



Health Care Team Challenge Instructors Guide

Author

Barbara B. Richardson, PhD, RN, Interprofessional Education, Washington State University, Spokane, WA

Contributors

Nancy Potter, PhD, Speech & Hearing Sciences, Washington State University, Spokane, WA
Meryl Gersh, PhD PT, Department of Physical Therapy, Eastern Washington University, Spokane, WA

International Network of Health Care Team Challenges (INHCTC):

Lesley Bainbridge, BSR(PT), MEd, PhD, Director, Interprofessional Education, Faculty of Medicine, University of British Columbia, Vancouver, BC, Canada

Karyn Baum, MD, MEd, Associate Chair of Clinical Quality, University of Minnesota Department of Medicine, Minneapolis, MN

Peter Bontje, PhD, PT, Tokyo Metropolitan University, Tokyo, Japan

Rosalie Boyce, PhD, Dietetics, Health Administration, Principle Research Fellow, Center for Rural & Remote Area Health, University of Southern Queensland, Toowoomba, Queensland, Australia

Monica Moran, MPhil (OT), DSocSc, Central Queensland University School of Health & Human Services, Rockhampton, Queensland, Australia

Christie Newton, MD, CCFP, FCFP, Family Practice, Director, Professional development, University of British Columbia, Vancouver, BC, Canada

Yumi Tamura, PhD, RN, Graduate School of Health Care Sciences, Jikei Institute, Osaka, Japan

Don Uden, Pharm D., College of Pharmacy, University of Minnesota, Minneapolis, MN

Susan Wagner, BS, Speech Pathology & Audiology, MSc, Communication Disorders, Center for Interprofessional Education, University of Toronto, Toronto, Ontario, Canada

Valerie Ball, Research Coordinator
College of Health Disciplines | University of British Columbia, Vancouver, British Columbia, Canada

Victoria Wood, Project Manager, College of Health Disciplines | University of British Columbia, Vancouver, British Columbia, Canada

INHCTC partially funded by the Canadian Institutes of Health Research #228167
Author partially funded by HRSA grant #1 D1DHP20355-01-00

Table of Contents

Abstract	page 1
Background / Health Care Team Challenge Description	1
Target Audience	3
Learning Objectives	3
Measurable Outcomes	4
Key Characteristics of a Health care Team Challenge	4
Strengths of the HCTC Model	6
Weaknesses of the HCTC Model	7
Effectiveness and Significance	7
Lessons Learned	8
Planning Guide / Practical Implementation Advice	10
• Logistics	
• Case Development	
• Student Recruitment	
• Sample Agendas – orientation and HCTC events	
References	15
Appendices	
A. Tool Kit / Guidelines for Student Participants	16
B. Judging Criteria / Form	21
C. Sample letter of recognition	23
D. Readiness for Interprofessional Learning Survey	24
E. Sample Budget	27

Abstract

The Health Care Team Challenge™ (HCTC) is an innovative, versatile, low cost interprofessional (IP) learning activity that is used to simulate “real-life” team based problem solving. The HCTC model can easily be adapted to meet core competencies for collaborative care in all health professions programs. Key characteristics of a HCTC are described and one example of how the HCTC model has been successfully implemented is highlighted. The HCTC is a clinical case-based competition between two or more interprofessional teams of students representing at least two health and social service disciplines (6-8 is ideal). Student participants receive the initial patient scenario at least one week, preferably 2 to 3 weeks, in advance of the live event. Teams are instructed to work collaboratively to formulate a patient-centered plan of care. On the day of the event, the teams present their plan in front of a live audience of faculty, peers and community members. Then, teams are presented with additional information relevant to the case, challenging each team to adjust its management plan to incorporate the new information. Additionally, teams are asked to respond to “process questions” such as, “How did your team resolve conflicts?” and “What do you view as the strengths of your team?” Teams alternate in the presentation of the care plans and responses to team process questions. At the conclusion of the event, teams are evaluated by an IP panel of judges that may include the patient or family member, faculty, and / or a practicing community-based interprofessional care team. An “audience choice award” may also be presented. Teams are judged on both the quality of the management plan *and* the level of collaboration as illustrated by responses to the team process questions. All team participants, judges, and event sponsors receive recognition for their involvement. Winning team members may also receive prizes or scholarship funding.

Background / Health Care Team Challenge Description

The goal of interprofessional (IP) education is to prepare health professional students with the knowledge, skills, values and attitudes necessary for collaborative interprofessional practice. One low tech, high impact IP simulation successfully used to practice IP core competencies is the Health Care Team Challenge (HCTC). Initially developed at the University of British Columbia, and more recently implemented in the US, Australia, and Japan, the HCTC is an innovative team-based educational model that promotes greater understanding of IP values, roles, teamwork, and communication. IP teams of students participating in the annual HCTC event hosted by Washington State University (WSU), Eastern Washington University (EWU), and the University of Washington (UW), are challenged to create a collaborative patient-centered plan of care for a real patient previously diagnosed with a chronic complex condition, such as Parkinson’s disease or amyotrophic lateral sclerosis (ALS). The HCTC is an extracurricular event at WSU/EWU/UW, but may also be offered as an elective course, incorporated as an IPE learning activity within existing curricula, or held as a competition in clinical practice settings. Each of the three teams includes a student from nursing, pharmacy, medicine, speech pathology, physical therapy, occupational therapy, dentistry, dental hygiene, nutrition and exercise physiology, and the physician assistant program.

Two weeks before the competition students attend an orientation session where they observe a nurse practitioner complete a history, review of systems, and abbreviated physical exam with the patient. Students may ask the patient additional questions as desired. Teams are given a tool-

kit that includes guidelines for the competition, potential resources, and tips for working in small groups (Appendix A). Teams then have two weeks to collaborate on developing a prioritized comprehensive patient/family centered plan of care. Students are encouraged to work together outside of regularly scheduled classes, connecting with one another face-to-face, online, and by phone.

