

Title: The International Network of Health Care Team Challenges

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Authors: Christie Newton^{1&2}

Lesley Bainbridge^{2&3}

Valerie Ball²

Victoria Wood²

Affiliations:

¹ Department of Family Practice, Faculty of Medicine, University of British Columbia,
Vancouver, British Columbia, Canada

² College of Health Disciplines, University of British Columbia, Vancouver, British
Columbia, Canada

³ Faculty of Medicine, University of British Columbia

Corresponding author:

Christie Newton MD, CCFP, FCFP

Assistant Professor, UBC Department of Family Practice

The David Strangway Building

5950 University Blvd., Suite 320

Vancouver, B.C., V6T 1Z3

Tel: (604) 822-5501 Fax : (604) 822-4089

E-mail: christie.newton@familymed.ubc.ca

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ABSTRACT

Academic institutions world-wide have been tasked with embedding interprofessional education (IPE) into the curricula of health and human service professions, yet few descriptions of IP learning activities that have been implemented internationally are reported in the literature. This paper describes the formation of an international IPE research network and a summary of its work to date implementing and evaluating one such IPE opportunity, the Health Care Team Challenge™ (HCTC™).

FULL TEXT

Interprofessional education (IPE) is an increasingly recognized strategy for ensuring that future health care providers are prepared to provide collaborative, team-based care when they enter the workforce (WHO, 2010). The University of British Columbia introduced the Health Care Team Challenge™ (HCTC™) in the 1980's as an innovative, extracurricular IPE initiative, which has since been adapted and implemented by numerous post-secondary institutions worldwide.

The HCTC™ is a popular annual IPE opportunity during which interprofessional teams of students work together on a clinical case. The basic case is provided to them a few weeks prior to the Challenge and then new developments in the case are revealed as the teams present their deliberations in front of a live audience. The teams are

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challenged to demonstrate best practices in both patient care and interprofessional collaboration in real time.

In 2011, the Canadian Institute of Health Research (CIHR) provided the University of British Columbia with a 'Meetings, Planning and Dissemination Grant' to bring together a group of faculty members who had experience with the HCTC™ model from universities in Canada, the United States, Australia, and Japan. The objective of the workshop was to develop an international research program to facilitate an improved understanding of the HCTC™ model, the learning processes involved and its impact on collaborative practice.

Participants formed an International Network of Health Care Team Challenges (INHCTC) that will continue to collaborate to advance this IPE model. This paper summarizes the HCTC™ Workshop; presents an overview of the research agenda; and highlights the strength of an international network of experts committed to a common research program.

THE WORKSHOP

The objectives of the workshop were to:

1. Examine the successes of the HCTC™ model among its related international counterparts;
2. Detail the challenges and opportunities of these models;

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3. Develop and implement common evaluation tools and strategies;
4. Strengthen research opportunities around the model;
5. Explore potential areas of focus for emerging cases which have maximum impact on learners; and
6. Identify potential applications of the model to enhance its dissemination, sustainability, and practice impact.

A SWOT analysis (Jackson, Joshi, & Erhardt, 2003), identifying strengths, weaknesses, opportunities, and threats of the HCTC™ model, allowed the group to identify key common elements of this specific IPE model. To further delineate essential characteristics of the model, a modified Delphi was conducted. The Delphi method *“...is in essence a series of sequential questionnaires or ‘rounds’, interspersed by controlled feedback, that seek to gain the most reliable consensus of opinion of an ‘expert panel’”* (Powell, 2002, p.377). It goes beyond identifying "what is" and attempts to address "what could/should be". The workshop modified the traditional Delphi method by engaging in face-to-face discussions or ‘rounds’ of the HCTC™ characteristics.

A review of the literature, previous evaluations and feedback from the various international Challenges, and the combined experience of the group were used to identify unanswered questions about this educational model.

