not been comprehensively reviewed or exhibits heterogeneity (Arskey & O'Malley, 2005; Colquhoun et al., 2014; Munn et al. 2018; Peters et al., 2015) and aligns with the research objective to map recent literature describing models of health profession regulation and their various forms and typologies described thus far. Charting the data and reporting the results followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Scoping Review extension (PRISMA-ScR) guidelines by Tricco et al. (2018).

Identifying the Relevant Studies

Eligibility Criteria

To achieve both breadth and depth of results, papers eligible for review focused on typologies and structures or forms of regulatory models. Peer-reviewed articles and documents from grey literature were included if they were: published between 2005 and 2023, written in English, and described one or more different forms of health profession

regulatory models. The year 2005 was selected as the starting point for the search in order to identify documents describing the final outcomes of reforms to HP regulatory frameworks implemented in the early 2000s, particularly in the UK, Australia, and New Zealand. Papers were excluded if they described the regulation of professions but did not specifically address the regulation of *health* professions.

Information Sources and Search Strategy

Online electronic databases that index journals related to healthcare and social sciences (Web of Science, SCOPUS, Medline, Google Scholar) were searched using the following strategy:

1. Regulated health profession*
2. Regulated health care profession*
3. Regulated healthcare profession*
4. Regulatory model
5. Classification
6. Typology
7. Structure
8. Reform
9. Policy
10. Legislation
11. (1 OR 2 OR 3) AND (4) AND (5 OR 6 OR 7 OR 8 OR 9 OR 10)

Citation or hand searching (Hinde & Spackman, 2015) of bibliographies of identified studies was also conducted to identify additional references. Finally, websites of

existing relevant policy networks and key regulatory organizations were reviewed for relevant documents (see Appendix A for a list of sites).

Selection of Sources of Evidence

Citations and abstracts for the papers identified through the study search strategy were uploaded to Covidence v2 (Veritas Health Innovation, 2022), a web-based software application for managing systematic reviews. After removal of duplicates and initial title and abstract screening for eligibility, full-text screening of the remaining documents and their reference lists was completed in Covidence to determine if eligibility criteria were met.

Data Charting Process

Studies and documents included in the qualitative synthesis were charted directly in Covidence v2 (Veritas Health Innovation, 2022) using a customized template to collect the following information: author(s), year of publication, title, document type (peer-reviewed literature, grey literature), jurisdiction(s), study population or subject of paper, purpose of study or document, methodology, and key findings relevant to the research question.

Synthesis of Findings

First, the content was coded using directed content analysis (Hsieh & Shannon, 2005) where codes were developed to identify high level trends or concepts related to health professions models. Initial codes were grouped into primary categories or characteristics reported in HP regulatory models. Secondary descriptive coding was used to further explore emergent themes within the initial structural codes. Descriptive

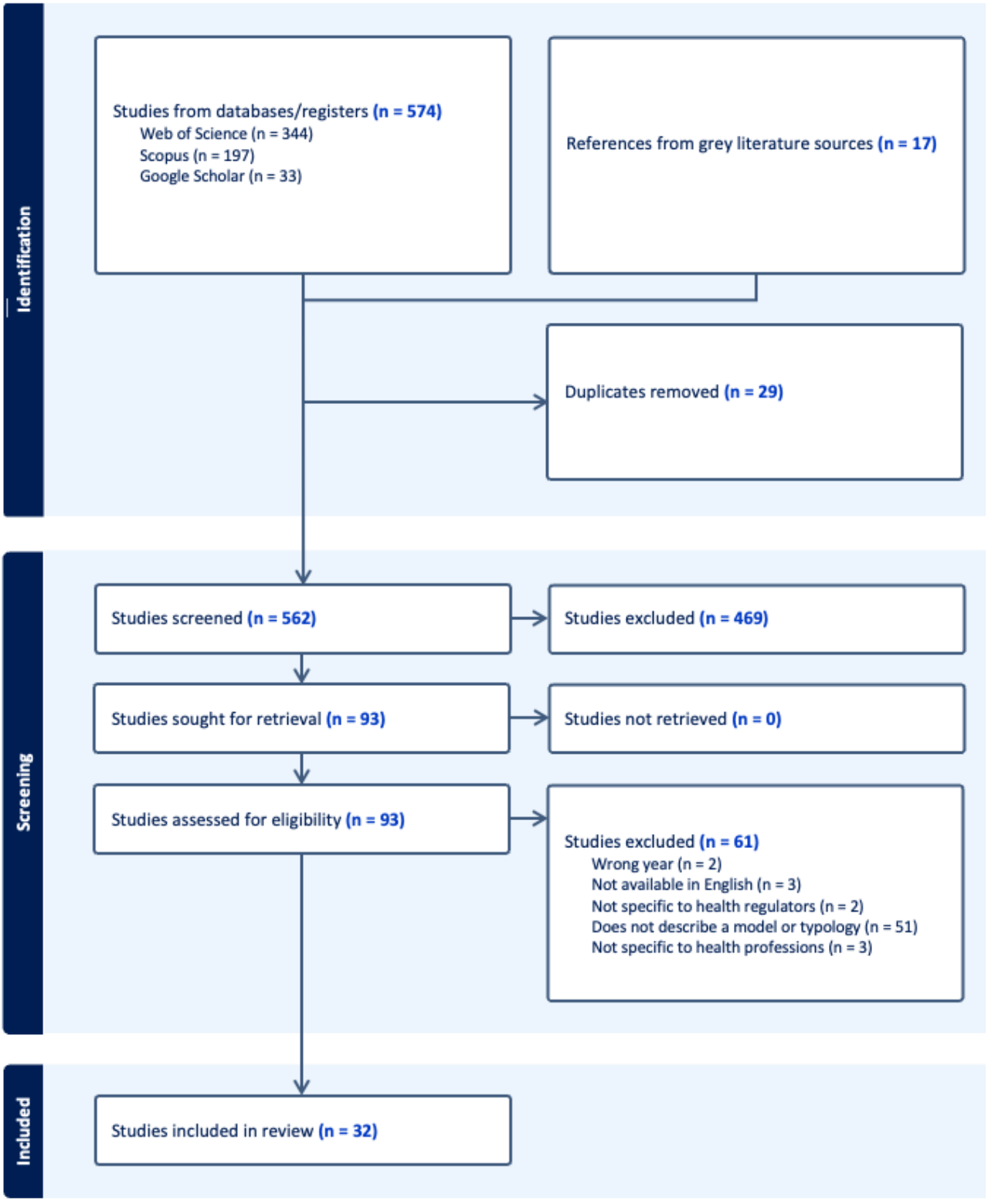
codes that emerged from secondary coding were organized as sub-characteristics within the initial codes.

Results

Search Outcomes

A total of 591 citations were identified through database searches (n=574) and searching of regulatory policy related websites (n=17). After 29 duplicates were removed, 562 documents proceeded to title and abstract screening. Of the 562 documents screened, 93 moved to full document review. Of these, 61 were excluded for the following reasons: wrong year (n=2), not available in English (n=3), not specific to *health* regulators (n=2), did not describe a regulatory model or typology (n=51), and not specific to *health* professions (n=3). The remaining 32 studies were eligible for inclusion and proceeded to data extraction.

Figure 2.1 PRISMA-ScR Flow Chart



Study Characteristics

Of the 32 papers included in the final analysis, 20 papers (62.5%) came from peer-reviewed journals and 12 documents (37.5%) were considered grey literature. Seven (35%) of the peer-reviewed articles were policy analyses, five (25%) were qualitative case studies, three (15%) were literature reviews, two (10%) were invited essays; and there was one (5%) rapid review synthesis, one (5%) historical analysis, and one (5%) scoping review. Only seven (22%) of the papers described the regulation of a specific profession: nursing (n=3), nursing and midwifery (n=1), dental surgeons (n=1), orthotists/prosthetists (n=1), and medical laboratory technologists (n=1). The remaining 25 papers (78%) described regulatory structures for health profession regulators in general without focusing on one specific health profession.

Table 1 summarizes the jurisdiction identified for each of the papers. Half of the papers (n=16) described regulation in a single jurisdiction, with Canada and/or its provinces being the most the frequently described health profession regulatory models (n=10). Papers describing regulatory models in multiple jurisdictions accounted for 47% of the analyzed documents (n=15), and there was one paper (3%) that did not specify any jurisdiction.

Table 2.1 Documents by jurisdiction

Documents by Jurisdiction	Count
Single Country Papers (n=16)	
Australia	2
Canada	10
New Zealand	1
United Kingdom (UK)	3
Multiple Country Papers (n=15)	
Africa (sub-Saharan countries)	1
Australia, Canada, UK	2

Australia, Canada, UK, United States of America (USA)	1
Australia, India, Kenya, Nepal, New Zealand	1
Canada, New Zealand, UK	1
Canada, UK, USA	2
Canada, USA	1
Germany, UK	1
Multiple countries from Global North and Global South (10 or more countries listed)	5
No Country Specified (n=1)	1
Total	**32**

Results of Individual Studies

Data extracted from individual studies are reported below.

Table 2.2 Scoping Review Literature Summary

Author(s)	Year	Title	Document Type	Jurisdiction(s)[1]	Study Population or Subject of Paper	Purpose of Study/Document	Methodology	Key Findings relevant to Scoping Review Research Question
Adams	2017	Self-regulating professions: past, present, future.	Peer Reviewed	Canada, UK, USA	Regulators	To explore international trends in professional self-regulation in Canada, UK, and USA, identify challenges to self-regulation, and propose why regulatory outcomes have varied across jurisdictions.	Literature Review	• Self-regulation has been criticized as hindering trade, global workforce mobility, and inadequately self-managing provider competence and misconduct. • Neo-liberal agendas that promote competition and efficiency, globalization trends, and historical events of professional scandal and misconduct have contributed to the shift away from self-regulation. • In the USA reforms to economic regulation (privatization of regulation, competition) may constrain professional self-regulation. • In the UK, the move toward stakeholder regulation has included the public and state actors in regulatory participation, and the development of meta-regulation or additional layers of regulation is also seen.
Adams	2020	Health professional regulation in historical context: Canada, the USA,	Peer Reviewed	Canada, USA, UK	Regulators	To explore how health profession regulation has varied since the mid-nineteenth	Historical Analysis	Current changes and challenges to health profession regulation are as follows: • UK - increased oversight of regulatory bodies with reduced

[1] Abbreviations: UK – United Kingdom; USA – United States of America; AB – Alberta; BC – British Columbia; NS – Nova Scotia; SK – Saskatchewan

Author(s)	Year	Title	Document Type	Jurisdiction(s)[1]	Study Population or Subject of Paper	Purpose of Study/Document	Methodology	Key Findings relevant to Scoping Review Research Question
		and the UK (19th century to present).				century and how issues and concerns have impacted regulatory outcomes.		number of regulators to promote system sustainability, accountability, transparency, and efficiency while reducing professional power. • Canada and USA - self-regulation persists with some regulatory amalgamation in Canada, oversight at regional (provincial/state) level with concerns about transparency and accountability; regional approach may be responsive to local needs but creates fragmentation and barriers across jurisdictions. • Generally, there are shifts to decrease power and autonomy held by profession experts and a focus on greater participation and oversight from state actors and the public in the name of public interest and protection.
Adams	2022	Drivers of regulatory reform in Canadian health professions: Institutional isomorphism in a shifting social context.	Peer Reviewed	Canada	Regulators	To use institutional isomorphism theory to examine the drivers of regulatory reform in Canada.	Case Study - Document review and qualitative interviews	Recent regulatory reforms identified as follows: • increased public participation on councils (AB), • amalgamation of regulators (BC, NL, NS), • changes to council structure and oversight (BC, ON), • focus on interprovincial mobility (AB, SK), • regulator collaboration on regulatory functions (NS). Coercive processes identified: • regulatory failures, government agendas, technology, and media/social media, and changing philosophies and values. Mimetic processes identified:

Author(s)	Year	Title	Document Type	Jurisdiction(s)[1]	Study Population or Subject of Paper	Purpose of Study/Document	Methodology	Key Findings relevant to Scoping Review Research Question
								• reform/meta-regulation trends in the UK, Australia, and BC. Normative processes identified: • current or previous experience as a regulated health professional, collaboration and networking between regulators, collective identity as "professional" professional regulators.
Australia Health Practitioner Regulation Agency (AHPRA)	2022	Regulatory Guide	Grey Literature	Australia	Regulators	To set out how health professions are regulated under the Health Practitioner Regulation National Law.	Information Update	• The National Law was passed separately by each state and territory thus providing a national approach or framework, but it was not itself passed nationally as a Commonwealth law. • The National Law establishes15 national health regulator boards for 16 professions and the AHPRA. • A health profession agreement is signed each year by the health regulator boards outlining APHRA's duties which include providing policy advice on regulatory matters, managing registration and renewal for local, overseas, and student practitioners, managing complaints (except in New South Wales and Queensland), monitoring and auditing registered professionals, and overseeing accreditation of education and training programs.
Adams and Wannamaker	2022	Professional regulation, profession-state relations, and the pandemic response: Australia, Canada,	Peer Reviewed	Australia, Canada, United Kingdom	Regulators	To explore how systems of healthcare professional regulation impacted regulatory responses during	Policy Analysis	The three regulatory jurisdictions were described as follows: • Australia - National regulatory agency oversees 15 national health profession boards, professional and public members

Author(s)	Year	Title	Document Type	Jurisdiction(s)[1]	Study Population or Subject of Paper	Purpose of Study/Document	Methodology	Key Findings relevant to Scoping Review Research Question
		and the UK compared				the first wave of the COVID-19 pandemic.		are by appointment, not true self-regulation. • UK - National regulatory agency Professional Standards Authority (PSA) oversees 10 national professional councils; professional and public members of PSA are by appointment, not true self-regulation, also considered "stakeholder regulation". • Canada - Regulatory function delegated to provincial or territorial colleges or councils with professional (elected) and public members. Some policy responses were similar across all three jurisdictions, with temporary registers developed to permit retired practitioners to return to practice and accommodations made for students whose training was interrupted. • Overall, medical and nursing professions experienced more policy change compared to oral professions. The UK policy response permitted senior medicine and nursing students to contribute to the pandemic response. • The Canadian response required provincial legislative changes to amend scopes of practice and was less nimble than UK and Australian systems, however legislative changes to scopes of practice may have resulted in more consistency of practice.

Author(s)	Year	Title	Document Type	Jurisdiction(s)[1]	Study Population or Subject of Paper	Purpose of Study/Document	Methodology	Key Findings relevant to Scoping Review Research Question
Benton et al.	2013	A Typology of Professional Nurse Regulatory Models and Their Administration.	Peer Reviewed	Canada, UK, Ethiopia, Australia, USA, Jamaica, Norway, India, Brazil, New Zealand	Nursing	To propose a taxonomy of professional nurse regulatory models.	Literature Review	Professional Nursing Continuum of Regulatory Model Typologies: • No regulation - citizens empowered with sufficient information to make informed choices and no government involvement. • Pure Self-Regulation - professionals set and enforce standards with no government involvement. • Delegated Self-Regulation - government delegates power to profession to autonomously set and enforce standards. • Supervised Self-Regulation - government delegates some power to profession and appointed board to set and enforce standards yet retains some power to intervene under certain circumstances. • Government-based Regulation - government retains power to develop and enforce standards. Typology of Administrative Approaches to Regulation: • Umbrella legislation covering multiple disciplines with a single governance board. • Umbrella legislation covering multiple disciplines with combination of delegation of powers to profession specific boards and shared administrative structures. • Umbrella legislation covering multiple disciplines delegating authority to multiple profession specific boards.

Author(s)	Year	Title	Document Type	Jurisdiction(s)[1]	Study Population or Subject of Paper	Purpose of Study/Document	Methodology	Key Findings relevant to Scoping Review Research Question
								• Profession specific legislation delegating power to a single profession specific board. • Regulation processes managed within government ministry. • Regulation processes divided between federal and regional government structures.
Cassiani et al.	2020	Regulation of nursing practice in the Region of the Americas.	Peer Reviewed	Multiple (>10)	Nursing	To describe and analyze the current nursing regulations across countries in the Region of the Americas.	Comparative Policy Analysis	Models were classified according to the International Council of Nurses' typologies: • Ministry of Health model - regulatory body is directly controlled by the government through the ministry of health (some Central and South American countries) • State led model arms' length body model - regulatory body is appointed by the ministry and given authority to advise on professional matters (countries in the Caribbean) • Professionally led model - authority is given to a regulatory body by the state and the body to govern and enforce standards (Brazil, Canada, USA) • Professional established model - pure self-regulation without government oversight.
Cayton	2017	Promoting professionalism, reforming regulation. A paper for consultation	Grey Literature	UK	Regulators	To provide a summary of the reforms needed to the UK healthcare regulatory system as identified through a national consultation.	Consultation	Regulator functions: • Keep a register of those fit to practice. • Set outcomes required from education/training programs, set standards of conduct/performance/behaviour.

Author(s)	Year	Title	Document Type	Jurisdiction(s)[1]	Study Population or Subject of Paper	Purpose of Study/Document	Methodology	Key Findings relevant to Scoping Review Research Question
								• Ensure registrants meet the standards and remain up to date in their knowledge and skills. • Restrict practice of those who do not meet standards of conduct/performance/behaviour.
Cayton	2018	An inquiry into the performance of the College of Dental Surgeons of British Columbia and the Health Professions Act.	Grey Literature	Canada	Dental Surgeons	To review recent issues in governance and regulatory performance related to the College of Dental Surgeons of British Columbia and propose recommendations for wider reform for professional regulation.	Inquiry	Proposed reforms include: • Move to smaller, appointed college boards using an independent, transparent, and competency-based process that includes registrants and public members. • Colleges have more freedom to change their own by-laws and be entirely separate from professional advocacy associations. • Colleges should be amalgamated to create multi-profession regulators. • Complaints should go through a common process and a streamlined process is proposed. • Establish a new professional registration body to hold a single register of all regulated health professionals and would adjudicate complaints. • Establish a regulator oversight body with similar responsibilities as the PSA in the UK
Clarke et al.	2021	Regulation of the global orthotist/prosthetist workforce, and what we might learn from allied health professions with international-level regulatory	Peer Reviewed	Multiple (>10)	Orthotists/prosthetists	To describe the national-level regulation of orthotist/prosthetists globally, and the international-level regulatory support provided to allied health professions.	Policy Analysis	Regulatory model type: • 20 countries adopted self-regulatory model. • 9 countries had government regulatory model. • 1 country had a model that displayed both self-regulation and government regulation.

Author(s)	Year	Title	Document Type	Jurisdiction(s)[1]	Study Population or Subject of Paper	Purpose of Study/Document	Methodology	Key Findings relevant to Scoping Review Research Question
		support: a narrative review.						Note: there were no operational definitions provided for each model type.
Durcan et al.	2023	Major Regulatory Reform Comes to Canada.	Grey Literature	Canada	Regulators	To explain recent reforms to model of health professional regulation in BC, Canada.	Essay	The Health Professions and Occupations Act (HPOA) ends self-regulation by making the following changes to health profession regulators: • Members of the regulator Board of Directors are appointed by government, with 50% of positions held by public and 50% held by members of the profession. • Regulator Board of Directors are advised by appointed members of the profession on practice standards but not bound by their recommendations. • Discipline adjudication is removed from the regulatory college purview and administered by a separate entity. • Regulatory college staff are given more authority to deal with regulatory matters without involvement of statutory committee. • The number of health regulatory colleges amalgamated from 20 to 6 with regulators overseeing multiple professions. • An oversight office is created that will review regulator performance, audit, oversee governance and complaint investigations.

Author(s)	Year	Title	Document Type	Jurisdiction(s)[1]	Study Population or Subject of Paper	Purpose of Study/Document	Methodology	Key Findings relevant to Scoping Review Research Question
Healy and Braithwaite	2006	Designing safer health care through responsive regulation.	Grey Literature	Not applicable	Regulators	To explore the concept of responsive regulation as a strategy to improve safety in health care.	Discussion Paper	As governance systems are expecting more transparency and accountability, a shift from a blame culture to a learning culture is required by regulatory bodies. Two approaches to shifting to a learning culture are described as follows: • Meta-regulation (enforced self-regulation) - an external regulator oversees the activities of the self-regulator to ensure regulatory processes meet identified standards. • Learning models - self-regulator monitors effects and outcomes and completes self-evaluations that provide feedback to inform adjustments in regulatory goals and strategies.
King's Fund	2007	Briefing: Professional Regulation	Grey Literature	UK	Regulators	To provide an overview of the health profession regulatory system in the UK and identify issues and proposals for reform.	Policy Briefing	Proposed changes include: • Change composition of regulator boards to counter the perception that boards operate in their profession's own best interests. • Council members will be appointed with 50% from profession and 50% from lay public. • Reduce the size of regulatory councils and Chair will be appointed rather than elected. • Addition of revalidation process every 5 years for physicians - relicensing for general practitioners, recertification for specialists. • Fitness to practice cases should be carried out by a separate independent body.

Author(s)	Year	Title	Document Type	Jurisdiction(s)[1]	Study Population or Subject of Paper	Purpose of Study/Document	Methodology	Key Findings relevant to Scoping Review Research Question
Kuhlmann and Allsop	2008	Professional self-regulation in a changing architecture of governance: comparing health policy in the UK and Germany	Peer Reviewed	UK, Germany	Regulators	To compare professional self-regulation and state-profession relationships in healthcare in UK and Germany.	Policy Analysis	Changes to regulatory bodies and stakeholder arrangements in response to economic pressures and a focus on efficiency and patient safety: • UK (tax-funded health insurance system) - Changes to regulatory bodies led by the state: Reduction in number of councils governing health professions with the development of multi-profession regulators, inclusion of public/lay members on professional councils of regulatory bodies, council members are appointed by government rather than elected, and new oversight bodies to coordinate activities. • Germany (employer and employee funded insurance system) - Changes led by professions rather than government and take a decentralized approach focused on the development of networks between councils (chambers) and health insurance institutions and the state, inclusion of public/lay member representatives.
Lahey	2011	Is self-regulation under threat?	Grey literature	Canada, UK, New Zealand	Regulators	To describe changes in nursing regulation legislation in other jurisdictions and identify implications for nursing regulation in Canada.	Essay/Interview	Instances of (and/or concerns about) regulatory capture have contributed to the decline of self-regulation in some jurisdictions. • UK response - creation of meta-regulatory agency (Council for Healthcare Regulatory Excellence) to oversee work of regulators. • New Zealand response - investigation of complaints handled by body separate from regulator - Health and Disability Commissioner, with discipline

Author(s)	Year	Title	Document Type	Jurisdiction(s)[1]	Study Population or Subject of Paper	Purpose of Study/Document	Methodology	Key Findings relevant to Scoping Review Research Question
								being handled by Health Practitioners Disciplinary Tribunal. Concerns that these reforms degrade the culture of self-responsibility and accountability that is important to professionalism. In Canada, some provinces have moved to implement umbrella legislation to (1) create consistency in framework and structures of regulators, and (2) create opportunities for flexibility and change in how responsibility is shared amongst providers.
Lahey and Fierlbeck	2016	Legislating collaborative self-regulation in Canada: A comparative policy analysis	Peer Reviewed	Canada	Regulators	To compare the two different policy approaches of Ontario and Nova Scotia in bringing about collaboration between health profession regulators.	Policy Analysis	Ontario • Top-down approach where provincial government developed and enacted legislation mandating collaboration between regulators. • Having an umbrella model of health professions legislation permitted this type of system-wide change by the government and framed regulatory collaboration as a requirement. Nova Scotia • Bottom-up approach where health profession regulators developed and proposed legislation that would enable them to voluntarily collaborate. • This aligns conceptually with the concept of interprofessional collaboration which depends on its voluntariness. The effectiveness of top down versus bottom-up approach has not been evaluated.

Author(s)	Year	Title	Document Type	Jurisdiction(s)[1]	Study Population or Subject of Paper	Purpose of Study/Document	Methodology	Key Findings relevant to Scoping Review Research Question
Lemmens and Ghimmire	2019	Regulation of health professions in Ontario: Self-regulation with statutory-based public accountability.	Peer Reviewed	Canada	Regulators	To describe the model of statutory self-regulation of health professionals in Ontario, explore the roles of the state and stakeholders, and examine challenges and gaps in the Ontario model.	Policy Analysis	The Regulated Health Professions Act (RHPA) is umbrella legislation that provides a regulatory framework for regulated health professions and delegates the following to regulatory colleges: • determining entrance requirements. • providing a system of registration to determine required applicant qualifications. • licensing professional practitioners • establishing and maintaining levels of competency • establishing and maintaining codes of conduct (ethics and standards) • receiving, investigating, and adjudicating complaints • administering a disciplinary proves to sanction members who fail to maintain established standards and practices. The Health Professions Advisory Council, separate from the regulators, provides advise to the government on regulatory issues. Profession-specific Acts set out the scope of practice for each profession. A separate Health Professions Appeal and Review board is independent from government and reviews decisions about complaints made at the regulator level. Challenges associated with this model identified: • Granting self-regulatory power can be seen as the government legitimizing the profession's practices.