The HCTC culminates in a lively competition held before an audience of fellow students, faculty, and community practitioners. At the event, each team is given five minutes to present its individualized plan of care. Then, each team draws a different “plot twist,” information that adds to the complexity of the scenario. Teams have another five minutes to update their plan in real-time, followed by three minutes to present changes that address the newly identified patient concerns. Finally, each team responds to four “process” questions such as, “How did your team resolve conflicts?” and “What do you view as the strengths of your team?” The competition offers “real-life” practice in team-based problem solving. The teamwork and communication skills developed in the pre-competition phase are fundamental to success at the event.

An IP panel of judges, including the patient, evaluates each team on the quality of their presentation and ability to demonstrate effective communication and teamwork (Appendix B). While judges deliberate, the audience engages team members with questions about their collaborative experience. Before announcing the winners, judges provide verbal feedback, including suggestions for improvement. Written feedback, including a summary of judge’s comments, may also be provided following the event. Student participants are asked to voluntarily complete a program evaluation, providing suggestions to HCTC organizers in order to improve the program in successive years. Each member of the winning team receives some form of formal recognition (certificate of participation or letter of recognition, for sample see Appendix C), and if resources permit, a reception may be held to honor all participants, faculty, judges and sponsors immediately following the event.

The HCTC is easily adaptable for a variety of health professions programs and local resources. At WSU/EWU/UW students from 10 health professional programs collaborate on patient care for a person with a chronic complex illness that has relevance for all participants. However, students from as few as two programs may collaborate in a HCTC, as long as the patient scenario is relevant to all participants. Cases may vary in complexity, be placed in various contextual settings, and include elements of safety and quality improvement. Case based themes may include real or simulated acute or chronic care, emergency care, care of vulnerable or underserved populations, or challenges associated with providing care in rural communities. Additionally, emphasis may be placed on variables such as cultural components of health, public health concerns, ethical dilemmas or end of life issues. The competition format stimulates student motivation and engagement.

Feedback indicates that the HCTC offers students the opportunity to engage in “real-life” patient-centered collaborative practice. As a result, students learn with, from, and about one another, while also practicing skills and acquiring knowledge that will enable them to be truly collaborative and “workforce ready” health care professionals.

In 2011, twelve representatives from six international universities, each that host an annual HCTC event, convened to develop a collaborative research program. The short term goal of the International Network of Health Care Team Challenges (INHCTC) was to refine the HCTC model through a process of reviewing applicable learning theories and IP literature,

identifying key characteristics of a HCTC using a modified Delphi process, and examining the strengths, weaknesses, opportunities, and threats (SWOT analysis) associated with including a HCTC in the IPE curricula of health professions programs. The long term goal of the INHCTC is to design and implement a multi-site research program that will measure whether students who participate in a HCTC are more likely to engage in collaborative practice, thus improving health care delivery and improved patient outcomes. Potential sources of funding are currently being sought to support this proposed research.

A 10 minute video depicting key elements of a HCTC event held at WSU/EWU/UW in 2012 may be accessed at <http://vimeo.com/48382380> or downloaded as an attachment to this resource guide (.w4v format).

Target Audience

The Health Care Team Challenge model is designed for students at a pre-licensure level and may include participants from any health profession. However, the model may easily be implemented with competing teams in a clinical setting. For the HCTC to be most effective, the case should be structured to contain relevant information for every participating profession. Cases may vary in complexity, be placed in various contextual settings, and include elements of safety and quality improvement. Case based themes may include management of acute or chronic conditions, care of vulnerable or underserved populations, or challenges associated with providing care in rural communities. Additionally, emphasis may be placed on variables such as cultural components of health, public health concerns, emergency preparation, ethical dilemmas, or end of life issues. The HCTC events at WSU/EWU/UW have involved students from medicine, nursing, pharmacy, speech and hearing sciences, physical therapy, occupational therapy, dentistry, dental hygiene, nutrition and exercise physiology, and physician assistant programs, collaborating on care of a patient with a chronic complex illness.

Learning Objectives

HCTC participants will demonstrate the ability to:

1. Work collaboratively with students from other health professions to maintain a climate of mutual respect and shared values.
2. Place the interests of the patient / family at the center of their plan of care.
3. Apply the knowledge of one's own professional role and those of other team members to appropriately assess and address the health care needs of the patient / family.
4. Communicate effectively with the patient / family and other members of the health care team.
5. Listen actively and encourage ideas and opinions of other team members.
6. Engage team members in shared patient-centered problem solving.
7. Integrate the knowledge and experience of all team members to inform decisions, while respecting the patient's values, priorities, and preferences for care.
8. Constructively manage disagreements about values, roles, goals, and actions that may arise among team members.
9. Practice leadership skills that support effective team work.

Measurable outcomes:

1. Collaborative care plans presented at the HCTC event
2. Team work as evidenced by (1) group presentations and (2) responses to four group process questions asked of each team during the competition. Additionally, judges observe each team “huddling” to plan responses to the additional patient concerns shared in real-time during the event.
3. Individual student responses to evaluation questions and /or written responses to reflection prompts following the experience.

Key Characteristics of a Health Care Team Challenge

Using a modified Delphi technique, INHCTC participants identified and recommend inclusion of the following key features and operational considerations for every HCTC .

