UNDERSTANDING AND FACILITATING INTERPROFESSIONAL EDUCATION

A Guide to Incorporating Interprofessional Experiences into the Practice Education Setting

June 2010
www.chd.ubc.ca
ACKNOWLEDGEMENTS

Authors of this guide:

Donna Drynan  
*Clinical Associate Professor & Academic Fieldwork Coordinator*  
Department of Occupational Science and Occupational Therapy  
The University of British Columbia

Sue Murphy  
*Academic Coordinator for Clinical Education*  
Department of Physical Therapy  
The University of British Columbia

Many individuals and programs have contributed to the development of this guide. We specifically would like to recognize and thank IRPbc for allowing us to adapt content from their *Field Guide* for the development of this resource.

The authors also wish to recognize and thank the Faculty of Medicine Faculty Development Initiative Grant for funding this guide.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>2</td>
</tr>
<tr>
<td>WHY INTERPROFESSIONAL EDUCATION?</td>
<td>6</td>
</tr>
<tr>
<td>INTERPROFESSIONAL EDUCATION AND TEAMWORK</td>
<td>7</td>
</tr>
<tr>
<td>IP COMPETENCIES</td>
<td>8</td>
</tr>
<tr>
<td>GOAL OF IP PRACTICE EDUCATION EXPERIENCES (IPPE)</td>
<td>9</td>
</tr>
<tr>
<td>IP SAMPLE LEARNING OUTCOMES</td>
<td>10</td>
</tr>
<tr>
<td>REQUIREMENTS OF THE FACILITY/PROGRAM IN PROVIDING AN IP PRACTICE EDUCATION EXPERIENCE</td>
<td>12</td>
</tr>
<tr>
<td>STUDENT RESPONSIBILITIES</td>
<td>14</td>
</tr>
<tr>
<td>ACADEMIC PROGRAM RESPONSIBILITIES</td>
<td>15</td>
</tr>
<tr>
<td>GETTING STARTED</td>
<td>16</td>
</tr>
<tr>
<td>WHEN STUDENTS ARRIVE</td>
<td>17</td>
</tr>
<tr>
<td>INTRODUCTIONS AND ICEBREAKERS</td>
<td>17</td>
</tr>
<tr>
<td>LEARNING OBJECTIVES</td>
<td>18</td>
</tr>
<tr>
<td>How to write really good learning objectives</td>
<td>18</td>
</tr>
<tr>
<td>TEAM BUILDING/TEAM CHARTER</td>
<td>20</td>
</tr>
<tr>
<td>TYPES OF ACTIVITIES</td>
<td>20</td>
</tr>
<tr>
<td>Student-led activities</td>
<td>20</td>
</tr>
<tr>
<td>Clinician-led activities</td>
<td>21</td>
</tr>
<tr>
<td>Tutor-led activities</td>
<td>21</td>
</tr>
<tr>
<td>INVOLVEMENT OF OTHER PARTICIPANTS</td>
<td>21</td>
</tr>
<tr>
<td>Other health professionals/unit members</td>
<td>21</td>
</tr>
<tr>
<td>Patients</td>
<td>21</td>
</tr>
<tr>
<td>INDIRECT CARE ACTIVITIES</td>
<td>22</td>
</tr>
<tr>
<td>Social events</td>
<td>22</td>
</tr>
<tr>
<td>ISSUES: THINGS TO CONSIDER</td>
<td>22</td>
</tr>
<tr>
<td>Timing of placements</td>
<td>22</td>
</tr>
<tr>
<td>Different academic levels of student</td>
<td>22</td>
</tr>
<tr>
<td>Power balance between students</td>
<td>23</td>
</tr>
<tr>
<td>EXAMPLES OF ACTIVITIES</td>
<td>23</td>
</tr>
<tr>
<td>ACTIVITIES INVOLVING PATIENTS/CLIENTS</td>
<td>23</td>
</tr>
<tr>
<td>Interprofessional rounds</td>
<td>23</td>
</tr>
<tr>
<td>Patient interviews</td>
<td>24</td>
</tr>
<tr>
<td>Patient assessment</td>
<td>24</td>
</tr>
<tr>
<td>Patient treatment</td>
<td>24</td>
</tr>
<tr>
<td>Discharge planning</td>
<td>25</td>
</tr>
<tr>
<td>Shadowing</td>
<td>25</td>
</tr>
<tr>
<td>Observational visits to other clinical areas</td>
<td>25</td>
</tr>
</tbody>
</table>
ACTIVITIES WITHOUT THE CLIENT PRESENT

Case presentations
Consultations and problem-solving
Mock interprofessional rounds
Team interviews
Reflection
Discussion
Debate
Case studies

EVALUATION OF IP LEARNING IN THE PRACTICE EDUCATION SETTING

APPENDICES

APPENDIX 1: NATIONAL INTERPROFESSIONAL COMPETENCY FRAMEWORK
APPENDIX 2: UBC FACULTY OF MEDICINE PROFESSIONAL STANDARDS DOCUMENT
APPENDIX 3: TEAM CHARTER
APPENDIX 4: EXAMPLES OF DISCUSSION QUESTIONS USED TO PROMOTE CRITICAL THINKING IN STUDENTS
APPENDIX 5: HOW TO ORGANIZE A DEBATE
APPENDIX 6: ENTRY LEVEL INTERPROFESSIONAL QUESTIONNAIRE (ELIQ)
APPENDIX 7: ATTITUDES TOWARD HEALTH CARE TEAMS SURVEY
APPENDIX 8: KEY FEATURES CASE ASSESSMENT (PRE AND POST)
APPENDIX 9: IP STUDENT LEARNING PLAN TEMPLATE

REFERENCES

ADDITIONAL RESOURCES
WHAT IS INTERPROFESSIONAL COLLABORATIVE PRACTICE?

Interprofessional Collaborative Practice (ICP):

- “Collaborative Practice is designed to promote the active participation of each discipline in patient care. It enhances patient- and family-centred goals and values, provides mechanisms for continuous communication among care givers, optimizes staff participation in clinical decision making within and across disciplines and fosters respect for disciplinary contributions all professionals.” (Health Canada, 2004)
- ICP allows professionals to search for solutions that go well beyond their own vision of what is possible
- ICP is designed to promote the active participation of several health care disciplines and professions
- ICP enhances patient-/family-/community-centred goals and values
- ICP provides mechanisms for continuous communication among health care providers
- ICP optimizes staff participation in shared clinical decision making within and across disciplines
- ICP fosters respect for the contributions of all providers

Collaborative practice involves the relationship between various professions as they purposely interact to work and learn together to achieve a common goal. For example, if a patient has trouble swallowing, nurses, occupational therapists, speech language pathologists and dietitians need to work together as a team to figure out what the issue/problem is and the treatment/care plan for the patient.

Interprofessional Collaboration is not...

...doing another professional's job
It is only when health care providers are secure and clear about their own roles that they can practice effectively in a collaborative way. Shared competencies exist across professions and a secure sense of professional self will allow providers to take on some of the shared roles more easily. Knowing when health care providers have reached the limit of their expertise allows them to be able to effectively refer to other team members.

...losing professional identity
On the contrary, to be most effective and productive on an IP team, providers must be confident in their role in order to contribute the best of their expertise, especially when their opinion differs from that of other professions.
WHY INTERPROFESSIONAL EDUCATION?

Our health care environment is faced with patient safety issues, health and human resource shortages, and an aging population with increasingly complex health care needs.

The literature supports the concept that collaboration is necessary to mitigate patient safety issues and to deal with our complex health care system and health and current human resource shortages.

Some significant research, policy, and government DRIVERS FOR CHANGE include:

**The 2002 Romanow Report**

This report stated that the best ways of ensuring that health care providers are able to work effectively in new, more integrated settings is to begin with their education and training. The report included a recommendation that education programs should be changed to focus more on integrated, team-based approaches to meeting health care needs and service delivery.

**BC health professional legislation changes**

In April 2008 the British Columbia Minister of Health launched the Health Professions Regulatory Reform Act, introducing a change to the bylaws of all Regulatory Colleges in B.C. Each College is now required “to promote and enhance the interprofessional collaborative practice between its registrants and persons practicing another health profession.”