Author(s)	Year	Title	Document Type	Jurisdiction(s)[1]	Study Population or Subject of Paper	Purpose of Study/Document	Methodology	Key Findings relevant to Scoping Review Research Question
								• Questions about how to address Indigenous self-governance and indigenous health practitioners. • Insulated or siloed forms of self-regulation seem contradictory to the notion of health profession collaboration.
Leslie	2012	Recent changes to the governance and accountability of the Regulated Health Professions in Ontario	Peer Reviewed	Canada	Regulators	To describe the concept of self-regulation and its legislative history in Ontario.	Policy Analysis	The paper describes the historical events leading up to the Health Professions Legislation Review and the development of the RHPA and the subsequent amendments that shifted the balance of power from professions to government: • Ability to appoint a college supervisor and/or auditor. • Limiting the Health Professions Regulatory Advisory Council (HPRAC) to providing advice only upon request from the government only. There are concerns that the self-regulatory model is being eroded by shifting power away from professions and can only be considered "partially self-regulated".
Leslie et al.	2023b	Protecting the public interest while regulating health professionals providing virtual care: A scoping review	Peer Reviewed	US, Canada, India, Hong Kong, Brazil, South East Asia, Europe/European Union, Australia, Portugal, Russia	Regulators	To review how health professions regulators were working to protect patients when health professionals were providing virtual care.	Scoping Review	In the context of virtual care provision, regulators will need to address new challenges in regulating professionals related to: • Cross-jurisdictional virtual care. • Artificial intelligence enabled practice and adaptation to new technologies in service provision. Technological competence has been added by some regulators as a competency for practice. Overall virtual care provision brings up questions about access to care and

Author(s)	Year	Title	Document Type	Jurisdiction(s)[1]	Study Population or Subject of Paper	Purpose of Study/Document	Methodology	Key Findings relevant to Scoping Review Research Question
								access barriers that may lead to inequities in access and outcomes.
Leslie et al.	2018	Policy Tensions in Regulatory Reform: Changes to Regulation of Health Professions in Australia, the United Kingdom, and Ontario, Canada	Peer Reviewed	Canada, Australia, UK	Regulators	To analyze factors influencing recent and current reforms to health profession regulation in three jurisdictions.	Comparative Case Study	Australia • A national agency (AHPRA) oversees 14 profession-specific national boards. Membership on AHPRA is government appointed and includes the public. State ministers can influence the structure of national boards, including consolidation or dissolution of national boards. UK • Movement to a meta-regulatory framework where the national agency of PSA regulates the profession regulators, which consist of single and multiple profession regulators. Government appoints members (professional and public) to professional councils, and professional majorities were eliminated from councils. Ontario • Creation of umbrella legislation (RHPA) to provide a framework for profession regulators, provisions for government-initiated supervisor and audits of regulators, increased consistency in handling sexual abuse allegations, and government power to make regulations regarding composition of and

Author(s)	Year	Title	Document Type	Jurisdiction(s)[1]	Study Population or Subject of Paper	Purpose of Study/Document	Methodology	Key Findings relevant to Scoping Review Research Question
								selection of members on regulator committees/panels. Health reforms in all three jurisdictions have been driven by claims of protecting the public interest and increasing transparency; creating greater independence of regulation from the professions and moving away from self-regulation and creating consistency across regulatory functions.
Leslie et al.	2023a	Design, delivery, and effectiveness of health practitioner regulation systems: an integrative review	Peer Reviewed	Multiple (>10)	Regulators	To summarize and analyze the evidence and issues related to health profession regulation to understand how design and delivery of systems can help to achieve health system goals.	Rapid Review Synthesis	Trends noted in regulatory structures: • shift toward risk-based regulation, • diversity in regulatory schemes • no widely accepted typology for describing regulatory governance • trends towards umbrella legislation, multi-discipline regulators, and public participation in governing boards.
Leslie et al.	2021	Regulating health professional scopes of practice: comparing institutional arrangements and approaches in the US, Canada, Australia, and the UK	Peer Reviewed	USA, Canada, Australia, UK	Regulators	To compare four different regulatory approaches to understand how each country regulates cope of practice.	Comparative Case Study	• Health profession legislation is at the national level in UK and Australia and sub-national level in Canada and USA. • National regulatory regimes permit greater consistency, mobility and workforce planning compared to sub-national regimes. • State or quasi-state actors have influence in the regulatory process through national authorities (PSA in UK and AHPRA in Australia) in national regimes.

Author(s)	Year	Title	Document Type	Jurisdiction(s)[1]	Study Population or Subject of Paper	Purpose of Study/Document	Methodology	Key Findings relevant to Scoping Review Research Question
Leslie et al.	2023c	Regulating During Crisis: A Qualitative Comparative Case Study of Nursing Regulatory Responses to the COVID-19 Pandemic	Peer Reviewed	Canada, USA	Nursing	To analyse the regulatory response of nursing regulators during the pandemic and understand how regulators conceptualize the public interest.	Comparative Case Study	Regulators used the following approaches: • taking a risk-based approach to regulatory processes • taking an agile and flexible approach to regulatory response • collaborating system-wide to respond to the pandemic • seeking consistency in regulatory approaches • identifying the pandemic as an opportunity to innovate. Regulatory structure can help or hinder the above, particularly with respect to consistency and workforce mobility.
Mahat et al.	2023	Health practitioner regulation and national health goals	Grey Literature	Australia, India, Kenya, Nepal, New Zealand, UK	Regulators	To explore the evolution of health profession regulatory systems and their adaptations during the COVID-19 pandemic.	Policy Bulletin	Models of regulation demonstrate diversity in form and function: • self-regulation (delegation of all regulatory functions to profession) • co-regulation (delegation of some regulatory functions to profession • direct government regulation. Delegation of regulation involves deciding who is responsible for regulating professional competencies, scope of practice, controlled acts, complaints, and discipline, etc. Regulation can also be non-statutory (voluntary). Recent reforms are related to current concepts of "public interest" (transparency, efficiency, value for money, quality and safety of health care, responsiveness of regulators to evolving needs, proportional to risks)
McCarthy et al.	2014	Development of a framework to measure health profession	Peer Reviewed	Sub-Saharan Africa	Nursing and Midwifery	To describe the development of a framework to evaluate the	Literature Review and Stakeholder Engagement	Identification of seven regulatory functions in a regulatory framework: • developing and revising legislation

Author(s)	Year	Title	Document Type	Jurisdiction(s)[1]	Study Population or Subject of Paper	Purpose of Study/Document	Methodology	Key Findings relevant to Scoping Review Research Question
		regulation strengthening				progress of an initiative to strengthen nursing and midwifery professional regulation in sub-Saharan Africa.		• member registration and management of registers • licensure • scope of practice • continuing professional development and competency • accreditation of education/training programs • professional conduct and discipline
Ministry of Health	2020	About the Health Practitioners Competence Assurance Act (HPCAA)	Grey Literature	New Zealand	Regulators	To explain the purpose and principles related to the HPCAA	Information Update	• The HPCAA is umbrella legislation that establishes separate regulatory bodies for the regulated health professions. • The primary responsibility for regulation is delegated to the individual regulatory bodies, however disciplinary hearings are centralized to the Health Practitioners Disciplinary Tribunal where each separate regulatory body must refer cases to the centralized authority if charges are laid. • The Minister is granted the right to appoint members of the regulatory bodies. Every five years the performance of the regulatory bodies is reviewed and evaluated.
Motluk	2019	Self-regulation in health care professions comes under scrutiny	Grey Literature	Canada	Regulators	To describe proposed changes to health professions regulation in BC, Canada.	Bulletin	• There is a trend away from self-regulation in response to lack of confidence in professions regulating themselves and concerns with regulatory capture. • Proposed changes to regulation in BC include the following: increased transparency and more representation from the public/people outside the profession, move away from

Author(s)	Year	Title	Document Type	Jurisdiction(s)[1]	Study Population or Subject of Paper	Purpose of Study/Document	Methodology	Key Findings relevant to Scoping Review Research Question
								elected and toward appointed boards, amalgamate regulators to create multi-profession regulators, create a new oversight body to regulate the regulators and a new adjudication body to manage complaints.
Pacey et al.	2017	National health workforce regulation: Contextualising the Australian scheme.	Peer Reviewed	Australia	Regulators	To examine how the introduction of a National Registration and Accreditation Scheme and its governance compares to different national systems and other regulatory bodies in Australia.	Case Study	• In response to a need for enhanced workforce planning and instances of regulatory failure when regulation was managed at the sub-national level, the Australian government moved toward a co-regulatory model that included national regulatory bodies/functions. • The AHPRA and national profession-based boards were formed and responsible for registration, accreditation, standard setting, and enforcement activities. • Sub-national/state representatives were given mechanism for input into regulation at the national level.
Penney and Wainwright	2017	Using trends to inform regulatory practices.	Peer Reviewed	Canada	Regulators	To identify emerging trends in health profession regulation and explore how trends can inform evolution of the regulatory system.	Commentary	Challenges and trends identified by regulators: • moving toward right-touch regulation • navigating structural conflict of interest inherent in self-regulation • emphasis on how a profession should be regulated rather than what should be regulated impacts the regulator's ability to mitigate or address real risk issues • collaborative self-regulation to enable both interprofessional collaboration at the regulator level and the practice level.

Author(s)	Year	Title	Document Type	Jurisdiction(s)[1]	Study Population or Subject of Paper	Purpose of Study/Document	Methodology	Key Findings relevant to Scoping Review Research Question
Professional Standards Authority (PSA)	2018	Health Professional Regulation: a long view with Annual Report and Accounts 2017/2018	Grey Literature	UK	Regulators	To provide an overview of health and care professional regulation and report on the annual accounts of the PSA.	Annual Report	Reforms to regulator governance: • Equal number of professionals and public members • Smaller council boards (8 to 12) • Members of boards are appointed against defined competencies. • No professional members appointed to the PSA board. • Regulators to develop mechanisms to require registrants to demonstrated continued competency. • Adoption of risk-based/right touch approach to regulation • PSA assesses regulators against 24 Standards of Good Regulation
Regulated Health Professions Network (RHPN)	2023	Frequently Asked Questions	Grey Literature	Canada	Regulators	To provide an overview of the role of the RHPN in Nova Scotia, Canada	Information Update	• The RHPN Act created the RHPN to provide a legislated and structured mechanism for health professions regulators to collaborate by sharing information and best practices. • The RHPN explores collaborative regulatory processes in the context of interprofessional collaboration and interprofessional teams. • The Act does not change individual regulator autonomy. It enables voluntary collaboration in processes such as complaints investigations, addressing scopes of practice, and review of registration appeals, yet does not extend to disciplinary decisions.

Author(s)	Year	Title	Document Type	Jurisdiction(s)[1]	Study Population or Subject of Paper	Purpose of Study/Document	Methodology	Key Findings relevant to Scoping Review Research Question
Wilkie and Tzountzouris	2017	Enabling evolving practice for healthcare professionals: a regulator's journey	Peer Reviewed	Canada	Medical Laboratory Technologists	To provide an overview of the functional taxonomy of health profession regulation and identification of opportunity to shift regulatory approaches.	Essay	Regulation involves managing processes for: • Restrictive functions: setting entry to practice standards. • Reactive functions: complaints, fitness to practice, discipline • Proactive functions: quality assurance and continued competence The role of regulators continues to evolve to increase focus on proactive functions to ensure continuous competence, ensuring responsiveness to system change, and reinforce professional culture and professionalism.

Synthesis of Results

Three main characteristics and eight sub-characteristics were identified through qualitative synthesis of the 32 included papers. They were source of statutory power (omnibus, umbrella, profession-specific legislation), autonomy over regulatory matters (delegation of power from state to authority, delegated components of regulation, stakeholder participation in governance), and regulatory collaboration (multi-professional models, legislated regulatory collaboration). Characteristics and sub-characteristics are described below:

I. Source of Statutory Power

Nine papers (28%) described various legislative approaches that the state could use to delegate power to HP regulatory bodies (AHPRA, 2022; Benton et al., 2013; Cassiani et al., 2020; Lahey, 2011; Lahey and Fierlbeck (2016); Lemmens and Ghimmire, 2019; Leslie et al., 2018; Leslie et al., 2023a; Ministry of Health, 2020). Legislative approaches fell into three sub-categories: omnibus legislation, umbrella legislation, and legislation specific to professions.

(a) **Omnibus legislation:** Two papers (Benton et al., 2013; Cassiani et al., 2020) described using omnibus legislation as a tool to broadly outline definitions and procedures for health profession regulation, where the omnibus legislation contained other health or social care related components. In this approach, additional regulatory requirements may or may not be set forth using supplementary legislation.

(b) **Umbrella legislation:** Nine papers described the use of umbrella legislation to provide a common regulatory framework to be shared by all regulated

health professions to promote consistency in requirements and structures of regulators (AHPRA, 2022; Benton et al., 2013; Cassiani et al., 2020; Lahey, 2011; Lahey and Fierlbeck (2016); Lemmens and Ghimmire, 2019; Leslie et al., 2018; Leslie et al., 2023a; Ministry of Health, 2020). The Ontario RHPA (1991) was commonly described as an example of umbrella legislation (Lahey, 2011; Lahey and Fierlbeck (2016); Lemmens and Ghimmire, 2019; Leslie et al., 2018; Leslie et al., 2023a), while umbrella legislation was also noted in the HP regulatory models in New Zealand (Ministry of Health, 2020) and Australia (AHPRA, 2022). An important advantage to implementing umbrella legislation for HP regulation identified by researchers was the potential agility in implementation of system-wide change using a top-down approach in response to evolving health system needs (Lahey and Fierlbeck, 2016; Leslie et al., 2018; Leslie et al., 2023a).

(c) **Profession-specific legislation**: Two papers (Benton et al., 2013; Cassiani et al., 2020) described the role of profession-specific legislation to outline how a regulatory body for a specific profession (e.g., often called a board, council, college, authority, etc.) is charged with explicit duties for regulation. In Ontario, profession-specific legislation is used in combination with umbrella legislation: the umbrella legislation of the RHPA (1991) sets out the broad framework and the profession-specific Acts detail the role and duties of each regulatory college (Lahey and Fierlbeck, 2016; Leslie et al., 2018).

II. Autonomy over Regulatory Matters

Twenty-two papers (69%) described the degree and scope of autonomy the profession was granted by the state over matters of regulation (Adams, 2017; Adams, 2020; Adams, 2022; Adams and Wannamaker, 2022; Benton et al., 2013; Cayton, 2017; Clarke et al., 2021; Durcan et al., 2023; Healy and Braithwaite, 2006; Kings Fund, 2007; Kuhlmann and Allsop, 2008; Lahey, 2011; Lemmens and Ghimmire, 2019; Leslie et al., 2018; Leslie et al., 2021; Leslie et al., 2023a; Mahat et al., 2023; McCarthy et al., 2014; Ministry of Health, 2020; Motluk, 2019; Pacey et al., 2017; PSA, 2018). Within the characteristic of autonomy over regulatory matters, three sub-characteristics were identified: delegation of power from state to profession, delegated components of regulation, and stakeholder representation in governance.

(a) **Delegation of power from state to profession:** Delegation of regulation involves deciding who is responsible for carrying out the various duties of regulation that could include regulating professional competencies, scope of practice, controlled acts, complaints, and discipline, etc. The delegation of power from state to profession was frequently described as a continuum that spanned from the state granting full power to the profession to the granting of partial regulatory power to the profession (and the state retains some regulatory power) to the granting of no regulatory power to the profession (Benton et al., 2013; Cassiani et al., 2020; Clarke et al., 2021; Mahat et al., 2023).

In the case where *the state has substantially delegated power and responsibility for regulation to the profession*, this model has been labelled in the literature as self-regulation (Clarke et al., 2021; Mahat et al., 2023), pure

self-regulation (Benton et al., 2013) and professionally established regulation (Cassiani et al., 2020).

Models of HP regulation also exist where *the state has partially delegated power and responsibility for regulation to the profession* and retained some power and/or assigned power elsewhere. Within this category of partial delegation of power, there were two different variants:

i. Models where the state retained some degree of direct power over HP regulation have been called co-regulation (Mahat et al., 2023), supervised self-regulation (Benton et al., 2013), partial self-regulation (Leslie, 2012), professionally led model of regulation (Cassiani et al., 2020), and self-regulation with government regulation (Clarke et al., 2021). This type of partial self-regulatory model has been observed in some provinces in Canada (Ontario, Alberta, Nova Scotia and Saskatchewan) (Adams, 2022), and states within the USA (Adams, 2017; Adams, 2020). For example, in Ontario the province has retained the power to intervene in regulatory college operations by appointing a supervisor and/or auditor (Leslie, 2012).

ii. Regulatory models where the state assigned power to an arms-length body to fulfill and/or oversee some elements of regulatory function have been called meta-regulation (Adams, 2017; Adams, 2020; Adams, 2022; Adams and Wannamaker, 2022; Cayton, 2017; Durcan et al., 2023; Kings Fund, 2007; Lahey, 2011;

Lemmens and Ghimmire, 2019; Leslie et al., 2018; Leslie et al., 2021; Ministry of Health, 2020; Motluk, 2019; Pacey et al., 2017), enforced self-regulation (Healy and Braithwaite, 2006), and state-led model with arm's length body model (Cassiani et al., 2020). This model has been implemented in the UK where the PSA oversees and evaluates 10 national HP regulatory councils (PSA, 2018) and in Australia where AHPRA oversees 15 national HP regulatory boards (Adams and Wannamaker, 2022). More recently, British Columbia has passed the Health Professions and Occupations Act, 2022 (HPOA) to create a meta-regulatory agency to review regulator performance and oversee governance and complaint investigations (Durcan et al, 2023; Cayton, 2018).

Finally, models of HP regulation can exist where *the government retains all power to regulate the professions*. This has been named government-based regulation (Benton et al., 2013), Ministry of Health model of regulation (Cassiani et al., 2020), and direct government regulation (Mahat et al., 2023).

(b) Delegated components of regulation: Components or objects of regulation are regulator duties that could be delegated from the state to the profession (Benton et al., 2013; Cayton, 2017; Lemmens and Ghimmire, 2019; Mahat et al, 2023; McCarthy et al., 2014; Wilkie and Tzountzouris, 2017). The state can delegate some or all regulatory functions to the profession. The types of functions that can be delegated are:

i. Proactive regulatory functions that enable quality assurance and continued competence: setting outcomes required from education programs, accrediting education programs, establishing and maintaining codes for professional conduct and professional standards, and developing and managing processes to ensure continued competence.
ii. Restrictive regulatory functions that set and uphold entry to practice standards: keeping a register of those fit to practice, and restricting the practice of those who do not meet the standards.
iii. Reactive regulatory functions that respond to complaints, concerns about fitness to practice and discipline: receiving, investigating and adjudicating complaints, and administering disciplinary processes for those who fail to maintain standards.

In the UK and Australia where regulatory models demonstrate meta-regulation the state has delegated some components of regulator functions to an arms-length agency. For example, issues related to discipline of regulated HPs were previously managed by HP councils or colleges but through legislative reforms the disciplinary function, in part or in whole, has been removed from HP councils and delegated to meta-regulators, The PSA in the UK has the power to review and appeal disciplinary decisions made by HP councils (PSA, 2018) and the AHPRA in Australia receives and investigates

complaints and refers suspected misconduct to tribunal except for practitioners in New South Wales and Queensland (AHPRA, 2022).

(c) Stakeholder participation in governance: Members of the public who are not members of the health profession can play a role in regulatory matters. Their participation in governance was described in 12 papers, consisting of two different aspects of participation: the degree to which stakeholders participate in regulatory governance, and how the membership of governance bodies is determined. Both features of regulatory models have the potential to shift power away from the professions and to other involved stakeholders (Adams, 2020).

i. The degree to which stakeholders (other than members of the profession) participate in regulatory governance and decision-making was identified as a characteristic of regulatory models (Adams, 2017; Adams, 2020; Adams, 2022; Adams and Wannamaker, 2022; Cayton, 2017; Durcan et al., 2023; Kings Fund, 2007; Kuhlmann and Allsop, 2008; Leslie et al., 2018; Leslie et al., 2023a; Motluk, 2019; PSA, 2018). Stakeholders can include members of the public and/or government representatives who actively participate in the governance of the profession. Recently, reforms to HP regulatory models have involved increasing representation of members of the public on regulator governance boards in order to improve accountability to the public and shift power away from professions, with the

requirement of 50% public representation on regulatory councils reported the UK (Cayton, 2018; Kings Fund, 2007; PSA, 2018), British Columbia (Durcan et al., 2023; Motluk, 2019), Australia (AHPRA, 2022). This type of model has been called stakeholder regulation (Adams, 2017; Adams and Wannamaker, 2022).

ii. Membership selection for governance bodies was identified as an important regulatory feature that impacts the power balance between professions and the state where members of governance councils can be either elected or appointed (Adams, 2022; Adams and Wannamaker, 2022; Benton et al., 2013; Cayton, 2018; Durcan et al., 2023; Kings Fund, 2007; Kuhlmann and Allsop, 2008; Leslie et al., 2018; Ministry of Health, 2020; Motluk, 2019; PSA, 2018). Governments engaging in regulatory reform are moving away from permitting regulators to elect the members of their governing bodies and instead require that professional and public members are appointed by the government. This trend in regulatory model reform is often implemented alongside increasing public participation on regulatory councils and can be observed in the UK (Cayton, 2018; Kings Fund, 2007; PSA, 2018), British Columbia (Durcan et al., 2023; Motluk, 2019), Australia (AHPRA, 2022).

III. Regulatory Collaboration

Sixteen papers (50%) described regulatory structures that would enable regulatory collaboration (Adams, 2020; Adams, 2022; Adams and Wannamaker, 2022; AHPRA, 2022; Cayton, 2018; Durcan et al., 2023; Kings Fund, 2007; Kuhlmann and Allsop, 2008; Lahey and Fierlbeck, 2016; Leslie et al., 2023a; Leslie et al., 2023b; Leslie et al., 2023c; Leslie et al, 2018; Motluk, 2019; Penney and Wainright, 2017; RHPN, 2023). The ability for regulators to collaborate on the various regulatory components or functions may be beneficial to ensure consistency in regulatory approach and agility in responding to health system needs (Lahey and Fierlbeck, 2016; Leslie et al., 2023c). Two different approaches to enabling regulatory collaboration were described: implementation of multi-profession regulators, and legislative approaches to require regulatory collaboration.

(a) **Collaboration through multi-profession models of regulation:** Eleven of the identified papers described regulatory models where more than one profession is regulated under one regulator (Adams, 2020; Adams, 2022; Adams and Wannamaker, 2022; AHPRA, 2022; Cayton, 2018; Durcan et al., 2023; Kings Fund, 2007; Kuhlmann and Allsop, 2008; Leslie et al., 2023a; Leslie et al, 2018; Motluk, 2019). This can be observed on a small scale where the regulator might group together two professions with related or overlapping scopes of practice under one regulator (e.g., Nursing and Midwifery professions regulated together under the Nursing and Midwifery Council in the UK) or many professions under one regulator (e.g., 15 different allied health professions regulated together under the Health and Care Professions Council) (PSA, 2018).

(b) Legislating regulatory collaboration: Nine papers described HP regulatory models that involved legislation that enabled collaboration between professions (Kuhlmann and Allsop, 2008; Lahey and Fierlbeck, 2016; Leslie et al., 2023a; Leslie et al., 2023b; Leslie et al., 2023c; Leslie et al, 2018; Motluk, 2019; Penney and Wainright, 2017; RHPN, 2023). In Lahey and Fierlbeck's paper (2016), they describe how the Ontario government used a top-down approach to legislate regulator collaboration by amending the RHPA to require that the regulatory colleges engage in collaboration on regulatory matters. The approach taken in Nova Scotia was considered a bottom-up approach where each of the HP regulators worked together to develop legislation that would enable them to voluntarily collaborate on regulatory matters.

Discussion

This study has provided a review of recent academic and grey literature describing the various characteristics and typologies of HP regulatory models with the goal of moving toward a conceptual framework of HP regulation. Three main characteristics and eight sub-characteristics were identified. They were: source of statutory power (omnibus, umbrella, profession-specific legislation), autonomy over regulatory matters (delegation of power from state to authority, delegated components of regulation, stakeholder participation in governance), and regulatory collaboration (multi-professional models, legislated regulatory collaboration).

Governments can delegate power to professions using different legislative tools. Depending on the type of legislative approach used, HP regulatory models may exhibit

greater detail or specificity in legislative framework (e.g., umbrella legislation used in conjunction with profession-specific legislation) or have legislative structures that can enable agile response to health system needs and regulator collaboration (e.g., umbrella legislation) (Lahey and Fierlbeck, 2016; Leslie et al., 2018; Leslie et al., 2023a). Whether the state's desired outcome is agility and flexibility for system-wide change, improved regulatory collaboration, consistency in regulatory approach across all professions, bureaucratic efficiency and value for money, public protection, or some or all of the above, it is important that policy makers first settle on a standard framework and terminology to describe and classify regulatory models. With that accomplished, we are better equipped to perform cross jurisdictional comparisons and evaluations of regulatory models to determine if policy goals are achieved with regulatory reform.

Based on the results of this study, the findings indicate that HP regulatory models can initially be described using these guiding questions:

Source of Statutory Power:

1. What type(s) of legislative tools has the state used to grant power to the profession to carry out regulatory matters – omnibus and/or umbrella and/or profession-specific legislation?

Autonomy over Regulatory Matters:

2. How much power has been delegated from state to profession (full, partial, none) and does the model include power(s) given to a meta-regulator?
3. What regulatory components or functions have been delegated to the profession (what specific restrictive, proactive, and reactive tasks?) and have components of regulation or other tasks been delegated to a meta-regulator?