WORKSHOP OUTCOMES

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The HCTC™ Workshop allowed participants to explore the Challenge as an educational model and to distinguish it from other IPE opportunities. Numerous institutions have adopted the HCTC™ since its introduction by the University of British Columbia and in 2009, the HCTC™ was trademarked to "distinguish...goods or services from those of others in the marketplace" (Canadian Intellectual Property Office). Of note are the team challenges that have been pioneered in Japan, Australia and the United States. The format and delivery of each Challenge varies based on local conditions (see Table 1). In addition to examining the characteristics of the model, participants developed an international research agenda to enable them to collectively explore questions of common interest. The research questions include:

- 1. How do students engage with each other and develop as a team during the HCTC™?*** Most student interaction occurs before the formal HCTC™. Student teams are created, given a case or a situation to work through, and then present the outcomes of their teamwork to the audience. To understand how the model influences student knowledge and attitudes about teamwork, it is important to understand their experience of teamwork during the preparation for and presentation at the HCTC™
- 2. What is the learning process of the HCTC™ and how does this learning influence students' intent and ability to practice collaboratively?*** Evaluations to-date provide some insight into what students learn by participating in the HCTC™ and whether their attitudes about collaborative practice change. However, more research is needed to specifically look at the impact on practice. For example, if there is a positive attitude

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shift toward collaboration in the short term, is this sustained over time and can sustained collaborative practice be attributed to the HCTC™ in some way?

The newly formed INHCTC offers an international laboratory in which to conduct this research. By exploring the strengths, challenges and opportunities of the model across contexts, the group was able to identify essential elements that distinguish the HCTC™ from other models of IPE. Using these key elements, the Network will be able to increase consistency of the model across settings, and facilitate transferability and collaborative research. In addition to these elements, HCTC™ processes including patient cases, timing, presentation format, and evaluation tools can all be standardized or varied to enable the Network to explore how students engage with each other and develop collaborative skills.

CONCLUSION

Workshop participants will continue to collaborate to refine and disseminate this IPE model into health care curricula worldwide. The planned research agenda will support a better understanding of the HCTC™ as an IPE model and its impact on collaborative practice.

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Table 1

INTERNATIONAL HEALTH CARE TEAM CHALLENGES

Workshop participants have each experienced administering a Health Care Team Challenge™ in a unique context. Format and delivery of each challenge varies based on local conditions. Variations across the challenges include: the number of professions involved; the number of teams that participate; the use of online and visual media; and evaluation strategies.

Location	University	Local Adaptations	Link
Vancouver, Canada	The University of British Columbia	IPE McCreary Award presentation. This community team then provides feedback.	http://www.chd.ubc.ca/students/health-care-team-challenge/hctc-2011
Brisbane, Australia	University of Queensland	Case presentation by video with live final event, Alumni organization, external financial sponsors, real patients.	http://www.healthfusionteamchallenge.com http://www.youtube.com/user/HealthFusionTC?feature=mhum
Local and national sights	University of Minnesota, Clarion	Developed independently; student-driven with a quality and safety focus.	http://www.chip.umn.edu/clarion/home.html
Spokane, Washington, USA	Washington State University in collaboration with Eastern Washington University and University of Washington	Uses a “real” patient, focus on chronic complex illness.	http://vimeo.com/35723768
Toronto, Canada	University of Toronto	Integrated as UT learning activities and supported the national HCTC.	
Osaka, Japan	Jikei Institute, Graduate School of Health Care Sciences	Master of Science level. Focus on patient safety and work-based training approaches.	
All Together Better Health Conference	International Interprofessional Collaborative 2012: Kobe Japan	International participants present case in front of an audience.	http://www.k-con.co.jp/atbh6/welcome.html

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Appendix

INTERNATIONAL NETWORK OF HEALTH CARE TEAM CHALLENGES (INHCTC)

Dr. Christie Newton (Project Lead) is an Assistant Professor in the Department of Family Practice. She is the Director of Continuing Professional Development and Community Partnerships for the Department of Family Practice and Director of Interprofessional Professional Development for the College of Health Disciplines. Her scholarly work focuses on interprofessional education for collaborative patient-centred practice and its role in primary care renewal. She has served as Chair of the Health Care Team Challenge™ Planning Committee at UBC since 2005.

Lesley Bainbridge is the Director, Interprofessional Education in the Faculty of Medicine and Associate Principal in the College of Health Disciplines at the University of British Columbia. Her areas of special interest are interprofessional health education (IPE), collaborative practice, leadership, evaluation of IPE, curriculum development related to IPE, interprofessional practice education and other areas related to IPE such as rural health, geriatrics and underserved populations. She has published in peer reviewed journals on IPE and informed shared decision making and has presented on IPE related topics at several national and international conferences. She holds a masters degree in education and an interdisciplinary doctoral degree with a focus on interprofessional health education.