In 1999 the U.S. Institute of Medicine published the landmark *To Err is Human* report. Based on data collected the report concluded that patient deaths were occurring due to lack of communication amongst health care workers.

A replicated study for the Canadian context took place in 2004 titled *The Canadian Adverse Events Study*. One of the findings was that due to the complexity of care in teaching hospitals, patients receive care from several different providers, which may increase the risk of Adverse Events related to miscommunication and coordination of care.

Similar reports around patient safety have come out of Australia, the U.K. and other jurisdictions. These drivers for change shaped Health Canada’s response that successful health care relies on collaborative care, which requires a broad network of collaborative interactions among a variety of health service providers, patients, their families and caregivers, and the community. This has resulted in Health Canada investing $20 million over four years on collaborative care projects throughout the country.
INTERPROFESSIONAL EDUCATION AND TEAMWORK

Interprofessional Education (IPE)
When two or more professions learn with, from and about each other to improve collaboration and the quality of care. (CAIPE, 2002)

Interprofessional Education is about learning together to work together. Being aware of one’s own learning style and exploring one’s own understanding and experience of working in groups and teams will assist in understanding other members of the healthcare team and their various roles. Effective, well functioning teams have enormous potential to improve healthcare delivery.

There is increasing evidence that interprofessional education is integral to addressing issues such as patient safety, chronic disease management and primary health care, through the formation of more effective healthcare teams.

When setting up an IP team, some things to think about are:

- Learning styles of team members
- Team member’s experience of team work in the past
- The effect good communication, understanding of self and others, and good group skills have on healthcare delivery and the healthcare team

In order to learn from each other, it is necessary to understand how teams work. Some questions to consider include:

- What is the purpose of the team?
- What are the different roles within the team?
- What are some features of well functioning teams?
- What are barriers to team work?

Effective teams do not happen by chance. They are a result of:

- Clear purpose and roles
- Effective relationships
- Communication
- Personal and team accountability

Since many highly effective teams have resolved team barriers and issues it is important to consider providing opportunities within an IP practice education experience to address:

- Who the members of the health care team are
- What stereotypes, assumptions and biases the students may have about other professions
- What ideas others have about their profession
- The specific roles and scopes of practice of team members
- Areas of overlap within the team
IP COMPETENCIES

The National Interprofessional Competency Framework provides an integrative approach to describing the competencies required for effective interprofessional collaboration. Six competency domains - role clarification, team functioning, patient-/client-/family-/community-centred, collaborative leadership, interprofessional communication, and addressing interprofessional conflict - highlight the knowledge, skills, attitudes and values that together shape the judgments that are essential for interprofessional collaborative practice. (See Appendix 1 for the full document).

The *National Interprofessional Competency Framework* provides Competency Statements that may be helpful in describing the attributes demonstrated by a collaborative health care provider, and Competency Descriptors which further describe the expectations of a health care provider in achieving the competencies within each domain.

Adopting a competency based approach comes with challenges. Competencies are limited in their ability to account for different contextual learning and practice environments. Competencies are designed to provide a framework for assessing ability and do not actually measure competence or skills in a specific area.
GOAL OF IP PRACTICE EDUCATION EXPERIENCES (IPPE)

Two key purposes of students participating in an IPPE experience include:

1. Gaining experience in interprofessional team work and collaboration
   a. Establishing and maintaining interdependent relationships with other professionals and students
   b. Developing an understanding of interprofessional team structures, effective team functioning and knowledge of group dynamics

2. Understanding the roles and contributions of the professions with whom the students will interact during their IPPE placement
   a. Understanding their own profession in relation to others
   b. Providing patient-centred care that is personal, professional and community sensitive
   c. Involving the patient/client and family as partners in group decision-making processes as part of an interprofessional care plan

Additional learning may include exposure and skill development in IP competencies of communication, conflict resolution and leadership.
**IP SAMPLE LEARNING OUTCOMES**

The examples below define a few interprofessional learning outcomes, based on the *National Interprofessional Competency Framework* (Appendix 1).

The framework defines the knowledge, skills, and attitudes needed for collaborative practice. The interprofessional learning outcomes define the desired results of interprofessional learning which will prepare students to effectively practice in today’s health care environment.

The following are a few examples of interprofessional learning outcomes:

<table>
<thead>
<tr>
<th>Competency</th>
<th>Team/Student Learning Outcome</th>
<th>Learning Activity/Strategies</th>
<th>Evidence (How will we know we have learned it?)</th>
<th>Validation of Met Outcomes</th>
</tr>
</thead>
</table>
| Role clarification          | Describe knowledge of other professional roles in relation to other/own (specific to the context/setting) | • Research regulatory websites of various professionals  
  • Refer to school notes  
  • Discussion with preceptors  
  • Discussion with other students  
  • Shadow a client with other professionals where student does not have a role and ask them to explain what they think the role of the professional is  
  • Case study presentation | • Able to describe other team members/students roles, job duties  
  • Able to identify where overlaps occur  
  • Able to openly discuss why some professions are not brought in to certain cases (redundant, no role at this stage, etc.) | • Feedback from preceptors  
  • Feedback from clients  
  • Feedback from other students |
| Team Functioning            | Describe the characteristics of a highly functioning effective interprofessional team         | • Participate in team functions  
  o Formal: rounds, family meetings, etc.  
  o Informal: social gatherings, etc.  
  • Review school notes on teams and teamwork | • Identify various team roles that are necessary for effective team functioning (leadership, active listeners)  
  • Personal reflections on team functioning (journals, blogs, use of guided reflection sheets, self assessment worksheet) | • Preceptor reviews written materials of student and provides feedback/validation of insights |
|                             | Demonstrate the characteristics of a team member on a highly effective interprofessional team | • Participate in formal and informal team activities and functions (e.g., rounds, family meetings, social gatherings, etc.)  
  • Review school notes on teams | • Able to set common client-centred goals which each team member is working towards  
  • Respects the “ground rules” of the team and adheres to them (e.g., arrives on time, assumes role assigned within the team)  
  • Performs duties within their scope of practice  
  • Seeks assistance when necessary  
  • Re-evaluates own position in light of new information from other professionals  
  • Consistency between verbal and non-verbal behaviour  
  • Non-judgmental/open-minded | • Peer feedback  
  • Preceptor feedback |
## Interprofessional learning outcomes (continued)

<table>
<thead>
<tr>
<th>Competency</th>
<th>Team/Student Learning Outcome</th>
<th>Learning Activity/Strategies</th>
<th>Evidence (How will we know we have learned it?)</th>
<th>Validation of Met Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interprofessional communication</td>
<td>Demonstrate effective interpersonal communication skills</td>
<td>• Observation of preceptors</td>
<td>• Does not use discipline-specific jargon or acronyms</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Uses respectful language when speaking with others; does not interrupt</td>
<td></td>
</tr>
<tr>
<td>Addressing Interprofessional Conflict</td>
<td>Describe possible IP conflict</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Demonstrate effective IP conflict resolution skills</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
You are among a growing number of facilities/programs within BC that is providing students a practice education placement. Professions represented include:

- Medicine
- Midwifery
- Nursing
- Physical therapy
- Occupational therapy
- Speech language pathology
- Audiology
- Social work
- Pharmacy

REQUIREMENTS OF THE FACILITY/PROGRAM IN PROVIDING AN IP PRACTICE EDUCATION EXPERIENCE

So you want to provide an Interprofessional Practice Experience to a group of students who will learn something innovative and provide exceptional patient care?

Well, congratulations – you are about to enable a remarkable journey! According to the literature, “situating interprofessional collaborative learning within practice environments can provide students with a range of valuable ‘real life’ clinical experiences.” (Reeves, S., 2009)

This type of experiential learning allows students to actively engage in learning with, from and about each other in clinical settings. It also encourages students to begin modeling good interprofessional collaboration before they meet the demands of clinical practice upon gaining their respective professional licensure.