Key Characteristics	Operational Considerations
Integrated into curricula	When possible, the HCTC event should be part of a larger interprofessional curriculum that engages students as part of their overall program.
Involves at least 2 teams	Having more than one team in the HCTC supports the principle of a challenge, which is supported by social learning theory. The overall number of teams involved will be influenced by available resources. There is no maximum number of teams that can be involved.
Minimum of 2 professions on each team	Based on the definition of interprofessional education, IPE involves two or more professions. Group theory suggests 6-8 people per team is ideal for small group learning (Johnson & Johnson, 1991). Team composition should be authentic, based on how a team would be composed in a “real” practice setting.
Students choose to participate as a team member	While students may be invited to participate as a team member, they should not be required to do so.
Transparent recruitment process of team members	As the event becomes more popular, more students than can be accommodated may volunteer to participate as a team member. Organizers should have a transparent process for deciding which students will be able to participate on a team.
Audience participation	The HCTCTM should take place in front of an audience. Students may be required to attend as an audience member as part of a class activity or as an elective. Observing the HCTCTM is considered to be exposure to an interprofessional learning activity.
Educational/learning support	Teams should have access to support for both content and process. This may be from: faculty mentors, practitioners, process resources, content resources, consumers (patient, community organizations, health care organization), and online resources.

Recognition for faculty	Ongoing support from dedicated faculty is necessary for sustainability of the model; therefore, it is important to recognize the contributions faculty make. This can take the form of faculty performance and workload recognition; a certificate/letter; or verbal/public acknowledgement.
Recognition for students	Ways in which students can be recognized for their participation include a certificate/letter, scholarships, academic credit, prizes, or meeting a required component of their program (i.e. IPE curriculum).
Case with assigned task(s)	The HCTC is a case-based learning activity. Cases should have an appropriate level of complexity based on theories of team development, the level of the learners and the learning objectives. The content of the case should not be so complex that it distracts from the interprofessional process. The case should be authentic, grounded in reality. It is also important that the case be distributed to participants prior to the HCTC event. Participants should be asked to complete a task associated with the case (e.g. develop an interprofessional care or management plan).
Interprofessional team development over time	Providing the case prior to the HCTC event enables students to develop as a team. This can be done face-to-face, virtually, synchronously or asynchronously.
Real-time team response to new information	During the HCTC event, teams should be presented with new information they will process as a team. This could involve engaging in team work or answering questions from the audience and/or judges; being presented with case plot twist/extensions; or responding to provocateurs.
Tangible product/deliverable that can be assessed	HCTC teams should be required to create a product such as an oral plan of care; a PowerPoint presentation; a written report; a video; or a role play.
Assessment of interprofessional teams	Teams can be assessed on their process and/or the content (the deliverable). Evaluation can come from a panel of judges, the audience, and/or peer/self-assessment. Judges may include faculty, consumers, community members, practitioners, or students.
Opportunity for feedback to teams	Verbal, written or online feedback can be provided to teams by the audience, judges, peers, and/or content and team process experts.
Program evaluation	In order to continuously improve the delivery of the HCTC it is important to evaluate the model. Formal evaluation may include online/written surveys and/or focus groups. Informal evaluation may include debriefs and/or student feedback. Faculty may also choose to evaluate the HCTC as part of a program-wide evaluation

Strengths of the HCTC Model

A major strength of the model is the sound theoretical framework. From an educational theory perspective, the HCTC directly aligns with the World Health Organization's (2010) principles of effective interprofessional education as the model is practice/problem-based and patient focused. As there is no universally accepted IPE theoretical framework, the HCTC is supported by elements of two established educational theories; social learning theory informs the structure of the HCTC model, and experiential learning theory for group process (Barr & Ross, 2006, Boduras, 2006, WHO, 2010). Additional strengths lie in the HCTC model's versatility. Flexibility is achieved through potential involvement from multiple health professions, adjustable levels of clinical and /or IPE learning, and 'extracurricular' scheduling. Faculty can easily develop the case to involve students from multiple health and human service programs. For example, teams may be challenged to manage priorities for acute or chronic care, to handle role overlap in transitioning the patient from a hospital to assisted living, or create a plan for a potential natural disaster.

The focus of clinical and /or IPE learning can also be manipulated in a similar manner to match the educational level of participants. At UBC, the HCTC is designed to expose students to the concept of collaborative care. The event is held early in the academic year and serves to introduce students to topics such as culture, social determinants of health, and roles of healthcare colleagues. The goal is to stimulate student's interest in learning more about both clinical content and collaborative care. The WSU/EWU/UW HCTC is held near the end of the academic year and serves to showcase IP collaboration skills and knowledge acquired in both classroom and clinical settings. The University of Minnesota's Clarion competition focuses on a sentinel event in which teams complete a root cause analysis and propose potential systems based solutions to the identified problem. Some institutions have developed the HCTC as an immersion model for IPE with pre-readings, reflective questions, and on-line components; much like an interprofessional problem-based course integrated into the curricula of different disciplines. Another approach has been to develop content details for a particular clinical focus. If the goal is to increase understanding of collaborative care of a particular disease such as diabetes, HIV or breast cancer, or care of a patient with chronic pain or at the end of life, teams may be assigned to work with an expert consultant in the specific topic. Clinical specialists may serve as a mentor and resource to teams both before and during the HCTC; and also provide a brief summary of their role for the audience. The level of cases may be structured to provide educational exposure, immersion or competency.

One of the initial keys to success for the HCTC is the extracurricular format that allows for flexibility in scheduling. As such, it bypasses many of the logistical barriers faced by most IPE programs. The extracurricular format avoids the slow and costly formal process of implementing curricular change, as well as allowing IPE to gain momentum. With the Accreditation for Interprofessional Health Education (AIPHE) project well established in Canada, and the Interprofessional Education Collaborative (IPEC, 2011) core competency recommendations in the US, most health disciplines are now required to demonstrate evidence of IPE for accreditation. The HCTC can potentially provide a simple and successful IPE model that meets accreditation requirements.

