EIC-ICU Toolkit
Enhancing Interprofessional Collaboration in the Intensive Care Unit
About the EIC-ICU Toolkit

The EIC-ICU Toolkit is a series of three tools that are based on extensive theoretically informed qualitative research in a number of ICUs across North America. The Toolkit aims to address the related issues of interprofessional collaboration and patient family involvement in the ICU in an effort to improve the safety and quality of care delivery. These tools in this toolkit can be used collectively, as stand-alone activities, or can be incorporated into existing interprofessional team activities, such as CUSP (Comprehensive Unit Based Safety Program).

Authors

Scott Reeves, PhD
Professor of Interprofessional Research & Editor-in-Chief, Journal of Interprofessional Care
Centre for Health and Social Care Research, Faculty of Health, Social Care and Education, Kingston & St. George’s, University of London, St George’s Hospital, London, United Kingdom

Simon Kitto, PhD
Associate Professor, Department of Innovation in Medical Education
Director of Research, Office of Continuing Professional Development
Faculty of Medicine, University of Ottawa
Ottawa, Ontario, Canada

Janet Alexanian, PhD
Research Associate, Department of Surgery
Faculty of Medicine, University of Toronto
Toronto, Ontario, Canada

Rachel E. Grant, MN, BScN, RN
Social Sciences and Humanities Research Associate, Department of Innovation in Medical Education
Social Sciences and Humanities Research Associate, Office of Continuing Professional Development
Faculty of Medicine, University of Ottawa
Ottawa, Ontario, Canada

Funding

The EIC-ICU Toolkit and supporting research study were funded by the Gordon and Betty Moore Foundation.

About the Gordon and Betty Moore Foundation

Intel co-founder Gordon and his wife Betty established the foundation to create positive change for future generations. The Moore Foundation believes in bold ideas that create an enduring impact in the areas of environmental conservation, patient care and science.

Their patient care vision focuses on eliminating preventable harms and unnecessary health care costs through meaningful engagement of patients and their families in a supportive, redesigned health care system.

More information about the Foundation is available at: www.moore.org
Advisory Group

This Advisory Group, representing diverse perspectives and professional backgrounds, were solicited for their feedback throughout the creation of the EIC-ICU Toolkit. The authors and Moore Foundation wish to acknowledge these individuals for their contribution in reviewing the EIC-ICU Toolkit:

**Hanan Aboumatar**, MD, MPH
Johns Hopkins School of Medicine, USA.

**Frank B. Cerra**, MD
University of Minnesota, USA.

**Benjamin J. Chesluk**, PhD
American Board of Internal Medicine, USA.

**Molly Courtenay**, PhD, MSc, BSc, Cert. Ed, RN
University of Surrey, UK.

**Linda Franck**, RN, PhD, FRCPCH, FAAN
University of California, USA.

**Michael A. Gropper**, MD, PhD
University of California, San Francisco, USA.

**Jeremy M. Kahn**, MD, MSc
University of Pittsburgh, USA.

**Gerri Lamb**, PhD, RN, FAAN
Arizona State University, USA.

**Audrey Lyndon**, RN, PhD, CNS-BC
University of California, San Francisco, USA.

**Peter J. Pronovost**, MD, PhD, FCCM
Johns Hopkins School of Medicine, USA.

**Kathleen Puntillo**, RN, PhD, FAAN, FCCM
University of California, San Francisco, USA.

**Madeline H. Schmitt**, PhD, RN, FAAN, FNAP
University of Rochester, USA.

**Mary van Soeren**, RN, PhD
Dalhousie University, Canada.

**Robert M. Wachter**, MD
University of California, San Francisco, USA.

**Merrick Zwarenstein**, MBBCh, MSc, PhD
University of Western Ontario, Canada.

Acknowledgements

The authors would like to thank Michelle Olding, Sarah McMillan, Dr. Joanne Goldman, and Natasha Kachan for their contributions to the toolkit. We would also like to thank Marybeth Sharpe and Diane Schweitzer from the Moore Foundation for their support and feedback on the toolkit.
# Contents