Studies of a growing number of interprofessional educational units from Sweden, the U.K. and Finland have shown that this model can be effective for:

- Pre-licensure learners as it provides ‘real life’ opportunities for senior students to provide team-based care for patients under clinical supervision.
- Preparation of students nearing qualification to enable understanding of the demands of collaborative clinical practice (Reeves, S., 2009)

In addition to the discipline-specific placement objectives, you will:

- Provide the interprofessional student team with learning opportunities beyond their own discipline
- Enhance the discipline-specific skills of the future workforce by providing first-hand experience in collaborative patient-centred care
- Give the students a broader understanding of their scope of practice
- Illustrate the importance of teamwork between healthcare providers

As educators we must empower our students to be able to answer the following questions:

- Who am I (my own profession) and what do I know?
- Who are the others (the other professions on the team) and what do they know?
- Who are we collectively as a team and what do we know?

Possible roles and responsibilities of the IP facilitator may include:

- Securing a space for the students to meet as arranged
- Assisting with identifying projects for the student teams
- Orienting students to the setting/facility
- Arranging a caseload for the students
PRECEPTOR RESPONSIBILITIES

Although there are no specific skill requirements in order to take on the role of an IP facilitator, the following are suggested elements for success:

- Registration in his/her regulating and professional bodies
- High levels of leadership and communication skills
- Interest in interprofessional work

The IP facilitator offers:

- Liaison with placement sites, clinical preceptors/educators and educational institutions to facilitate the IP activities
- Guidance to the IP student teams as they participate in IP learning activities
- Feedback to IP student teams during development of team goals
- Feedback and facilitation of peer evaluation of projects and activities
- Opportunities for students to develop their collaborative team skills
- Facilitation of communication among students, preceptors and academic programs

Please refer to other sections of this handbook and the accompanying web resource www.chd.ubc.ca.
STUDENT RESPONSIBILITIES

As per any clinical education experience, students are expected to abide by the professional standards guidelines from their respective faculty/school/department. For an example of the *UBC Faculty of Medicine Professional Standards* document please see Appendix 2.
ACADEMIC PROGRAM RESPONSIBILITIES

Interprofessional Practice Education experiences are generally considered part of discipline specific training. During the time the student is on an interprofessional practice education experience each student is typically supervised by a discipline specific preceptor as well as by the IP facilitator.

The Academic program roles may include:

- Ensuring requirements for the practice placement are met
- Facilitating discipline-specific competency acquisition
- Connecting with preceptors and IP facilitators regarding IP opportunities and activities
- Provision of IP training, materials, resources to preceptors
GETTING STARTED

It is preferable that your IP team participates in some or all of the following activities described below. These will complement and enhance the discipline-specific requirements of the student’s respective education. Please note that sometimes team members will be arriving and departing from the IPE experience at different times given that start and end dates for the placements across the disciplines and schools differ. This has significant implications for your interprofessional interaction and team assignments. Communication with your team may need to be conducted via email, Facebook and/or telephone.

As the facilitator of an interprofessional student team, you may arrange for students to:

- Meet as a team for a set number of hours each week
- Shadow one another and/or other health professionals beyond their own discipline
- Shadow clients that other students are following and describe the other team members role
- Participate in interprofessional rounds as available
- Complete at least one in-depth case study relating to a complex situation – patient, family or community-focused
- Discuss the function of the team as students learn with, from and about each other (see page 7 for IP teamwork questions)
- Complete an IP team project
  - For example, develop educational materials or present an interprofessional in-service

There are many different activities that can be adapted or created for IP learning in the clinical setting. Selection of activities for your particular clinical setting will depend on multiple factors such as:

- Client type
- Number of students
- Readiness/availability of staff for IP and IP learning
- The physical environment

Some settings naturally lend themselves to an IP experience:

- Geriatric team environments
- Child development centres
- Specific practice areas such as assistive technology (including, seating, computer access)

Some settings such as private clinics may find it more challenging to provide an IP learning experience. The key message is “there is no one right answer” for which activities should be included in an IP learning experience in your setting; you know your setting best and will design activities which will work for you in your particular environment. Wherever possible a mix of activities should be included in order to accommodate different learning styles and preferences.

Key Principles

The definition of IPE states that students learn “with, from and about each other ... to improve collaboration or quality of care.” (CAIPE, 2002). Activities should include at least one of these elements and will often involve more than one. Interactive, group-based activities requiring collaboration to achieve a learning goal are key to an IP learning experience.
WHEN STUDENTS ARRIVE

INTRODUCTIONS AND ICEBREAKERS

In order that students feel comfortable sharing their thoughts and experiences in the learning environment it is important to:

- Introduce group members to each other and to set a comfortable, relaxed tone at the start of the experience
- Establish a culture of trust and openness

Ice breaker activities are a good way to get students to interact and get to know each other on the first day of the placement. Examples of icebreakers include:

The 2-minute mixer

Group members pair up and have two minutes to find out about their partners answers to previously developed questions which are clearly posted on the wall. Questions should be designed to get participants talking – for example, “What is your favourite sport?” or “Where did you go on holiday last year?” After two minutes a bell rings and participants change partners and repeat the exercise. This is repeated so that participants meet several (or all, depending on group size) group members.

Commonalties

Depending on the size of the group, this activity can be done either with the whole group or with small subsets of the group. There should be 4-5 people in each group. Ask the group to list as many things as possible that they have in common. (You may want to list some “rules” – e.g., cannot include body parts, clothing or the fact that they are students).

Famous People Game

Write the name of a famous person on an index card. Tape a card on to each group members back (do not let the person know what their card says). The aim is for each person to find out what the card on their back says, by asking questions of the other group members. For example they might ask “Am I still living today?” Other group members look at the card and answer yes or no (no other conversation is allowed).

Marooned Game

Depending on the size of the group, this activity can be done either with the whole group or with small subsets of the group. There should be 4-5 people in each group. The team is told that they are marooned on an island. Their task is to determine the five items they would have taken with them if they had known they were going to be marooned. If there is more than one team each team should be challenged to defend their choice of items to the other groups.

This web link (www.training-games.com/pdf/40FreeIceBreakers.pdf) provides several other suggestions, or try doing an internet search for “icebreakers.”
LEARNING OBJECTIVES

It is important to negotiate clear learning objectives with the student team at the outset of the placement. This is a good time to explain:

- The meaning of IP
- The competences required for collaborative client care
- What the student can expect to achieve during the IP experience

How to write really good learning objectives

Reasons for Learning Objectives

- To clearly define realistic expectations of the placement relevant to the level of student
- To guide planning of formal and informal learning activities

Steps in Developing Instructional Objectives

Objectives should state in precise, measurable terms what the student will accomplish.

Components of a well written learning objective/outcome include:

- Audience (the student or students)
- Action or behaviour (what it is the student will be doing)
- Conditions (are there any rules or circumstances that must be followed in the procedure or prior to the student attempting something)
- Standards or level of performance expected (with supervision, independently, etc.)

**HINT!** Avoid cramming too much into one objective, or being too vague.

Remember, an objective is a statement that describes in precise, measurable terms what the student will be able to do by the end of the placement.

The behaviour element in an objective is a phrase containing an action or behavioural verb that ties what the learner is to perform or exhibit to the object of the behaviour. The behaviour element needs to be reflective of the level of student - for example, being able to critically appraise is at a higher level than description. Critical appraisal of a concept could possibly be an objective for senior level students while describing a concept might be more appropriate for a junior level student.

A crucial element of an objective is: “How well do students need to achieve an objective in order for their performance to be judged satisfactory?” This will also differ for each level of student - for example, junior level students may perform tasks with supervision while senior students may demonstrate aspects of their performance independently, efficiently and perhaps even proficiently.