Currently, the majority of HCTC events are held “in person.” However, the model may be expanded to include a greater number of teams and include teams from different regions with the use of digital media. At the University of Queensland’s Health Fusion Team Challenge, teams receive the initial case scenario via the web, and then create and submit a short (4-5 minute) video of their care management plan for evaluation by a panel of judges. The top 6 teams then meet (in person) for the second phase of the competition. In this way, student teams in remote locations may compete with colleagues in urban academic settings. Using digital media allows teams from across regions, states, or countries to compete against one another.

Weaknesses of the HCTC Model

Holding a HCTC requires resources, both human and financial. At least a small group of faculty must be committed to ensure a successful event. Volunteering to organize a HCTC takes time and may not be recognized as a scholarly pursuit in some academic settings. The HCTC usually involves only a limited number of students from each health profession, with other students participating as members of the audience. Students that participate on a team have an opportunity to practice IP core competencies, but those sitting in the audience are not as engaged in IP learning. While student evaluations of their involvement in a HCTC event have been overwhelmingly positive, there is a lack of outcome data suggesting that participation eventually leads to better collaborative practitioners.

Effectiveness and Significance

From the perspective of faculty and students, the HCTC successfully provides an interactive learning opportunity to develop the knowledge, skills, and attitudes outlined in the Interprofessional Education Collaborative (IPEC) core competencies. At the conclusion of the event, students completed an online evaluation for purposes of improving future HCTC events. 100% of students (n=54) stated that participating in the HCTC (at WSU/EWU/UW) was worth their time. Evaluations included the following comments:

“I was able to do as a student what I hope to do as a working professional. My team bonded and worked together very well. It gave me team experience with health care disciplines I have never even spoken to as a student. I have wanted this kind of experience since entering my program. Experiences rewire the brain, and this was a wonderfully positive experience that no book learning or same-discipline team projects can duplicate. I am really glad I got to do this!!”

“I became much more aware over these two weeks how much there is to know in health-care, and that I really can't know it all myself. Neither can anyone else, and it is in the patient's best interest to have multiple specialties putting their ideas together rather than working independently.”

“It was one of the best experiences of my educational career because it showed me where I fit in to the big picture of collaborative health care. It also taught me a lot about the other fields that I will have contact with once I graduate and begin working.”

“Participating in the HCTC gave me a huge appreciation for where my knowledge stops and

other health care professions start. Knowing that will greatly help me to utilize them appropriately and seek out their expertise in the future.”

Participants were encouraged to complete the Readiness for Interprofessional Learning Survey (RIPLS) pre- and post-participation in the HCTC (Appendix D). The 19 item questionnaire measures attitudes about teamwork, collaboration, professional identity and roles and responsibilities. Of the students (n=12) that completed the RIPLS both before and after the HCTC, significant differences in the paired t-test scores were detected for two questions. Following the HCTC, participants were more likely to agree ($M = -.417, SD = .515$) that shared learning with other health care students would help them communicate better with patients and other professionals ($p = .017$). Students were less likely to agree ($M = .583, SD = .900$) that the function of nurses and therapists is mainly to provide support for doctors ($p = .046$). All students agreed (22%) or strongly agreed (78%) that team-working skills are essential for all health care students to learn and that patients would ultimately benefit if health care students worked together to solve patient problems. All students also agreed (44%) or strongly agreed (56%) that learning with other students would help them become a more effective member of a health care team and shared learning with other health care students would help them to communicate better with patients and other professionals.

In addition to asking participants to complete the RIPLS, we encourage students to complete an on-line evaluation for purposes of improving future HCTC events. The following are sample questions that may be used to solicit feedback:

What suggestions do you have for making the HCTC a better event next year?

Was participating in the HCTC worth your time? If yes, why? If no, why not?

If participation in the HCTC is required, faculty may wish to ask students to write a reflection on how the experience has changed their perception about providing collaborative patient centered care as a health care *team*.

Lessons learned

Use a real patient if possible. The most significant difference between the HCTC held at WSU and other places is the involvement of a real patient, rather than a paper-based scenario. We have found that interacting with a genuine person greatly increases motivation and buy-in from students. Patients are recruited through clinics staffed by faculty. Patients have enthusiastically volunteered to participate and at the conclusion of the event have expressed gratitude for the sincere interest and care provided by each IP team. Having the patient serve as a judge enforces the concept of patient-centered care. One of the most meaningful interactions came at the conclusion of a HCTC when the patient shared with students that while they were still novices, he would much prefer any one of their collaborative care plans than the current approach to his care, which includes multiple specialists who do *not* communicate well with one another, the patient, or his family / caregivers.

1. If using a real patient, take care to observe HIPPA regulations. Do not distribute patient's confidential information via the internet.
2. Have one point of contact. It is important that all questions and concerns be answered in a timely and consistent manner. Identifying one "point person" decreases the potential for confusion.
3. Make the recruitment process transparent. Participating in the HCTC has become very popular on our campus. Determine a clear process to recruit students, make sure it is "fair", advertised well in advance of the sign-up date, and keep a list of alternates in case a student withdraws.
4. Give recognition. Honor the patient who volunteered his / her time. Acknowledge faculty and community members that participate in planning or serving as a judge. Provide students with a certificate of participation and/or letter to include in their portfolio. Thank sponsors (if used) and recognize their contributions to the event.
5. A HCTC creates IPE champions. A HCTC event clearly demonstrates how IPE can prepare students for collaborative practice. Faculty who previously were *not* enthusiastic about IP approaches to learning, became convinced of the importance of IPE as a direct result of their students' participation on a HCTC team. Health care professionals from the community who attended the event commented that student presentations helped them better understand how the concept of collaborative patient centered care could be actualized in their practices.
6. Celebrate success and have fun. Participating in the HCTC takes 8-10 hours of each student's time outside of regularly scheduled classes. To increase motivation, all participants are given a HCTC T-shirt and water bottle, and extras are randomly given to people in the audience. Students raise additional funds (~\$2000) from local professional organizations to purchase Kindles for the winning team and food for a reception following the event. Many student teams continue to be a resource for one another and meet (primarily for social purposes) long after the event takes place.