*Enhancing Interprofessional Collaboration in the Intensive Care Unit*

<table>
<thead>
<tr>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction</strong></td>
</tr>
<tr>
<td><strong>Organization and Layout</strong></td>
</tr>
<tr>
<td><strong>Tool 1: Defining &amp; Improving Patient Family Involvement in the ICU</strong></td>
</tr>
<tr>
<td>Phase 1: Implementing Family Involvement Activity</td>
</tr>
<tr>
<td>Phase 2: Intervention – Patient Family Involvement Workshop</td>
</tr>
<tr>
<td>Phase 3: Evaluation</td>
</tr>
<tr>
<td><strong>Tool 2: Defining &amp; Improving Interprofessional Collaboration in the ICU</strong></td>
</tr>
<tr>
<td>Phase 1: Interviews with Healthcare Professionals</td>
</tr>
<tr>
<td>Phase 2: Observations</td>
</tr>
<tr>
<td>Phase 3: Intervention – Interprofessional Collaboration Workshop</td>
</tr>
<tr>
<td>Phase 4: Evaluation</td>
</tr>
<tr>
<td><strong>Tool 3: Identifying &amp; Addressing Interprofessional Issues that Affect Care Delivery</strong></td>
</tr>
<tr>
<td>Phase 1: Identifying Interprofessional &amp; Patient Family Member Issues Workshop</td>
</tr>
<tr>
<td>Phase 2: Identifying Related Interventions</td>
</tr>
<tr>
<td>Phase 3: Evaluation</td>
</tr>
<tr>
<td><strong>Glossary of Terms</strong></td>
</tr>
<tr>
<td><strong>References</strong></td>
</tr>
</tbody>
</table>

## Appendices

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix 1</td>
<td>Modified CUSP: 5-Step Program</td>
</tr>
<tr>
<td>Appendix 2</td>
<td>Facilitating Tool 1</td>
</tr>
<tr>
<td>Appendix 3</td>
<td>Facilitating Tool 2</td>
</tr>
<tr>
<td>Appendix 4</td>
<td>Facilitating Tool 3</td>
</tr>
<tr>
<td>Appendix 5</td>
<td>Facilitating Tips</td>
</tr>
<tr>
<td>Appendix 6</td>
<td>Checklists for Identifying Interprofessional Issues</td>
</tr>
<tr>
<td>Appendix 7</td>
<td>Existing Tools</td>
</tr>
<tr>
<td>Appendix 8</td>
<td>Evaluating ICU Interventions</td>
</tr>
<tr>
<td>Appendix 9</td>
<td>Additional Information</td>
</tr>
</tbody>
</table>
Introduction

The EIC-ICU Toolkit aims to improve **interprofessional collaboration** and **patient family involvement** in the ICU in an effort to improve the safety and quality of care delivery. The EIC-ICU Toolkit also includes resources for those interested in implementing this Toolkit in their ICU.

The issue of **patient safety** has been the focus of numerous policies, interventions and research on clinical errors for the past decade or so. Recently the focus has shifted from the individuals in the healthcare system towards safety culture and the entire system itself.

**Safety culture** refers to health and social care professionals' value systems and their patterns of clinical behavior. These attitudes and behaviors can have a number of undesirable effects, including:
- Undermining a team’s effectiveness and communication;
- Strengthening embedded hierarchies;
- Fostering a culture of non-reporting;
- Creating a lack of standardization of reporting and addressing errors.

Safety culture can be seen in things as basic as how the healthcare team shares physical space and communicates with one another. Interprofessional collaboration, teamwork, effective communication, and culturally informed interventions have been identified as vital to solutions to these issues.

The Institute of Medicine’s (IOM) reports *To Err is Human: Building a Safer Health Care System (2000)* and *Crossing the Quality Chasm, Patient Safety: Achieving a New Standard for Care (2001)* first introduced the concept of safety culture. These reports specifically point to the social, political and cultural factors that must be understood in order to address the problem of patient safety. These include:
- Environmental influences;
- Interpersonal and group interaction processes;
- Underlying cultural and systemic issues.

The IOM recommendations include qualitative research and descriptive studies that focus on the everyday practice of healthcare professionals. Research on healthcare professionals' perceptions of safety also demonstrates the importance of qualitative methods in contextualizing—and thus, better understanding—healthcare professionals' perceptions.