Additionally, the time allocated for specific tasks or the required number of repetitions may also change based on the level of placement.
In addition, all good objectives should be SMART:

**S** Specific

**M** Measurable

**A** Achievable

**R** Realistic

**T** Time-oriented

**SKILL ACTION VERBS**

Examples of strong skill action verbs include:

<table>
<thead>
<tr>
<th>Achieve</th>
<th>Initiate</th>
<th>Promote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administer</td>
<td>Instruct</td>
<td>Publicize</td>
</tr>
<tr>
<td>Analyze</td>
<td>Interpret</td>
<td>Reason</td>
</tr>
<tr>
<td>Answer</td>
<td>Invent</td>
<td>Recruit</td>
</tr>
<tr>
<td>Approve</td>
<td>Investigate</td>
<td>Reorganize</td>
</tr>
<tr>
<td>Assess</td>
<td>Judge</td>
<td>Research</td>
</tr>
<tr>
<td>Budget</td>
<td>Lead</td>
<td>Resolve</td>
</tr>
<tr>
<td>Calculate</td>
<td>Listen</td>
<td>Review</td>
</tr>
<tr>
<td>Collaborate</td>
<td>Maintain</td>
<td>Schedule</td>
</tr>
<tr>
<td>Communicate</td>
<td>Manage</td>
<td>Share</td>
</tr>
<tr>
<td>Counsel</td>
<td>Market</td>
<td>Strengthen</td>
</tr>
<tr>
<td>Create</td>
<td>Mediate</td>
<td>Supervise</td>
</tr>
<tr>
<td>Demonstrate</td>
<td>Negotiate</td>
<td>Support</td>
</tr>
<tr>
<td>Develop</td>
<td>Obtain</td>
<td>Teach</td>
</tr>
<tr>
<td>Document</td>
<td>Organize</td>
<td>Tend</td>
</tr>
<tr>
<td>Establish</td>
<td>Persuade</td>
<td>Track</td>
</tr>
<tr>
<td>Evaluate</td>
<td>Plan</td>
<td>Train</td>
</tr>
<tr>
<td>Facilitate</td>
<td>Predict</td>
<td>Tutor</td>
</tr>
<tr>
<td>Formulate</td>
<td>Prepare</td>
<td>Unified</td>
</tr>
<tr>
<td>Gather</td>
<td>Present</td>
<td>Upgrade</td>
</tr>
<tr>
<td>Generate</td>
<td>Problem-Solve</td>
<td>Verbalize</td>
</tr>
<tr>
<td>Implement</td>
<td>Process</td>
<td>Verify</td>
</tr>
<tr>
<td>Improve</td>
<td>Program</td>
<td>Write</td>
</tr>
</tbody>
</table>
Fuzzy words or phrases to avoid when writing performance statements or objectives*

<table>
<thead>
<tr>
<th>To:</th>
<th>To show:</th>
<th>To become:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Know</td>
<td>Awareness of</td>
<td>Aware of</td>
</tr>
<tr>
<td>Learn</td>
<td>Appreciation of</td>
<td>Capable of</td>
</tr>
<tr>
<td>Believe</td>
<td>Enjoyment of</td>
<td>Familiar with</td>
</tr>
<tr>
<td>See</td>
<td>Feeling for</td>
<td></td>
</tr>
<tr>
<td>Feel</td>
<td>Knowledge of</td>
<td></td>
</tr>
<tr>
<td>Comprehend</td>
<td>Interest in</td>
<td>Critical thinking</td>
</tr>
<tr>
<td>Perceive</td>
<td>Comprehension of</td>
<td>Intelligence</td>
</tr>
<tr>
<td>Realize</td>
<td>A proper attitude for</td>
<td></td>
</tr>
<tr>
<td>Understand</td>
<td>A capacity for</td>
<td></td>
</tr>
<tr>
<td>Think</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conceptualize</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Each of these verbs is not directly observable, since they must be indirectly inferred from action, which leaves a large margin of error for misinterpretation. Thus, it is best to avoid these when writing performance statements.


The *National Interprofessional Competency Framework* provides a useful tool for the development of IP learning objectives (See Appendix 1).

**TEAM BUILDING/TEAM CHARTER**

The students involved in IPPE will usually form a team for a period of the placement. Time should be provided during the placement to enable the students to set ground rules for their team meetings, or to develop a team charter. (For more information on Team Charter, see Appendix 3).

**TYPES OF ACTIVITIES**

IP activities in the clinical setting can be facilitated by clinicians, tutors/experts, or the students themselves.

**Student-led activities**

Student-led activities are often the most effective, and often inherently involve many of the skills required for teamwork, such as collaboration and cooperative problem solving.

Student-led activities should be included as part of an interprofessional learning experience whenever possible, as these mimic the “real world” where interprofessional teams work together. Students should be encouraged to take the lead on many of the activities they undertake in an IP experience, such as shadowing experiences, care planning and case studies.
Clinician-led activities

Clinician-led activities may be part of the daily unit routine and examples may include:

- Unit rounds or case conferences
- Visits to other clinical areas or to see different clients

Debriefing or discussion after the activity is very important in order to learn from student’s perspectives as well as from the perspective of the clinician

Tutor-led activities

Tutor-led activities include a visiting tutor or speaker (e.g., a health professional who is a specialist in a specific area of care or an educator from an academic institution).

Tutor roles often include presenting a specific topic of interest to multiple professions (e.g., management of pain in a specific client group). This can be followed by group discussion, or the tutor might facilitate a forum for exploration of a topic in various ways (e.g., multi-professional roles in the management of spasticity). Tutors should be well versed in interprofessional teamwork and roles, and be able to present in a style that is relevant to multiple health professions. Tutor-led activities need to ensure there is opportunity for students to engage with each other in exploring the content/topic, either during or following the tutorial session. A straight lecture format with no active student involvement should generally be avoided.

INvolVEMENT OF OTHER PARTICIPANTS

Other health professionals/unit members

Involvement of other health professionals in a student IP experience can be both valuable and interesting. Other professionals can be invited to participate as observers or as part of the team discussions. Involvement of other professionals or unit members provides an opportunity for interprofessional learning from other team members as well as being useful for team building on the unit.

The involvement of other team members needs to be managed carefully in order not to detract from the students learning experiences, as the focus on learning should remain with the students learning from each other.

Patients

Patients can be excellent teachers and should be involved in IPPE wherever possible. Examples of IPPE activities involving patients:

- Patient interviews
- Care planning
- Case rounds involving the patient/client
INDIRECT CARE ACTIVITIES

Although much of the IPE experience will be focused on clinical topics and direct care, other unit activities can form the basis for interesting projects, debates and discussions.

For example, questions around unit functioning could be explored:

- Unit rounds or case conferences – how could these be structured more meaningfully for all participants?
- How might documentation be structured to better meet the needs of all professions?

Social events

Inclusion of social events is an important part of the IPPE experience. Whenever possible, social events should be incorporated as part of the student’s day rather than requiring attendance outside of placement hours. By getting to know one another in a relaxed, social environment, students learn to appreciate and build trust with each other.

Events might include: A lunch, networking coffee breaks, or a pub night.

ISSUES: THINGS TO CONSIDER

Timing of placements

Often the hardest part of planning an IP learning experience is scheduling. Different students have different placement times and length which may not fully coincide. It is important to build in flexibility for students to ‘come and go’ and yet still feel part of the team for the time they are there.

Strategies might include:

- Having the IP experience for part of, rather than all, the placement time
- Having a schedule which accommodates different students arriving and leaving during the planned activities

Different academic levels of student

Sometimes the team of students may have varying levels of academic preparation, for example, undergraduate students (1st, 2nd, 3rd or 4th year) or graduate students.

IPE often works well with this diversity, as students from different professions all have something to offer each other regardless of stage in their academic program. Peer coaching models where senior students can teach or coach more junior students can also be used effectively with a mixed group.
Power balance between students

It is important for the IP facilitator to be aware of potential “power struggles” within the student group. Things to watch for include:

- Senior students being inclined to teach rather than learn from the junior students
- Certain groups feeling that they should become the team leaders

Strategies to prevent or defuse power struggles include:

- Rotating leadership for activities
- Appropriate ground rules
- Development of a team charter supporting equal participation by all
- Redirection from the IP facilitator

It is important that the group are coached and guided in managing internal conflicts themselves rather than have the facilitator solve the problem for them if at all possible, as is what would happen after graduation.

EXAMPLES OF ACTIVITIES

Many of the usual activities you do with your students on placement can be adapted for an interprofessional group. While the following are example of activities, it is important to remember that there are many other excellent activities that could be used for interprofessional learning. Your particular environment and situation will lend itself to a variety of different leaning opportunities and options. As facilitator, you will likely want a mix of activities involving clients, as well as activities which are only for the students.