Planning Guide / Practical Implementation Advice

The purpose of this guide is to help the Health Care Team Challenge planning committee get started by assigning responsibilities and implementing tasks in a timely manner. Your committee may wish to assign several people to each of the 3 general categories of tasks: (1) general logistics, (2) case development or recruiting a “real” patient and provider, and (3) recruiting student participants.

One person, either faculty or staff, should assume the role of HCTC event coordinator. It is helpful to have one person that oversees all planning and can be the “point person” for any questions. It is particularly important that all participants have just one person to whom all questions are directed. Consistent answers to frequently asked questions are one key to a successful event!

I. General Logistics

6 months prior to HCTC

- Establish an IP organizing committee, name an event coordinator or point person (may be faculty or staff)
- Set a date for the event
- Secure locations
 - A large classroom with tables works well for the orientation
 - A large auditorium works well for the HCTC event
- Secure a room for a reception if you choose to include this as part of your event
- Begin to brainstorm ways to publicize the event
- Draft a budget (Sample, Appendix E). Potential items to consider include cost of venue, t-shirts for students participants and judges, food, and beverages for reception, snacks for student orientation session, prizes for winning team members, etc. The HCTC can be done on a shoestring budget or be quite an expensive event, depending on the approach desired by the planning committee.
- Create a list and contact potential funders (sponsors) if you decide to provide prizes to the winning team members and /or wish to have a reception following the event. Organizations that may contribute funds to such an event include associated student governments, local health professional groups such as a medical society or nursing association, hospitals or clinics, or pharmaceutical and medical supply companies.
- Identify volunteers to organize the reception if you choose to include a social aspect of the HCTC. In addition to identifying a location, this group will take responsibility for ordering food and beverages.
- Recruit a master of ceremonies (MC) for the event

1 month prior to HCTC

- Publicize event – include IP students, faculty, administration, local providers, funders / sponsors
- Order prizes, t-shirts, water bottles, etc...
- Recruit volunteers to assist at the event
- Confirm location, ensure availability of microphones and other technology as needed (screens, computers, etc...)

- Work with videographers if you plan to film the event

Day of the HCTC event

- Organize volunteers
 - Student and judges registration table – name tags
 - Time keeper for competition (a smart phone works well as a stop watch)
 - Assist judges as needed with tallying scores (smart phone calculator)
 - T-shirt distribution (optional)
 - Set-up and clean-up crews for reception
- Make sure portable microphones are available and working
- Confirm use of other technology (computer, screen, etc...) if needed
- Room set up - tables for each team and tables for judges
- Confirm any accommodations that are needed for patient participant (parking, special chair, transportation, etc...)

II. Case Development

3 months prior to HCTC

- IP teams of faculty develops a case study relevant to all professions and educational levels of students that will be participating
- Or, recruit a real patient if you plan to use this approach
- Or, secure a standardized patient (SP) if you plan to use a SP
- Recruit a health care provider (physician, resident, nurse practitioner) to conduct a history and review of systems with patient while teams observe, IF you decide to use a real or standardized patient. Information to be covered includes:
 - Patient's first name, gender, age, ethnicity
 - Likely setting (clinic, ER, hospital room, etc.)
 - History of present complaint
 - Past medical history
 - Family medical history
 - Social history
 - Brief physical exam / patient presentation
 - Diagnosis
 - Current management plan
- Recruit expert clinicians or faculty as case CONTENT resources (if desired)
- Recruit faculty mentors for each team to assist with GROUP PROCESS (if desired)

2 months prior to HCTC

- If using a real patient, ask patient to provide a written health history that may be photocopied and distributed to student participants. Note: the health history provided by the patient is NOT made available to students on-line for purposes of maintaining privacy.

3 weeks prior to HCTC

- Ensure room where orientation session will be held is adequately equipped if patient will need any special measures (oxygen, wheel chair accessible)

- Communicate with patient about specifics related to orientation session and HCTC event including parking or transportation needs, room location, how event will be organized and what the patient's role will be
- Provide written copies of case / health history to lead event organizer

At orientation session

- Ensure comfort of patient and health care practitioner
- Facilitate student question / answer session following patient interview
- Serve as a time keeper if needed (to honor time of patient, practitioner, and student participants)

III. Student Recruitment

6 months prior to HCTC

- Determine if IRB approval is needed (depending on educational research component of HCTC)
- Complete IRB application if required

3 months prior to HCTC

- Communicate expectations of student participants with lead faculty (IPE champions) in each health professional program
- Develop plan to recruit student participants. Approaches may vary by program. Successful recruitment may include:
 - Email invitations to all potential participants asking for volunteers
 - Publicize event in student newspapers / newsletters
 - Engaging faculty to recruit participants
 - Require participation as a course assignment
 - Peer to peer recruitment through IP student organizations
 - Use a lottery or brief application process if too many students express interest

1 month prior to HCTC

- Implement student recruitment plan
- Have all student participants send contact information including name, program, phone number, and email to event organizer

3 weeks prior to HCTC (1 week prior to orientation)

- Assign students to teams (one student from each profession per team)
- Create master list of team members including contact information, distribute list to faculty and all participants. Master list will also be used for student check in at the orientation session and HCTC event.
- Clearly communicate expectations to student participants
 - Include important dates / times / locations for orientation session and HCTC event
 - Professional expectations (including strict patient confidentiality)
 - Obtain signed media release forms
 - If IRB approval was required, obtain signed consent forms from participants
- Assist with logistics of planning orientation session as needed

- Create and distribute student guideline packets (see appendix A)
- Provide snacks for teams at orientation if desired (appreciated by all)