**A Note on Terminology**

The sidebar to the right presents definitions of the terms ‘interprofessional collaboration’ and ‘teamwork’ to help distinguish between the two mains type working arrangements we observed in the ICUs. As outlined in this box, collaboration is a looser type of working arrangement which lacks some of the key element of teamwork.
What is the EIC-ICU Toolkit?

The EIC-ICU Toolkit is a series of three tools that are informed by social theory and based on extensive qualitative research in ICUs:

- Tool 1: Defining and Improving Patient Family Involvement in the ICU
- Tool 2: Defining and Improving Interprofessional Collaboration in the ICU
- Tool 3: Identifying and Addressing Interprofessional Issues that Affect Care Delivery

The EIC-ICU Toolkit aims to address the related issues of interprofessional collaboration and patient family involvement in the ICU in an effort to improve the quality of care delivery.

The EIC-ICU Toolkit also includes eight appendices to help with the facilitation and evaluation of these tools:

- Appendix 1: Modified CUSP: 5-Step Program
- Appendix 2: Facilitating Tool 1
- Appendix 3: Facilitating Tool 2
- Appendix 4: Facilitating Tool 3
- Appendix 5: Tips for Facilitating Workshops
- Appendix 6: Checklists for Identifying Interprofessional Issues
- Appendix 7: Existing Tools for Evaluating Interprofessional Collaboration
- Appendix 8: Designing Your Own Evaluation of ICU Interventions on Collaboration and Family Member Involvement

What Makes this Toolkit Unique?

This toolkit is based on our two-year, multi-sited ethnographic study of eight ICUs in North America, providing us with a unique and significant perspective into the everyday work of healthcare professionals in the ICU.

This study involved over 1,000 hours of direct observation of interprofessional work, communication, and collaboration in ICUs, as well as interactions between healthcare professionals and patient family members. We also conducted 80 clinician interviews and nearly 40 interviews with patients and family members. More information on this study is available in Appendix 9.

Like the IOM recommendations, our approach is based on the premise that interventions should be empirically grounded and adapted to the specific units in which they will be implemented.

How to Use the Toolkit

These tools can be used collectively, as stand-alone activities, or can be incorporated into an existing interprofessional team program such as the CUSP. The tools can be employed individually, consecutively, or simultaneously. While it is advisable to have a staff member or an external resource dedicated to serving as facilitator for the quality improvement process, this is not necessary.

The toolkit is designed to be used by ICU clinicians who are interested in enhancing interprofessional collaboration and/or family member involvement. Although in practical terms it will usually be local hospital patient safety committees or CUSP safety teams whose support will be needed before the toolkit can be used in an ICU. Indeed, it is important to initially have this level of support as patient safety leads from these committees or teams will in turn need to liaise with hospital management to ensure that the toolkit has wider organizational ‘buy in’. Once the local patient safety committees/teams are involved, discussion can be undertaken in terms of planning the roll out (implementation) of the different tools.

Each of the tools includes a description of resources needed, intended audiences, and supporting resources. Throughout the Toolkit there are also suggestions for decreasing the amount of time required for each Tool, and making the most of resources that are available to you on your unit. Additional suggestions can be found in Appendix 5: Facilitation Tips.

The Importance of Context

It is important to consider the nature of local context (i.e. hospital and unit level) when examining teamwork, collaboration, reporting and error. By considering these concepts within their context we can understand the deeper meanings, and can then tailor interventions to improve patient safety within that specific context. The extensive research and

*CUSP (Comprehensive Unit Based Safety Program), as described by Peter Pronovost and colleagues (see Appendix 1) is ideal for this purpose, not only because it provides a framework for organizational change, which is applied to the specific concerns of a health care unit (as identified by frontline staff), but also because it recognizes the importance of cultural factors in the delivery of care. In order to enhance the program’s process of adaptation to cultural context, we recognized the potential value of incorporating our empirically informed EIC-ICU Toolkit to CUSP.
holistic conceptual framework informing this toolkit make it clear that patient safety initiatives need to consider how professionals perceive errors, as well as unpack the assumptions surrounding teamwork in the ICU. It can also be difficult to foster collaborative relationships with patients and families when there is conceptual ambiguity around what patient and family involvement is.