ACTIVITIES INVOLVING PATIENTS/CLIENTS

Interprofessional rounds

- Many facilities have some type of interprofessional client care rounds which can be valuable for students to attend
- Students should focus on the information presented by their own profession and how it contributes to a collaborative care plan or goal setting for the patient
- Students should focus on which team member provides which information; that is, which information is shared and which information is profession-specific
- Following rounds, an interesting discussion question might be why specific professional roles have emerged, and how changing these might improve patient care
Patient interviews

- Ask students to interview a pre-selected client about their experiences in the health care system and focus on how collaborative care could be improved from a patient’s perspective
  - Clients without cognitive impairment, who have chronic disease issues or multiple problems and who are comfortable talking about their experiences are well suited to this exercise
  - Students should probe around areas of service duplication, communication issues, lack of teamwork and other areas where interprofessional teamwork is of particular importance
- Following the interview students can debrief by planning a more effective way of collaboration around the client needs, including strategies that could be used to make this happen (exploring what might need to change in the health care system to facilitate type of care this might also be useful)

Patient assessment

- Patients can be assessed by interprofessional groups of students
- Students learn about other professions perspectives and areas of focus by observing the questions asked and the clarification required by the different professions
- If it is inappropriate for more than one student to interview the patient at a time, students can “compare notes” following their interactions with the patient
- If there are students who do not have a role with a particular patient, they may still observe the interactions of other group members with the client and discuss why they would not be involved with the specific client

Patient treatment

- Following assessment (whether from an in-person assessment or using information from the medical record and previous assessments if an actual assessment is impractical) students should collaboratively develop a patient centered care plan for the patient
- Students agree on functional goals for the client and then plan the treatment that they will give either from an individual profession perspective or from the perspective of two or more professions working together
  - It is vital that the patient’s perspective is kept central, and that the plan is tailored to meet the mutually agreed on goals rather than profession-specific issues
  - The plan must be realistic given the clinical setting
- Issues of shared scope should be identified and discussion encouraged as to which roles and activities should be shared amongst multiple team members
- Discussion of the rationale for sharing or not sharing specific functions is often useful
- Potential barriers to collaboration should also be discussed and plans made address these

It may take the students several hours to come up with a mutually agreeable plan, particularly if the student group is large. It is important to remember that the process of treatment planning as well as the final product is an important part of the learning experience. Before the plan is instigated, it should be presented to the facilitator and/or to the health care team for approval and comment.
Discharge planning

Activities such as discharge planning provide an excellent opportunity for collaborative learning and care

- Students should be asked to collaborate to set up a discharge plan
- The plan should clearly outline profession-specific responsibilities as well as those which are shared
- If the students plan is modified or not adhered to in actuality, discussion can be instigated around why changes occurred
- Look at whether the changes were positive or negative from the patient’s perspective: how could the plan be changed to be more collaborative and client focused?

Shadowing

- Students “shadowing” other professions is not a new concept but one which can be used very effectively with an interprofessional group of students
- Students should shadow each other and teach each other about their role instead of shadowing a graduate staff member. Learning of their own role is enhanced as the students teach and explain it to each other.
- Ask the students to state their specific goals and learning objectives for the shadowing experience in advance, both as the “shadower” and as the “shadowee” - this will help to focus the learners and can also help with articulation of clinical reasoning for their practice

Observational visits to other clinical areas

Exposing interprofessional students to the client’s continuum of care can be a useful teaching tool and starting point for discussion or debate. You may want to:

- Arrange for students to observe clients with similar clinical needs to those the students will encounter but in different stages of their care
- Organize visits to where their clients may be discharged. Also, seeing where the patients have progressed from may be useful (e.g., students in home care visit the acute setting).
- Provide an opportunity for debriefing such as a structured interprofessional discussion and reflection on what was observed following the visit

Students can also be asked to identify what the goals of treatment might be in the new setting.

Once the visit has been completed, students can be asked to use their new knowledge during collaborative treatment planning, for example in preparing their clients for discharge home or in anticipating their potential needs on transfer from an acute setting.
ACTIVITIES WITHOUT THE CLIENT PRESENT

Case presentations

- Students can be asked to take turns presenting a case they are currently working with. This can occur either individually or with one or more partners.
- The role of the audience, which can be made of up students or other health care team members, is to ask questions and provide suggestions for enhancement of collaborative care in the specific case

Consultations and problem-solving

It is not always feasible or relevant to have multiple professions involved in the care of a client. If this is the case, consultations to other students may be appropriate. Students may:

- Ask the student of another profession to give input into a specific problem or issue
- Participate in a discussion ‘behind the scenes’ with the team around a particular problem the student is having with a specific client
- Bring the problem to the team, which has the additional advantage of allowing many different professions to have input; sometimes a profession that the student does not expect will be able to provide assistance, further emphasizing the role of that profession

Students often find it valuable to have specific times allocated for the team to problem-solve using each other’s expertise during the week

Mock interprofessional rounds

A useful activity is the facilitation of ‘mock rounds,’ where the student attempts to present information from another team member’s perspective (e.g., a medical student would attempt to present the OT information). The OT student then provides feedback as to what they would have presented, and gaps are analyzed.

This fun activity can highlight the gaps in understanding of another team member’s role, and build respect for another team member’s knowledge base.

Team interviews

Interviewing each other on specific topics and issues can provide an insight into the values and beliefs underlying other professions. Students should be encouraged to select a topic which will elicit views and perspectives on a current health care issue and to prepare questions which may contrast their own professional views with those of another. Examples of topics might be:

- The use of assistants in their profession
- Entry-level qualifications and licensing
- Current “hot issues,” with an emphasis as to why specific issues are of importance to other professions
**Reflection**

Students should be encouraged to self-reflect in order to deepen their learning.

In interprofessional teams there is also value in group reflection, focusing on interprofessional communication, collaboration, problem solving and roles.

Looking at current practice, what optimal practice in the specific clinical area might look like, and what would be needed to move to a more collaborative team model can be useful to start the reflective process.

Team members could also be encouraged to reflect on their own current and optimal roles within the team, including their own perspectives and comfort levels around shared scopes of practice.

**Discussion**

Discussions are a key element of IP, promoting IP learning and developing critical thinking skills.

- Discussion may occur spontaneously between team members, however it is important for the IP leader/facilitator to have developed questions to stimulate and direct the conversation when needed
- Discussion can be focused on issues brought forward by the students, or be generated from specific client cases and key concepts
- Any key concepts relevant to the clinical area which it is important for students to discuss (for example, end of life issues on a palliative care unit), should be formulated ahead of time into specific discussion questions for the IP team
- Discussion of resources which may be useful for students to access will be important, including both literature, relevant websites, and any on-site resources

Examples of discussion questions used to promote critical thinking in students can be found in Appendix 4.

**Debate**

- Different interprofessional perspectives can be elicited in both the preparation for, and activity of, a formal debate
- Topics allocated for debate can be wide ranging, from system-wide issue to those tailored to the specific clinical environment (for example, the merits and drawbacks of a specific clinical pathway or treatment protocol, or current healthcare issues such as resource allocation)

Setting the ground rules for debate (for example, attacking positions rather than the person) is important and can be done by the participants using their team charter or group ground rules as a basis. Other team members from the clinical unit can be invited to the debate itself and have a role in judging the quality of the arguments, as well as being encouraged to question the debaters about their positions.

For an effective debate, a minimum of six participants is required, three on each team. If there are less than six students, graduate representatives of different professions may be asked to participate with the students. For more information on the structure of a formal debate see Appendix 5.
Case studies

- Case studies are a great way to encourage a team of students to collaborate in treatment planning and problem solving.
- Cases can be created in advance, allowing complete control over specific concepts which may be important in a clinical area, or a current client case on the unit can be used. The advantage of using a current patient or client is that students can often “try out” their specific treatment plan and/or follow the client to see how their conclusions play out in practice.