4. How do stakeholders participate in regulator governance (are they members of council and how much of the council membership do they represent) and how are council members selected?

Regulator Collaboration:

5. Do separate professions collaborate through shared regulators (multi-profession regulators) and/or are they legislated to collaborate?

This is the first step in moving toward a conceptual framework of HP regulatory models, however as demonstrated by this paper there is still a lack of consensus in the literature on the use of terminology for specific aspects of regulatory models. For example, do we describe models of HP regulation where the state retained some degree of power over HP regulation as co-regulation, supervised self-regulation, partial self-regulation, professionally led model of regulation, or self-regulation with government regulation? Further work is required to engage policy experts and HP regulators to collaboratively move this work forward and land on a consensus framework using common terminology.

Study Limitations

This study fills a gap in the literature that brings together existing interrelated conceptual ideas and characteristics of HP regulatory models. However the findings should be interpreted cautiously. A scoping review is not exhaustive as it is meant to scan and summarize literature when the content is heterogeneous. Thus, we can only report on what was found and documented. There may be a selection bias toward published results, and more specifically a selection bias toward models that appear to

be most frequently described in the literature (Canada, UK, Australia). Regulatory models from countries from the Global South were not well represented in the literature search. Additionally, a scoping review does not include a quality assessment of the included articles that would be required of systematic review. Finally, the search was limited to existing HP regulatory models so (1) characteristics of regulatory models for non-health care professions would not be represented and (2) theoretical regulatory models, or models yet to be conceptualized, would not be reported here.

Conclusion

Using the HP regulatory model characteristics and sub-characteristics identified by this scoping review study, we propose an initial approach and guiding questions to assist in describing HP regulatory models. This is particularly helpful in classifying HP regulatory models for description or comparison. However, this preliminary work is the first step in moving toward a framework and standard terminology for HP regulatory models. Engagement with policy experts and regulators on an international level will be required to reach a consensus framework. This work is an important step in being better equipped to compare and evaluate how regulatory reforms may or may not impact anticipated health system policy goals and outcomes.

.

References

Adams, T. L. (2017). Self-regulating professions: Past, present, future. *Journal of Professions and Organization*, *4*(3), 70–87. https://doi.org/10.1093/jpo/jow004

Adams, T. L. (2020). Health professional regulation in historical context: Canada, the USA, and the UK (19th century to present). *Human Resources for Health*, *18*(1), 72–72. https://doi.org/10.1186/s12960-020-00501-y

Adams, T. L. (2022). Drivers of regulatory reform in Canadian health professions: Institutional isomorphism in a shifting social context. *Journal of Professions and Organization*, *9*(3), 318–332. https://doi.org/10.1093/jpo/joac018

Adams, T., & Wannamaker, K. (2022). Professional regulation, profession-state relations, and the pandemic response: Australia, Canada, and the UK compared. *SOCIAL SCIENCE & MEDICINE*, *296*. https://doi.org/10.1016/j.socscimed.2022.114808

Arskey, H., & O'Malley, L. (2005). Scoping studies: towards a methodological framework. *International journal of social research methodology*, *8*(1), 19-32.

Australia Health Practitioner Regulation Agency (AHPRA). (2022). Regulatory Guide. *AHPRA & National Boards*. https://www.ahpra.gov.au/documents/default.aspx?record=WD22%2F31995&dbid=AP&chksum=9Ya77Rt7UtbXFTVJvP%2BkvA%3D%3D

Black, J. (1996). Constitutionalising self-regulation. *The Modern Law Review*, *59*(1), 24-55.

Black, J. (2001). Decentring Regulation: Understanding the role of regulation and self-regulation

in a 'post-regulatory' world. *Current legal problems*, *54*(1), 103.

Benton, D. C., González-Jurado, M. A., & Beneit-Montesinos, J. V. (2013). A Typology of Professional Nurse Regulatory Models and Their Administration. *Journal of Nursing Regulation*, *4*(2), 22–29. https://doi.org/10.1016/S2155-8256(15)30153-8

Cassiani, S., Lecorps, K., Cañaveral, L., da Silva, F., & Fitzgerald, J. (2020). Regulation of nursing practice in the Region of the Americas. *REVISTA PANAMERICANA DE SALUD PUBLICA-PAN AMERICAN JOURNAL OF PUBLIC HEALTH*, *44*. https://doi.org/10.26633/RPSP.2020.93

Cayton, H. (2017). *Promoting professionalism, reforming regulation. A paper for consultation*. Department of Health London.

Cayton, H. (2018). An inquiry into the performance of the College of Dental Surgeons of British Columbia and the Health Professions Act. *The Professional Standards Authority for Health and Social Care.* https://www.harrycayton.net/talkingandwriting/doesgovernancematter-lsygj

Clarke, L., Puli, L., Ridgewell, E., Dillon, M. P., & Anderson, S. (2021). Regulation of the global orthotist/prosthetist workforce, and what we might learn from allied health professions with international-level regulatory support: a narrative review. *Human Resources for Health*, *19*(1). https://doi.org/10.1186/s12960-021-00625-9

Colquhoun, H. L., Levac, D., O'Brien, K. K., Straus, S., Tricco, A. C., Perrier, L., Kastner, M., & Moher, D. (2014). Scoping reviews: time for clarity in definition, methods, and reporting. *Journal of clinical epidemiology*, *67*(12), 1291-1294.

Corporation for Digital Scholarship. (2016). Zotero [Computer software] v6.0.28. Retrieved from www.zotero.org/download

Durcan, R., Richler, E., & Steinecke, R. (2023). Major Regulatory Reform Comes to Canada. *Journal of Nursing Regulation*, *14*(2), 43–48. https://doi.org/10.1016/S2155-8256(23)00091-1

Healy, J., & Braithwaite, J. (2006). Designing safer health care through responsive regulation: [Self-regulation by the health professions]. *Medical Journal of Australia*, *184*(10, Supplement), S56–S59. https://doi.org/10.5694/j.1326-5377.2006.tb00364.x

Hinde, S., & Spackman, E. (2015). Bidirectional citation searching to completion: an exploration of literature searching methods. *Pharmacoeconomics*, *33*, 5-11.

Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative health research*, *15*(9), 1277-1288.

Kuhlmann, E., & Allsop, J. (2008). Professional self-regulation in a changing architecture of governance: comparing health policy in the UK and Germany. *Policy and Politics*, *36*(2), 173–189. https://doi.org/10.1332/030557308783995099

Lahey, W. (2011). Is self-regulation under threat? *Canadian Nurse (1924)*, *107*(5), 7–8.

Lahey, W., & Fierlbeck, K. (2016). Legislating collaborative self-regulation in Canada: A comparative policy analysis. *Journal of Interprofessional Care*, *30*(2), 211–216. https://doi.org/10.3109/13561820.2015.1109501

Lemmens, T., & Ghimire, K. M. (2019). Regulation of health professions in Ontario: Self-regulation with statutory- Based public accountability. *Revista de Direito Sanitario*, *19*(3), 124–204. https://doi.org/10.11606/ISSN.2316-9044.V19I3P124-204

Leslie, K. (2012). Recent Changes to the Governance and Accountability of the Regulated Health Professions in Ontario. *Nursing Leadership (Toronto, Ont.)*, *25*(2), 70–80. https://doi.org/10.12927/cjnl.2012.22964

Leslie, K., Bourgeault, I. L., Carlton, A.-L., Balasubramanian, M., Mirshahi, R., Short, S. D., Carè, J., Cometto, G., & Lin, V. (2023a). Design, delivery, and effectiveness of health practitioner regulation systems: an integrative review. *Human Resources for Health*, *21*(1). https://doi.org/10.1186/s12960-023-00848-y

Leslie, K., Moore, J., Robertson, C., Bilton, D., Hirschkorn, K., Langelier, M. H., & Bourgeault, I. L. (2021). Regulating health professional scopes of practice: comparing institutional arrangements and approaches in the US, Canada, Australia, and the UK. *Human Resources for Health*, *19*(1). https://doi.org/10.1186/s12960-020-00550-3

Leslie, K., Myles, S., Schiller, C. J., Alraja, A. A., Nelson, S., Adams, T. L., & Kocaballi, B. (2023b). Protecting the public interest while regulating health professionals providing virtual care: A scoping review. *PLOS Digital Health*, *2*(4), e0000163. https://doi.org/10.1371/journal.pdig.0000163

Leslie, K., Myles, S., Stahlke, S., Schiller, C. J., Shelley, J. J., Cook, K., Stephens, J., & Nelson, S. (2023c). Regulating During Crisis: A Qualitative Comparative Case Study of Nursing Regulatory Responses to the COVID-19 Pandemic. *Journal of Nursing Regulation*, *14*(1), 30–41. https://doi.org/10.1016/S2155-8256(23)00066-2

Leslie, K., Nelson, S., Deber, R., & Gilmour, J. (2018). Policy Tensions in Regulatory Reform: Changes to Regulation of Health Professions in Australia, the United Kingdom, and Ontario, Canada. *JOURNAL OF NURSING REGULATION*, *8*(4), 32–42. https://doi.org/10.1016/S2155-8256(17)30180-1

Levac, D., Colquhoun, H., & O'Brien, K. K. (2010). Scoping studies: advancing the methodology. *Implementation science*, *5*(1), 69.

Mahat, A., Dhillon, I. S., Benton, D. C., Fletcher, M., & Wafula, F. (2023). Health practitioner regulation and national health goals. *Bulletin of the World Health Organization*, *101*(9), 595–604. https://doi.org/10.2471/BLT.21.287728

McCarthy, C. F., Kelley, M. A., Verani, A. R., St. Louis, M. E., & Riley, P. L. (2014). Development of a framework to measure health profession regulation strengthening. *Evaluation and Program Planning*, *46*, 17–24. https://doi.org/10.1016/j.evalprogplan.2014.04.008

Ministry of Health. (2020). About the Health Practitioners Competence Assurance Act. *Te Kawanatanga o Aotearoa New Zealand Government.* https://www.health.govt.nz/our-work/regulation-health-and-disability-system/health-practitioners-competence-assurance-act/about-health-practitioners-competence-assurance-act

Motluk, A. (2019). Self-regulation in health care professions comes under scrutiny. *Canadian Medical Association Journal (CMAJ)*, *191*(33), E926–E927. https://doi.org/10.1503/cmaj.109-5790

Munn, Z., Peters, M. D., Stern, C., Tufanaru, C., McArthur, A., & Aromataris, E. (2018). Systematic review or scoping review? Guidance for authors when choosing between a systematic or scoping review approach. *BMC medical research methodology*, *18*(1), 143.

Ogus, A. (2000). Self-regulation. *Encyclopedia of law and economics*, *5*, 587-602.

Pacey, F., Smith-Merry, J., Gillespie, J., & Short, S. D. (2017). National health workforce regulation Contextualising the Australian scheme. *International Journal of Health Governance*, *22*(1), 5–14. https://doi.org/10.1108/IJHG-01-2016-0005

Penney, C., & Wainwright, A. (2017). Using trends to inform regulatory practices. *Healthcare Papers*, *16*(4), 40–43. https://doi.org/10.12927/hcpap.2017.25202

Peters, M. D., Godfrey, C. M., Khalil, H., McInerney, P., Parker, D., & Soares, C. B. (2015). Guidance for conducting systematic scoping reviews. *International journal of evidence-based healthcare*, *13*(3), 141-146.

Priest, M. (1997). The privatization of regulation: five models of self-regulation. *Ottawa L. Rev.*, *29*, 233.

Professional Standards Authority for Health and Social Care (PSA). (2018). Health professional regulation: a long view with annual report and accounts 2017/2018. *Controller of Her Majesty's Stationery Office*. https://assets.publishing.service.gov.uk/media/5b460ad3ed915d39deab9491/professional-standards-authority-annual-report-and-accounts-2017-2018-print-ready.pdf

Regulated Health Professions Network (RHPN). (2023). Frequently Asked Questions. *Nova Scotia Regulated Health Professions Network*. https://www.nsrhpn.ca/faqs/

Tricco, A. C., Lillie, E., Zarin, W., O'Brien, K. K., Colquhoun, H., Levac, D., Moher, D., Peters, M., Horsley, t., Weeks, L., Hempel, S., Akl, E., Change, C., McGowan, J., Stewart, L., Hartling., L., Aldcroft, A., Wilson, M., Garritty, C., Lewin, S., Godfrey, C., Macdonald, M., Langlois, E., Soares-Weiser, K., Moriarty, J., Clifford, T., Tuncalp, O., & Straus, S. E. (2018). PRISMA extension for scoping reviews (PRISMA-ScR): checklist and explanation. *Annals of internal medicine*, *169*(7), 467-473.

Tuohy, C. H. (2013). Models of professional regulation: institutionalizing an agency relationship. *Israel journal of health policy research*, *2*(1), 10.

Tuohy, C. H. (2003). Agency, contract, and governance: shifting shapes of accountability in the health care arena. *Journal of health politics, policy and law*, *28*(2-3), 195-216.

Veritas Health Innovation. (2022). Covidence [Computer software] v2. Retrieved from www.covidence.org.

Wilkie, K., & Tzountzouris, J. (2017). Enabling evolving practice for healthcare professionals: A regulator's journey. *Healthcare Papers*, *16*(4), 10–23. https://doi.org/10.12927/hcpap.2017.25206

Appendix A. Grey Literature Sites Searched

Organization	Website
World Health Organization	https://www.who.int/health-topics/health-workforce#tab=tab_1
Organization for Economic Cooperation and Development (OECD) – Regulatory Policy by Country	https://www.oecd.org/gov/regulatory-policy/by-country.htm
World Health Professions Alliance	https://www.whpa.org/
The King's Fund	https://www.kingsfund.org.uk/
Australian Health Practitioner Regulation Agency	https://www.ahpra.gov.au/Resources/Be-safe-in-the-knowledge.aspx
The Commonwealth Fund	https://www.commonwealthfund.org/
Professional Standards Authority	https://www.professionalstandards.org.uk/home

Chapter 3

A Comparative Case Study Exploring How Single and Multi-Profession Approaches to Occupational Therapy Regulation Influence Interprofessional Collaboration for Occupational Therapists in Ontario and England.

Abstract

Researchers have explored factors that shape interprofessional collaboration (IPC) in health care settings, however the focus of inquiry has centred on influences at the provider (micro) level and the organizational (meso) level and little attention has been paid to the influence of macro level health profession regulatory policies on IPC. The objective of this study was to examine and compare macro level influences on IPC for Occupational Therapists in two different types of health professional regulators – a single profession model in Ontario and a multi-profession model in England. The comparative case study consisted of six semi-structured interviews of regulators and documentary analysis of 16 regulatory documents using the Canadian National Interprofessional Collaboration Framework's six core competencies (role clarification, client-centredness, team functioning, interprofessional communication, interprofessional conflict resolution, and collaborative leadership) to guide analysis. Both regulators demonstrated inconsistent and variable representation of the IPC competencies across their regulatory documents, however the multi-profession regulator communicated IPC expectations through a practice document shared by 15 professions as compared to the single profession regulator that only reached OTs. Multi-profession or amalgamated regulators do not inherently foster more IPC, however with the ability to require shared standards of practice across professions, the multi-profession regulator has the ability to promote consistency in expectations and conduct compared to the single profession regulator.

Introduction

Interprofessional collaboration (IPC) is defined as a process of collaboration in health care teams where interdependent professionals organize collective action towards patient or client needs through processes of sharing, partnership, power, interdependency, communication, and trust (D'Amour & Oandasan, 2005; D'Amour et al., 2005; Reeves et al., 2017). The Canadian National Interprofessional Collaboration Framework has identified six core competencies that are required of health professionals (HP) to practice IPC: role clarification, client-centredness, team functioning, interprofessional communication, interprofessional conflict resolution, and collaborative leadership (Orchard et al., 2010). Governments, health profession regulators, and health care organizations are interested in promoting IPC in health professions (HP) as a means to improve the quality of care within the health system by preparing HPs with the necessary collaborative skills to practice in integrated service delivery models (Bookey-Bassett et al., 2016; Zwarenstein et al., 2009).

Health professions in Ontario are introduced to IPC through interprofessional education (IPE) initiatives during their clinical education prior to entry to practice, and clinicians' IPE opportunities may continue once they are in the workplace (Bookey-Bassett et al., 2022; Mueller et al., 2008). However necessary IPE may be to develop IPC skills in clinicians, IPE may not be sufficient to ensure that IPC skills are demonstrated in the workplace (D'amour et al., 2005; King et al., 2010; Orchard et al., 2012).

Researchers have explored factors that shape interprofessional collaboration in health care settings, however the focus of inquiry has centred on factors at the provider

(micro) level and the organizational (meso) level and little attention has been paid to the influence of HP regulatory policies. For example, meso level factors such as the type of care setting (rehabilitation vs. non-rehabilitation) and the organizational policies and processes guiding how health care team members work together influence interprofessional collaboration (Sangaleti et al., 2017; Xyrichis & Lowton, 2007); and established team norms around roles, communication, and decision-making have been identified as micro level factors (DiazGranados et al., 2018; Rosen et al., 2018).

In Ontario, HP regulatory colleges have a legislative obligation to collaborate between colleges on matters of shared controlled acts and the incorporation of IPC in quality assurance programs (Government of Ontario, 2009). Despite this legislative mandate to promote IPC, Regan et al. (2015) found that there was an absence of formal IPC frameworks available at the regulatory college level, and issues related to protection of professional scope as well as limited knowledge about other HPs' scopes of practice presented as barriers to collaboration between regulatory colleges. Moreover, regulators have identified that they experience challenges in overcoming distinct professional cultures as they attempt to move toward shared models of IPC (Wilkie and Tozountzouris, 2017). Ways of promoting IPC at the regulatory level may indeed be required to shift front line care from siloed thinking to interprofessional collaboration. Therefore, from a system governance perspective, models of HP regulation where professions are regulated separately in a "landscape of legislated silos" may serve as a barrier for the promotion of IPC in the health system (Lahey and Fierlbeck, 2016; p.212). At present, there is a gap in research examining the role of health professional regulation in promoting and developing interprofessional

collaboration in HPs, particularly as the legislative landscape for HP regulation is shifting and new regulatory frameworks are developed.

Research Objective and Question

To address this gap in the literature, the research objective of this study is to examine and compare macro level influences and regulatory policy instruments on interprofessional collaboration for Occupational Therapists in two different types of health professional regulatory models. The study will adopt an institutionalism lens (Scott, 2013) to examine the *regulative* ("must do") institutional pillar of HP regulatory policy to answer the research question:

> *How might one characteristic of HP regulatory model, degree of regulator collaboration, influence policy approaches on interprofessional collaboration for Occupational Therapists??*

The profession of OT was selected as the focus of this inquiry because as allied health professionals Occupational Therapists primarily practice in interprofessional contexts and the regulation of OT varies based on degree of regulatory collaboration across different contexts.

Background

Occupational Therapy Regulation

Overview of Occupational Therapy Regulation in Ontario – Single Profession Model. The regulation of HPs is a provincial responsibility in Canada. Under the Regulated Health Professions Act, 1991 (RHPA), 26 health profession

colleges regulate 29 distinct professions[2]. Occupational Therapy is one of the professions regulated under the RHPA. The RHPA provides umbrella legislation for health professions that sets out requirements for governance, public representation, registration, complaints, and discipline. Under the RHPA, the Occupational Therapy Act (1991) sets out the profession's scope of practice, authorized acts, and establishes the College of Occupational Therapists (COTO) as the government-delegated regulatory body for the profession. In Ontario, OTs are regulated under a single profession regulatory model, where COTO regulates only OTs and does not regulate any other profession. However, there are regulatory colleges in Ontario that are responsible for regulating more than one profession, usually when scopes of practice are closely related. For example, the Ontario College of Pharmacists is responsible for regulating both Pharmacists and Pharmacy Technicians.

Overview of Occupational Therapy Regulation in England – Multi-Profession Model. In England, the regulation of HPs is at the national level. There are nine statutory health and care regulators in England[3], of which one is the Health and Care Professions Council (HCPC). Occupational Therapists are regulated by the HCPC alongside 14 other allied health professionals[4] in a multi-profession regulatory model

[2] Audiology, Speech Language Pathology, Chiropody, Podiatry, Chiropractic, Dental Hygiene, Dental Technology, Dentistry, Denturism, Dietetics, Homeopathy, Kinesiology, Massage Therapy, Medical Laboratory Technologist, Medical Radiation Technology, Medicine, Midwifery, Naturopathy, Nursing, Occupational Therapy, Opticianry, Optometry, Pharmacy, Physiotherapy, Psychology, Psychotherapy, Respiratory Therapy, Traditional Chinese Medicine, Acupuncture

[3] General Medical Council, General Pharmaceutical Council, Social Work England, General Optical Council, General Dental Council, Nursing & Midwifery Council, Pharmaceutical Society of Northern Ireland, General Osteopathic Council, Health & Care Professions Council, General Chiropractic Council.

[4] Art Therapists, Biomedical Scientists, Chiropodists/podiatrists, Clinical Scientists, Dieticians, Hearing Aid Dispensers, Occupational Therapists, Operating Department Practitioners, Orthoptists, Paramedics, Physiotherapists, Practitioner Psychologists, Prosthetists/Orthotists, Radiographers, Speech Language Therapists.

(Professional Standards Authority, 2018). In a multi-profession regulatory model, the regulator develops shared regulatory standards and regulatory processes that apply to all registrants of the college regardless of the profession (HCPC, 2015). All the statutory health and care regulators are in turn regulated by the Professional Standards Authority in a meta-regulatory framework (Professional Standards Authority, 2018).

Recent Changes to Occupational Therapy Regulation in British Columbia. In November 2022, the province of British Columbia passed the Health Professions and Occupations Act (HPOA) (2022) to transform the regulatory framework for health professions based on the commissioned report *Recommendations to Modernize the Provincial Health Profession Regulatory Framework* (Cayton, 2020). The HPOA (2022) sets out the regulations to enable the amalgamation of 15 health profession regulatory colleges from 15 colleges to six. Occupational Therapists will be regulated under a multi-profession regulator with dieticians, opticians, optometrists, physical therapists, psychologists, and speech and hearing professionals. While the legislation has not yet been enacted, it is anticipated that moving to fewer regulatory colleges will require that professions and their regulators collaborate to carry out regulatory duties and processes, and an increased focus on interprofessional practice at the regulatory level may have a positive influence on IPC at the point of care for registrants (Durcan et al., 2023; Leslie et al., 2021).

With this recent regulatory reform toward multi-professional regulation for Occupational Therapists in British Columbia, it is important to explore the differences between the current Ontario model of single professional regulation and an existing multi-professional model in England to better understand potential impacts and issues,

particularly related to IPC and its relationship to regulative policy. Moreover, examining and comparing regulator policy documents that communicate practice standards, codes of conduct, and entry to practice competencies can help to illustrate ways in which regulative policy in each model can communicate and influence IPC expectations.

Method

Multiple case study method was used based on criteria set by Yin (2013) to explore differences within and between cases differing on degree of health professional regulatory model collaboration. This study applied an institutional framework by Scott (2013) to examine and compare the institutional influences and policy instruments related to the *regulative ("must do") pillar* in two different models of HP regulation to determine how each might provide regulatory direction to shape interprofessional collaboration.

Scott's regulative pillar of institutions includes formal and informal rules, monitoring, and evaluative activities, as well as sanctioning activities that indicate what the health professional *must do* as part of their practice. Regulative influences can be found in documents produced by regulatory colleges that provide direction on how a regulated health professional meets entry to practice requirements and maintains their registration in the profession.

Case Definition

The case or "unit of analysis" (Miles and Huberman, 1994; p.24) for this study was defined as: *professional regulatory model for Occupational Therapy*. Occupational Therapists were the focus for the study because: (i) OTs are positioned within

interprofessional teams and the nature of their role requires that they collaborate with physicians, nurses, physiotherapists, etc., in institutional or community settings (Korner, 2010); (ii) OT regulatory models vary, with single and multi-professional models evident in different jurisdictions; and (iii) the investigator is an OT and has a personal interest in professional practice issues within Occupational Therapy.

Case Selection

Occupational Therapy is considered one of the allied health professions (AHP). Allied health professions are defined as “those health professions that are distinct from medicine, dentistry, and nursing” (Arena et al., 2011, p.161). As noted, in Ontario, OT is regulated as a single profession (single profession model) ; whereas in England, 15 different AHPs, including OT, are regulated together under one integrated regulatory body (multi-profession model).

Case Study Design

This multiple case study combined semi-structured interviews with a documentary analysis of relevant policy and practice literature to enable an exploration of the professional policy instruments used in the two HP regulatory models and how they might address interprofessional collaboration.

Semi-Structured Interviews

Sampling Procedure and Recruitment. A purposive sampling strategy was used to ensure recruitment of participants knowledgeable at the macro level (government and regulatory agency) with contextual information and insights into the regulative institutional influences (Etikan et al., 2016; Patton, 1990). Recruitment emails were sent to individuals holding various roles within government and/or HP regulatory

agencies in England and Ontario using publicly available information. These roles included positions on college or council advisory boards, registrars or deputy registrars of HP regulatory colleges, statutory committee members of regulatory colleges, and regulatory policy makers. Study participants were included if they were: at least 18 years of age, English-speaking, residing in Ontario or England, working in a role with a health profession regulator or with a government as a regulatory policy maker with a focus on Occupational Therapy or other allied health profession, and able to provide informed consent. After interviews with participants were completed, participants were asked to share the email invitation with colleagues to permit further recruitment through a snowballing technique (Biernacki & Waldorf, 1981). The sample size for this study was limited by the small number of experts available in the two jurisdictions that would have experience with regulatory policy and regulatory practices with a focus on Occupational Therapy or other AHP. A total of six participants were interviewed: three participants had expertise in the Ontario regulatory landscape and three participants were working in the England regulatory system. Demographic data is not reported here to maintain confidentiality of participants for this small sample.