We recognize different local contexts may affect how the EIC-ICU Toolkit can be implemented. Below we present three case study examples to illustrate how the toolkit can be implemented in a variety of different ICUs, including an urban teaching hospital, urban community hospital, and rural community hospital:

**Urban Teaching Hospital:** Samira is a Nurse Educator at a 12 bed ICU at a large urban teaching hospital. The hospital aspires to be an example of exemplary interprofessional collaboration and patient family involvement, and they have asked Samira to lead the implementation of the EIC-ICU Toolkit in the ICU. The hospital also has a research agenda, and is keen to publish any findings. Samira is able to combine her training in education with a number of resources available to her through her institution.

**Urban Community Hospital:** Kierra is an Intensivist leading the CUSP Safety Team at an eight bed ICU. The ICU manager has noticed the ICU is having problems with team dynamics, particularly interprofessional communication. Tension and poor communication have made it difficult to implement other patient safety initiatives in the ICU. Kierra and the CUSP Safety Team have decided to use the EIC-ICU Toolkit to examine some of the underlying problems that are contributing to dysfunctional teamwork.

**Rural Teaching Hospital:** Ian is the Nurse Manager of a four bed ICU. Often the ICU care delivered on his unit is temporary to stabilize patients so they can be transferred to a larger center. Ian and the interprofessional team are concerned about the impact these transfers have on patients, families and the community. Although they cannot control what happens after a patient is transferred, Ian has decided to implement the EIC-ICU Toolkit to improve patient family involvement on his unit. The hospital and staff are keen to improve patient family involvement at their hospital despite having a limited budget.

The Facilitator Appendices (Appendix 2 – 4) go on to demonstrate how the toolkit can be implemented in a variety of different ICUs, including an urban teaching hospital, urban community hospital, and rural community hospital.
### Organization and Layout

This Toolkit is organized into three tools for improving patient-family involvement and interprofessional teamwork in the ICU. Each tool includes its own Assessment, Intervention, and Evaluation sections. There are also a number of appendices to aid in the facilitation and evaluation of these tools. The toolkit concludes with an appendix with additional information about the Toolkit’s authors and the supporting research study.

<table>
<thead>
<tr>
<th>PURPOSE</th>
<th>SECTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Defining &amp; Improving Patient Family Involvement in the ICU</strong></td>
<td></td>
</tr>
<tr>
<td><strong>TOOL 1</strong></td>
<td></td>
</tr>
</tbody>
</table>
| **Description:** Tool 1 helps ICU staff identify discrepancies in how different family members define family involvement. Tool 1 also allows frontline staff to explore their assumptions about family involvement. | **Assessment:**  
• Family record activity  
• HCP reflection cards  
**Interventions:**  
• Patient Family Involvement Workshop  
**Evaluation:**  
• Various |
| **Impact:** Allows family members to communicate their desired level of involvement in daily care. | |
| **Defining & Improving Interprofessional Collaboration in the ICU** | |
| **TOOL 2** | |
| **Description:** Tool 2 allows for the identification of discrepancies in how healthcare professionals understand IPC and others’ roles on the healthcare team. | **Assessment:**  
• Interviews  
• Structured observations  
**Interventions:**  
• Interprofessional Collaboration Workshop  
**Evaluation:**  
• Various |
| **Impact:** An understanding of your ICU will allow for the adaptation and implementation of effective interventions to improve patient care. | |
| **Identifying & Addressing Interprofessional Issues that Affect Care Delivery** | |
| **TOOL 3** | |
| **Description:** Tool 3 guides ICU staff in exploring and identifying interprofessional issues that can impact the delivery of care and patient safety in their ICU. | **Assessment:**  
• Identifying Interprofessional & Patient Family Member Issues Workshop  
**Intervention:**  
• Various  
**Evaluation:**  
• Various |
| **Impact:** Unit-specific solutions to respond to interprofessional issues that may jeopardize patient safety | |

| APPENDICES | |
|-----------||
| Appendix 1 | Modified CUSP: 5-Step Program |
| Appendix 2 | Facilitating Tool 1 |
| Appendix 3 | Facilitating Tool 2 |
| Appendix 4 | Facilitating Tool 3 |
| Appendix 5 | Facilitation Tips |
| Appendix 6 | Checklists for Identifying Interprofessional Issues |
| Appendix 7 | Existing Tools for Evaluating Interprofessional Collaboration |
| Appendix 8 | Designing Your Own Evaluation of ICU Interventions on Collaboration and Family Member Involvement |
| Appendix 9 | Additional Information |
TOOL 1
Defining & Improving Patient Family Involvement in the ICU

