ISSN 2641-1148 HIP&F

An International Interprofessional Health Quality Graduate Internship: The Shared Gains of Educational-Research Partnerships

Kayley Perfetto MSc, PT, PhD Health Quality student, Health Quality Programs, School of Nursing, Queen's University

Abigail Albutt PhD, Research Fellow, National Institute for Health Research, Yorkshire and Humber Patient Safety Translational Research Centre

Kim Sears RN, PhD School of Nursing, Queen's University
Jane O'Hara PhD School of Healthcare, University of Leeds
Lenora Duhn RN, PhD School of Nursing, Queen's University

Introduction

The health system is becoming increasingly complex, due in part, to an aging population with chronic conditions, growing specializations for health care professionals, and resource challenges (Dinius et al., 2020). To address these issues, effective interprofessional teamwork is vital (Weller et al., 2014). Interprofessional teamwork is achieved when professionals from differing backgrounds have a strong understanding of the role of each team member, leading to open and continuous communication and mutual respect (Nancarrow et al., 2013). Effective collaborative relationships between team members are important for the provision of high-quality and safe patient care (Cutler et al., 2019). Further, failures in patient safety within health care have been attributed to ineffective teamwork and communication between interprofessional team members (Reeves et al., 2017).

Interprofessional education (IPE) is necessary for preparing health care professionals to become collaborative team members. IPE is when individuals from two or more professional backgrounds learn about, from and with each other, to enable collaboration (World Health Organization [WHO], 2010). The reciprocal learning that occurs when individuals from two or more professions partner together, challenges learners to think in new ways, leading to a recognition of different perspectives (Reeves et al., 2017). Specific to the health sciences, when learners are engaged in understanding the viewpoints and approaches of other professionals, misconceptions can be diminished, leading to an enriched appreciation of diverse beliefs and values, and improved teamwork and collaboration (Guraya & Barr, 2018; WHO, 2010). Moreover, when individuals are comfortable interacting with other professionals, they may be more likely to reflect on difficult circumstances that arise during patient care, such as power imbalances, which may impact quality and safety (Reeves et al., 2017). IPE has been widely endorsed, and the World Health Organization (WHO) developed the Framework for Interprofessional Education and Collaborative Practice (IPE/CP) in recognition of the importance of interprofessional collaboration in meeting the needs of the health system (WHO, 2010). This framework is

^{© 2023} Perfetto, et al. This open access article is distributed under a Creative Commons Attribution License, which allows unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

about strategies to promote and strengthen IPE/CP as a way to develop "collaborative practice-ready" professionals who are ready to meet health care challenges (WHO, 2010). A collaborative practice-ready professional has learned how to work effectively with other team members which can lead to a stronger health system and improved health outcomes (WHO, 2010).

It is important to consider the benefit of IPE for health professionals who work outside of clinical practice. Interprofessional collaboration is valuable in many aspects of the health system, including research (Green & Johnson, 2015). Interprofessional research collaboration occurs when researchers from diverse professional backgrounds work together to achieve the common goal of producing new knowledge (Katz & Martin, 1997). The benefits of a research collaboration include thinking beyond that which is considered traditional (Vangen & Huxham, 2003), and sharing knowledge across professions to manage complex problems (van Rijnsoever & Hessels, 2011). Researchers who work in isolation may never have their thoughts and ideas challenged, possibly limiting the potential, and spread of the work (Green & Johnson, 2015).

In this paper, I present my virtual PhD Health Quality (HQ) international internship, wherein I was connected with academics based in my home country of Canada to those in the United Kingdom (UK). My perspective of it as successful was, I believe, due to interprofessional learning and working, which fostered productive collaborative research, including the planning for future initiatives founded in a shared passion for improving health quality and safety.

My Internship Experience

There is growing recognition of the value of graduate-level internships for emerging scholars to have experiences outside of academia (Chong & Clohisey, 2021). These experiences allow the practical application of learned concepts and theories, and the opportunity to collaborate with experienced professionals. Internships can be defined in different ways, but the overarching premise is a mentored 'real world' experience to promote learning and shared interests (Maertz et al., 2014). The value of an internship can be further enhanced when learners are able to work with individuals from differing professional backgrounds (van Rijnsoever & Hessels, 2011).