Data Collection. An interview guide (Appendix B) was developed with demographic and open-ended questions about the regulative influences on interprofessional collaboration using the theoretical foundations of Scott's institutional theory (2013). The open-ended questions were designed so that participants could provide contextual information about the regulatory landscape and clarify and explain regulative processes. Following the informed consent process, semi-structured interviews were completed with participants by telephone. Digital recordings of the

interviews were transcribed verbatim, and the transcriptions were entered into NVivo 12 (QSR International, 2018).

Data Analysis. Interview data were coded using the Constant Comparative Method of Analysis of Interviews (CCM) as described by Boeije (2002) and thematic analysis. Initial themes were identified and as coding of the interviews progressed and as any new codes emerged, they were added to the codebook and previously coded data was recoded until a final coding structure emerged. The final coding structure informed the development of themes that are reported in the results section.

Regulatory Documents

Data Collection. The websites of the regulators responsible for regulating the profession of OT in Ontario and England were reviewed in May 2023 for publicly available practice standards. The websites were reviewed again in September 2023 to reflect recent updates to practice standards at one of the regulators. To be eligible for the inclusion in the study, documents needed to meet the following criteria: (1) available to the public on the regulator's website, (2) address entry to practice requirements (required to become a registrant) and ongoing practice standards (required to remain registered), and (3) available in English.

Data Analysis. The documents were analyzed and coded based on the competency domains for interprofessional collaboration in the National Interprofessional Competency Framework (NICF) (Orchard et al., 2010). Each document was reviewed using the competency domain definitions from the NICF (role clarification, interprofessional communication, client-centred care, team functioning, collaborative leadership, and interprofessional conflict resolution) to identify messaging within the

practice standard that aligned with each definition. Definitions for each competency domain are found in Appendix C.

Ethics Approval

This study was approved by the Hamilton Integrated Research Ethics Board (HIREB) at McMaster University – REB Project # 7300.

Results

Document Search Outcomes

Case A: Ontario (COTO)

The search identified 24 documents on the COTO website that were related to practice expectations for OTs (See Appendices D and E for document links). Twelve of the documents were excluded for the following reasons: one document (Decision Making Framework) that was co-located on the site with practice standards did not directly relate to practice standards for registration and only provided practice advice; and 11 documents provided interpretation of existing legislation (e.g. Medical Assistance in Dying) or practice advice (e.g. Use of Social Media, Working with Managed Resources). The remaining 12 documents contained practice standards and were analyzed against the NICF domains for IPC.

Case B: England (HCPC)

There were a total of 28 practice related documents identified on the HCPC website (See Appendices D and E for document links). Nine of the documents were excluded because they did not address practice standards for registration or to maintain

registration and instead provided practice advice and professional development resources (e.g., Reflective Practice, Maintaining Confidentiality, and Communications and Using Social Media). Fourteen of the documents were excluded because they contained standards of proficiency for regulated AHPs that did not apply to OTs. As a result, four documents were reviewed against the NICF domains for IPC.

Document Characteristics

Case A: Ontario (COTO)

The regulatory documents provided for registered OTs in Ontario consisted of a code of ethics, a document outlining the essential competencies (knowledge and skills) needed for practice, and 10 standards of practice for various clinical tasks and responsibilities. Of the 10 standards of practice, 8 of them apply to all OTs while 2 standards apply only to OTs who are qualified to perform specific controlled acts (psychotherapy, acupuncture). All documents were last updated by COTO in June 2023 to reflect a greater emphasis on culture, equity, and justice in health care.

Each document addressed a specific aspect of regulated practice and was structured with (i) a preamble explaining the scope of the document, (ii) a list of standards or competencies related to the document's scope, and (iii) behavioural or skill requirements required for each competency. The documents provided detailed and specific direction for OTs, taking the approach of describing the "what" and "how" of clinical knowledge and skills for occupational therapy. One of the Ontario regulatory experts reflected that the regulatory approach in Ontario has historically taken a prescriptive lens to communicating practice competencies and standards: "I would say

that the worst that I see is [profession redacted], it's crazy in terms of the detail. I don't even know how they function on a floor. You take a look at their details, 'You can do this, you can't do the other thing'." (ONT 03). The regulatory expert went to on explain that the regulatory landscape in Ontario may be transitioning to focus more on desired outcomes for the client rather than prescriptive behaviours for the regulated health professional: "I would say that there's been a real evolution to just say the expectations [for practice] and get out of anything that starts to lean into the how [to do it]. (ONT 03)

The topics of the regulatory documents are found in Table 1. The competencies and practice standards cover topics such as expectations for ethical practice, communication with clients and colleagues, providing culturally appropriate services, professional responsibilities, assessment and intervention standards, managing boundaries and conflicts of interest, and performing controlled acts. Within the regulatory documents, there was no specific practice standard or competency document for interprofessional collaboration.

Case B: England (HCPC)

The regulatory documents provided for AHPs registered with HCPC in England included standards of conduct, performance and ethics, standards of continuing professional development, and standards relevant to education and training. There is also a document addressing profession-specific standards of proficiency for each AHP registered with HCPC. The profession-specific standards of proficiency, including the document relevant to OT practice, were last updated September 2023 to expand the role of equity, diversity and inclusion in practice, increase focus on effective

communication, update for digital skills and new technologies, emphasize the role of leadership in practice, and promoting public health.

The HCPC standards were structured similarly to the COTO documents with an introductory section, a list of standards for each topic, and a list of practice expectations for each standard or competency. Given that the HCPC standards apply to multiple professions, they have been written with less detail than the COTO standards so that they can apply across professions. A regulatory expert from England explained that the multi-profession regulatory model in England focuses on outcomes:

> How our standards work, they outline what outcomes we would expect of someone completing their registration and training, and being able to contribute effectively to the work of taking part amongst the multi-disciplinary team is one of those outcomes. (ENG 03)

Additionally, the multi-professional model of regulation must balance the requirement for consistent regulatory expectations across professions with the need to ensure that the expectations are framed broadly so that they apply to each profession:

> A challenge with multi-professional regulation is that you aren't able to perhaps delve into the detail [of specific standards] compared to how a regulator looking at just one profession is able to. That's how we've ended up with a lot of our regulatory processes as outcomes-based and not overly prescriptive in our requirements; purely because we can't be more prescriptive without perhaps favoring one profession over another or having different processes for each one profession which would be quite a challenging model for us to offer it. (ENG 03)

The topics of the regulatory documents are found in Table 2. The topics covered in the HCPC competencies and practice standards are consistent with those found in the COTO standards, addressing expectations for tasks such as protecting the interests of clients, effective communication, delegation of tasks, confidentiality, record keeping, ethical practice, quality assurance, and professional boundaries. Consistent with

COTO, HCPC also had no specific practice standard or competency document for interprofessional collaboration.

Interprofessional Collaboration in Regulatory Documents

Case A: Ontario (COTO)

Within all COTO documents reviewed, the *Competencies for Occupational Therapists in Canada* was the only document that contained direction consistent with all six ICP competency definitions according to the NICF. Collaborative leadership was represented in 9 of the 22 standards (41%), while client-centred care was included in 6 of the standards (27%) and role clarification was included in 5 of the standards (23%). Interprofessional communication and interprofessional conflict resolution were each represented in one standard (5%).

The *Standard for Assessment and Intervention* addressed three of the ICP competency definitions: role clarification was found in 3 out of 31 standards (10%), and client-centred care and interprofessional communication each in 4 of 31 standards (13%). The remaining documents reviewed addressed two or fewer of the ICP competency definitions, with 5 of the documents addressing none of the ICP competency definitions.

Across all 12 of the COTO documents reviewed, role clarification (12 of 265 standards, or 5%) and client-centred care (15 of 265 standards, or 6%) were the most represented ICP competencies. Interprofessional conflict resolution was only represented in 1 of the 265 standards (0.4%) and team functioning was addressed in 2 of the 265 standards (0.8%).

Table 3.1 Number of COTO Standards aligning with Interprofessional Competencies from the National Interprofessional Competency Framework. Canadian Interprofessional Health Collaborative (Orchard et al., 2010)

COTO Document Title	Purpose of Document	Total Number of Standards	Number of Standards aligning with Interprofessional Competencies [a]					
			Role Clarification	Client-centred care	Team Functioning	Collaborative Leadership	Interprofessional communication	Interprofessional Conflict Resolution
Code of Ethics	Outlines values and principles to guide registrants' interactions with public and colleagues.	**9**	**0**	**2** (2%)	**0**	**0**	**1** (1%)	**0**
Competencies for Occupational Therapists in Canada	Sets out entry level practice and professional behaviour expectations for registrants working in OT.	**22**	**5** (23%)	**6** (27%)	**2** (9%)	**9** (41%)	**1** (5%)	**1** (5%)
Standards for Acupuncture	Outlines requirements for competency for registrants who are competent to perform this controlled act.	**13**	**2** (15%)	**0**	**0**	**0**	**0**	**0**
Standard for Consent	Describes legal and professional requirements for obtaining and documenting consent for services.	**26**	**0**	**2** (8%)	**0**	**0**	**0**	**0**

COTO Document Title	Purpose of Document	Total Number of Standards	Number of Standards aligning with Interprofessional Competencies [a]					
			Role Clarification	Client-centred care	Team Functioning	Collaborative Leadership	Interprofessional communication	Interprofessional Conflict Resolution
Standard for the Prevention and Management of Conflicts of Interest	Sets out expectations for registrants to identify, prevent, and address conflicts of interest in client-registrant relationship.	**23**	**0**	**1** (4%)	**0**	**0**	**0**	**0**
Standard for Psychotherapy	Outlines requirements for competency for registrants who are competent to perform this controlled act.	**42**	**2** (5%)	**0**	**0**	**0**	**0**	**0**
Standard for Assessment and Intervention	Explains requirements for registrants when engaging in assessment and treatment planning with clients.	**31**	**3** (10%)	**4** (13%)	**0**	**0**	**4** (13%)	**0**
Standard for Infection Prevention and Control (IPAC)	Outlines expectations for registrants to maintain health and safety through evidence based IPAC practices.	**10**	**0**	**0**	**0**	**0**	**0**	**0**

COTO Document Title	Purpose of Document	Total Number of Standards	Number of Standards aligning with Interprofessional Competencies [a]					
			Role Clarification	Client-centred care	Team Functioning	Collaborative Leadership	Interprofessional communication	Interprofessional Conflict Resolution
Standard for Professional Boundaries and the Prevention of Sexual Abuse	Sets out requirements for registrants when establishing and maintaining professional relationships in clinical and professional settings.	**25**	**0**	**0**	**0**	**0**	**0**	**0**
Standard for Record Keeping	Describes requirements for registrants to document and maintain records of services to clients.	**43**	**0**	**0**	**0**	**0**	**0**	**0**
Standard for Use of Title	Explains how registrants are to communicate their title, name, and credentials correctly to the public.	**19**	**0**	**0**	**0**	**0**	**0**	**0**
Standard for the Supervision of Students and Occupational Therapy Assistants	Outlines expectations of registrants when delegating and overseeing tasks to non-registered therapy assistants.	**2**	**0**	**0**	**0**	**0**	**0**	**0**
Totals		**265** (100%)	**12** (5%)	**15** (6%)	**2** (0.8%)	**9** (3%)	**6** (2%)	**1** (0.4%)

[a] **Competency Definitions (Orchard et al., 2010)**

Role Clarification: practitioners understand their own role and the roles of those in other professions and use this knowledge appropriately to establish and achieve client, family and community goals.
Client-centred care: practitioners seek out, integrate and value, as a partner, the input and the engagement of the patient/client/ family/community in designing and implementing services.
Team Functioning: practitioners understand the principles of teamwork dynamics and group/team processes to enable effective interprofessional collaboration.
Collaborative Leadership: practitioners understand and can apply leadership principles that support a collaborative practice model.
Interprofessional Communication: practitioners from different professions communicate with each other in a collaborative, responsive and responsible manner.
Interprofessional Conflict Resolution: practitioners actively engage self and others, including the client/patient/family, in positively and constructively addressing disagreements as they arise.

Case B: England

The *Standards of Proficiency* document that is specific to OT practice was the only document that addressed all six ICP competency definitions in its standards. Client-centred care was represented in 8 of the 15 standards (53%), team functioning was included in 7 of the standards (47%) and collaborative leadership was included in 6 of the standards (40%). Role clarification and interprofessional communication were each represented in 3 standards (20%), and interprofessional conflict resolution was found in one standard (7%).

The *Standards of Conduct, Performance and Ethics* addressed five of the ICP competency definitions: client-centred care was found in 6 of 10 standards (60%), interprofessional communication was in 3 of 10 standards (30%), and interprofessional conflict resolution in 2 of 10 standards (20%). Role clarification and team functioning were each represented in 1 of 10 standards (10%).

The *Standards for Continuing Professional Development* did not address any of the ICP competency definitions according to the NICF.

Across all 4 of the HCPC documents reviewed, client-centred care (15 of 36 standards, or 42%) and team functioning (9 or 36 standards, or 25%) were the most represented ICP competencies. Interprofessional conflict resolution was only represented in 3 of the 36 standards (8%) while the ICP definitions for role clarity (11%), collaborative leadership (17%), and interprofessional communication (17%) were moderately reflected in the total number of standards.

Table 3.2 Number of HCPC Standards aligning with Interprofessional Competencies from the National Interprofessional Competency Framework. (Orchard et al., 2010)

HCPC Document Title	Purpose of Document	Total Number of Standards	Number of Standards aligning with Interprofessional Competencies [a]					
			Role Clarification	Client-centred care	Team Functioning	Collaborative Leadership	Interprofessional communication	Interprofessional Conflict Resolution
Standards of Conduct, Performance and Ethics	Sets out expectations for registrant behaviour and what the public should expect from their health care professional	**10**	**1** (10%)	**6** (60%)	**1** (10%)	**0**	**3** (30%)	**2** (20%)
Standards of Proficiency (OT specific)	Explains the entry-level practice expectations required to be registered	**15**	**3** (20%)	**8** (53%)	**7** (47%)	**6** (40%)	**3** (20%)	**1** (7%)
Standards of Continuing Professional Development	Set expectations for registrants to keep knowledge and skills up to date for safe and effective practice	**5**	**0**	**0**	**0**	**0**	**0**	**0**
Standards Relevant to Education and Training	Articulates what education and training programs must do to prepare students for professional practice	**6**	**0**	**1** (17%)	**1** (17%)	**0**	**0**	**0**
Totals		**36** (100%)	**4** (11%)	**15** (42%)	**9** (25%)	**6** (17%)	**6** (17%)	**3** (8%)

[a] **Competency Definitions (Orchard et al., 2010)**

Role Clarification: practitioners understand their own role and the roles of those in other professions and use this knowledge appropriately to establish and achieve client, family and community goals.

Client-centred care: practitioners seek out, integrate and value, as a partner, the input and the engagement of the patient/client/ family/community in designing and implementing services.
Team Functioning: practitioners understand the principles of teamwork dynamics and group/team processes to enable effective interprofessional collaboration.
Collaborative Leadership: practitioners understand and can apply leadership principles that support a collaborative practice model.
Interprofessional Communication: practitioners from different professions communicate with each other in a collaborative, responsive and responsible manner.
Interprofessional Conflict Resolution: practitioners actively engage self and others, including the client/patient/family, in positively and constructively addressing disagreements as they arise.

Comparison of Case A (Ontario) and Case B (England)

In Ontario's single-profession model, there were 265 standards across 12 identified COTO documents that communicated competency and behavioural expectations to OTs. All 12 COTO documents were developed specifically for OT practice and thus could be written with detailed and prescriptive requirements. England's multi-profession model had 36 standards across four documents that communicated broad competency and behavioural expectations. Three of the HCPC documents were shared across 15 allied health professions, thus creating a common set of expectations for all professions regulated under the HCPC. One of the HCPC documents (*Standards of Proficiency*) was specific to OT practice expectations. Despite the fact that the *Standards of Proficiency* were meant only for an OT audience, the document focused on desired OT behavioural outcomes and/or client outcomes, and did not take the same prescriptive approach as compared to the COTO equivalent (*Competencies for Occupational Therapists in Canada)*.

Both regulators provided a document that addressed expected ethical conduct. The COTO *Code of Ethics* focused only on ethical conduct expectations while the HCPC *Standards of Conduct, Performance, and Ethics* outlined not only ethical conduct, but also expectations for professional boundaries, communication, and adherence to legislation such as consent and privacy. The Ontario regulator also addressed these regulatory topics however they achieved this through separate documents (e.g. *Standard for Professional Boundaries and the Prevention of Sexual Abuse, Standard for Consent,).* Additionally, COTO (*Competencies for Occupational Therapists in Canada)* and HCPC (*Standards of Proficiency*) each had a document that set out entry level

practice and professional behaviour expectations. Otherwise, there was little overlap in content in the remaining documents.

Both regulators did not have a specific practice standard document addressing IPC expectations for Occupational Therapists. The regulators in Ontario and England communicated IPC competencies within their standards of practice, competency documents, and codes of ethics to varying degrees. COTO mainly communicated IPC expectations through the *Competencies for Occupational Therapists in Canada* document although some of the IPC competencies were found in the other COTO documents. Generally, COTO documents focused on only two of the six IPC competencies -- client-centeredness and role clarification. HCPC mainly communicated IPC through the *Standards of Conduct, Performance and Ethics* (applies to all professions) and the *Standards of Proficiency* (applies only to OTs) with a focus on client-centred care and team functioning. Although the remaining two HCPC regulatory documents applied to all 15 professions, they contained few references to IPC competencies. In comparing the documents from both regulators, the IPC competencies of collaborative leadership, interprofessional communication, and interprofessional conflict resolution were rarely addressed.

Multi-Professional Models of Regulation and IPC

When reflecting on ways in which regulative policies can influence interprofessional collaboration, interview participants identified three important considerations related to multi-profession models of regulation compared to single profession models. These were: (i) ways in which multi-profession models can promote professional role clarity, (ii) enabling consistency in expectations across professions,

and (iii) considerations for the impact on smaller or less powerful professions in regulatory matters.

(i) Promoting Role Clarity for Professions

Multi-profession models of professional regulation may support IPC through bringing together different professions at the regulatory level to understand each other's roles, scope of practice, and approach to care. Role clarification is one of the six IPC competencies and interview participants identified that the governance structures required in a multi-professional model of regulation can help to reinforce role clarification. One regulatory expert from England outlined the benefits to professions as follows,

> In terms of those who are regulated, I suppose it's more interesting to know what's going on in a broad range of professions and maybe less isolating than it would be for those who are regulated just by profession… I suppose from the learning perspective, it's good for the register to know what's going on outside of their profession perhaps. (ENG 01)

However, the regulatory expert speculated that multi-regulatory models of regulation might present challenges related to role clarification, particularly when the regulator is overseeing many different professions. With respect to fitness to practice and the investigation of complaints, the expert stated:

> Because they look at so many different professions, I wonder if that is a drawback to them, because even though I guess there are some similarities between the professions they do regulate, they also work in very different contexts and environments, and sometimes I often wonder whether there is that depth of understanding of all of the professions they regulate. (ENG 01)

Thus, multi-profession regulators responsible for many different professions may be challenged in developing an in-depth understanding of each profession's role due to the

complexity of practice environments. Nonetheless, improved role clarity at the regulatory level may help to support the development of regulatory policies that impact role clarity at the provider level.

(ii) Promoting Consistency Across Professions

Regulatory experts identified that a multi-professional regulatory model has potential to promote consistency across professions for regulatory requirements that could be shared such as codes of ethics, communication standards, documentation standards, and professional boundaries. A participant from Ontario pointed out that despite the potential benefits relating to shared standards and IPC, there might be resistance from professions if they see it as a threat to their professional identity:

> I think that those fundamentals are pretty much the same… It's an interesting thing. I think that so much of it is in how we inculturate professions and the desire to feel special. [As a profession] you fight to retain the special role because it's an identity element. That's counter-intuitive to the interprofessional fabric component. (ONT 03)

Despite the potential benefits of shared standards across professions, participants from Ontario and England did not feel that a separate shared standard for IPC was warranted, and having elements of IPC woven throughout existing standards would meet the needs of the regulators. This position appears to contradict the findings of the documentary analysis where both regulators did not equally address the six IPC competencies within their existing standards.

(iii) Power Differences Across Professions

Interview participants from both jurisdictions also identified that multi-professional models of regulation have the potential to amplify the voices and needs of the larger professions in the multi-profession regulator at the expense of smaller professions with

fewer registrants. A participant from England identified that engagement and consultation processes may be negatively impacted by relative sizes of professions in a multi-regulator. With respect to professions with greater numbers of registrants:

> That might mean that their voices are more represented in feedback that we receive and obviously, are thinking about the impact that it has on our approach and trying to ensure that that doesn't in any way impose on how we treat all of the smaller professions. (ENG 03)

There is also potential for impact at the regulatory level for the work of statutory committees. For example, for the work of fitness to practice and disciplinary committees, the regulatory expert expressed concern about how different professions pose different levels of risk to the public, and this combined with relative size of profession could have a negative impact on fitness to practice and disciplinary outcomes for smaller professions such as OT:

> If you would lump the occupational therapists in with all the other colleges, I think that they might just be flying below the radar and be completely ignored because they are not having many registrants sexually abusing clients. They are not watching surgeries, giving wrong medications, or doing some of those really high-risk things. Yes, they are getting complaints but they don't get the same number [of complaints] and many of the complaints [that pose low risk to clients] are resolved not through the discipline process but through education and remediation…. The registrars who have 50,000 registrants have more power than the registrars who have 50 registrants. That makes the same sort of dynamic. (ONT 01)

Overall, the participants described potential power dynamics at the regulator level that can also be seen at the provider level where different professions in interprofessional teams experience barriers to collaboration and teamwork related to professional power.

Table 3.3: Comparison of Macro-level Policy Approaches for Interprofessional Collaboration in Multi-profession and Single Profession Models

Characteristics	Multi-Profession Model (England)	Single profession Model (Ontario)
Alignment with IPC competencies	• Focus on **team functioning** and **client-centred care** • Rarely addressed **interprofessional conflict resolution**	• Focus on role clarification and client-centred care • Rarely addressed interprofessional conflict resolution
Document characteristics	• Broadly framed standards to apply across multiple professions (outcome)	• Detailed and prescriptive standards (process)
Shared documents across professions	• Yes – three documents are shared between 15 professions; one document is specific to OT	• No – all documents are written specific to the profession of OT
Consistent communication of IPC expectations across professions	• Yes – allied health professions under the same regulator follow same standards	• Unknown – dependent on how other regulators communicate IPC competencies within their documents
Model benefits	• Promotes role-clarity through interprofessional membership on council and committees • Enables consistent expectations across professions	• Allows smaller professions and/or professions with less power to have their own voice in regulatory matters

Discussion

The goal of this study was to examine and compare the macro level regulative policy documents in two types of health professional regulatory models to understand their impact on IPC for Occupational Therapists. In comparing the regulatory approach in Ontario (single profession model) with England (multi-profession model), this study identified the following regulatory approaches to IPC:

- Regulatory bodies in Ontario (COTO) and England (HCPC) do not have a specific practice standard document addressing IPC expectations for Occupational Therapists, however they address IPC competencies within other standards of practice documents to varying degrees.
- COTO and HCPC take different approaches to the content and structure of their practice standards. COTO produces practice standards that are detailed, prescriptive, and focus on skills and behaviours, and are only meant for OT audiences. HCPC takes an outcomes-based approach to developing their standards that balances the need to create standards that apply to multiple AHPs yet are specific enough to promote consistency of expectations across professions.
- Of the IPC competencies identified by the NICF, client-centred care is represented in COTO and HCPC documents to the greatest degree, while the documents from both regulators address interprofessional conflict resolution to a minimal degree.
- The HCPC has the *potential* to address IPC more effectively as a multi-profession regulator compared to COTO because the majority of practice documents are shared amongst 15 professions, however in practice HCPC does not consistently represent all six IPC competencies in their documents.

Regulatory experts from both jurisdictions identified the potential benefits of a multi-professional regulatory model would include shared standards of practice that communicate consistent IPC expectations across professions; however given that standards shared across professions may lack detail so that they can apply to all

professions, it is uncertain if broadly worded IPC expectations would in fact result in consistent IPC behaviours at the point of care. Moreover, approaches to promoting IPC to date have excluded the development of a specific IPC regulatory standard and the current strategy of embedding elements of IPC across regulatory standards may not translate into clear messaging of expectations for Occupational Therapists and other professions.

Participants also identified potential negative consequences related to a multi-professional regulatory model when there are significant differences in sizes of profession membership. Professions with larger numbers of registrants may have greater input into governance issues and policy development, while professions with smaller numbers may not have the specific needs of their profession appreciated and met appropriately. Interestingly, this concern mirrors experiences that providers have reported when working in interprofessional teams where some professions or roles within the team have more power in decision-making and other team processes (Donovan et al., 208; Gergerich et al, 2019; Gleeson et al., 2023).