With either a fictitious or an actual case study, thought must be given to what elements of the case are the most important (for example: discharge planning or patient teaching). Students should then be encouraged to discuss their different perspectives and focus in those areas. Students should be guided to discuss their potential involvement with the case, the underlying principles guiding their involvement, and their perceived scope of practice. If various members of the student team are not familiar with the roles of other team members, it may be useful for them to combine a shadow experience with the case study (see Shadowing).
EVALUATION OF IP LEARNING IN THE PRACTICE EDUCATION SETTING

Why evaluate?

- To meet curriculum/learning objectives of each discipline, of each faculty/program
- For accreditation purposes
- To provide data for external audiences (research, IPE movement, policy implications)
- To develop an evidence base for changes that need to occur at the strategic level of IPE
- For better health outcomes of patients

Assessment and evaluation of interprofessional education and learning are challenging tasks given the complexity of the process and the intended outcome. However there are a number of common principles that assist in guiding the evaluation or assessment of IP projects and initiatives. Some of the principles and steps to follow in developing IPE assessment and evaluation include the following:

1. Aligning assessment and evaluation with the Objectives of the learning experience:

Evaluation needs be centred on the pre-determined IPE Objectives. Some examples of IPE Objectives can be found on page 10.

2. Using appropriate measurement tools

- Choose assessment and evaluation tools/measures based on the objective and expected outcome. When choosing a validated tool, consider what it is designed to measure and whether that matches the objectives of the program (see note above).
  - Most validated measures are aimed at detecting modifications of attitudes and perceptions
  - Self-reporting measures learner’s abilities and knowledge concerning skills in multidisciplinary team working
- When choosing a standardized measure regard whether the measure was developed and tested using a similar population, and similar circumstance–this is what makes IPE so complex and complicated to measure!
- If you are considering developing your own questionnaire or evaluation tool, consider the psychometric properties of reliability and validity and how you will ensure the tool has these attributes.

Consider who is being evaluated:

- Students
- Preceptors
- Continuing Professional Development program/sessions
- Stakeholders (clients)
When should assessment or evaluation occur?

- **Formative**
  - Developmental evaluation: during the process/project

- **Summative**
  - At the end of the process/project: an impact assessment: outcomes are evaluated against the success criteria specified during the goal/objective setting stage

- Short term: to evaluate the program, students

- Long term: to evaluate outcomes to the organizations, health care system

As discussed above there are numerous methods to assess learner outcomes. Some common tools utilized in the practice setting are the pre-post placement experience survey/questionnaire. See Appendices 6 and 7 for examples of surveys that can be used.

Another method that is often used to test competence is a case-based scenario or Key Features test based on a case. Key features assess decision making skills by focusing on the test taker’s abilities with respect to the critical elements of a scenario to achieve the best solution.

Key features (KFs) are the steps or actions most likely to lead to error; the most important aspects of the case; or the most difficult aspects of problem identification and management in practice. Candidate responses are only focused on the key features of each clinical scenario, rather than each and every step of managing a situation.

According to Page and Bordage (1987), (clinical) problem solving skills are “contingent on the effective manipulation of those few elements of the problem that are critical to its successful resolution. [Those] authors labeled these critical elements the problem’s key features.”

An example of a Key Features Case study can be found in Appendix 8. These can be used in an interprofessional collaborative placement experience, both pre and post IP experience. Be mindful that you will have to adapt the cases to your specific practice context.
APPENDICES
Appendix 1: National Interprofessional Competency Framework

To view this document please go to: www.cihc.ca/files/CIHC_IPCompetencies_Feb1210.pdf
To view this document please go to: www.med.ubc.ca/faculty_staff/policies-procedures.htm
> People
> Professional Standards for Faculty Members and Learners in the Faculties of Medicine and Dentistry
Appendix 3: Team Charter

As a team, create one team charter that you can all live with for the term. Include the headings below and answer each of the questions. Discuss the various issues listed under ground rules to discover what each team member’s expectations are. Do your best to reach a consensus that everyone can live with. Remember: you can revise your ground rules if it becomes necessary.

Team Purpose
- What are we supposed to do?
- What is our vision of the team?

Key Customers
- Who will receive/use the output of the team?

Stakeholders
- Who else is interested in our success?

Team Ground Rules
- What is acceptable behaviour? What is not? What would it take for you to “fire” someone from the team?

Discuss these items:
- Accountability for commitments (I.e., keeping your word)
- Attendance (Consequences of missing meetings and classes?)
- Communication guidelines (How, and how often?)
- Completion of assignments
- Conflict resolution processes (How and when will you address problems?)
- Decision-making processes (When will you use majority rule and when will you use consensus?)
- Interpersonal behaviour guidelines (How will you treat each other?)
- Leadership (How will you share leadership?)
- Meetings (Agendas, minutes, breaks, location)
- Participation (What do you expect? How will you get the most from each of you?)
- Rewards and celebrations
- Roles and responsibilities (Who will do what? What will you all share?)

© 2000 by Lorraine Robson. Used with permission.
Appendix 4: Examples of Discussion Questions Used to Promote Critical Thinking in Students

Sample questions used to promote critical thinking focus on the following:

DEPTH
What makes this situation more complex?

BREADTH
How could we look at this differently?

LOGIC
How does this fit with what the evidence says?

SIGNIFICANCE
Which of these test results is most important?

FAIRNESS
Are we listening to the client’s wishes as well as to our own?

CLARITY
Could you give me an example?

ACCURACY
How do you know this is true?

PRECISION
Could you be more specific?

RELEVANCE
How do these findings relate to the diagnosis?
Appendix 5: How to Organize a Debate

A debate can be defined as a discussion of a public question with opposing viewpoints; a formal presentation in which the positive and negative sides of a proposition are advocated by speakers.

In the clinical education setting students could be assigned to a debating team. There needs to be at least two students (one for each viewpoint) to participate or engage other staff members or clinicians. There will be one pro and one con team for each statement.

During the debate only one person may speak at a time. A moderator should be assigned. The moderator will recognize each team's turn and signal when time is up. Teams may choose a single spokesperson, choose one spokesperson for the argument and another for the rebuttal, or otherwise divide the available time among speakers as they see fit. If there are multiple students participating, all team members are expected to participate in the development of the argument, and as a group should determine the optimal strategy for presenting concise and persuasive arguments.

A proposed time frame could be such:

- **Pro and Con presentations**: 4 minutes each
- **Pro and Con rebuttals**: 2 minutes each
- **Pro and Con closing statements**: 1 minute each

The “pro” team argues in favour of the statement (i.e., implies it is true), the “con” side argues against the statement (i.e., implies it is false or flawed).

Some examples of topics might include:

- “Interprofessional collaboration is a lofty ideal, not applicable to everyday practice”
- “Collaborative practice gets in the way of delivering client services”
- “Striving for client-centred practice within interprofessional teams is unrealistic and unachievable”
Appendix 6: Entry Level Interprofessional Questionnaire (ELIQ)

Entry Level Interprofessional Questionnaire (ELIQ)

University of the West of England, Bristol

Profession:       Gender: Female ☐  Male ☐
ID #: 
Previous clinical experience (total number of weeks): 

Please answer the following questions according to these categories (Note: Section A contains only 4 categories)

SA = Strongly Agree  A = Agree  N = Neutral  D = Disagree  SD = Strongly Disagree

A. Communication and Teamwork Scale

1. I feel comfortable justifying recommendations/advice face-to-face with more senior people*
   SA ☐  A ☐  D ☐  SD ☐

2. I feel comfortable explaining an issue to people who are unfamiliar with the topic*
   SA ☐  A ☐  D ☐  SD ☐

3. I have difficulty in adapting my communication style (oral and written) to particular situations and audiences*
   SA ☐  A ☐  D ☐  SD ☐

4. I prefer to stay quiet when other people in a group express opinions that I don’t agree with
   SA ☐  A ☐  D ☐  SD ☐

5. I feel comfortable working in a group*
   SA ☐  A ☐  D ☐  SD ☐

6. I feel uncomfortable putting forward my personal opinions in a group
   SA ☐  A ☐  D ☐  SD ☐

7. I feel uncomfortable taking the lead in a group
   SA ☐  A ☐  D ☐  SD ☐

8. I am able to become quickly involved in new teams and groups*
   SA ☐  A ☐  D ☐  SD ☐

9. I am comfortable expressing my own opinions in a group, even when I know that other people don’t agree with them
   SA ☐  A ☐  D ☐  SD ☐
### B. Interprofessional Learning Scale