This tool consists of a 3-phase process to help frontline ICU staff (e.g. nurses, physicians, pharmacists, respiratory therapists) gain a deeper understanding of the variation in how families choose to be involved in the delivery of care. This tool also helps healthcare professionals become more aware of their own understanding and assumptions of family involvement in the delivery of care.

**Purpose of the Tool**
This tool provides a systematic process for identifying discrepancies between how various patient family members define family involvement, and any assumptions frontline clinicians may have about family involvement.

The tool is simple and easily implementable, and allows family members to convey to healthcare professionals what their desired level of involvement in the delivery of care is. Additionally, it allows the unit to reflect critically upon their own understanding about family involvement and acknowledge the range of possible definitions of involvement offered by patient family members.

**TOOL AT A GLANCE**

| Purpose | Identify discrepancies in how different family members define family involvement
|         | Identify assumptions of frontline clinicians about family involvement
| User    | Family members
|         | ICU staff
| Activities | 1. Family Involvement Record
|         | 2. Patient Family Involvement Workshop
| Impact  | Allows family members to communicate their desired level of involvement in daily care |
Phase 1: Implementing Family Involvement Activity

The purpose of this activity is to allow family members to communicate their desired level of involvement in daily care. The patient family spokesperson (or other primary caregiver) is provided with a *Family Involvement Record*, which allows them to express in their own words how they define their involvement in the care of their loved one.

Some Examples of Family Involvement

“I am an advocate for my dad. I like to know what his stats are, and get detailed information about how he is doing. I have a lot of questions, and also research his medical condition online when I have time.”

“I am here for support. My husband feels scared without me. I try to be here as much as I can, but do not want to hear about all the medical details. I leave that to the doctors.”

“I have been my sister’s primary caregiver for the past 10 years. I am used to taking care of her medical needs, and would like to be involved in any way I can. I have a lot of information about her condition and medications she takes at home. I am very involved in her care.”

“I am here to spend time with my mom. I come when I can, but I prefer to check in by phone.”

Instructions

1. Gather your materials, including a writing instrument and paper for the family member to write on.
2. Ensure you are approaching the family member at an appropriate time.
3. Explain that the *Patient Family Involvement Record* is an opportunity for them to express how they define their involvement in the care of their loved one. They can explain how they define their role and how involved they want (or do not want) to be in the delivery of care.
4. Ask the patient/family if they wish to participate (note: consult your unit’s guidelines on Power of Attorney and consent beforehand). At this point do check about if any help is needed completing the *Record*. For example, with patients or family members who are elderly, have English as a second language or low health literacy may need some support.
5. If needed, a number of prompts can be used for patients and family members when completing their *Record*. For example: who should be the main contact about care decisions; how often would you like information about care; how would you like this information communicated to you.
6. Collect the *Patient Family Involvement Record* once the patient/family are done filling it out.
7. Display the record in a prominent place where it is visible to other healthcare professionals.
8. Once patients leave the unit, collect all *Patient Family Involvement Records* and keep them together. They will be used in Phase 2 (Intervention).

Tips for Success

**Involve existing personnel and representatives.** Depending on your unit and organization, you may have access to personnel whose roles are heavily rooted in the patient family realm, such as patient/family representatives or social workers. You may want to consider consulting these individuals where applicable as appropriate for your ICU.

**Displaying the patient family record.** Take advantage of existing infrastructure in your ICU when deciding where to display the *Patient Family Involvement Record*. Possible display locations include:

- Wall
- Bedside whiteboards
- Bedside nurse’s station

Before displaying the *Patient Family Involvement Record*, consult your ICU’s policies (particularly those pertaining to infection control) regarding posting anything on the walls. Care should also be taken to maintain privacy. While the record should be visible to healthcare professionals, it should not be visible to the visitors of other patients.