Implications for Policy and Practice

Consistency of IPC Expectations within a Profession

The findings of this study suggest that the degree of direction given to Occupational Therapists at the *regulative* ("must do") level regarding expectations for IPC practice is inconsistent across college regulatory documents regardless of regulatory model (single profession or multi-profession). Some regulatory documents emphasize IPC competencies while others do not address IPC at all. Moreover, when

IPC is addressed in regulatory documents, only some of the core IPC competencies are evident. Thus, the document does not contain a complete representation of IPC or reflect the inter-relatedness of the different skills and knowledge required. Regulators may consider adopting one standard IPC framework that articulates core IPC competencies to be used across regulatory practice documents while ensuring that each core IPC competency is easily identifiable by registrants in the practice standards. This study used the Canadian National Interprofessional Competency Framework as an analytic tool to examine IPC; however, there are other IPC frameworks available including the World Health Organization's (WHO) Framework for Action on Interprofessional Education and Collaborative Practice (WHO, 2010) that could be used to guide future work on this topic.

Consistency of IPC Expectations across Professions

Developing consistency across professions through regulatory collaboration can improve system efficiency and promote consistent outcomes (Leslie et al., 2018). One strategy to improve consistency in the communication of IPC expectations is for separate HP regulators to collaborate and develop a common IPC document to be adopted by all HPs. In fact, the Ontario Health Professions Regulatory Advisory Council (HPRAC), established under the Regulated Health Professions Act (1991) to advise the Minister of Health on the regulation of HPs, recommended that regulators develop internal policies encouraging collaboration through shared standards of practice (HPRAC, 2008). The Health Profession Regulators of Ontario (HPRO), a not-for-profit association of HP regulators representing the 26 regulatory colleges in Ontario, is currently developing an *Interprofessional Collaboration eTool* to guide IPC across

professions, however it has yet to be released. Yet, if regulators are relying on voluntary adoption of a shared standard of practice or eTool, inconsistent uptake and/or incomplete implementation of the standards may be the outcome without having stronger policy levers. Taking a multi-profession regulatory approach like England's HCPC may be an alternative way to ensure that a shared standard is developed and adopted across different professions. However, there could be significant trade-offs for inclusion of smaller professions in this type of multi-profession regulatory model where smaller professions are granted less (or no) influence around the regulatory table. Additionally, it is important to note that to operationalize shared standards in a multi-professional regulatory model and ensure they apply to each profession, the standards may be written in such a way that they do not contain sufficient specificity, and this may also result in inconsistent or incomplete implementation across professions.

Limitations

This study explored two cases, examining one example each of a single profession regulator and a multi-profession regulator. The comparison of only two cases may limit generalizability about each of these regulatory model types. Additionally, the documentary analysis was completed based on IPC definitions from a Canadian IPC framework, and although the NICF was developed through national engagement and consensus of experts, the identified IPC competencies and their definitions may differ from the definitions for IPC used by HCPC and COTO. As a result, both regulators may identify additional aspects related to IPC behaviours in their regulatory documents that differ from the findings of this study.

This study's findings are limited to evidence of IPC requirements observed in documents, and therefore we cannot determine if OTs are consciously using these documents to make connections between the IPC domains and their everyday practice. With respect to multi-profession regulatory models, this study does not examine if developing shared standards of practice has an impact on AHP's understanding of IPC expectations and/or demonstrating them in the workplace.

Conclusion

This study has described two different approaches to promoting IPC based on type of HP regulatory model for Occupational Therapists. The findings have demonstrated that differences in the regulative institutional structures between a single profession regulatory approach and a multi-profession regulatory approach result in different degrees of alignment with IPC competencies in regulatory documents. A single profession regulatory model allows for detailed standards of practice, thus providing an opportunity to deliver specific direction to OTs around IPC expectations. However, it is uncertain the degree to which other professions in single profession regulatory models receive the same amount of IPC direction in their practice standards, thus consistency in messaging of expectations is not addressed. If the policy goal is to provide consistency in IPC expectations, one solution is to adopt a multi-profession regulatory model where common IPC standards are shared across many professions. Multi-profession or amalgamated regulators do not inherently foster more IPC, however with the ability to develop shared standards of practice across professions, the multi-profession regulator has the ability to communicate and require consistency in

expectations and conduct. If multi-profession regulatory models are adopted, policy makers and regulators must be aware of the need to balance the specificity of regulations while ensuring they still broad enough to apply to all professions.

It is important to note that promoting IPC is only one consideration in the decision to move toward a multi-profession or amalgamated regulatory model. Policy makers will also need to consider ways in which moving to a multi-profession regulatory model can increase operational efficiency and cost-effectiveness, simplify processes through centralization, and promote accountability and transparency for the public, while balancing upfront costs of reform, potential impacts to regulator agility, and concerns around loss of professional identity and autonomy that could come with increasing the size of regulators (Adams, 2022). These findings are particularly timely for HPs in British Columbia as they embark on a transformation of their HP regulatory system to move from a single-profession regulatory model to a multi-profession model.

References

Adams, T. L. (2022). Amalgamation of Professional Regulators: Conflicting Perceptions and Beliefs Among Canadian Regulatory Leaders. *Journal of Nursing Regulation*, *13*(2), 25-33.

Arena, R. A., Goldberg, L. R., Ingersoll, C. D., Larsen, D. S., & Shelledy, D. (2011). Research in the allied health professions: why fund it? A report of the ASAHP Research Committee. *Journal of allied health*, *40*(3), 161-166.

Biernacki, P., & Waldorf, D. (1981). Snowball sampling: Problems and techniques of chain referral sampling. *Sociological methods & research*, *10*(2), 141-163.

Boeije, H. (2002). A purposeful approach to the constant comparative method in the analysis of qualitative interviews. *Quality & quantity*, 36(4), 391-409.

Bookey-Bassett, S., Espin, S., Northwood, M., Jeffs, L., & Veerasuntharam, A. (2022). Exploring the Role of Interprofessional Education in Ontario Hospital to Home Integrated Care Programs. *International Journal of Integrated Care (IJIC)*, *22*.

Bookey-Bassett, S., Markle-Reid, M., McKey, C., & Akhtar-Danesh, N. (2016). A review of instruments to measure interprofessional collaboration for chronic disease management for community-living older adults. *Journal of interprofessional care*, *30*(2), 201-210.

Castro, F. G., Kellison, J. G., Boyd, S. J., & Kopak, A. (2010). A methodology for conducting integrative mixed methods research and data analyses. *Journal of mixed methods research*, *4*(4), 342-360.

Cayton, H. (2020). Recommendations to modernize the provincial health profession regulatory framework. Steering Committee on Modernization of Health Professional Regulation August 2020. Retrieved from

https://www.harrycayton.net/s/200827-Recommendations-to-modernize-regulatory-framework.pdf

Coyne, I. T. (1997). Sampling in qualitative research. Purposeful and theoretical sampling; merging or clear boundaries? *Journal of advanced nursing*, *26*(3), 623-630.

Durcan, R., Richler, E., & Steinecke, R. (2023). Major Regulatory Reform Comes to Canada. *Journal of Nursing Regulation*, *14*(2), 43-48.

D'Amour, D., & Oandasan, I. (2005). Interprofessionality as the field of interprofessional practice and interprofessional education: An emerging concept. *Journal of interprofessional care*, *19*(sup1), 8-20.

D'Amour, D., Ferrada-Videla, M., San Martin Rodriguez, L., & Beaulieu, M. D. (2005). The conceptual basis for interprofessional collaboration: core concepts and theoretical frameworks. *Journal of interprofessional care*, *19*(sup1),116-131.

DiazGranados, D., Dow, A. W., Appelbaum, N., Mazmanian, P. E., & Retchin, S. M. (2018). Interprofessional practice in different patient care settings: A qualitative exploration. *Journal of interprofessional care*, *32*(2), 151-159.

Donovan, A. L., Aldrich, J. M., Gross, A. K., Barchas, D. M., Thornton, K. C., Schell-Chaple, H. M., Gropper, G.A., & Lipshutz, A. K. (2018). Interprofessional care and teamwork in the ICU. *Critical care medicine*, *46*(6), 980-990.

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American journal of theoretical and applied statistics*, *5*(1), 1-4.

Gergerich, E., Boland, D., & Scott, M. A. (2019). Hierarchies in interprofessional

training. *Journal of interprofessional care*, *33*(5), 528-535.

Gleeson, L.L., O'Brien, G.L., O'Mahoney, D., & Byrne S. (2023). Interprofessional communication in the hospital setting: a systemic review of the qualitative literature. *Journal of Interprofessional Care,* 37(2), 203-213.

Health and Care Professions Council (HCPC). (2015). The making of a multi-professional regulator – The HCPC 2001 to 2015. Retrieved from https://www.hcpc-uk.org/resources/reports/2015/the-making-of-a-multi-professional-regulator---the-hcpc-2001-2015/

Health Professions Regulatory Advisory Council (HPRAC). (2008). An Interim Report to the Minister of Health and Long-Term Care on Mechanisms to Facilitate and Support Interprofessional Collaboration among Health Colleges and Regulated Health Professionals. Queen's Printer for Ontario. Retrieved from http://solr.bccampus.ca:8001/bcc/items/69637d19-d822-efd4-553c-0eadc2c52c9f/1/HPRAC-EnglishInterprofessionalCollaborationInterimReportMarch08.pdf?.vi=file&drm.s=true

King, G., Shaw, L., Orchard, C. A., & Miller, S. (2010). The interprofessional socialization and valuing scale: A tool for evaluating the shift toward collaborative care approaches in health care settings. *Work*, *35*(1), 77-85

Körner, M. (2010). Interprofessional teamwork in medical rehabilitation: a comparison of multidisciplinary and interdisciplinary team approach. *Clinical rehabilitation*, *24*(8), 745-755.

Lahey, W., & Fierlbeck, K. (2016). Legislating collaborative self-regulation in Canada:

A comparative policy analysis. *Journal of interprofessional care*, *30*(2), 211-216.

Leslie, K., Nelson, S., Deber, R., & Gilmour, J. (2018). Policy tensions in regulatory reform: changes to regulation of health professions in Australia, the United Kingdom, and Ontario, Canada. *Journal of Nursing Regulation*, *8*(4), 32-42.

Leslie, K., Benoit, C., Freeman, A., & Bourgeault, I. (2021). The Regulatory Amalgamation for Nursing and Midwifery in British Columbia. *Health Reform Observer–Observatoire des Réformes de Santé*, *9*(1).

Meyer, C. B. (2001). A case in case study methodology. *Field methods*, *13*(4), 329-352.

Miles, M.B., & Huberman, M. (1994). *Qualitative Data Analysis: A Sourcebook of New Methods*. 2. Beverly Hills, CA: Sage Publications.

Mueller, D., Klingler, R., Paterson, M., & Chapman, C. (2008). Entry-level interprofessional education: perceptions of physical and occupational therapists currently practicing in Ontario. *Journal of allied health*, *37*(4), 189-195.

Orchard, C., Bainbridge, L., Bassendowski, S., Stevenson, K., Wagner, S. J., Weinberg, L. & Sawatsky-Girling, B. (2010). A national interprofessional competency framework. Canadian Interprofessional Health Collabortive. Retrieved from https://practiceedportal.health.ubc.ca/a-national-interprofessional-competency-framework/

Orchard, C. A., King, G. A., Khalili, H., & Bezzina, M. B. (2012). Assessment of Interprofessional Team Collaboration Scale (AITCS): development and testing of the instrument. *Journal of continuing education in the health professions*, *32*(1), 58-67.

Occupational Therapy Act, 1991, SO 1991, c33.

https://www.ontario.ca/laws/statute/91o33

Patton, M. (1990). Purposeful sampling. *Qualitative evaluation and research methods*, 2, 169-186.

Professional Standards Authority. (2018). Professional healthcare regulatioin in the UK explained. Retrieved from https://www.professionalstandards.org.uk/news-and-blog/blog/detail/blog/2018/04/10/professional-healthcare-regulation-explained

QSR International. (2018). NVivo [software program]. Version 12.

Regulated Health Professions Act, 1991, SO 1991, c 18. https://www.ontario.ca/laws/statute/91r18.

Regan, S., Orchard, C., Khalili, H., Brunton, L., & Leslie, K. (2015). Legislating interprofessional collaboration: A policy analysis of health professions regulatory legislation in Ontario, Canada. *Journal of interprofessional care*, *29*(4), 359-364.

Reeves. S., Pelone, F., Harrison, R., Goldman, J., & Zwarenstein, M. (2017). Interprofessional collaboration to improve professional practice and healthcare outcomes. *Cochrane Database of Systematic Reviews*. (6). DOI: 10.1002/14651858.CD000072.pub3.

Rosen, M. A., DiazGranados, D., Dietz, A. S., Benishek, L. E., Thompson, D., Pronovost, P. J., & Weaver, S. J. (2018). Teamwork in healthcare: Key discoveries enabling safer, high-quality care. *American Psychologist*, *73*(4), 433.

Sangaleti, C., Schveitzer, M. C., Peduzzi, M., Zoboli, E. L. C. P., & Soares, C. B. (2017). Experiences and shared meaning of teamwork and interprofessional collaboration among health care professionals in primary health care settings: a systematic review. *JBI Evidence Synthesis*, *15*(11), 2723-2788.

Scott, W. R. (2013). *Institutions and organizations: Ideas, interests, and identities*. Sage publications.

Wilkie, K., & Tzountzouris, J. (2017). Regulatory Models and Model Behaviours. *HealthcarePapers*, *16*(4), 61-65.

World Health Organization (2010). Framework for action on interprofessional education & collaborative practice. Retrieved from https://www.who.int/publications/i/item/framework-for-action-on-interprofessional-education-collaborative-practice

Xyrichis, A., & Lowton, K. (2008). What fosters or prevents interprofessional teamworking in primary and community care? A literature review. *International journal of nursing studies*, *45*(1), 140-153.

Yin, R. K. (2013). *Case study research: Design and methods*. Sage publications.

Zwarenstein, M., Goldman, J., & Reeves, S. (2009). Interprofessional collaboration: effects of practice-based interventions on professional practice and healthcare outcomes. *Cochrane database of systematic reviews*, (3).

Appendix A – Recruitment Letter for Regulators, Regulatory Associations, and Regulatory Experts

Dear XXXX:

You are being invited to participate in a research study by Lynda van Dreumel, Principal Investigator and PhD Candidate, because you are a registered Occupational Therapist practicing in Ontario or England; or you have knowledge about regulatory policies governing Occupational Therapists in either Ontario or England.

This study is part of Lynda van Dreumel's PhD thesis, conducted under the supervision of Dr. Glen Randall, Associate Professor (Health Policy & Management) at DeGroote School of Business.

Study Title: Models of Health Professional Self-Regulation and their Influence on Interprofessional Practice: An exploration of the profession of Occupational Therapy.

WHY IS THIS RESEARCH BEING DONE?
In most countries, OTs are regulated by their own profession (e.g. a college of OTs siloed from other professions), however regulatory reform to health and social care professions in England has led to an integrated HP regulatory model where OTs are regulated by an interprofessional college of 16 different healthcare professions. The objective of this study is to compare a siloed OT regulatory model in Ontario with an interprofessional OT regulatory model in England to describe and contrast how the two models provide policy direction on interprofessional practice.

WHAT WILL MY RESPONSIBILITIES BE IF I TAKE PART IN THE STUDY?
If you volunteer to participate in this study, we will ask you to take part in one interview of approximately 30 minutes. You can choose to complete the interview by telephone or in-person at a time that is convenient for you.

If you are interested in volunteering for the study, please find attached a letter of information and consent form for more information, and please contact me with any questions.

Thank you,

Lynda van Dreumel

Appendix B – Semi-structured Interview Guide

Preliminary Interview Guide: Phase 1 Interview with Regulators, Associations, and Regulatory Experts

Interviewer instructions:
After completion of the informed consent process, begin the interview with the following statement:

Thank you again for agreeing to participate in this interview. I will spend the next 30 minute asking you questions about Occupational Therapy regulations about interprofessionalism and how those policies may or may not make influence interprofessionalism. If at any time you need to stop or take a break, or you wish to end the interview, please let me know.

I will begin the audio tape now:

Rapport building questions:
1. (a) Tell me about your role in a health professional regulatory body/association. How long have you been in this organization? In this role?
(b) Follow up: Are you a regulated health professional? OT? Other? If yes, did you work clinically before?

Concept of Interprofessionalism:
3. (a) How does the health professional regulatory body/association term define "interprofessionalism"?
(b) Follow up: According to the health professional regulatory body/association, what does interprofessional practice look like for the OT? For the patient? What are the characteristics of interprofessionalism?

4. Is there a government policy that mandates the health professional regulatory body/association provides direction on interprofessionalism? Please explain or describe.

Understanding check: Summarize and ask informant if 'I'm getting this right'.

Sources of Understanding about Interprofessionalism:
4. (a) Where and how do OTs generally learn about interprofessionalism?
(b) Follow up: Where does this information come from? What are all of the different types of sources of this information? (think team, organization, profession, education)

5. (a) What are the formal rules, guidelines or policies of the health professional regulatory body/association that inform interprofessional practice? These can be any directives or documents that guide interprofessional practice.
Probes: Any other sources that we haven't discussed?

(b) Follow up: Thinking specifically about the professional and governmental level guidelines on interprofessionalism, what are the ways OTs are expected to incorporate them into their daily work? Please explain and provide an example.

(c) What barriers exist to the incorporation of professional/regulatory body guidelines on interprofessionalism in the daily clinical work of OTs?

Understanding check: Summarize and ask informant if 'I'm getting this right'.

Influences on Interprofessional Practice:

6. (a) What processes or practices an OT might complete, if any, at the request of the regulatory body that would inform their understanding of interprofessional practice? Please explain.

(b) Follow up: How might that become incorporated into their daily work? Please explain with an example if possible.

(c) What barriers might exist to the incorporation of this interprofessional knowledge in their daily work?

7. In which ways might professional culture or professional norms influence how OTs practice interprofessionally? Please explain and provide an example if possible.

Probe: These can be positive and negative.

9. (a) Are there mechanisms or structures in place at the regulatory level that promote consistency of policy on interprofessionalism across professions? Please describe them and how do they work to promote consistency?

(b) Follow up: Are there any barriers (at any level) that might prevent consistency of policy on interprofessionalism across professions? Please elaborate.

10. Is there anything that we may have missed that you would like to add regarding your understanding of interprofessionalism and how professional regulatory policies influence OTs daily clinical activities?

Understanding check: Summarize and ask informant if 'I'm getting this right'.

Interviewer instructions:

Interview Conclusion

After completion of the interview:

- thank participant for time and contribution
- review and confirm that if they have requested a summary report (refer to consent form)

Appendix C

Coding definitions for Interprofessional Collaboration Competencies from the National Interprofessional Competency Framework (Orchard et al., 2010) and Examples from COTO and HCPC Documents.

Competency	Competency Definition	Examples of Descriptors (Orchard et al., 2010)	Examples from COTO Documents	Examples from HCPC Documents
Role Clarification	Learners/ practitioners understand their own role and the roles of those in other professions and use this knowledge appropriately to establish and achieve patient/client/ family and community goals.	- describing their own role and that of others - recognizing and respecting the diversity of other health and social care roles, responsibilities, and competencies - performing their own roles in a culturally respectful way - communicating roles, knowledge, skills, and attitudes using appropriate language - accessing others' skills and knowledge appropriately through consultation - considering the roles of others in determining their own professional and interprofessional roles - integrating competencies/roles seamlessly into models of service delivery.	- Identify practice situations where clients may benefit from services assigned to assistants or others. - Share information about the occupational therapist's role and knowledge. - Negotiate shared and overlapping roles and responsibilities. - Perform psychotherapy within the occupational therapist's role and the scope of occupational therapy practice. Make referrals to other qualified providers as needed.	- You must only delegate work to someone who has the knowledge, skills and experience to carry it out safely and effectively. - Identify the limits of their practice and when to seek advice or refer to another professional or service. - Recognize the principles and practices of other health and care professionals and systems and how they interact with their profession.
Client-centred Care	Learners/ practitioners seek out, integrate and value, as a partner, the input and the engagement of the patient/client/ family/community in designing and implementing care/ services.	- support participation of patients/clients and their families, or community representatives as integral partners with those health care personnel providing their care or service planning, implementation, and evaluation - share information with patients/clients (or family and community) in a respectful manner and in such a way that is understandable, encourages discussion, and enhances participation in decision-making - ensure that appropriate education and support is provided by learners/practitioners	- Co-create with clients a shared understanding of scope of services, expectations, and priorities. - Partner with clients in decision-making. Advocate for them when appropriate. - Work with clients to co-create and develop personalized intervention plans.	- You must work in partnership with service users and carers, involving them, where appropriate, in decisions about the care, treatment or other services provided to them. - Understand the need to engage service users and carers in planning and evaluating

		to patients/ clients, family members and others involved with their care or service - listen respectfully to the expressed needs of all parties in shaping and delivering care or services.	- Review and evaluate plans regularly in partnership with clients, and change plans as needed.	assessments, treatments and interventions to meet their needs and goals.
Team Functioning	Learners/ practitioners understand the principles of team work dynamics and group/team processes to enable effective interprofessional collaboration.	- understand the process of team development - develop a set of principles for working together that respects the ethical values of members - effectively facilitate discussions and interactions among team members - participate and be respectful of all members' participation in collaborative decision-making - regularly reflect on their functioning with team learners/practitioners and patients/clients/ families - establish and maintain effective and healthy working relationships with learners/ practitioners, patients/clients, and families, whether or not a formalized team exists - respect team ethics, including confidentiality, resource allocation, and professionalism.	- Maintain mutually supportive working relationships. - Participate in team evaluation and improvement initiatives.	- Understand the need to build and sustain professional relationships as both autonomous practitioner and collaboratively as a member of a team. - Contribute effectively to work undertaken as part of a multi-disciplinary team. - Understand group dynamics and roles, and facilitate group work in order to maximize support, learning and change within groups and communities.
Collaborative Leadership	Learners/ practitioners understand and can apply leadership principles that support a collaborative practice model.	- work with others to enable effective patient/ client outcomes - advancement of interdependent working relationships among all participants - facilitation of effective team processes - facilitation of effective decision making - establishment of a climate for collaborative practice among all participants - co-creation of a climate for shared leadership and collaborative practice - application of collaborative decision-making principles - integration of the principles of continuous quality improvement to work processes and outcomes.	- Identify practice situations that would benefit from collaborative care. - Support evidence-informed team decision-making. - Provide useful feedback to others. - Support improvement initiatives at work. - Support assistants, students, support staff, volunteers, and other team members.	- Understand the qualities, behaviours and benefits of leadership. - Recognize that leadership is a skill that all professions can demonstrate. - Identify their own leadership qualities, behaviours and approaches, taking into account the importance of equality, diversity, and inclusion.

Interprofessional Communication	Learners/ practitioners from different professions communicate with each other in a collaborative, responsive and responsible manner.	- establish team work communication principles - actively listen to other team members including patients/clients/families - communicate to ensure common understanding of care decisions - develop trusting relationships with patients/ clients/families and other team members - effectively use information and communication technology to improve interprofessional patient/client/community-centred care, assisting team members in: o setting shared goals o collaboratively setting shared plans of care; o supporting shared decision-making; o sharing responsibilities for care across team members; and o demonstrating respect for all team members including patients/clients/ families.	- Participate actively and respectfully in collaborative decision-making. - Within the identified circle of care, collaborate and communicate with clients and others to obtain relevant information. - Collaborate and communicate with clients, other professionals, partners, and interested parties to support evidence-informed decision-making.	- Use effective and appropriate verbal and non-verbal skills to communicate with service users, carers, colleagues and others. - Understand the characteristics and consequences of verbal and non-verbal communication and recognize how these can be affected by difference of any kind.
Interprofessional Conflict Resolution	Learners/practitioners actively engage self and others, including the client/patient/family, in positively and constructively addressing disagreements as they arise.	- valuing the potential positive nature of conflict - recognizing the potential for conflict to occur and taking constructive steps to address it - identifying common situations that are likely to lead to disagreements or conflicts, including role ambiguity, power gradients, and differences in goals - knowing and understanding strategies to deal with conflict - setting guidelines for addressing disagreements - effectively working to address and resolve disagreements, including analyzing the causes of conflict and working to reach an acceptable solution - establishing a safe environment in which to express diverse opinions	- Recognize and address real or potential conflict in a fair, respectful, supportive, and timely manner.	- Identify anxiety and stress in service users, carers and colleagues, adapting their practice and providing support where appropriate.