<table>
<thead>
<tr>
<th></th>
<th>My skills in communicating with patients/clients would be improved through learning with students from other health and social care professions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SA □ A □ N □ D □ SD □</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>My skills in communicating with other health and social care professionals would be improved through learning with students from other health and social care professions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>SA □ A □ N □ D □ SD □</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>I would prefer to learn only with peers from my own profession</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>SA □ A □ N □ D □ SD □</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Learning with students from other health and social care professions is likely to facilitate subsequent working professional relationships</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>SA □ A □ N □ D □ SD □</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Learning with students from other health and social care professions would be more beneficial to improving my teamwork skills than learning only with my peers</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>SA □ A □ N □ D □ SD □</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Collaborative learning would be a positive learning experience for all health and social care students</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>SA □ A □ N □ D □ SD □</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Learning with students from other health and social care professions is likely to help to overcome stereotypes that are held about the different professions</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>SA □ A □ N □ D □ SD □</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>I would enjoy the opportunity to learn with students from other health and social care professions</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>SA □ A □ N □ D □ SD □</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Learning with students from other health and social care professions is likely to improve the service for patient/client</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>SA □ A □ N □ D □ SD □</td>
</tr>
</tbody>
</table>

### C. Interprofessional Interaction Scale

<table>
<thead>
<tr>
<th></th>
<th>Different health and social care professionals have stereotyped views of each other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SA □ A □ N □ D □ SD □</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>The line of communication between all members of the health and social care professions is open</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>SA □ A □ N □ D □ SD □</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>There is a status hierarchy in health and social care that affects relationships between professionals</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>SA □ A □ N □ D □ SD □</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Different health and social care professionals are biased in their views of each other</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>SA □ A □ N □ D □ SD □</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>All members of health and social care professions have equal respect for each discipline</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>SA □ A □ N □ D □ SD □</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>It is easy to communicate openly with people from other health and social care disciplines</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>SA □ A □ N □ D □ SD □</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Not all relationships between health and social care professionals are equal</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>SA □ A □ N □ D □ SD □</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Health and social care Professionals do not always communicate openly with one another</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>SA □ A □ N □ D □ SD □</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Different health and social care professionals are not always cooperative with one another</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>SA □ A □ N □ D □ SD □</td>
</tr>
</tbody>
</table>


Adapted by: D. Drynan, UBC College of Health Disciplines
Notes on Scoring the ELIQ

Communication and Teamwork Scale

Maximum score: 36
Minimum score: 9

- Strongly Agree = 1
- Agree = 2
- Disagree = 3
- Strongly Disagree = 4

Self-assessment of communication is scored as follows:

- Positive = Between 9 - 20
- Neutral = Between 21 - 25
- Negative = Between 26 - 36

Interprofessional Learning Scale and Interprofessional Interaction Scale

Maximum score: 45
Minimum score: 9

- Strongly Agree = 1
- Agree = 2
- Neutral = 3
- Disagree = 4
- Strongly Disagree = 5

Self-assessment of interprofessional learning is scored as follows:

- Positive = Between 9 - 22
- Neutral = Between 23 - 31
- Negative = Between 32 - 45

Perceptions of interprofessional interaction are scored as above, i.e.:

- Positive = Between 9 - 22
- Neutral = Between 23 - 31
- Negative = Between 32 - 45

The statements marked with an asterisk (*) were taken from an existing scale used for the self-assessment of communication skills by candidates applying for fast stream entry to the Civil Service (H.M. Government 2001), and are reproduced with the permission of the Controller of The Stationery Office and the Queen’s Printer for Scotland.
Appendix 7: Attitudes toward Health Care Teams Survey

Attitudes toward Health Care Teams

The ATHCT scale is a 21 item research measure of general attitudes about teams. The measure contains 3 subscales Team Value, team efficiency and physician centrality in teams. Tests of reliability and validity demonstrate that each subscale is a strong measure of its respective underlying concept. The instrument’s purpose include: a) comparing attitudes of team members from different disciplines, b) comparing attitudes amongst different types of teams, and c) testing hypotheses about the interrelationships between attitudes and such variables such as education, participation of team members, tenure on the team and team functioning. The measure has strong psychometric data and has been used successfully as a pre/post test instrument for evaluation educational interventions with teams.


Rank the responses according to the following scale:

1 = strongly disagree
2 = moderately disagree
3 = somewhat disagree
4 = somewhat agree
5 = moderately agree
6 = strongly agree

To create a total summed scale score ranging from 0 to 105, each item in the 21-item scale was re-coded to a zero base.

Table 1. Attitudes toward Healthcare Teams

<table>
<thead>
<tr>
<th>Item</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Working in teams unnecessarily complicates things most of the time.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>2. The team approach improves the quality of care of patients</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>3. Team meetings foster communication among team members from different disciplines.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>4. Physicians have the right to alter patient care plans developed by the team.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>5. Patients receiving team care are more likely than other patients to be treated as whole persons.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>6. A team’s primary purpose is to assist physicians in achieving treatment goals for patients.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>7. Working on a team keeps most health professionals enthusiastic and interested in their jobs.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>8. Patients are less satisfied with their care when it is provided by a team.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td></td>
<td>Statement</td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>9</td>
<td>Developing a patient care plan with other team members avoids errors in delivering care</td>
</tr>
<tr>
<td>10</td>
<td>When developing interdisciplinary patient care plans, much time is wasted translating jargon from other disciplines.</td>
</tr>
<tr>
<td>11</td>
<td>Health professionals working on teams are more responsive than others to the emotional and financial needs of patients.</td>
</tr>
<tr>
<td>12</td>
<td>Developing an interdisciplinary patient care plan is excessively time consuming.</td>
</tr>
<tr>
<td>13</td>
<td>The physician should not always have the final word in decisions made by health care teams.</td>
</tr>
<tr>
<td>14</td>
<td>The give and take among team members helps them make better patient care decisions</td>
</tr>
<tr>
<td>15</td>
<td>In most instances, the time required for team meetings could better spent in other ways</td>
</tr>
<tr>
<td>16</td>
<td>Hospital patients who receive team care are better prepared for discharge than other patients</td>
</tr>
<tr>
<td>17</td>
<td>Physicians are natural team leaders</td>
</tr>
<tr>
<td>18</td>
<td>The team approach makes the delivery of care more efficient.</td>
</tr>
<tr>
<td>19</td>
<td>The team approach permits health professionals to meet the needs of family caregivers as well as patients.</td>
</tr>
<tr>
<td>20</td>
<td>Having to report observations to the team helps team members better understand the work of other health professionals.</td>
</tr>
</tbody>
</table>

**TOTAL**

The Attitudes Toward Team Value subscale measures attitudes about whether team care improves patient outcomes through consensus on the needs and priorities of the patient; the Cronbach’s for this subscale, as calculated by Hyer et al., was 0.85.

The Attitudes toward Team Efficiency subscale measures attitudes about whether teams waste time through inefficiencies such as use of discipline-specific jargon (Cronbach’s of 0.76). The third subscale, Attitudes about the Physician’s Shared Role on the Team, measures values of shared leadership and equality among team members (Cronbach’s of 0.75). In the 10-year development of the scale and since, there has been debate about whether the first two subscales, Team Value and Team Efficiency, measure the same general concept or distinct ones.

Heinemann et al. and Hyer et al. agree that the last subscale, Physician Centrality, is a distinct factor (Cronbach’s of 0.68 in Heinemann and 0.75 in Hyer). Given that the population of trainees tested here draws from the same population tested by Hyer et al., the original three-factor solution was used.
Appendix 8: Key Features Case Assessment (Pre and Post)

Interprofessional Student Placement
Post -Placement
Key Features Case Study

Your program of study: __________________________________________________

Year (circle): 1 2 3 4 5 Other

Name is not required.