Sample agendas for 2 hour orientation session and HCTC event

Orientation: Monday, February 13th, 5-7pm, NURSING Building Room 105

HCTC: Thursday, March 1st, 5-7pm, South Campus Facility Auditorium

Orientation Agenda

- Introductions
- What is the Health Care Team Challenge?
- Meet team members / Icebreaker
 - Introduce yourself to your health care teammates (include name, profession, year in your program, and one strength you will bring to the team)
 - Icebreaker – in the next 5 minutes find 1 thing you have in common with 3 of your HCTC teammates (doesn't have to be the same thing in common with all 3 ... just 1 common thing you share with each of 3 different people). Once everyone in your group has found something in common with 3 people, share with the larger group one of the things you have in common with a teammate.
- Introduction of client & nurse practitioner
 - Health history, review of systems, targeted physical assessment
- Question / Answer – opportunity for teams to ask the patient additional questions or clarify concerns regarding the patient's health and social history
- The challenge? Prepare a collaborative patient centered plan of care that you will present to a panel of judges at the HCTC event. **Presentation limited to 5 minutes.**
- Evaluation criteria
- Sign media consent forms
- Complete RIPLS (Readiness for Interprofessional Learning Survey) - optional
- Resources:
 - Faculty
 - Community partners
 - Peers
 - View video of 2012 HCTC <http://vimeo.com/48382380>
- Questions?

Point of contact for any questions:

Please contact – XXXXX XXXXXX at XXXXX@ XXX.edu

HCTC Program Coordinator

Office of Interprofessional Education

Health Care Team Challenge Agenda

ARRIVE no later than 4:45pm – register, pick up HCTC t-shirts and name tags

- 5:00 Welcome, opening remarks, thanks to sponsors, introduction of team members and judges, planning committee, and volunteers
- 5:10 Team presentations (5 minutes for each team- 30 second warning will be given)
- 5:30 Teams will be given an extension scenario and 5 minutes to make changes to plan of care -- while judges are working, president of student IP organization will give brief overview of organization's purpose, projects, and offer thanks to student volunteers
- 5:35 Team presentations (3 minutes for each team- 30 second warning will be given)
- 5:50 Teams will be asked process questions (4 questions, each team will have up to 1 minute to answer each question)
- 6:05 Judges convene to determine winning team - while judges are working, audience members may ask team participants questions about their experience
- 6:20 Judges provide feedback to teams
Announcement of winning team, distribution of prizes, thank sponsors
- 6:30 Reception
- 7:00 Adjourn

References

Barr, H, Ross, F. Mainstreaming interprofessional education in the United Kingdom: A position paper. *Journal of Interprofessional Care*. 2006; 20(2): 96–104.

Borduras, F, Frank, B, Hall, P, et al. *Facilitating the integration of interprofessional education into quality health care: Strategic roles of academic institutions*. Ottawa, ON: Health Canada; 2006.

Johnson, D, Johnson, F. *Joining together: Group Theory and Group Skills*. 4th ed. Englewood Cliffs, NJ: Prentice-Hall, Inc; 1991.

Appendices:

Appendix A -Tool-Kit /Guidelines for Student Participants

Appendix B - Judging Criteria

Appendix C – Sample letter of recognition

Appendix D – Readiness for Interprofessional Learning Survey (RIPLS)

Appendix E – Sample Budget

Appendix A
Health Care Team Challenge
Student Participant Guidelines

Adapted from Ontario Health Care Team Challenge 2009-2010 Student & Faculty Toolkit accessed 8/30/2012 at http://meds.queensu.ca/oipep/assets/HCTC_Toolkit_-_August_21st_2009.pdf

What is the PURPOSE of the Health Care Team Challenge?

With the increasing prevalence of chronic diseases, new advancements in treatments, current emphasis on safety and quality, and the growing complexity of health care delivery systems, the need for coordination and integration of clinical care through a multidisciplinary approach has become essential. Recognizing this issue, the Institute of Medicine (2003) has called for a redesign of health professions educational programs in order to provide health care professionals, both in academic and practice settings, the knowledge, skills, and attitudes to work effectively in interprofessional teams. Such programmatic redesign warrants the implementation of interprofessional education (IPE) across health care disciplines. One model being used internationally to promote team work and greater understanding of interprofessional roles is the **Health Care Team Challenge** (HCTC). Why is this event important to health care professions students? To be work-force ready upon graduation, students need to be able to work well in multidisciplinary teams. Yet historically, students receive little training in how to function within an interprofessional teamwork context. Competent patient care increasingly requires practitioners to know how each of the different health professions contributes to the goal of optimizing health outcomes.

What is interprofessional education?

“Interprofessional education occurs when students from two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes.

*Professional is an all-encompassing term that includes individuals with the knowledge and/or skills to contribute to the physical, mental and social well-being of a community.” (World Health Organization (WHO). 2010. Framework for action on interprofessional education & collaborative practice. p.13. Retrieved Nov. 6, 2012 from http://whqlibdoc.who.int/hq/2010/WHO_HRH_HP_N_10.3_eng.pdf)

The goal of interprofessional education is to prepare health professional students with values and core competencies necessary for collaborative interprofessional practice.

What is interprofessional collaborative care?

“Interprofessional collaborative care (IPCC) is the provision of comprehensive health services to patients/clients by multiple health caregivers who work collaboratively to deliver quality care within and across settings.” (CAIPE – Center for the Advancement of Interprofessional Education, [www.caipe.org.uk](http://www.caipe.org.uk/resources)/resources 2011)

Core Competencies

Through the Health Care Team Challenge students will have the opportunity to gain exposure to and immersion in IPE core competencies. Students who apply these competencies will exemplify student leadership in IPE.