		- developing a level of consensus among those with differing views; allowing all members to feel their viewpoints have been heard no matter what the outcome		

Appendix D

Practice Standards publicly available on the Health and Care Professions Council website

Health and Care Professions Council (HCPC)		
Document Name	**Last Updated by HCPC**	**Web Address for Publicly Available Document**
Standards of conduct, performance, and ethics	January 26, 2016	https://www.hcpc-uk.org/standards/standards-of-conduct-performance-and-ethics/
Standards of proficiency	September 1, 2023	https://www.hcpc-uk.org/standards/standards-of-proficiency/
Standards of continuing professional development	June 22, 2017	https://www.hcpc-uk.org/standards/standards-of-continuing-professional-development/
Standards relevant to education and training	June 27, 2017	https://www.hcpc-uk.org/standards/standards-relevant-to-education-and-training/

Appendix E

Practice Standards publicly available on the College of Occupational Therapists of Ontario website

College of Occupational Therapists of Ontario (COTO)	
Document Name [1]	**Web Address for Publicly Available Document**
Code of Ethics	https://www.coto.org/standards-and-resources/resources/code-of-ethics
Competencies for Occupational Therapists in Canada	https://www.coto.org/docs/default-source/competencies/competencies-for-occupational-therapists-in-canada-2021---final-en-web.pdf?sfvrsn=e4f10c52_2
Standards for Acupuncture	https://www.coto.org/standards-and-resources/resources/standard-for-acupuncture-2023
Standard for Consent	https://www.coto.org/standards-and-resources/resources/standard-for-consent-2023
Standard for the Prevention and Management of Conflicts of Interest	https://www.coto.org/standards-and-resources/resources/standard-for-the-prevention-and-management-of-conflicts-of-interest-2023
Standard for Psychotherapy	https://www.coto.org/standards-and-resources/resources/standard-for-psychotherapy-2023
Standard for the Supervision of Students and Occupational Therapy Assistants	https://www.coto.org/standards-and-resources/resources/standard-for-the-supervision-of-students-and-occupational-therapy-assistants-2023
Standard for Assessment and Intervention	https://www.coto.org/standards-and-resources/resources/standard-for-assessment-and-intervention-2023
Standard for Infection Prevention and Control	https://www.coto.org/standards-and-resources/resources/standard-for-infection-prevention-and-control-(ipac)-2023
Standard for Professional Boundaries and the Prevention of Sexual Abuse	https://www.coto.org/standards-and-resources/resources/standard-for-professional-boundaries-and-the-prevention-of-sexual-abuse-2023
Standard for Record Keeping	https://www.coto.org/standards-and-resources/resources/standard-for-record-keeping-2023
Standard for Use of Title	https://www.coto.org/standards-and-resources/resources/standard-for-use-of-title-2023

[1] All COTO Practice Standards were updated June 2023

Chapter 4

How Institutions Shape Interprofessional Collaboration for Occupational Therapists in Ontario: An Institutional Ethnography

Abstract

Interprofessional collaboration in healthcare increases quality of care by bridging communication gaps, negotiating overlaps in scope of practice, and ensuring collaboration on care plans. To date, research has focused on organizational (meso) and provider (micro) influences on IPC. The objective of this study was to use institutional ethnography to explore how macro level policies on interprofessional collaboration (IPC) shape Occupational Therapists' interprofessional experiences when working within a jurisdiction with mainly single profession regulators such as Ontario. Twenty-one occupational therapists from across Ontario were interviewed and macro level institutional influences on IPC were identified. Recommendations for policy makers include promoting IPC through regulatory collaboration between separate HP regulators to share common IPC practice standards across professions or exploring multi-profession models of regulation; continued adoption of integrated funding models to reinforce multi-disciplinary approaches to care and thus enable a continued shift away from the biomedical model; and continued emphasis on interprofessional education to overcome differences in professional cultures and values that can present as barriers to collaborative decision making.

Introduction

Occupational therapy is a regulated profession in Canada and Occupational Therapists (OTs) must be registered with the appropriate provincial regulatory body to provide services (Canadian Association of Occupational Therapists [CAOT], 2016). Occupational therapy practice focuses on client-centred interventions to promote health and well-being (Law et al., 1997; Townsend & Polatajko, 2007) and to address clients' barriers to participation in purposeful and meaningful activities related to productivity, self-care and leisure (Law et al., 1997). Occupational therapists work in diverse practice areas and the nature of the OT role as an allied health professional means that they are required to collaborate with other healthcare professionals in team settings through processes of interprofessional collaboration (Blaga & Robertson, 2008; Brown et al., 2007). Interprofessional collaboration of health professionals requires a range of behaviours, including collaboration with team members holding interdependent roles to work towards client-centred goals through sharing, partnership, communication, coordinating, networking, and trust behaviours (D'Amour & Oandasan, 2005; D'Amour et al., 2005; Reeves et al., 2017; Reeves et al., 2018).

Interprofessional collaboration is desirable since teams demonstrating high levels of related behaviours are associated with the delivery of high quality and safe health care (Donevan et al., 2018; Reeves et al., 2008). Interprofessional collaboration also serves to increase quality of care by bridging communication gaps, negotiating overlaps in scope of practice, and ensuring collaboration on integrated treatment protocols (Schot et al., 2018). Accordingly, to achieve improvements in quality and safety, it is important to understand the various factors that shape interprofessional collaboration

during the delivery of health care so that enablers and barriers to interprofessional practice can be identified and effective interventions implemented.

Recently, policy and legislative reforms to health professional regulation in different Canadian jurisdictions have attempted to use macro level policy instruments (i.e., provincial legislation) to influence how health professionals collaborate (Leslie et al., 2018). Nova Scotia's policy reform involved the implementation of a provincial statute to enable each regulatory body to collaborate on regulatory administrative functions (complaints, scopes of practice) (Lahey, 2013; *Regulated Health Professions Network Act*, SNS 2012) at the level of the regulatory colleges, however the legislation did not address interprofessional collaboration within health care teams for the purpose of delivering health care.

In contrast, in 2007 Ontario amended the *Regulated Health Professions Act* (RHPA) (an umbrella statute that brings together most of the health profession regulators under the governance of the Ministry of Health) to include a statutory requirement to promote interprofessional collaboration among the health profession colleges (*The Health System Improvements Act*, SO 2007; Regan et al., 2015). The impact of this statutory requirement for interprofessional collaboration between professional regulators in Ontario has yet to be explored. In an evolving regulatory environment where governments are developing interprofessional policies to address public protection, safety, and quality of care it is important to explore if in fact macro level policy change has the potential to achieve the policy goal of shaping practice and behaviour at the point of care. In the case of Ontario regulators, the requirement to collaborate on regulatory matters has the potential to influence IPC for

professions/providers the development of coordinated or shared practice guidelines across all professions is one strategy implemented by regulators.

In additional to regulatory policies, other macro level or provincial policies have the potential to influence how care is delivered by providers. Health care funding policies can be designed to incentivize providers to deliver care in alignment with provincial or health system goals (Lukey et al., 2021; Wranik et al., 2017).

In order to address this gap in the literature, the objective of this study is to explore how macro level institutional influences can shape interprofessional care at the point of care (micro level) for Occupational Therapists by addressing the following research question: ***How do macro level policies on interprofessional collaboration shape Occupational Therapists' interprofessional experiences when working within a jurisdiction with mainly single profession regulators such as Ontario?***

Ontario was selected as the jurisdiction for study as it has a statutory requirement to promote interprofessional collaboration between professions, yet Occupational Therapy is regulated under a separate piece of legislation and regulatory college – a single profession regulatory framework.

Background

Factors Shaping Interprofessional Collaboration – Micro and Meso Environments

Researchers have explored factors that shape interprofessional collaboration in health care settings, however to date the focus of inquiry has centred on characteristics at the individual and team (micro) level and the organizational (meso) level. For example, the literature describes ways in which interprofessional collaboration can be

influenced by elements such as team structure, practice setting and professional power. Effective collaborative communication and decision-making in interprofessional teams has been associated with health care settings where physicians hold a less dominant role (i.e., the role of the physician is less prominent in team tasks due to the type of care provided) compared to non-rehabilitation settings where physicians hold a more dominant role (DiazGranados et al., 2018; Rosen et al., 2018). The type of care setting (rehabilitation vs. non-rehabilitation) and the organizational policies and processes guiding how health care team members work together may be considered a "meso" level influence on interprofessional collaboration. Moreover, research has shown that meso level factors including physical proximity of team members and established organizational mechanisms for communication like team meetings are effective enablers of interprofessional collaboration (Sangaleti et al., 2017; Xyrichis & Lowton, 2007). Conversely, when team members are geographically separated as a result of working in rural areas or on remote/virtual teams, they can experience challenges with communication and collaboration due to technology access issues and/or coordinating schedules (Mills et al., 2010).

Micro level factors that can influence interprofessional collaboration include established team norms around roles, communication, and decision-making (DiazGranados et al., 2018; Rosen et al., 2018). Gleeson et al. (2023) found that the micro level factors of mutual respect, positive personal relationships within the team, and appreciating each profession's role on the team are facilitators to effective interprofessional practice. Additionally, implicit bias within individuals and teams around their professions and other professions, whether positive or negative, has been

identified as a factor that can shape effectiveness of interprofessional collaboration (Sukhera et al., 2022).

Factors Shaping Interprofessional Collaboration – The Macro Environment

While the literature describes contextual factors influencing interprofessional collaboration at the micro and meso levels, researchers are just beginning to explore factors at the macro level to understand how system-level policies and institutional structures might influence interprofessional collaboration within health care teams. Lahey & Fierlbeck (2016) have raised the concern that as the number of regulated professions continues to grow, there exists a "landscape of legislated silos [between health professions] making functional engagement across professional boundaries difficult" (p.212). They also noted that dominant professions with institutionalized power may serve to reinforce silos at the system level to protect scopes of practice.

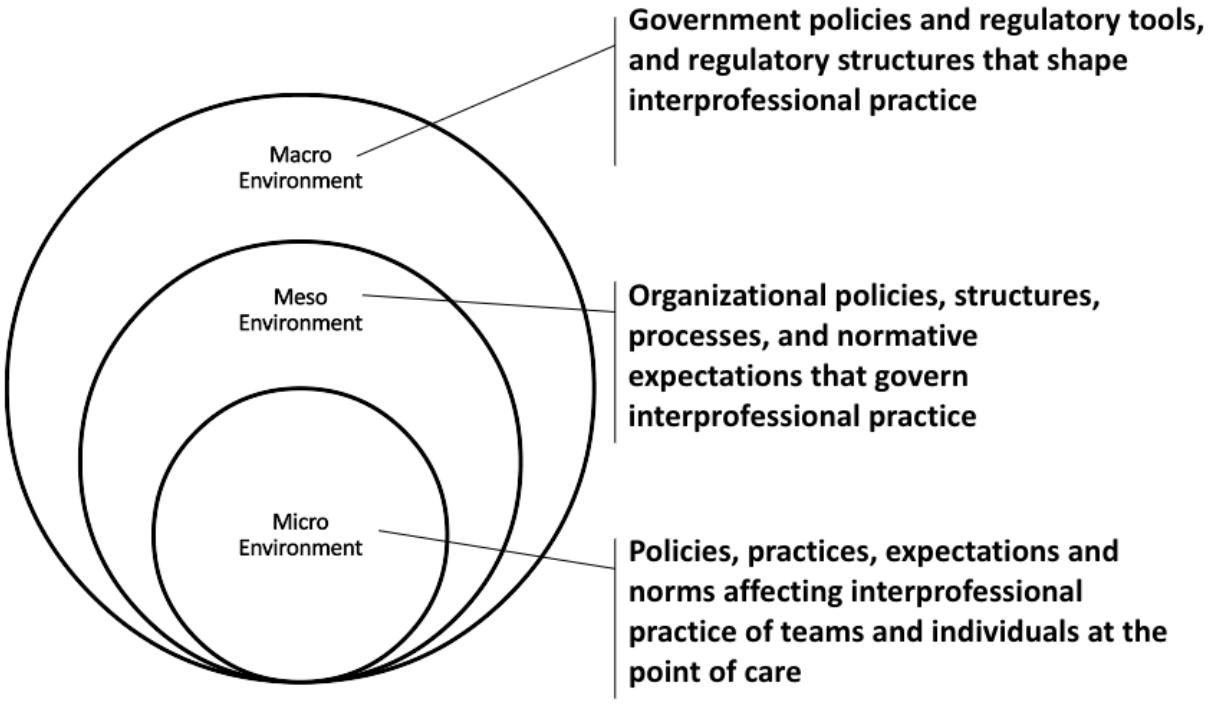


Figure 4.1 Macro, Meso, and Micro Level Influences on Interprofessional Collaboration

Theoretical Framework for the Study: Institutionalism

Institutions are defined as "the shared concepts used by humans in repetitive situations organized by rules, norms, and strategies" (Ostrom, 2007, p.23), involving not only formal structures and bureaucracies, but also legal and cultural forces that influence how individuals and groups determine courses of action. Thus, institutions influence the actions of policy actors by shaping how problems are interpreted and determining possible solutions and patterns of behaviour. Scott's institutional theory (2013) was used as a theoretical framework to guide the exploration of the formal and informal rules that shape health professional behaviour. In particular, Scott divides institutional influences into the following three categories or pillars:

- *Regulative influences* on behaviour, the formal and informal rules that indicate what the health professional **must do** as part of their point of care work,
- *Normative influences* on behaviour, the processes and behaviours that indicate what the health professional **ought to do** as part of their point of care work; and,
- *Cultural-cognitive influences* on behaviour, the shared symbols that guide the health professional in what they **want to do** as part of their point of care work.

This framework is relevant to the study of health profession regulatory policy because health profession regulation as an institution has a bureaucratic structure, rules, and policy instruments that will ultimately influence the behaviour of those they regulate. Thus, Scott's three institutional pillars provides a conceptual

framework to organize the various types of macro level factors that influence OT interprofessional collaboration.

Methodology

Strategy of inquiry: Institutional Ethnography

Institutional ethnography (IE) is the approach of inquiry for this study. IE focuses on how everyday experience is socially organized through rules, or institutions, and how individuals understand and experience their daily work (Devault, 2006; Smith, 2006; Smith, 2007). Given that the objective of the study was to understand how rules shape the work of interprofessional collaboration for OTs, IE is an appropriate way to address the research question. The methodology of IE, which explores how individuals assign meaning and purpose to the daily activities of work, also conceptually aligns with theoretical underpinnings of the profession of OT where understanding the nature of meaningful and purposeful activity or work is important to client-centred collaborative treatment planning (Fisher, 1998). Moreover, the methodology of IE complements the institutionalism lens to assist in understanding the regulative, normative, and cultural-cognitive factors that shape an individual's experiences.

The goal of an IE study is to identify the *ruling relations* (rules and policies produced elsewhere) that are embedded into people's everyday work, to show how they work and reveal when those ruling relations do not support the interests of people (Rankin, 2017; Smith, 2006). An IE differs from traditional ethnography in that "a great deal of IE research is conducted without observations, using only interviews and text" (Rankin,

2017, p.6). This makes it an appropriate fit for health care environments as it eliminates exposure to patient information and does not interfere in daily clinical processes or patient interactions.

Standpoint of the Informants and the Problematic

For the purpose of this study, I examined the standpoint of OTs working across different sectors within the health care system. Participants in this research study were referred to as standpoint 'informants', which is a commonly used terminology in IE research (Rankin. 2017). It is the *standpoint* of the informants that identifies the *problematic*, and directs the researcher's analysis (Smith, 2007). Smith (2006) described standpoint as a point of entry into exploring the experiences and knowledge of the informant with the goal to uncover the problematic; that is, recognizing that knowledge is socially situated and listening to the informant describe and explicate their understanding of how and why particular experiences happen (Smith, 2006). Therefore, exploring the problematic from the standpoint of the informant places the informant at the centre and enables them to share their knowledge that has been socially constructed.

Point of Entry

Smith (2006) suggested that the researcher identify their stance in relation to the inquiry, instead of methodologically removing oneself from it. One of the ways this can be done is through outlining the embodied experience of the researcher in relation to the inquiry to initiate reflexivity. This researcher's point of entry is as a registered OT,

currently working in a non-clinical role, with 22 years of practice experience in interprofessional teams in both hospital and community settings.

Research Setting

This study examines OTs work environments and processes in community and hospital settings in Ontario where OTs work within interprofessional teams. OTs in Ontario are regulated by a professional college in a single profession regulatory model; that is, the OT regulatory college in Ontario fulfills its legislative mandate to protect the public without significant levels of regulatory collaboration with other regulatory colleges.

Sampling Procedure and Recruitment

A purposive heterogeneous sample of OTs working in Ontario was selected to ensure representation of clinicians across a broad spectrum of practice areas and with a diversity of experience. Specifically, the following criteria were important to the purposive sample: practice sector, practice area, funding source, type of role, and years of experience. Purposive heterogeneous sampling is a deliberate choice of participant based on their knowledge and expertise related to the research question (Etikan et al., 2016; Patton, 1990). Invitations to participate in the study were sent by email to unit managers and professional practice leaders situated in hospital and community settings across Ontario. Once interviews with informants commenced, informants were asked to share the email invitation with colleagues to permit further recruitment through a snowballing technique (Biernacki & Waldorf, 1981).

OTs were included in the study if they met all the following criteria:

1. At least 18 years of age;

2. A registered OT with the College of Occupational Therapists of Ontario;
3. Working in clinical practice and/or working in an administrative role in the health system; and,
4. Working in an interprofessional team or had recent work experience in an interprofessional team where they were required to collaborate on patient/client outcomes with at least one other type of regulated health professional.

Data Collection

An interview guide (Appendix B) was developed consisting of demographic questions and questions about experiences and perceptions of interprofessional collaboration using the theoretical foundations of Scott's institutional theory (2013). For example, the interview guide included questions about how provincial policies, regulatory documents, and professional norms might influence IPC Informed consent was obtained from the informants and semi-structured interviews with open-ended questions were completed by telephone. Member-checks were carried out by the investigator during each interview to summarize and reflect the informants' response to check for meanings (Birt et al., 2016). Interviews were digitally recorded and transcribed verbatim into Microsoft Word documents. Data collection and analysis continued until data saturation was achieved and no new qualitative themes emerged (Sandelowski, 1995).

Data Analysis

There is no prescribed way of analyzing data in an IE. A successful analysis "supersedes any one account and even supersedes the totality of what informants know and can tell" (Campbell & Gregor, 2002, p. 85). Data analysis in IE involves dialogue between the interviewer and standpoint informant, and secondarily includes the dialogue between the interviewer and the interview transcript/field notes (Walby, 2013). The typical sequence of an IE research is described as "(a) identify an experience, (b) identify some of the institutional processes that are shaping that experience, and (c) investigate those processes in order to describe analytically how they operate as the grounds of experience" (DeVault & McCoy, 2012, p.20).

Interview data were analyzed based on the integrated approach to developing code structure as described by Miles and Huberman (1994). Transcribed interviews were entered into NVivo 12 (QSR International, 2018). An initial codebook created from the qualitative interview guide served as an organizing framework for preliminary coding to identify ruling relations. Secondary coding and thematic content analysis using the Constant Comparative Method of Analysis of Interviews (CCM) as described by Boeije (2002) was used where identification and coding of ruling relations was modified through comparison within and between interviews. When no new ruling relations emerged from the data, theoretical saturation had occurred.

Rigour

In an IE study, the analytic goal is "to find and describe the ruling relations that can be shown to extend beyond the study informants" (Rankin, 2017, p.3). This provides a unique way in which IE researchers can situate inside issues of *generalizability*, which is

discussed as an issue of rigour in other methodologies (Rankin, 2017). Rigour has been addressed through study design in the following ways:

- At the sample stage, purposive heterogeneous sampling based on the parameters of practice sector, practice area, funding source, type of role, and years of experience promotes transferability in the identified ruling relations to OT practice across Ontario,
- At the data collection stage, confirmability and credibility of the findings are enhanced with the use of member-checks during interviews to summarize and reflect the informants' response to check for meanings (Birt et al., 2016), and
- At the data analysis stage, reliability of the data is addressed through the use of researcher reflexivity.

Rigour is an important methodological issue as the qualitative data must be trustworthy so that it is both credible and dependable (Creswell & Miller, 2000; Guba, 1981; Krefting, 1991).

Ethics Approval

This study was approved by the Hamilton Integrated Research Ethics Board (HIREB) at McMaster University – REB Project # 7300.

Results

Participant Characteristics

Twenty-one informants were interviewed by telephone with an average interview duration of 40 minutes (range: 24 minutes to 47 minutes). All 21 OT informants self-

identified as female and the average experience level was reported as 14 years (range: 3 years to 29 years). Nine informants reported their practice sector as a hospital setting (42.9%), while ten informants reported working in the community sector (47.6%). Two informants (9.5%) reported working in both hospital and community sectors. Ten informants held clinical roles (47.6%) and 7 informants worked in management roles (33.3%), while 4 informants reported working in a dual management and clinical role (19%). While all informants were part of a multidisciplinary team, 19 informants reported being members of two or more separate interprofessional teams as part of their current position (90.4%). Seven of the informants reported working in a private practice where services are funded through third party payors (insurance) or out of pocket or a combination of both (33.3%). The sample of informants came from a variety of practice areas including mental health and addictions, return to work and disability management, medicine, musculoskeletal injuries, pediatrics, acquired brain injury, and stroke rehabilitation.

Ruling Relations – Macro Level Factors Shaping Interprofessional Practice

OT informants identified a series of ruling relations at the macro level that influenced their ability to practice IPC in multidisciplinary teams. The following macro level ruling relations have been organized and explicated according to their alignment with Scott's three pillars (2013) of regulative, normative, and cultural-cognitive influences. A summary of ruling relations can be found in Table 4.1.

Regulative Ruling Relations

Regulatory College Resources. Two informants indicated that they were aware that the College of Occupational Therapists of Ontario (COTO) played a role in promoting interprofessional collaboration through resources provided by the regulatory college, however most informants did not identify COTO as an institutional influence on their interprofessional collaboration. The two informants who identified COTO as a potential influence both reported that college resources did not play a meaningful role in informing their interprofessional collaboration.

One informant identified Occupational Therapy Practice Standards as a potential means to provide guidance on interprofessional collaboration, however they indicated that interprofessional behaviours were mainly learned on the job.

> *I would say that where I gained the most knowledge and the habit of working in an interprofessional manner is based on my current experience, being at work and learning from my peers being the benefit of working in a professional manner. I wouldn't say that I benefited that much up to date based upon resources from the college or whatever other type of information from a regulatory approach. I know it sounds bad to say, but I would say that I've gained the most experience in practice. (OT10)*

Another informant explained that the annual prescribed education modules completed by all registered OTs as part of registration renewal requirements were an opportunity to promote interprofessional collaboration; yet it was difficult for the informant to identify and make these connections to practice.

> *I do find those prep modules very helpful, and I really like them. In terms of feeling how that connects with me interprofessionally, I honestly can't really think about how. That does not resonate with me for those. I might be missing something with them. (OT9)*

According to the informants who identified regulatory college resources, they were not aware of a specific resource that clearly articulates interprofessional collaboration expectations. Informants indicated that without a specific IPC resource they would need to identify relevant IPC guidance across multiple college document. This may not be an effective or efficient method of communicating interprofessional collaboration.

Funding Policies. Health care funding policies where funding is allocated by health care provider on a fee for service basis often require that each separate provider treating the same client submits a separate report and invoice as part of the contractual agreement. Occupational Therapists providing care in community settings may be working in teams where each health care professional is reimbursed by a different community agency, which can exacerbate the impact of siloed funding because each agency may have its own separate patient health record.

> *As I was managing the program and trying to get our service provider organizations that were actually delivering the therapy in the community to be thinking as an interprofessional team in developing one plan for the patient, it really became clear that the way that community therapy is set up, that it is very siloed between therapists: OT/PT [occupational therapy/physiotherapy], speech therapy, and nursing if nursing was involved, and social work. The administrative structures that existed within the contracts was requiring them to submit individual reports. That was one barrier we faced. (OT13)*

Siloed and fee for service funding presents as a barrier to interprofessional communication and collaboration on client treatment goals when each separate provider does not have access to complete information about the client and there are few structures or processes for collaborative treatment planning and documentation. The result is fragmented care as explained by the informants:

> *You were paid per visit, and it was also the way it was set up. The idea was you were to report back to that care coordinator and then that care coordinator was to share the information. You might get some reports, but it was quite limited in the information you got from the other professionals. There might be the odd time that they'd come together for care conferences, but that was usually in situations that were really complex or there was some crisis situation going on. When I think about it too, probably, a lot of it was [because of] the way that you were reimbursed. (OT15)*

Despite having care coordinator roles in siloed fee for service systems, communication remains fragmented with incomplete information exchange and few to no opportunities to collaborate with team members other than the care coordinator:

> *There's so much communication breakdown because I will send an update to the PSW [personal support worker] agency and then it goes into their agency and then it gets filtered out between the scheduler and this and that and the other thing and then by the time it reaches the PSW that's supposed to go out, who knows what their care plan even looks like. (OT20)*

> *I found it was like you're struggling to try to get all these people involved, and getting approval, and asking and making referrals. But then the physio might be from [name of agency redacted], the OT might be from another agency. They don't have the same health record; they don't know what each other is doing. (OT9)*

Other informants explained how fee-for-service policies can present as a barrier to participating in collaborative processes such as team meetings, particularly when part of the team consists of full-time salaried employees while other member(s) are paid on a consultancy or fee-for-service basis. Consultants may not perceive themselves as part of the team and/or their contract may not include financial compensation to participate in indirect client care processes such as team meetings.

> *If they're not a full-time consultant and are just coming and going, and as well depending on their perception of their role as a consultant, they may not see themselves as a member of the team. They may have to work harder, but I've certainly seen consultants who fit beautifully into the team and they find a way to make sure that they can work collaboratively with the team on their common patients. I've seen it go both ways. (OT21)*

Further, funding based on a rationed number of visits can present as a challenge for providers when deciding if one of the paid visits ought to be allocated for indirect activities such as case conferences, recognizing that the cost to the patient will be less direct care time. This decision-making around allocating finite resources to indirect care is made more complex when multiple treatment team members are funded in the same way.