Description of Learning

The Queen's University PhDHQ program is hybrid in nature and prepares individuals from a variety of interprofessional backgrounds (such as medicine, nursing, occupational therapy, pharmacy, physiotherapy, law, and engineering) to become independent researchers and improvement specialists in health quality. By the very structure of the program and its attendees, an IPE approach is cultivated and ingrained. The first year of the four-year program is dedicated to coursework, where learners are encouraged to engage in open discussions and share their real-world experiences, insights, and knowledge. The internship follows the completion of coursework and occurs prior to a comprehensive exam, after which students begin their thesis study.

An objective of the Queen's University PhDHQ program is to integrate theoretical and practical opportunities, so graduates are equipped with knowledge, and competencies, regarding quality, and safety in health system transformation. To meet this objective, students complete the 200-hour internship in a health-related organization, wherein students apply what they have learned from their first-year courses (i.e., philosophy of improvement science; advanced qualitative research; advanced quantitative research; organizational behaviour and leadership), to advance research skills and theory about health quality. These experiences give students the chance to grow expertise in the conduct of research, as well as quality improvement initiatives and to develop their thinking about a substantive topic for their thesis.

Discussion

Queen's University PhD Health Quality Internship

As a requirement of the Queen's PhDHQ program, I completed my internship with the Yorkshire Quality and Safety Research Group (YQSR Group)in the UK—a first of its kind. The YQSR Group was established in 2007 to produce evidence to improve quality care for patients of England. This organization has interprofessional scholars and clinicians from the Bradford health community and the Yorkshire and Humber region. Advancing quality and patient safety within the health system is its core mandate.

The COVID-19 pandemic necessitated changing to a virtual internship. To ensure its value was not lost in this

ISSN 2641-1148 HIP&E

change, a learning plan was created outlining my virtual contributions as a member of two research teams. The first was a qualitative study about experiences of health care from the perspectives of people with learning disabilities. For the second, I contributed to a scoping review about the involvement of patients and family members in serious incident investigations in acute care. For both projects, I contributed to the study development, execution, and analysis. I learned a lot during this experience, but it was made most memorable by getting to know individuals from other professions and learning how they viewed and conducted their work to improve patient safety. The YQSR Group team members came from different professional backgrounds than my own, primarily psychology. I am a physiotherapist, currently holding a position as a Patient Safety Specialist at an acute care hospital. The perspectives on patient safety differed from my own and I was encouraged to expand my thinking about safety. This broader approach was evident in the research I contributed to, causing me to reflect on how this could be incorporated into my doctoral work and also in my professional role. Specifically, during discussions with the team members, I recognized how I held a somewhat limited view, considering only the patient in patient safety. I came away from these discussions with a greater appreciation of how patient safety incidents also impact the patient's family, the health care professionals involved and the greater health system. Notably, the research about understanding the role of the family (and patients) in serious incidents has informed my doctoral studies.

A Conversation I Will Not Soon Forget

During my internship, I had a lengthy discussion with Professor Rebecca Lawton, the director of the Yorkshire Quality and Safety Research Group, whose work included studies about the health care professional and patient safety. Professor Lawton asked me to think about the psychological aspect of safety and to consider the effect patient harm has on the health care team and newly graduated professionals. I was encouraged to explore how this experience might influence a professional's future career choices and the overall safety of the health care system. This discussion has stayed with me, and I have spent considerable time contemplating the psychological aspect of safety, and I have taken this learning and new awareness with me in my professional role. I believe being challenged to think broader and to

reflect on different perspectives has made me a better Patient Safety Specialist, and I am more compassionate when dealing with staff members involved in safety incidents. I shared this discussion with my colleagues and encouraged them to think beyond the patient in patient safety and to consider how the family, and health care professionals may be impacted. This experience has broadened my knowledge and informed my professional and doctoral work.

Seeing Effective Interprofessional Teams In Action

After my internship, I was invited to (virtually) attend a YQSR Group team meeting and provide a presentation to describe my experience. Approximately 25 researchers were present, representing a variety of professional backgrounds. During the meeting I observed the team members providing their colleagues with updates on their research projects. The team discussed barriers and challenges, with members collaborating to solve complex research and safety problems that had been encountered. All team members were respectful of the contributions of their colleagues, providing insightful opinions based on previous experiences. Through this discussion, I witnessed the value of interprofessional teams and how having differing perspectives and experiences can elevate thinking.