Core Competencies*

1. Interprofessional communication
2. Role clarification (roles and responsibilities of own and other health professionals)
3. Values / ethics for interprofessional practice
 - Mutual respect for all team members
 - Value contributions and knowledge of other team members
 - Willingness to collaborate
 - Reflection – upon role of self and other team members
4. Teams and teamwork

*adapted from Interprofessional Education Collaborative Expert Panel. (2011). Core Competencies for interprofessional collaborative practice: Report of an expert panel. Washington, D.C.: Interprofessional Education Collaborative

What is the Health Care Team Challenge (HCTC)?

The HCTC competition was first developed by the College of Health Disciplines at the University of British Columbia. Since 2007, competitions have been hosted at a number of universities in Australia, Canada, the United States, New Zealand, and Japan. Although the structure of these competitions may vary, all of the competitions share the same ultimate goals: to improve collaborative health care and deliver the highest quality of care for patients, clients, and families.

The HCTC is an interprofessional /client centered event. It is designed to be an interprofessional learning experience But it's also supposed to be fun! Each team is provided with the same client information and scenario, with the goal of developing a collaborative interprofessional patient centered plan of care. At least two weeks prior to the event, teams are given a complex case study that has been structured to ensure there is relevant content for all participating professions. The competition will offer “real-life” practice in team-based problem solving. The teamwork skills developed in the pre-competition phase are fundamental to success at the event, where each team will be challenged with an additional round of previously unknown information in the clinical scenario. Teams will be judged on both the quality of the care / management plan they devise and collaborative teamwork.

Expectations of Students Prior to the HCTC:

- Attend orientation
- All teams will receive case history and scenario
- All teams will receive list of sample process questions

- Names and contact information of team members provided so team members can arrange to meet (electronically and face-to-face)
- Using a patient centered approach, teams are to identify and prioritize issues relevant to the case
- Develop a team approach for the management of issues considered high priority

At the HCTC event:

- Teams will each be given 5 minutes to present their coordinated plan of care
- Each team will be given a *different* extension scenario and 5 minutes to decide how their plan will be altered to incorporate the new information
- Teams will each be given 3 minutes to present changes to plan of care based on extension scenario
- Teams will be asked to respond to selected process questions – 1 minute maximum for each team’s response to the 4 questions (maximum total response time of 4 minutes)

Agenda for HCTC

ARRIVE no later than 4:45pm – pick up HCTC t-shirts and name tags

- 5:00 Welcome, opening remarks, thanks to sponsors, introduction of team members and judges, volunteers, and event organizers
- 5:10 Team presentations (5 minutes for each team- 30 second warning will be given)
- 5:30 Teams will be given an extension scenario and 5 minutes to make changes to plan of care -- while judges are working, president of student interprofessional organization (or faculty advisor) will give brief overview of the purpose of IPE.
- Recognize and offer thanks to student volunteers
- 5:35 Team presentations (3 minutes for each team- 30 second warning will be given)
- 5:50 Teams will be asked process questions (4 questions, each team will have up to 1 minute to answer *each* question)
- 6:05 Judges convene to determine winner - while judges are working, audience members ask team participants questions about their experience
- 6:20 Judges provide verbal feedback to teams
Announcement of winning team, distribution of prizes, thank sponsors
- 6:30 Reception
- 7:00 Adjourn

Guidelines for student conduct*

The overall goal of the HCTC is to develop an appreciation for interprofessional teamwork in collaborative patient/client/family care management. This should be demonstrated in student behavior and responses. Presentations will be assessed not only for accuracy of content but also on the spirit of teamwork that is demonstrated. Good teamwork is characterized by the following qualities: respect for one another; sharing expertise; knowing one's limitations; consensus building; developing a realistic plan with appropriate priorities for the client and family; and effective time management.

Suggestions for demonstrating effective team work include:

Presentation / responses to questions:

- Be clear and concise
- Speak at a good pace – not too fast
- Answer from a team perspective rather than as a specific profession approach
- Present content in an organized manner
- Prioritize content so most important issues are presented in the allotted time
- Avoid overlapping responses from various team members
- Plan which team members will speak to specific issues. It is not ideal to have only one person responding to all questions

Leadership

Behavior should reflect team spirit with all members contributing to the final plan of care. It is important, however, for individuals to assume responsibility for leading team discussions and responses. Leadership ideally should be flexible (rotate) depending on the question. Be aware of one person dominating the discussion and responses.

Respect for competitors

Please refrain from using the time when other teams are presenting their plan of care to discuss your team's responses.

Microphone management

The person using the microphone for your team should be sure to speak clearly and directly in to the microphone. Know who is speaking in what order for planned responses so time is not wasted figuring out who will need the microphone next.

Organize a plan for your presentation

Remember that the competition is designed to be interdisciplinary. It is the responsibility of individual team members to look for ways that they can contribute to the discussion and the formulation of responses. Ensure that seating around the table allows for optimal participation for all team members.

Characteristics of Effective Interprofessional Health Teams*

1. Clients are active participants in their care
2. Practice is collaborative in that all members willingly participate in planning and decision making
3. Individuals view themselves as part of a team and contribute to a common goal
4. Participants offer their expertise, share in the responsibility for outcomes and are acknowledged by other members of the group for their contribution to the process
5. Team members understand each other's roles
6. The team as a whole possesses skills that enable teamwork: interprofessional communication, leadership, negotiation, facilitation, consensus building, conflict resolution, time and stress management
7. The relationship between team members is non-hierarchical and power is share
8. Leadership is fair and impartial
9. Individuals are able to maximize the full potential of their knowledge and skills
10. Conflict is resolved when it occurs

*Adapted from University of British Columbia College of Health Professions

- Dr. Christie Newton, 2010 Health Care Team Challenge Orientation packet

Gilbert, J., Camp, R., Cole, C., Bruce, C., Fielding, D., & Stanton, S. (2000). Preparing students for interprofessional teamwork in health care. *Journal of Interprofessional Care*. 14(3), 223-235.