> *In the area that I work, we sometimes get approximately four or five sessions or consultation visits to work with the child and their team. In that situation, the family often wants as much hands-on work or demonstration as possible. Due to time constraints, trying to have everybody come together in one case conference, it's very challenging to set up case conferences and then it uses up one of those four to five sessions to do a meeting, a case conference meeting. While we do that, it is very beneficial, everybody knows what's going on, but it's not always the way that the system is set up to encourage using one of those sessions as a meeting. Yes, it's not ideal, but based on the number of sessions that you get, you want to use as many of you can on the actual intervention and then, unfortunately, we don't get to do as much interprofessional communication as we'd like. (OT7)*

Thus, when funding does not provide reimbursement for interprofessional collaboration activities between professionals, across organizations, or between sectors (e.g., hospital and primary care), OTs may not be able to participate in collaborative activities such as case conferences. Additionally, siloed funding policies involving fee-for-service payment based on profession may also result in documentation produced and submitted by individual providers, lack of shared electronic medical record, and lack of team collaborative communication. These rules around funding that have been codified in legislation, contracts, and policies have a cascading effect on health

professional behaviour at the point of care and can shape how interprofessional teams function.

Normative Ruling Relations

Multi-disciplinary Models of Care. Informants identified the use of multi-disciplinary models of care as an enabler for interprofessional practice and a means to provide evidence-based care. Multi-disciplinary models of care may be set at the organizational level, however within the Ontario context multi-disciplinary models of care are often developed at the provincial level by provincial expert advisory groups. These expert advisory groups develop evidence-based care pathways that outline care team member roles and best practice treatment.

> *One of my responsibilities as the regional stroke rehabilitation coordinator is to ensure that organizations are using best practice and interprofessional teams as part of best practice. I do promote interprofessional teams, the use of interprofessional teams in organizations because it is best practice in stroke rehabilitation. (OT10)*

The use of multi-disciplinary models of care requires that collaborative processes are built into daily team tasks, including collaborative goal setting and having mechanisms for interdisciplinary and shared approaches to documentation.

> *We come up with a collaborative goal that we're going to work towards as a team, so that we're on the same page for the next week until we review the clients the following week. The way our reports are structured, they're interdisciplinary reports. Every clinician is part of the team and contributing to those reports and everyone is also responsible for making sure that everything makes sense, the goals are aligned and just everything is tied in. Everyone has to be on the same page and really aware of what one another is working on with the client. (OT5)*

Inherent in these multi-disciplinary models of care are the normative behavioural requirements of collaboration, communication, coordinating, and trust that are typical of

effective interprofessional practice behaviours. When health care team members understand and follow the normative expectations associated with multi-disciplinary models, this can have a positive influence on shaping interprofessional practice.

Biomedical Model. Informants identified that the persistence of the biomedical model within the health care system (where health is defined as the absence of illness, and illness is reducible to a physical or biological disease) prioritizes the physician role in medical diagnosis and treatment processes and results in OTs having less influence and/or diminished role in health care teams. This can create tension within the health care team and prevent true collaboration and teamwork., whether it is between physician and team or psychologist and team as explained below:

> *Oftentimes we also have a psychotherapist that works on the team. Oftentimes if there's different opinions about how things are going or what the clinical opinion is on the client's barriers or whatnot, we have had cases where the psychologist has their own opinion that - I don't want to say overrides the psychotherapist but there has been some tension in that relationship just because they're doing very similar work, the same scope of practice, but that's really in terms of the treatment. That level of power, the psychologist versus the psychotherapist, because there was sort of a supervisory relationship. I know that that has come into play before. (OT5)*

Additionally, OT informants indicated that centering care processes and thus the team around the physician's role excludes OTs from meaningful participation in care planning.

> *"We work with orthopedic surgeons, plastic surgeons, when we're doing assessments so then we're supposed to be collaborating to provide recommendations. Sometimes when a clinician is discussing with the physician what their findings were and what they're thinking a recommendation should be and feeling as though that they're on the same page. However, later the physician goes in a different direction, in terms of what they're recommending, that perhaps the clinician doesn't necessarily agree with but because they're the physician-- It is predominantly a physician assessment. What the physician's opinion is and what their recommendations are stand, even if the clinician doesn't*

> *necessarily agree with it. I know that there's been some recent feedback from clinicians about that, in which we're having to have conversations with the physicians just to get their perspective as well and trying to understand how we can all work together so that everybody's recommendations are being heard and everybody's feeling good about what's actually being recommended for these clients." (OT5)*

The impact of the biomedical model as a barrier to interprofessional practice also impacts the quality of care clients receive by excluding important aspects of health such as psychosocial wellbeing that can be identified and addressed by OTs within their scope of practice.

> *In working with say with a physician where the physician and the therapists were a strong team with the physicians that still worked on more of an old model where what they brought into the treatment plan for the patient was very isolated and singular. Then what you did as the clinician was a separate piece and really didn't look at it as one piece being contingent on the other for success, then it fails. I have seen some surgeons that have approached things like that. When, for example, if there's some psychosocial concerns, they're not interested in hearing about it, but those psychosocial concerns may have an impact on the success of the surgery that they were planning or may have, maybe should have had an impact on how they approach to explain things to patients. If they're not willing to hear what you have to say as part of the whole thing, even if it's related to the surgical side which on the surface means that they're part of the plan, then that can fail. (OT21)*

The impact of the biomedical model can also leave OTs feeling unheard and that their role in the team is undervalued.

> *When agency is really setup based on more of a medical model, more of a nursing framework, it can impact the value or the input that some of those other professionals had. (OT15)*

It is important to note that not all OT informants reported working under the biomedical model in their practice setting. OTs also reported working in multi-disciplinary teams where collaborative processes between therapists and physicians were well developed, enabling the OT to contribute to care planning and feel respected for their role on the team.

> *I think we really try to work as a team here, at least where I work at. I like it because it doesn't seem like there's a hierarchy such as the doctors are number one, this should come first. Our doctors here are quite collaborative with the treating therapists, because obviously if we spend more time with the clients as opposed to a physician who may only see them once every few months and we see them three times a week, they really do respect our thoughts or whatever recommendations that we may have on our clients. OT6*

Therefore, in health care settings where the normative expectation is that team members operate under the biomedical model, OTs may experience barriers to participation and collaboration for care planning and treatment processes and client care may be impacted.

Cultural-Cognitive Ruling Relations

Values and Culture of a Profession. OT informants identified that different professions may hold specific professional values that support a professional culture that prioritizes interprofessional practice within their profession compared to others. One informant reflected on how some professions within the multi-disciplinary team may not value collaboration to the same extent as OTs, thus resulting in barriers to interprofessional practice.

> *Not everybody maybe identifies the same value in working together. Depending on who you were working with, maybe that wasn't something that they valued as much. I'm just thinking too, even on some examples from even team meetings in the hospital settings… some doctors and psychiatrists really didn't want that much feedback from others. They just wanted to make their decision. (OT15)*

In fact, informants indicated that interprofessional collaboration was an important value within the OT profession, providing OTs with important interprofessional skills for delivering care on multi-disciplinary teams.

> *I don't know whether or not I'll be biased but I feel like OT tends to have a little bit more knowledge of interprofessional teams and interprofessional practice, and I don't know whether that's because it's embedded in our education. I know it's also embedded in thenursing education, but I think that there just seems to be a broader understanding or perspective of what it means to work together. It's the foundation of OT, I would say. (OT10)*

Moreover, informants reported that the professional culture of OT combined with the profession's interprofessional skills position OTs to be leaders in promoting and modeling collaborative behaviours within teams.

> *I'm not going to generalize to every discipline, but in general, I feel we have a better handle on it [interprofessionalism], to be honest. Not that other people don't, it's just-- I don't know. I always see us as sort of always being a bit of leaders on the team [chuckles] with that. (OT9)*

> *I have found that the OT has tended to take on more of that collaborative approach in terms of function and trying to get people all on the same page both in those situations where I'm working with everyone at the same location and both where I'm working outside of the community, especially if there isn't a case manager on a file. I have found that the OT tends to take that on. (OT3)*

Each profession may demonstrate a set of values and beliefs specific to the profession that aligns with interprofessional collaboration to varying degrees, and it is these underlying values that influence how a professional culture supports interprofessional practice. OTs view themselves as skilled leaders in interprofessional collaboration due

to their education and training; however, they are working within systems where other professions with more power or influence may not value collaboration or they may see collaboration as a threat to their power within the system.

Table 4.1. Summary of Macro Level Ruling Relations and Barriers to Interprofessional Collaboration.

Macro Level Ruling Relations	Brief Description	Barriers identified by Informants
Regulative Influences		
Regulatory College Resources	Expectations for interprofessional collaboration are embedded across many practice standards and prescribed education modules.	There is no specific resource that clearly articulates interprofessional collaboration expectations, thus requiring practicing OTs to identify and select relevant guidance across multiple resources.
Funding Policies	Funding allocation is siloed by sector, organization, program, and profession. Care is delivered within funded silos. Funding may also be allocated as fee-for-service and allocated by profession.	Funding may not provide reimbursement for interprofessional collaboration activities across organizations, or between sectors, between professions, or within teams. Siloed funding policies may also result in documentation produced by individual providers rather than together by the multidisciplinary team, lack of shared electronic medical record, and lack of team collaborative communication.
Normative Influences		
Multi-disciplinary Models of Care	Evidence-based practice has led to the development of multi-disciplinary models of care which require collaboration, communication, coordination, and trust – critical interprofessional behaviours.	No barriers identified – this was viewed as an important enabler of interprofessional collaboration.
Biomedical Model	Systems and care organized with physician at centre	Professions accept the normative expectation that the physician role and

	leaves other professions with less influence in care planning and treatment processes.	scope of practice supersedes other roles within the team. Other professions defer to physician for decision-making or their contribution to care planning is undervalued, thus impacting client care.
Cultural-Cognitive Influences		
Values and Culture of a Profession	Each profession demonstrates a set of values and beliefs specific to the profession that may align with interprofessional collaboration to varying degrees. (Note this influence is separate from meso and micro level cultural and value influences)	It is these underlying values that influence how a professional culture supports interprofessional practice. Some professions that place less value on collaboration can influence the level of IPC on the team. OTs view themselves as skilled leaders in interprofessional collaboration due to their education and training.

Discussion

The OT informants provided several insights and identified important macro level barriers and enablers to interprofessional collaboration at the micro level, revealing how these institutional influences shape OT experience at the point of care, and providing opportunities to improve IPC within the health care system.

Despite a provincial mandate for interprofessional collaboration at the regulatory college level in Ontario, few OTs in the study were aware of how the college currently promotes IPC to its registrants and therefore could not identify ways in which the college shapes what an OT "must do" with respect to interprofessional collaboration. A few informants reported that without a specific resource dedicated to interprofessional collaboration, it was difficult to make connections to practice. The OT informants' experience is consistent with a study by Regan et al. (2015) that found most health professional regulatory colleges in Ontario identified having interprofessional team-

based care expectations integrated into various practice standards and position statements; however regulators had not produced specific college resources dedicated solely to interprofessional collaboration expectations. The findings of this study suggest that there is an opportunity at the regulatory level in Ontario to more clearly articulate interprofessional collaboration expectations within OT college resources (e.g. within the *Code of Ethics* and the *Competencies for Occupational Therapists in Canada*) so that OTs can identify expectations and how they apply to practice. Additionally, there is an opportunity to develop a separate practice standard for IPC as a means to precisely articulate IPC expectations. Moreover, there is a need to improve the approach to providing regulatory direction on interprofessional collaboration expectations *across regulated professions* by adopting an integrated approach to interprofessional collaboration which could include shared practice standards for interprofessional practice across multiple professions. This approach is feasible under existing provincial policies and structures. Under *The Health System Improvements Act*, SO 2007, Ontario health profession regulators have a legislated mandate to promote interprofessional collaboration between regulators, and they have the structure of the Health Profession Regulators of Ontario (HPRO), where they can coordinate regulatory approaches between the 26 HP regulators (HPRO, 2023); however, the likelihood of change under current conditions is uncertain and thus additional external pressures through legislative or policy levers may be required.

An additional regulative influence identified in the study included how funding policies developed at the system level shape interprofessional behaviours at the point of care. Funding policies that reimburse health professionals as consultants, on a fee-for-

service basis, or for only direct client care visits serve as barriers for health professionals to participate in collaborative processes such as team meetings, which are crucial components of interprofessional care. Health professionals may focus on what they perceive as “must do” care activities based on their funding contracts and thus deprioritize collaborative activities not explicitly reimbursed. As Ontario explores opportunities for health care funding reform, early results from implementation of integrated funding models (IFMs) across the province has yielded important findings that may address the barriers to interprofessional collaboration reported by the OT informants. An integrated funding model is an approach to funding care where a pre-determined "bundled” payment is paid to a group of health care providers and is shared across partnering health care organizations to incentivize health care providers to communicate and collaborate to provide efficient and effective care (Ontario Ministry of Health and Long-Term Care, 2015). Early results from IFMs implemented in Ontario found that bundled care funding models incentivized health care providers to collaborate and engage in shared care planning and taking a team-based approach even when members of the team were from different organizations (Embuldeniya et al., 2018; Shearkhani et al., 2019; Sniderman et al. 2022). The importance of including the physician in the payment bundle has been identified as a key to success in IFMs (Jacobs et al., 2015; Kadu et al., 2021), however within the Ontario funding context, physician payment is currently excluded from the bundle. Despite this limitation in implementing IFMs in Ontario, there is potential for incentivizing interprofessional collaboration, and thus improved patient care, through the expansion of bundled funding models.

Normative influences on interprofessional practice identified in this study include the impact of adopting multi-disciplinary models of care and the persistence of the biomedical model in health care settings. Both models serve to shape how OTs perceive what they "ought to do" in the workplace, with multi-disciplinary models of care shaping and enabling collaborative care behaviours and the biomedical model presenting as a barrier to collaboration by prioritizing the role of the physician in team processes. The legacy of the biomedical model may be difficult to overcome within the health care system, however with increased focus on implementing multi-disciplinary models of care, the normative influence of the biomedical model may slowly be replaced by the new norm of collaboration with improved understanding and respect for each profession's role in the care process. One strategy that health care organizations employ to promote interprofessional collaboration and reduce the effects of professional hierarchy is to create specific interprofessional practice educator roles within the organization (O'Carroll et al., 2018). The mandate of the interprofessional practice educator often includes assessing organization IPC learning needs and designing and facilitating ongoing interprofessional education opportunities. It is still up for debate if this strategy is sufficient to overcome historical power structures within health care (Fox et al., 2020; Gergerich et al., 2019). In fact, Lingard et al. (2012) found in three teaching hospitals perceptions around interprofessional collaboration and the existence of a hierarchy differed between physicians and non-physicians; that is, physicians believed the teams functioned nonhierarchically while non-physicians reported that hierarchical behaviours persisted.

Finally, informants identified how the culture of each profession, and their underlying professional values, present as an important cultural-cognitive influence over how different professions "want" to engage in interprofessional collaboration. OTs self-identified as having strength in interprofessional knowledge and skills due to their education, training, and the underlying values of collaboration within the profession; thus, enabling a professional culture of teamwork and collaboration and positioning OTs as potential leaders in this area. However, it was noted that other professions with more power in the health care system may place less value on collaborative behaviours or perceive collaboration as a threat to their power and have the potential to negatively influence the effectiveness of interprofessional practice. Oandasan and Reeves (2005) and Hall (2005) identified how each profession's socialization, value attributed to different types of professional knowledge, and issues of turf protectionism can influence their approach to interprofessional collaboration. They suggested that interprofessional education has an important role in shaping this socialization process by reducing early negative stereotypes about different professions. Hall (2005) also identified that clinician training processes may focus on outcomes or results over communication, and when focusing on communication it may be with patients and families rather than communication across professions. This type of professional socialization can present barriers to collaborative communication and interprofessional practice (Ginsburg and Tregunno, 2009). Ongoing interprofessional education at all levels of clinician development, from clinician in training to novice clinician to experienced clinician is important to develop shared approaches to communication and collaboration as well as improved understanding of professional roles.

Study Limitations

This study examines the experiences of OTs working in interprofessional teams in Ontario and therefore results may not be generalizable beyond the profession of OT. Professions with more power within the health care system may not identify the same enablers and barriers. Moreover, macro level institutional influences identified in this study would only pertain to the Ontario policy and legislative context. Additionally, although the purposive sampling strategy of this study ensured representation across diverse practice sectors and practice areas, all OT informants recruited identified as female. The likelihood of recruiting a male OT was low, given that approximately 9% of OT registrants identify as male (College of Occupational Therapists of Ontario, 2021), however it is important to note that the experiences of male OTs in interprofessional teams may differ from those identified by the female OT informants due to gender differences and their influence in team settings.

Conclusion

This study identified regulative, normative, and cultural-cognitive macro level institutional influences that shape interprofessional collaboration for OTs working in interprofessional teams in Ontario. These macro level influences are a result of policies and practices developed and enforced at the provincial level, whether it is the provincial policy makers (regulatory legislation, funding policies), provincial expert advisory groups (multi-disciplinary models of care), HP regulators (regulatory practice standards), or systems of HP education. Policy change will need to come from these groups.

Although regulatory legislation at the provincial level is meant to enable and promote interprofessional collaboration, OTs are not able to identify specific ways in which their provincial regulator promotes interprofessional collaboration through regulatory practice documents. Additional provincial regulatory pressure may be required to strengthen the regulators' mandate to promote interprofessional collaboration and there is opportunity for an integrated approach across regulated health professions. This could be achieved through regulatory collaboration in one of two ways: (i) collaboration and coordination between separate HP regulators to share common IPC practice standards across professions, or (ii) exploring multi-profession models of regulation where all professions under the same regulator share the same IPC practice standards.

Provincial funding policies involving siloed and fee for service approaches were identified as barriers to interprofessional collaboration due to the lack of incentives or reimbursement for indirect care activities such as attending team meetings, collaborative care planning, and shared documentation processes. Policy makers should focus on continued adoption of integrated funding models to reinforce the collaborative behaviours required for interprofessional care by permitting flexibility in funding to enable shared care planning and communication. The adoption of IFMs can also help to reinforce multi-disciplinary approaches to care and thus enable a continued shift away from the biomedical model.

Finally, while leadership and organizational culture at the meso level can also have an influence on team culture and collaboration (Morley and Cashell, 2017; Rose et al., 2006; Wei et al., 2020) continued emphasis on interprofessional education is

important to overcome differences in professional cultures and values that can present as barriers to collaborative decision making, understanding of each profession's role, and development of trust and respect within the team.

References

Biernacki, P., & Waldorf, D. (1981). Snowball sampling: Problems and techniques of chain referral sampling. *Sociological methods & research*, *10*(2), 141-163.

Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking: a tool to enhance trustworthiness or merely a nod to validation?. *Qualitative health research*, *26*(13), 1802-1811.

Blaga, L., & Robertson, L. (2008). The nature of occupational therapy practice in acute physical care settings. *New Zealand Journal of Occupational Therapy*, *55*(2), 11.

Boeije, H. (2002). A purposeful approach to the constant comparative method in the analysis of qualitative interviews. *Quality & quantity*, 36(4), 391-409.

Brown, G. T., Rodger, S., Brown, A., & Roever, C. (2007). A profile of Canadian pediatric occupational therapy practice. *Occupational Therapy in Health Care*, *21*(4), 39-69.

Campbell, M., & Gregor, F. (2002). Mapping Social Relations: A Primer in Doing Institutional Ethnography. *Mapping Social Relations: A Primer in Doing Institutional Ethnography*. https://doi.org/Doi 10.1177/1363459304038800

Canadian Association of Occupational Therapists. (2016). *What is Occupational Therapy*. https://caot.ca/site/aboutot/whatisot?nav=sidebar

College of Occupational Therapists of Ontario. (2021). *Fair Registration Practices Report 2021.* Retrieved from https://www.coto.org/docs/default-source/fair-registration-practices-reports/college-of-occupational-therapists-of-ontario-frp-2021.pdf?sfvrsn=ebe4f8be_3

Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory*

into practice, 39(3), 124-130.

D'Amour, D., & Oandasan, I. (2005). Interprofessionality as the field of interprofessional practice and interprofessional education: An emerging concept. *Journal of interprofessional care*, *19*(sup1), 8-20.

D'Amour, D., Ferrada-Videla, M., San Martin Rodriguez, L., & Beaulieu, M. D. (2005). The conceptual basis for interprofessional collaboration: core concepts and theoretical frameworks. *Journal of interprofessional care*, *19*(sup1),116-131.

Devault, M. L. (2006). Introduction: What is Institutional Ethnography? *Social Problems*, *53*(3), 294–298. https://doi.org/10.1525/sp.2006.53.3.294

DeVault, M. L., & McCoy, L. (2012). Investigating ruling relations: Dynamics of interviewing in institutional ethnography. In *The SAGE Handbook of Interview Research: The Complexity of the Craft*. https://doi.org/10.4135/9781452218403.n27

DiazGranados, D., Dow, A. W., Appelbaum, N., Mazmanian, P. E., & Retchin, S. M. (2018). Interprofessional practice in different patient care settings: A qualitative exploration. *Journal of interprofessional care*, *32*(2), 151-159.

Donovan, A. L., Aldrich, J. M., Gross, A. K., Barchas, D. M., Thornton, K. C., Schell-Chaple, H. M., Gropper, G.A., & Lipshutz, A. K. (2018). Interprofessional care and teamwork in the ICU. *Critical care medicine*, *46*(6), 980-990.

Embuldeniya, G., Kirst, M., Walker, K., & Wodchis, W. P. (2018). The generation of integration: the early experience of implementing bundled care in Ontario, Canada. *The Milbank Quarterly*, *96*(4), 782-813.

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling

and purposive sampling. *American journal of theoretical and applied statistics*, *5*(1), 1-4.

Fisher, A. G. (1998). Uniting practice and theory in an occupational framework. *The American Journal of Occupational Therapy*, *52*(7), 509-521.

Fox, S., & Comeau-Vallée, M. (2020). The negotiation of sharing leadership in the context of professional hierarchy: Interactions on interprofessional teams. *Leadership*, *16*(5), 568-591.

Gergerich, E., Boland, D., & Scott, M. A. (2019). Hierarchies in interprofessional training. *Journal of interprofessional care*, *33*(5), 528-535.

Ginsburg, L., & Tregunno, D. (2005). New approaches to interprofessional education and collaborative practice: Lessons from the organizational change literature. *Journal of Interprofessional Care*, *19*(sup1), 177-187.

Gleeson, L.L., O'Brien, G.L., O'Mahoney, D., & Byrne S. (2023). Interprofessional communication in the hospital setting: a systemic review of the qualitative literature. *Journal of Interprofessional Care,* 37(2), 203-213.

Guba, E. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Resources Information Center Annual Review Paper*, *29*, 75-91.

Hall, P. (2005). Interprofessional teamwork: Professional cultures as barriers. *Journal of Interprofessional care*, *19*(sup1), 188-196.

Health Professions Regulators of Ontario. (2023). Retrieved from https://www.regulatedhealthprofessions.on.ca/index.html

Health System Improvements Act, Statutes of Ontario (2007, c. 10). http://www.ontla.on.ca/web/bills/bills_detail.do?locale=en&BillID=519

Jacobs, J., Daniel, I., Baker, G. R., Brown, A., & Wodchis, W. (2015). Bundling care and payment: evidence from early-adopter. Health System Reconfiguration. Retrieved from https://tspace.library.utoronto.ca/bitstream/1807/80122/1/Jacobs%20et%20al_2015_Bundling%20Care%20and%20Payment.pdfextension://efaidnbmnnnibpcajpcglclefindmkaj/https://tspace.library.utoronto.ca/bitstream/1807/80122/1/Jacobs%20et%20al_2015_Bundling%20Care%20and%20Payment.pdf

Jongbloed, L., & Wendland, T. (2002). The impact of reimbursement systems on occupational therapy practice in Canada and the United States of America. *Canadian Journal of Occupational Therapy*, *69*(3), 143-152.

Kadu, M., Sutherland, J. M., Abrahamyan, L., & Wodchis, W. P. (2021). Designing Financial Incentives for Integrated Care: A Case Study of Bundled Care. *Handbook Integrated Care*, 939-954.

Krefting, L. (1991). Rigor in qualitative research: The assessment of trustworthiness. *American journal of occupational therapy*, *45*(3), 214-222.

Lahey, W., (2013). Legislating interprofessional regulatory collaboration in Nova Scotia. *Health Reform Observer, 1(1).*

Lahey, W., & Fierlbeck, K. (2016). Legislating collaborative self-regulation in Canada: A comparative policy analysis. *Journal of interprofessional care*, *30*(2), 211-216.

Law, M., Stanton, S., Polatajko, H., Baptiste, S., Thompson-Franson, T., Kramer, C., & Campanile, L. (1997). Enabling occupation: an occupational therapy perspective. *Ottawa, ON: CAOT Publications*.

Leslie, K., Nelson, S., Deber, R., & Gilmour, J. (2018). Policy Tensions in Regulatory

Reform: Changes to Regulation of Health Professions in Australia, the United Kingdom, and Ontario, Canada. *Journal of Nursing Regulation*, *8*(4), 32-42.

Lingard, L., Vanstone, M., Durrant, M., Fleming-Carroll, B., Lowe, M., Rashotte, J., Sinclair, L., & (2012). Conflicting messages: examining the dynamics of leadership on interprofessional teams. *Academic Medicine*, *87*(12), 1762-1767.