Although perhaps not a primary objective of my internship, I unexpectedly benefitted from the opportunity to learn from individuals from differing backgrounds from my own. I am in a fortunate position to be able to apply the learnings from my internship in my doctoral work, and also in the health care setting through my professional role as a Patient Safety Specialist. In this role, my colleagues and I regularly witness how ineffective teamwork and communication can impact the quality and safety of patient care, potentially resulting in patient harm. Through my professional and academic experiences, I have a new appreciation for IPE as a potential strategy for improving patient safety, a position that aligns with the Safety Competencies described by the Canadian Patient Safety Institute [now Healthcare Excellence Canada] (Canadian Patient Safety Institute, 2020). In light of this new perspective and drawing on the principles of IPE presented in the Framework for Interprofessional Education and Collaborative Practice, my colleagues and I are making deliberate efforts to provide opportunities for health care professionals to learn with and from one another

in discussions of patient safety. Specially when developing project improvement teams, we carefully consider the composition of the members to include a diverse group of professionals—in addition to patients and family members—from physicians to unit clerks, with the intent they will gain an understanding of the roles each professional has in providing safe health care along with the sharing of knowledge and skills. This increased exposure to the knowledge and contributions of different health care professionals has led to successful initiatives to improve patient falls and pressure injuries within the health care organization.

In sum, I believe my internship experience and the learning that occurred during it, have prepared me to be a "practice-ready" member of an interprofessional research collaborative, consistent with the goal of the Framework for Interprofessional Education and Collaborative Practice. True to the framework, I experienced IPE with researchers from diverse backgrounds. Through regular conversation and pointed discussion, I was challenged to consider a different perspective, the importance of learning and being challenged by others and my practice as a Patient Safety Specialist has grown. I learned how multifaceted (research) teams work, and I was an engaged, contributing member of those teams the benefit of that I know will be long-lasting.

My Internship Outcomes and the Path Ahead

This learning experience exceeded my expectations. Contributing to a qualitative study consolidated my interest in this research methodology, and I gained a deeper understanding of my substantive area. Moreover, I had beneficial practice experience, the results of which included co-authoring two published manuscripts. Further, I have applied my learning and broader perspectives in my professional setting, which I believe has benefitted the organization. Lastly, I made valuable connections with like-minded graduate students completing their work at the YQSR Group and seasoned researchers in my field of interest.

As I look ahead to the work I hope to accomplish as a student and working professional, I feel heartened that this experience, in some ways, is not ending—I carry it with me. My approach to patient safety has broadened to consider more than the patient in patient safety, and the objective of my doctoral research to understand the role family members have in patient safety has been established. I am thrilled my established collaborations will continue to evolve. My internship (site) supervisor's acceptance to serve on my thesis committee is confirmation of that partnership. Further, I have taken the gained knowledge in my professional role, sharing the findings from the two studies to improve care at my hospital.

Overall, I felt the YQSR Group was invested in my learning and I was challenged to expand my thinking. I valued hearing the perspectives of like-minded individuals from differing professions, who pushed me to consider different ways where patient safety and quality might be improved. My conversation with renowned psychologist and patient safety researcher Professor Rebecca Lawton will long be remembered and held in high regard. I continue to work with and learn from the YQSR Group, hoping someday I can thank them in person for this exceptional experience!

Implications for Future Practice

I, as a doctoral student, fully appreciate graduate-level internships provide learners with an unparalleled opportunity to apply concepts introduced in the classroom in a real-world setting. Further, I have witnessed the importance of learning from and sharing with professionals of diverse backgrounds in research/practicebased settings, which leads to broader perspectives, and can solidify theoretical concepts through pragmatic application. Internships that allow for collaboration with professionals from differing backgrounds provide a unique way of learning—and for some, that kind of learning has more relevance and lasting implication. At its core, IPE/CP is about respectfully and genuinely listening, learning, and practicing together with knowledge of each other—as researchers, educators, health professionals, and clinicians, there should be no other way, especially when it comes to health care safety.