Karyn Baum is Associate Professor of Medicine at the University of Minnesota Medical School. Dr. Baum directs the University of Minnesota Training Resource Center that is part of the National Implementation of TeamSTEPPS initiative and is a TeamSTEPPS Master Trainer and consultant, presenting on team training to health systems nationally and internationally. She is also the Medical Director for Utilization Review for the University of Minnesota Medical Center. Her research interests are in the fields of medical education and interprofessional education; she has published and traveled nationally and internationally to deliver lectures and invited workshops.

Peter Bontje is a Dutch occupational therapist who ended up in Japan. Through his work in adult and elderly rehabilitation he developed a keen interest in collaborative client-centred practice. After his shift into education and research and through his work with Yumi Tamura this interest expanded to interprofessional education (IPE). He is a part-time distance PhD student at Karolinska Institutet (Sweden) and combined this with a part-time research position doing research and development of an IPE curriculum. Having worked and studied in 6 different countries he developed some sensitivity to diversity in (clients and students) perspectives.

Rosalie Boyce is an internationally recognized researcher in the organization and management of health professions. She has been at the forefront of the planning and operational development of the HCTC model from a local event at the University of Queensland, to the current national and international competitions. Rosalie is an

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experienced researcher at the forefront of health workforce reform and collaborative models of organization and practice. She has focused on how to design sustainable interprofessional activities capable of garnering intersectoral (health, education, government and industry) support and external sponsorship.

Monica Moran has organized multiple Health Care Team Challenge events at university level, nationally and as part of major conferences. She has contributed several chapters to IPE texts and maintains the website www.healthcareteamchallenge.com. She is also responsible for the development of the AIPPEN website which is the online interface of the Australasian Interprofessional Practice and Education Network. Dr. Moran has had prolonged engagement with the UBC team in conceptualizing and project managing Health Care Team Challenge activities. This collaboration has resulted in shared conference and plenary presentations, expansion of the HCTC as an international demonstration and several joint papers in the professional literature.

Barbara Richardson is the Director of Interprofessional Education and Research at Washington State University (WSU). Her clinical background is in pediatric intensive care nursing with special interests in health care ethics and research related to the effects of insufficient sleep in youth. With sponsorship from an interprofessional student group, Dr. Richardson organized and facilitated the first HCTC for students attending the University of Washington, WSU, and Eastern Washington University on the Riverpoint campus in Spokane, WA. She currently works with colleagues from these three universities to create and implement interprofessional classroom and practice opportunities for students across 11 health professions programs.

Yumi Tamura is one of Japan's leaders and a pioneer of interprofessional (IP) work and education. Publications from her hand were the first to introduce these terms into Japan's health professions literature in 1998/1999. This was shortly after she got her Master's degree in IP health and welfare studies from London South Bank University. Since April 2011 she is professor at Jikei Institute's graduate school, course of safety management in health care, where she remains committed to researching and developing interprofessional work and education. Other expertise she brings to the table pertains to curriculum development and reflective practice in nursing.

Don Uden is a distinguished university teaching professor in the Department of Pharmaceutical Care and Health Systems at the University of Minnesota. He has developed or participated in numerous interprofessional educational courses or experiences. He has extensive experience in the development of interprofessionally based team cases. In addition, he has been instrumental in the establishment of rural interprofessional practices.

Susan J. Wagner is the Faculty Lead – Curriculum at the Centre for IPE, University of Toronto (UT) where she and her colleagues are leading the development of the requisite IPE curriculum for health science students that began in 2009. This has involved

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creating and integrating the core competencies, learning activities and points for interprofessional education system (PIPEs), including initiating two Health Care Team Challenges (HCTC) as learning activities at the UT and supporting the inaugural 2011 National HCTC held in Toronto. Susan has also been integrally involved in the assessment, evaluation and faculty leadership components of the curriculum. She is an investigator on a variety of research projects including development of an interprofessional objective structured clinical examination (iOSCE) and of IPE cases.

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