Sample process questions:

1. What do you view as the strengths of your team?
2. What did your team do when faced with conflicting opinions?
3. Do you think your participation in the HCTC will influence your ability and willingness to collaborate in future practice settings?
4. What challenges did your team face when creating your plan of care?
5. How would you include the patient/client/family if given the same scenario in a clinical (not simulated) setting?
6. What resources did you use when creating your plan of care?

**Health Care Team Challenge
Team Rating Sheet**

Team Name:

Please circle the number that best represents your judgment about the team processes and management plan.

1. Presenting students demonstrated a good understanding of the central role of the patient in guiding management planning.

1	2	3	4	5	6	7
Strongly disagree						strongly agree

2. The management plan reflected professional contributions from each profession to promote best practice, remembering that not all professions were included in each team.

1	2	3	4	5	6	7
Strongly disagree						strongly agree

3. The team highlights the major issues of the clinical case scenario into their responses.

1	2	3	4	5	6	7
Strongly disagree						strongly agree

4. Team responses highlight opportunities for collaboration between health care professions.

1	2	3	4	5	6	7
Strongly disagree						strongly agree

5. Team responses are reasonable and defended with evidence.

1	2	3	4	5	6	7
Strongly disagree						strongly agree

6. Responses are creative and original.

1	2	3	4	5	6	7
Strongly disagree						strongly agree

7. Ethical decision making and recommendations for practice were explicit in student presentations.

1	2	3	4	5	6	7
Strongly disagree			strongly agree			

8. Open and respectful communication among team members appeared to take place as plans were being formulated.

1	2	3	4	5	6	7
Strongly disagree			strongly agree			

9. Decision making responsibilities appeared to be shared among team members

1	2	3	4	5	6	7
Strongly disagree			strongly agree			

10. Questions are answered professionally and within the time allotted.

1	2	3	4	5	6	7
Strongly disagree			strongly agree			

11. Overall team functioning and collaboration

1	2	3	4	5	6	7
Poor function Limited Collaboration			Highly functioning Highly Collaborative			

Total score _____

Additional comments / feedback for the team:

*Adapted from scoring instruments used by the University of Queensland Health Fusion team Challenge, 2011, and Ontario HCTC, 2010.

Sample Letter of Participation

{Place Your University or HCTC Logo here}

Date

Dear {student's name},

Thank you for representing your program at the Health Care Team Challenge (HCTC). This interprofessional event was organized to provide an opportunity to learn and demonstrate how patient-centered care can be managed in a collaborative fashion. The competition offered “real-life” practice in team-based problem solving. The teamwork skills developed in the pre-competition phase were fundamental to your success at the event, where each team was challenged with an additional round of previously unknown information in the clinical scenario. With the increasing prevalence of chronic diseases, new advancements in treatments, the ongoing emphasis on improving safety and quality, and the growing complexity of health care delivery systems, the need for coordination and integration of clinical care through a collaborative approach has become essential. Competent patient care increasingly requires practitioners to know how each of the different health professions contributes to the goal of optimizing health outcomes. Hopefully, your participation in the HCTC provided you with a positive introduction to working in a collaborative patient-centered care team. I wish you all the best in your career as a health care professional.

Sincerely yours,

{faculty name}, Director
Health Care Team Challenge

Readiness for Interprofessional Learning Scale (RIPLS) Questionnaire¹

The purpose of this questionnaire is to examine the attitude of health care students towards interprofessional learning.

Please complete the following questionnaire.

		Strongly agree	Agree	Undecided	Disagree	Strongly disagree
1.	Learning with other students will help me become a more effective member of a health care team					
2.	Patients would ultimately benefit if health care students worked together to solve patient problems					
3.	Shared learning with other health care students will increase my ability to understand clinical problems					
4.	Communications skills should be learned with other health care students					
5.	Team-working skills are vital for all health and social care students students / professionals to learn					
6.	Shared learning will help me to understand my own professional limitations					
7.	Learning between health and social care students students before qualification and for professionals after qualification would improve working relationships after qualification / collaborative practice.					
		Strongly agree	Agree	Undecided	Disagree	Strongly disagree

8.	Shared learning will help me think positively about other health and social care professionals					
9.	For small-group learning to work, students / professionals need to respect and trust each other					
10.	I don't want to waste time learning with other health and social care students / professionals					
11.	It is not necessary for undergraduate / postgraduate health and social care students / professionals to learn together					
12.	Clinical problem solving can only be learnt effectively with students / professionals from my own school / organisation					
13.	Shared learning with other health and social care professionals will help me to communicate better with patients and other professionals					
14.	I would welcome the opportunity to work on small group projects with other health and social care students / professionals					
15.	I would welcome the opportunity to share some generic lectures, tutorials or workshops with other health and social care students / professionals					
16.	Shared learning and practice will help me clarify the nature of patients' or clients' problems					
17.	Shared learning before and after qualification will help me become a better team worker					
18.	I am not sure what my professional role will be / is					
		Strongly agree	Agree	Undecided	Disagree	Strongly disagree

19.	I have to acquire much more knowledge and skill than other students / professionals in my own faculty / organisation					
-----	--	--	--	--	--	--

If you have any further comments regarding interprofessional education please enter them in the box below

Thank you for completing this survey. The data will provide us with an understanding of the influence of the Interprofessional Education program that we are implementing.

1. Parsell, G, Bligh, J. The development of a questionnaire to assess the readiness of health care students for interprofessional learning (RIPLS). *Medical Education*. 1999; 33(2): 95-100.

Sample Budget

Budget Item	Number of Items	Price per Unit	Total Amount
Kindles for winning team	11	@\$99 each + tax	\$1185
Water bottles	72		\$ 400
T-shirts with Logo	48		\$ 300
Sub Sandwiches	10	\$3 per person	\$ 600
Beverages	10 cases	\$10	\$ 100
Advertising / printing			\$ 15
Total amount requested			\$2600