Acknowledgement

The support, guidance, and mentorship of L. Duhn [thesis supervisor], A. Albutt, J. O'Hara and K. Sears during the internship experience and the writing of this paper is acknowledged with sincere gratitude and thanks by the first author (KP). Further, a sincere thank you is extended to the Research team at the YQSR Group for providing this internship opportunity.

Disclosure

The authors has no conflicts of interest to declare.

ISSN 2641-1148 HIP&E

Author Contributions

TThe first and last author (KP and LD) conceptualized this paper, with support and contributions from the other authors. All authors participated in writing sections and or editing drafts. All authors reviewed and approved the final manuscript.

References

Canadian Patient Safety Institute. (2020). The safety competencies: Enhancing patient safety across the health professions. https://www.healthcareexcellence.ca/en/resources/safety-competencies-framework/

Chong, Z. S., & Clohisey, S. (2021). How to build a well-rounded CV and get hired after your PhD. *The FEBS Journal*, 288(10), 3072-3081. https://doi.org/10.1111/febs.15635

Cutler, S., Morecroft, C., Carey, P., & Kennedy, T. (2019). Are interprofessional healthcare teams meeting patient expectations? An exploration of the perceptions of patients and informal caregivers. *Journal of Interprofessional Care*, *33*(1), 66-75. https://doi.org/10.1080/13561820.2018.1514373

Dinius, J., Philipp, R., Ernstmann, N., Heier, L., Göritz, A. S., Pfisterer-Heise, S., Hammerschmidt, J., Bergelt, C., Hammer, A., & Körner, M. (2020). Inter-professional teamwork and its association with patient safety in German hospitals. A cross-sectional study. *PLoS One*, *15*(5), 1-15. https://doi.org/10.1371/journal.pone.0233766

Green, B. N., & Johnson, C. D. (2015). Interprofessional collaboration in research, education, and clinical practice: Working together for a better future. *Journal of Chiropractic Education*, 29(1), 1-10. https://doi.org/10.7899/jce-14-36

Guraya, S. Y., & Barr, H. (2018). The effectiveness of interprofessional education in healthcare: A systematic review and meta-analysis. *Kaohsiung Journal of Medical Science*, *34*, 160-165. https://doi.org/10.1016/j.kjms.2017.12.009

Katz, J. S., & Martin, B. R. (1997). What is research collaboration? *Research Policy*, *26*(1), 1-18. https://doi.org/10.1016/50048-7333(96)00917-1

Maertz, C., Stoeberl, P., & Marks, J. (2014). Building successful internships: Lessons from the research for interns, schools, and employers. *Career Development International* 19, 123-142. https://doi.org/10.1108/CDI-03-2013-0025

Nancarrow, S. A., Booth, A., Ariss, S., Smith, T., Enderby, P., & Roots, A. (2013). Ten principles of good interdisciplinary team work. *Human Resources for Health, 11*(1), 1-11. https://doi.org/10.1186/1478-4491-11-19

Reeves, S., Clark, E., Lawton, S., Ream, M., & Ross, F. (2017). Examining the nature of interprofessional interventions designed to promote patient safety: A narrative review. *International Journal for Quality in Health Care, 29*(2), 144-150. https://doi.org/10.1093/intqhc/mzx008

van Rijnsoever, F. J., & Hessels, L. K. (2011). Factors associated with disciplinary and interdisciplinary research collaboration. *Research Policy*, 40(3), 463-472. https://doi.org/10.1016/j_respol.2010.11.001

Vangen, S., & Huxham, C. (2003). Nurturing Collaborative Relations: Building Trust in Interorganizational Collaboration. *The Journal of Applied Behavioral Science*, *39*(1), 5-31. https://doi.org/10.1177/0021886303039001001

Weller, J., Boyd, M., & Cumin, D. (2014). Teams, tribes and patient safety: overcoming barriers to effective teamwork in healthcare. *Postgraduate Medical Journal*, *90*(1061), 149-154. https://doi.org/10.1136/postgradmedj-2012-131168

World Health Organization [WHO]. (2010). Framework for action on interprofessional education and collaborative practice.

W. Press. https://www.who.int/publications/i/item/framework-for-action-on-interprofessional-education-collaborative-practice

Corresponding Author

Kayley Perfetto, MSc, PT

Health Quality Programs 92 Barrie Street Queens' University Kingston, Ontario K7L 3N6

19kdp1@queensu.ca