Lukey, A., Johnston, S., Montesanti, S., Donnelly, C., Wankah, P., Breton, M., ... & Oelke, N. D. (2021). Facilitating integration through team-based primary healthcare: a cross-case policy analysis of four Canadian provinces. *International Journal of Integrated Care*, *21*(4).

Miles, M.B., & Huberman, M. (1994). *Qualitative Data Analysis: A Sourcebook of New Methods*. 2. Beverly Hills, CA: Sage Publications.

Mills, J. E., Francis, K., Birks, M., Coyle, M., Henderson, S., & Jones, J. (2010). Registered nurses as members of interprofessional primary health care teams in remote or isolated areas of Queensland: collaboration, communication and partnerships in practice. *Journal of Interprofessional Care*, *24*(5), 587-596.

Morley, L., & Cashell, A. (2017). Collaboration in health care. *Journal of medical imaging and radiation sciences*, *48*(2), 207-216.

Oandasan, I., & Reeves, S. (2005). Key elements of interprofessional education. Part 2: factors, processes and outcomes. *Journal of Interprofessional care*, *19*(sup1), 39-48.

O'Carroll, V., McSwiggan, L., & Campbell, M. (2018). Practice educators' attitudes and

perspectives of interprofessional collaboration and interprofessional practice learning for students: A mixed-methods case study. *Journal of interprofessional Care*.

Ontario Ministry of Health and Long-Term Care. (2015). *Health Care Teams to Implement Innovative Bundled Care Approach*. Retrieved from https://news.ontario.ca/mohltc/en/2015/09/health-care-teams-to-implement-innovative-bundled-care-approach.html.

Patton, M. (1990). Purposeful sampling. *Qualitative evaluation and research methods*, 2, 169- 186.

Rankin, J. (2017). Conducting Analysis in Institutional Ethnography: Analytical Work Prior to Commencing Data Collection. *International Journal of Qualitative Methods*, *16*(1). https://doi.org/10.1177/1609406917734484

Regan, S., Orchard, C., Khalili, H., Brunton, L., & Leslie, K. (2015). Legislating interprofessional collaboration: A policy analysis of health professions regulatory legislation in Ontario, Canada. *Journal of interprofessional care*, *29*(4), 359-364.

Regulated Health Professions Network Act, Statutes of Nova Scotia (2012, c. 48). http://nslegislature.ca/legc/bills/61st_4th/3rd_read/b147.htm

Reeves, S., Nelson, S., & Zwarenstein, M. (2008). The doctor-nurse game in the age of interprofessional care: a view from Canada. *Nursing inquiry*, *15*(1), 1-2.

Reeves. S., Pelone, F., Harrison, R., Goldman, J., & Zwarenstein, M. (2017). Interprofessional collaboration to improve professional practice and healthcare outcomes. *Cochrane Database of Systematic Reviews*. (6). DOI: 10.1002/14651858.CD000072.pub3.

Reeves, S., Xyrichis, A., & Zwarenstein, M. (2018). Teamwork, collaboration, coordination, and networking: Why we need to distinguish between different types of interprofessional practice.

Rose, J. S., Thomas, C. S., Tersigni, A. R., Sexton, J. B., & Pryor, D. (2006). A leadership framework for culture change in health care. *The Joint Commission Journal on Quality and Patient Safety*, *32*(8), 433-442.

Rosen, M. A., DiazGranados, D., Dietz, A. S., Benishek, L. E., Thompson, D., Pronovost, P. J., & Weaver, S. J. (2018). Teamwork in healthcare: Key discoveries enabling safer, high-quality care. *American Psychologist*, *73*(4), 433.

Sandelowski, M. (1995). Sample size in qualitative research. *Research in Nursing & Health*, 18, 179-183.

Sangaleti, C., Schveitzer, M. C., Peduzzi, M., Zoboli, E. L. C. P., & Soares, C. B. (2017). Experiences and shared meaning of teamwork and interprofessional collaboration among health care professionals in primary health care settings: a systematic review. *JBI Evidence Synthesis*, *15*(11), 2723-2788.

Schot, E., Tummers, L., & Noordegraaf, M. (2020). Working on working together. A systematic review on how healthcare professionals contribute to interprofessional collaboration. *Journal of interprofessional care*, *34*(3), 332-342.

Scott, W. R. (2013). *Institutions and organizations: Ideas, interests, and identities*. Sage.

Shearkhani, S., Beltzner, C., Carter, M. B., & Gosse, C. (2019). Integrated comprehensive care-bundled care and funding: transition from hospital to home. *International Journal of Integrated Care (IJIC)*, *19*.

Sinclair, L. B., Lingard, L. A., & Mohabeer, R. N. (2009). What's so great about rehabilitation teams? An ethnographic study of interprofessional collaboration in a rehabilitation unit. *Archives of physical medicine and rehabilitation*, *90*(7), 1196-1201.

Smith, D. E. (2006). Part I: Institutional ethnographic data: Interview, observation, and text. In *Institutional Ethnography as Practice*. http://books.google.ca/books?hl=en&lr=&id=ZQlvAAAAQBAJ&oi=fnd&pg=PP3&dq=institutional+ethnography+as+practice&ots=V0f_vcaU_S&sig=4zbP0d6woB5itCqcOidTo_3VJ1U#v=onepage&q=institutional ethnography as practice&f=false

Smith, D. E. (2007). Institutional ethnography: From a sociology for women to a sociology for people. In *Handbook of feminist research Theory and praxis* (pp. 409–416). https://doi.org/10.1177/107110079902000103

Sniderman, J., Krueger, C., & Wolfstadt, J. (2022). Bundled care in elective total joint replacement: payment models in Sweden, Canada, and the United States: a critical analysis review. *JBJS reviews*, *10*(11), e22.

Sukhera, J., Bertram., K., Hendrikx, S., Chisholm, M.S. Perzhinsky, J., Kennedy, E., Lingard, L., & Goldszmidt, M. (2022). Exploring implicit influences on interprofessional collaboration: a scoping review. *Journal of Interprofessional Care, 36(5), 716-725.*

Townsend, E., & Polatajko, H. (2007). *Enabling occupation II: Advancing an occupational therapy vision of health, well-being and justice through occupation*. Ottawa, ON: CAOT Publications ACE.

Walby, K. (2013). Institutional ethnography and data analysis: Making sense of data

dialogues. *International Journal of Social Research Methodology*. https://doi.org/10.1080/13645579.2012.661207

Wei, H., Corbett, R. W., Ray, J., & Wei, T. L. (2020). A culture of caring: the essence of healthcare interprofessional collaboration. *Journal of interprofessional care*, *34*(3), 324-331.

Wranik, W. D., Haydt, S. M., Katz, A., Levy, A. R., Korchagina, M., Edwards, J. M., & Bower, I. (2017). Funding and remuneration of interdisciplinary primary care teams in Canada: a conceptual framework and application. *BMC health services research*, *17*, 1-12.

Xyrichis, A., & Lowton, K. (2008). What fosters or prevents interprofessional teamworking in primary and community care? A literature review. *International journal of nursing studies*, *45*(1), 140-153.

Appendix A – Recruitment Letter

EMAIL RECRUITMENT

Dear XXXX:

You are being invited to participate in a research study by Lynda van Dreumel, Principal Investigator and PhD Candidate, because you are a registered Occupational Therapist practicing in Ontario; or you have knowledge about regulatory policies governing Occupational Therapists in either Ontario or England.

This study is part of Lynda van Dreumel's PhD thesis, conducted under the supervision of Dr. Glen Randall, Associate Professor (Health Policy & Management) at DeGroote School of Business.

Study Title: Models of Health Professional Self-Regulation and their Influence on Interprofessional Practice: An exploration of the profession of Occupational Therapy.

WHY IS THIS RESEARCH BEING DONE?
The objective of this study is to explore how policies addressing interprofessionalism are experienced by OTs and enacted in their daily work.

WHAT WILL MY RESPONSIBILITIES BE IF I TAKE PART IN THE STUDY?
If you volunteer to participate in this study, we will ask you to take part in one interview of approximately 30 minutes. You can choose to complete the interview by telephone or in-person at a time that is convenient for you.

If you are interested in volunteering for the study, please find attached a letter of information and consent form for more information, and please contact me with any questions.

Thank you,

Lynda van Dreumel

Appendix B – Semi-structured Interview Guide

Preliminary Interview Guide: Interview with Occupational Therapists

Interviewer instructions:

After completion of the informed consent process, begin the interview with the following statement:

Thank you again for agreeing to participate in this interview. I will spend the next 30 minutes asking you questions about Occupational Therapy provincial regulations about interprofessional practice and how those policies may or may not make their way down to influence your daily clinical activities. If at any time you need to stop or take a break, or you wish to end the interview, please let me know.

I will begin the audio tape now:

Rapport building questions:

1. (a) Tell me about your professional experience as an Occupational Therapist.
   (b) Follow up: How long have you been a registered Occupational Therapist in Ontario?
   Probes:
   - What drew you to the profession of Occupational Therapy?
   - In what types of clinical settings have you worked before?
   - How many years have you worked in interprofessional teams in Ontario?
   - Thinking about all of the years you have been working as an OT, how many of those do you think you have been working in interprofessional teams (with 2 or more different healthcare disciplines)?
   - How many different regulated health care professionals work in your current team?

Current professional situation:

2. Describe the nature of the team you work in.
   Probes:
   - What types of roles or professions are part of the team?
   - Is the team membership relatively stable, flexible, or ad-hoc?
   - Do you work in more than one team as part of your role? Are there differences between the teams?

Concept of *interprofessional practice*:

3. (a) What does the term "*interprofessional practice*" mean to you?
   (b) Follow up: What does interprofessional practice look like for the OT? For the patient?
   Probe:
   - What are the characteristics of *interprofessional practice*?

Understanding check: Summarize and ask informant if 'I'm getting this right'.

Sources of Understanding about *interprofessional practice*:

4. (a) Thinking back over your experiences as an OT, where and how did you learn about *interprofessional practice*?
   (b) Follow up: In what ways have you received direction about why and how to practice interprofessionally?
   (c) Follow up: Where did this information come from? What are all the different types of sources of this information? (think about your team, your organization, your profession, your education)
5. (a) What are the formal rules, guidelines, or policies that you are aware of that inform interprofessional practice? These can be any directives or documents that guide interprofessional practice.
   Probes: At the team or department level?
   At the organizational level?
   Beyond the organization at the professional and governmental level (e.g. from the College of Occupational Therapists of Ontario [COTO]?)
   Any other sources that we haven't discussed?
   (b) Follow up: Thinking specifically about the professional and governmental level guidelines on *interprofessional practice*, how do those get incorporated into your daily work? Please explain and provide an example.
   (c) What barriers exist to the incorporation of professional/COTO guidelines on *interprofessional practice* in your daily work?

Understanding check: Summarize and ask informant if 'I'm getting this right'.

Influences on Interprofessional Practice:

6. Are there any tools or practices in place that also inform how you practice interprofessionally. Please elaborate.
   Probe: These can be practices you complete as part of your daily work.

7. (a) What processes or practices might you complete, if any, at the request of COTO that would inform your understanding of interprofessional practice? Please explain.
   (b) Follow up: How does that become incorporated into your daily work? Please explain with an example if possible.
   (c) What barriers exist to the incorporation of this interprofessional knowledge in your daily work?

8. In what ways might professional culture or professional norms influence how you practice interprofessionally? Please explain and provide an example if possible.
   Probe: These can be positive and negative.

9. (a) Now that we have explored different sources of policy and direction on *interprofessional practice*, how do you see COTO policies and guidelines on *interprofessional practice* being expressed in your daily work? Please explain.

(b) Follow up: How do they make their way into your daily clinical activities? What is the mechanism?
In what ways might they be prevented from making their way in your daily clinical activities?

10. Is there anything that we may have missed that you would like to add regarding your understanding of *interprofessional practice* and how COTO policies are expressed in your daily clinical activities?

Understanding check: Summarize and ask informant if 'I'm getting this right'.

Interviewer instructions:

Interview Conclusion

After completion of the interview:

- thank participant for time and contribution.
- review and confirm that if they have requested a summary report (refer again to consent form)

Appendix C: Study Sample Demographics

Informant Demographics

Informant Code	Practice Sector		Practice Area	Funding Source	Type of Role		Years of Experience
	Hospital	Community			Clinical	Management	
OT1		X	Mental Health & Addictions	Public Sector		X	14
OT2		X	Musculoskeletal Injuries	Private Practice	X		16
OT3		X	Return to Work	Private Practice	X		17
OT4	X		Medicine	Public Sector	X	X	14
OT5	X		Musculoskeletal Injuries	Public Sector	X	X	10
OT6	X		Musculoskeletal Injuries	Public Sector	X		12
OT7		X	Pediatrics	Private Practice	X		19
OT8	X		Acquired Brain Injury	Public Sector	X		17
OT9	X		Medicine	Public Sector		X	20
OT10	X		Stroke	Private Practice		X	3
OT11		X	Mental Health & Addictions	Public Sector	X		4
OT12		X	Mental Health & Addictions	Public Sector	X		4
OT13		X	Musculoskeletal Injuries	Public Sector		X	20
OT14		X	Musculoskeletal Injuries	Private Practice		X	25
OT15		X	Mental Health & Addictions	Private Practice	X		13
OT 16		X	Musculoskeletal Injuries	Public Sector	X	X	8
OT17	X	X	Musculoskeletal Injuries	Private Practice	X		8
OT18	X		Medicine	Public Sector		X	19
OT19			Stroke	Public Sector		X	12
OT20		X	Musculoskeletal Injuries	Public Sector	X		12
OT21	X		Musculoskeletal Injuries	Public Sector	X	X	29

Chapter 5

Conclusion

The objective of this dissertation was to explore and describe how health profession (HP) regulatory models influence interprofessional collaboration (IPC) for Occupational Therapists (OTs) and specifically to examine how macro level regulatory policies may impact interprofessional collaboration for OTs in Ontario. The profession of occupational therapy was selected as the focus for this work because OTs are primarily situated in multi-disciplinary teams and have relevant context for the exploration of IPC, and the doctoral candidate is a registered OT and has special interest in occupational therapy professional practice. Despite a growing body of research examining how micro (individual and team) level and meso (organizational) level factors impact IPC for HPs, researchers are only beginning to identify how macro level policies influence IPC (Bourgeault & Grignon, 2013; Lahey & Currie, 2005; Leslie et al., 2018; Penney & Wainwright, 2017; Regan et al., 2015). Moreover, as policy makers and governments embark on designing and implementing reforms to HP regulatory policy to influence health system outcomes, it is important to explore if in fact macro level policies have the potential to impact practice at the point of care (micro level).

To address the main objective of the dissertation, three original research studies were conducted, with each study informing the research question and design of the subsequent study. Study 1 (Chapter 2) explored the characteristics of HP regulatory models and proposed a framework to organize and describe the different HP regulatory model characteristics. One of the identified characteristics was the degree of regulatory collaboration between professions that existed in the regulatory model. This characteristic was further explored in Study 2 (Chapter 3) to compare how degree of

regulatory collaboration might impact how OT regulators communicate IPC expectations in their regulatory policies in two different jurisdictions. And finally, Study 3 (Chapter 4) focused on the OT experiences in one jurisdiction to understand how macro level HP regulatory policies shape IPC at the point of care. The main findings for each of the studies, contributions to the literature, and recommendations for policy and practice are described below.

Study 1

Main findings. The first study (Chapter 2) answered the following research question: "How are health professions regulated and what are the characteristics of models of health profession regulation?". Scoping review methodology (Arskey & O'Malley, 2005; Leval et al., 2010; Colquohoun et al., 2014) was used to identify relevant academic and grey literature. The study identified 32 relevant papers and through content analysis three main characteristics and eight sub-characteristics of HP regulatory models were identified. These were: source of statutory power (omnibus, umbrella, profession-specific legislation), autonomy over regulatory matters (delegation of power from state to authority, delegated components of regulation, stakeholder participation in governance), and regulatory collaboration (multi-professional models, legislated regulatory collaboration). Using these characteristics and sub-characteristics, a series of guiding questions were proposed to support policy makers and governments in classifying current HP regulatory models.

Contributions to the literature and policy implications. This work is the first step in moving toward a conceptual framework of HP regulatory models, and these findings highlight that there continues to be a lack of consensus in the literature on the use of

terminology to describe HP regulatory models. By highlighting the diversity in terminology that is being used in the literature and proposing characteristics and sub-characteristics for describing HP regulatory models, the next step is to engage policy experts and HP regulators to collaboratively agree on a consensus framework using common terminology. For researchers, a using common terminology would aid in the efficient and accurate identification of different regulatory forms which is particularly important when seeking to compare and evaluate different regulatory frameworks – common language allows for identification and comparison based on specific characteristics when evaluating policy outcomes. Additionally, having a common framework with consistent language can help to guide policy makers in the identification of potential opportunities for policy reform and/or highlight regulatory gaps that would merit policy innovation.

Study 2

Main findings. To answer the research question, "How might one characteristic of HP regulatory model, degree of regulator collaboration, influence policy approaches on interprofessional collaboration for Occupational Therapists?"**,** the second study (Chapter 3) used case study methodology (Yin, 2013) to compare macro (regulator) level policy approaches in two different HP regulatory model jurisdictions (Ontario and England) for the profession of Occupational Therapy. Twelve practice documents for OTs in Ontario, and four practice documents for OTs in England were identified for review and six OT regulatory and policy experts were interviewed. The findings showed that differences in the regulative ("must do") institutional structures between a single profession regulatory approach for OTs in Ontario and a multi-profession regulatory approach for OTs in

England result in different degrees of alignment with IPC competencies in regulatory documents. The single profession model most frequently communicated role clarification and client-centred care IPC competencies to OTs in practice documents and rarely addressed the IPC competency of interprofessional conflict resolution. It was also observed that a single profession regulatory model allowed for detailed standards of practice specific to one profession, thus providing an opportunity to deliver clear direction to OTs around IPC expectations. However, the direction around IPC expectations for non-OT professions would be communicated through a separate regulator and expectations may not be communicated consistently across professions. In the multi-profession model, client-centered care and team functioning were the most frequent IPC competencies described, and like the single profession model interprofessional conflict resolution was rarely described. The identified benefit of the multi-profession model was that all professions under the same regulator receive the same direction and messaging of IPC expectations, which could potentially result in shared and consistent approaches to IPC across professions.

Contributions to the literature and policy implications. This study helped to clarify one way in which a multi-profession model of HP regulation with regulator collaboration can influence consistency in IPC expectations for all professions using common IPC standards that are shared across multiple professions. Shared standards of practice are but one consideration when moving to HP regulatory models with multi-profession regulators; however the potential benefits of consistency in IPC expectations across professions and promotion of role clarity for professions that can be achieved through mutli-profession models are still important outcomes to consider. A caveat to

implementing multi-profession regulators identified in this study was that power differences across professions, whether due to size of membership or professional hierarchy and power, may amplify voices of more powerful professions in this model. Overall, IPC has not been a sufficient policy priority within either the single profession or multi-profession framework and this study identified the opportunity for (i) regulators to use IPC frameworks to embed explicit IPC competencies in regulatory documents, and (ii) policy makers to leverage multi-profession models and the development of shared regulatory documents to promote IPC consistently across professions.

Study 3

Main findings. The third study (Chapter 4) used institutional ethnography (Rankin, 2017; Smith, 2006) to address the research question, "How do macro level policies on interprofessional collaboration shape Occupational Therapists' behaviour when working within a jurisdiction with mainly single profession regulators such as Ontario?". Twenty-one OT informants identified important ruling relations (institutions) at the macro level that influenced OTs' experiences with IPC at the micro level (point of care). Regulative ruling relations ("must do") that shaped OTs experiences in IPC included the existence of IPC expectations in regulatory college resources and whether health care funding policies supported collaborative activities within the team. Normative ruling relations ("ought to do") influencing IPC identified were multi-disciplinary models of care and how they enabled interprofessional interactions; and the persistence of the biomedical model in some clinical settings and how normalization of physician hierarchy in the team presented as a barrier to IPC. And finally, a cultural-cognitive ruling relation ("want to do") identified as influencing IPC was

the underlying values of a profession that shape how a professional culture conceptualized IPC, with allied health professions reported as showing greater value alignment with IPC behaviours compared with medical professions.

Contributions to the literature and policy implications: This study identified macro level factors that influence OTs' experiences with IPC at the micro level in their clinical work. These macro level factors are a result of legislation and policies set at the provincial level – they are provincial health system funding policies, provincial policies and approaches for models of care and educating regulated HPs, and policies and documents developed by the provincial HP regulator. The findings of this study suggest that there is an opportunity for policy makers to more explicitly consider how macro level health care policy decisions have the potential to shape how HP practice IPC and deliver patient care when developing provincial policy. Specific recommendations for HP regulators involved (1) including precise articulation of IPC expectations in college resources *within OT* (and each of the regulated professions) including codes of ethics, OT practice standards and competency documents, and (2) developing a dedicated practice standard for IPC. Policy makers should also consider how provincial funding policies that reimburse health professionals as consultants, on a fee-for-service basis, or for only direct client care visits serve as barriers for health professionals to participate in collaborative processes such as team meetings, which are crucial components of interprofessional care and instead move toward integrated funding model approaches to incentivize health care providers to communicate and collaborate to provide efficient and effective care (Ontario Ministry of Health and Long-Term Care, 2015). Finally, provincial policy makers, regulators, and university education programs should continue

to emphasize the socialization of IPC in the development of professional cultures during clinical training programs as well as in the workplace through continued professional development and competency in IPC.

Future Research

As noted in Study 1, future research should be directed to the development of a consensus framework and standard terminology for describing and categorizing HP regulatory models. This will require a collaborative approach amongst international regulatory policy experts and researchers to develop the framework as well as commitment to adopt and utilize the framework and terminology.

With respect to Study 2, further research should be focused on understanding how IPC competencies are reflected in regulatory documents across professions. This dissertation only examined the profession of OT and it would be valuable to understand to what degree IPC competencies appear in the regulatory documents of other professions in Ontario. This would help to give insight into the degree of consistency of IPC expectations across professions when HP regulators do not demonstrate high levels of regulatory collaboration.

And finally, the results of Study 3 should be explored further by comparing IPC outcomes between different HP regulatory models in order to understand if patients and clients experience IPC differently whether they are treated by an OT in a single profession regulatory model or a multi-profession model.

Integration of Findings

Taken together the three studies in this dissertation help to further the understanding of how (i) regulatory structure and (ii) policies set at the provincial level can influence HP experiences at the micro level. By examining the relationship between macro level and micro level in this regulatory system, this dissertation has demonstrated that regulatory structure, regulator guidelines and documents, provincial funding policies, provincial models of care, and professional culture all have the ability to influence how OTs experience IPC while working in their interprofessional teams. Therefore, policy decisions around (i) how regulatory structures are designed (i.e. multi-profession regulators with shared regulatory IPC documents and guidelines), (ii) how providers are remunerated to incentivize collaboration, and (iii) how providers are trained and educated to work within multi-disciplinary models of care are important ways to shape IPC in the health care system.

References

Arskey, H., & O'Malley, L. (2005). Scoping studies: towards a methodological framework. *International journal of social research methodology*, *8*(1), 19-32.

Bourgeault, I. L., & Grignon, M. (2013). A comparison of the regulation of health professional boundaries across OECD countries. *The European Journal of Comparative Economics*, *10*(2), 199.

Colquhoun, H. L., Levac, D., O'Brien, K. K., Straus, S., Tricco, A. C., Perrier, L., Kastner, M., & Moher, D. (2014). Scoping reviews: time for clarity in definition, methods, and reporting. *Journal of clinical epidemiology*, *67*(12), 1291-1294.

Health Professions Regulators of Ontario. (2023). Retrieved from https://www.regulatedhealthprofessions.on.ca/index.html

Health System Improvements Act, Statutes of Ontario (2007, c. 10). http://www.ontla.on.ca/web/bills/bills_detail.do?locale=en&BillID=519

Lahey, W., & Currie, R. (2005). Regulatory and medico-legal barriers to interprofessional practice. *Journal of Interprofessional Care*, *19*(sup1), 197-223.

Leslie, K., Nelson, S., Deber, R., & Gilmour, J. (2018). Policy Tensions in Regulatory Reform: Changes to Regulation of Health Professions in Australia, the United Kingdom, and Ontario, Canada. *Journal of Nursing Regulation*, *8*(4), 32-42.

Levac, D., Colquhoun, H., & O'Brien, K. K. (2010). Scoping studies: advancing the

methodology. *Implementation science*, *5*(1), 69.

Ontario Ministry of Health and Long-Term Care. (2015). *Health Care Teams to Implement Innovative Bundled Care Approach*. Retrieved from https://news.ontario.ca/mohltc/en/2015/09/health-care-teams-to-implement-innovative-bundled-care-approach.html.

Penney, C., & Wainwright, A. (2017). Using Trends to Inform Regulatory Practices. *Healthcare Papers*, *16*(4), 40-43.

Rankin, J. (2017). Conducting analysis in institutional ethnography: Guidance and cautions. *International Journal of Qualitative Methods*, *16*(1), 1609406917734472.

Regan, S., Orchard, C., Khalili, H., Brunton, L., & Leslie, K. (2015). Legislating interprofessional collaboration: A policy analysis of health professions regulatory legislation in Ontario, Canada. *Journal of interprofessional care*, *29*(4), 359-364.

Smith, D. E. (Ed.). (2006). *Institutional ethnography as practice*. Rowman & Littlefield.

Yin, R. K. (2018). *Case study research and applications*. Sage.