You are a student on placement at ________________on the ______________ /ward/unit/Program. You are presented with a ______ year-old woman/man ______ days/weeks after her/his ____________________. S/He has (describe medical/physical difficulties) ____________________, and (describe social or communication difficulties) and (describe strengths and resources) _______________. During physiotherapy sessions in the Gym, s/he has been consistently independently transferring from his wheelchair to the plinth with some verbal instructions from her/his therapist. Ward staff report that he has regularly had un-witnessed falls in her/his room, last of which occurred the previous evening. Staff have commented on the inconsistency of her/his transfers in the last week.

Questions:

From this list, select four primary problems that require addressing for this client?

A. Staff education
B. Transfer technique
C. Exercise tolerance/fatigue
D. Memory
E. Comprehension
F. Environment
G. Safety
H. Equipment
You do not have to list in order of priority.

Problem 1:

Problem 2:

Problem 3:

Problem 4:

2. Which members of the team should be involved in the assessment of each of the problems you have identified? Please place a tick mark \(\checkmark\) to identify which team members you believe would be involved with this client for each of the problems you selected.

<table>
<thead>
<tr>
<th>Team member</th>
<th>Problem 1</th>
<th>Problem 2</th>
<th>Problem 3</th>
<th>Problem 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Worker</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupational Therapist</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speech Language Pathologist</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physiotherapist</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Licensed Practical Nurse</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychologist</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In one or two sentences, please describe the key role for each team member(s) in this assessment for each problem chosen above. You may list each problem more than once if there is more than one team member involved.

**Problem name:**

**Team member:**

**Role:**

**Problem name:**

**Team member:**

**Role:**
Problem name: 
Team member: 
Role: 

Problem name: 
Team member: 
Role: 

Problem name: 
Team member: 
Role: 

Problem name: 
Team member: 
Role: 

Problem name: 
Team member: 
Role: 

Problem name: 
Team member: 
Role: 

Problem name: 
Team member: 
Role: 

Problem name: 
Team member: 
Role: 

Thank you
Answer Key

Collaborative Team Problem “Falls”

Question 1

One mark each for up to four of the following problems:

A. Staff education
B. Transfer technique
C. Exercise tolerance/fatigue
D. Memory
E. Comprehension
F. Safety

Maximum mark is 4.

Comment: If students select more than four problems, it increases their odds of selecting the correct ones. Could subtract a mark for every problem selected over 4? Yes

Question 2

Comments:

1. Patient care aid will not be scored in this problem, and nurse and practical nurse will be collapsed into one response (i.e., if one or both are selected, one mark will be assigned).

2. We should have, but did not specify a maximum number of selections permitted for this question, such as ‘select up to 8 team members for each problem’. As it is, students selecting larger numbers of team members will have a better chance of including the right ones in their answers. To counter this, could subtract a mark for each incorrect selection for each problem. Yes

For problem A. Staff education (maximum of 9 marks)
- Two marks for each of OT, PT, Nurse/Practical Nurse – maximum of 6 marks
- One mark for each of family member, Rehab Aide, and PT Services Coordinator – maximum of 3 marks

For problem B. Transfer technique (maximum of 8 marks)
- Two marks for each of OT, PT, Nurse/Practical Nurse – maximum of 6 marks
- One mark for each of family member and Rehab Aide – maximum of 2 marks

For problem C. Exercise tolerance/fatigue (maximum of 11 marks)
- Two marks for each of PT, Nurse/Practical Nurse, Physician – maximum of 6 marks
- One mark for each of OT, family member, Rehab Aide, Registered Dietician, Pharmacist – maximum of 5 marks

For problem D. Memory (maximum of 7 marks)
- Two marks for each of OT, Speech Language Pathologist – maximum of 4 marks
- One mark for each of Nurse/Practical Nurse, Physician, family member – maximum of 3 marks
For problem E. Comprehension (maximum of 7 marks)
- Two marks for each of OT, Speech Language Pathologist – maximum of 4 marks
- One mark for each of Nurse/Practical Nurse, Physician, family member – maximum of 3 marks

For problem F. Safety (maximum of 9 marks)
- Two marks for PT and Nurse/Practical Nurse – maximum of 4 marks
- One mark for each of OT, Physician, family member, Rehab Aide, Patient Services Coordinator – maximum of 5 marks

Question 3

For problem A: Staff education (maximum of 6 marks)
- For each of OT, PT and Nurse, one mark for each of the following responses
  - ½ pt: Identify gaps, needs assessment or education needed
  - 1 pt: Collaborative component
  - ½ pt: Develop action plan/care plan/problem solving plan

For problem B: Transfer technique (maximum of 6 marks)
- For each of OT, PT and Nurse, one mark for each of the following responses (maximum 3 marks per discipline):
  - ½ pt: Assess location of fall and transfer in this location (¼ pt mark for ‘assess environment’)
  - 1 pt: With other core professionals
  - ½ pt: Assess technique and need to change

Problem C: Exercise tolerance and fatigue (maximum of 6 marks)
- For PT, one mark for each of (maximum of 2 marks)
  - 1 pt: Reassess their exercise tolerance for transfers
  - 1 pt: Reassess muscle strength for changes

- For Nurse (including LPN), one mark for (maximum 2 marks)
  - 1 pt: Assess for contributing factors to the fatigue
  - 1 pt: Change in medical condition, meds, sleep, activity levels

- For Physician, one mark for each of (maximum 2 marks)
  - 1 pt: Assess meds for potential impact on fatigue levels
  - 1 pt: Rule out medical status changes

Problem D: Memory (maximum of 6 marks)
- For either OT and SLP, score for each: (maximum of 4 marks)
  - 1 pt: Functional assessment of memory skilled observation, in a variety of settings, e.g., during ADLs
  - ½ pt: More objective assessment to identify where memory has broken down
  - ½ pt: Talk to family to assess for changes from previous weeks and premorbidly
  - ½ pt: Assess contributing factors like mood, fatigue, effect of meds on memory
• **For SLP only** (maximum one mark)
  o 1 pt: Assess interaction between language and memory deficit

**For problem E: Comprehension (maximum of 6 marks)**
• **For OT** (maximum of 2 marks - partial marks acceptable)
  o 2 pts: Skilled observation of understanding in the functional contexts, including with family

• **For SLP** (maximum of 4 marks)
  o 2 pts: Assess understanding of verbal instructions, and functional understanding in the given environment
  o 2 pts: Identify best method of communication e.g. verbal or other strategy

**For problem F: Safety (maximum of 6 marks)**
• **For PT** (maximum 3 marks)
  o 1 pt: Assess physical safety, e.g., how the client plans and performs their transfers, how safely client transfers
  o 1 pt: Determine client’s awareness of safety
  o ½ pt: Assess the level of supervision required
  o ½ pt: For up to one of the following examples:
    ▪ Assess how verbal cues are provided
    ▪ Assess the environment and equipment
    ▪ Assess impact of cognitive and language deficits on safety

• **For Nursing** (maximum of 3 marks)
  o 1pt: Assess the environment and equipment
  o 1 pt: Assess frequency of observation required OR supervision needs
  o 1pt: Determine client’s awareness of safety

Comment:

For questions 2 and 3, student responses will address the 4 problems that they selected in question one (and not all 6 problems listed in the scoring key). This creates a scoring problem in that the responses to different problems in questions 2 and 3 are assigned varying maximum responses. The way to deal with this is to mark the students’ answers out of the maximums for each problem as outlined in the scoring keys above, and then (later) divide each score by the maximum for problem, so that each problem score is a number between 0 and 1. Thus, each question will have a maximum score of 4, and the maximum score over the 3 questions for the entire problem will be 12. **To solve this and reduce steps, we have made each question in number 3 have a maximum of 6.**
<table>
<thead>
<tr>
<th>Competency</th>
<th>Team/Student Learning Outcome</th>
<th>Learning Activity/Strategies</th>
<th>Evidence (How will we know we have learned it?)</th>
<th>Validation of Met Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REFERENCES


ADDITIONAL RESOURCES

Canadian Interprofessional Health Collaborative
www.cihc.ca

The University of Toronto Office of Interprofessional Education
www.ipe.utoronto.ca

University of British Columbia College of Health Disciplines
www.chd.ubc.ca