**Collecting the patient family records.** You may require consent from the patient and/or family member to use this record beyond the patient’s ICU stay. Please review your institution’s policies before implementing the *Patient Family Involvement Record*. 
This workshop allows healthcare professionals to learn about patient family involvement in your ICU. This workshop can be integrated into an in-service continuing education session, or run separately.

If needed, more details on facilitating this workshop can be found in Appendix 2: Facilitating Tool 1.

Learning Outcomes
By the end of this workshop, participants will be able to:

1. Describe different ways in which patient family members describe their involvement in their loved one’s care.
2. Compare differences and similarities in how patient family members and healthcare professionals understand patient family involvement.
3. Analyze how expectations of patient family member involvement impact their work.
4. Critique practices pertaining to patient family member involvement in their ICU.

Workshop Components

Activity 1: Complete Healthcare Professional Reflection Cards
At the group session, participating healthcare professionals will be asked to complete a Healthcare Professional Reflection Card. Staff will be asked to anonymously write down what role they see for family in the delivery of care.

This card can be filled out during the workshop, or prior to the workshop to conserve time.

Activity 2: Reviewing Completed Patient Family Involvement Records
The purpose of this activity is for ICU staff to reflect on how patient family members describe their involvement in the delivery of care. This activity will use the patient family involvement records that were collected in Phase 1.

At the workshop, small groups will review the Patient Family Involvement Records and discuss what kinds of involvement family members and caregivers have expressed. The small groups will write the key findings onto sticky notes. Then the whole group will come together to arrange all of the findings into themes on the wall. The participants be asked to reflect on how these findings resonate with the experiences, and what impact these kinds of involvement have on their work.

Activity 3: Reviewing Healthcare Professional Reflection Cards
The purpose of this activity is for healthcare professionals’ to reflect on their understanding of patient family member involvement in the delivery of care. In small groups, participants will review the Healthcare Professional Reflection Cards from Activity 1.

Key findings will be written on to sticky notes (different color than in Activity 2). The large group will once again reconvene to arrange these new findings into themes on the wall. Some themes may be the same, and some new themes may emerge. By using different colors, the participants will be able to see the similarities and differences in how patient family members and healthcare professionals understanding patient family involvement.
Phase 3: Evaluation

Evaluation is an important part of implementing interventions to ensure effectiveness. There are many ways you can measure the outcomes of this tool, such as:

- Run the workshop again, and assess for changes in healthcare professionals' thoughts and attitudes between both sessions.
- Observation of ICU staff’s behavior and uptake of the Patient Family Involvement Record.
- Interviews or focus groups.
- Surveys (online or paper-based).

Areas of interest in your evaluation may include:

- Uptake of the Patient Family Involvement Record into practice.
- Changes in healthcare professionals’ perception of patient family member involvement in the delivery of care.
- Increased patient family member involvement integrated into clinical practice.
- Barriers and facilitators for increasing patient family member involvement in your ICU.

For more information on planning evaluations, please view Appendix 8: Designing Your Own Evaluation of ICU Interventions.
This tool is a 3-phase process to help ICU staff gain a deeper understanding of interprofessional dynamics and identify related issues that can contribute to patient harm. Improved interprofessional collaboration and communication have both been identified as central to ensuring reduced patient harm and increased quality in the delivery of care.

**Purpose of the Tool**

This tool provides a systematic process for identifying any differences in how healthcare professionals define the nature of IPC on an ICU, their roles and the roles of their ICU colleagues. The tool also outlines activities that can be used to share and foster discussion around findings.

**TOOL AT A GLANCE**

**Purpose**

Identify discrepancies in how healthcare professionals understand IPC and others’ roles on the healthcare team.

**User**

ICU staff and students, such as:
- Dieticians
- Nurses
- Physiotherapists
- Physicians
- Respiratory Therapist
- Social Workers

**Activities**

1. Interviews with staff
2. Observation in the ICU
3. Interprofessional Collaboration Workshop

**Impact**

An understanding of that specific ICU allows for the adaptation and implementation of effective interventions to improve patient care.
How do we select an interviewer?

The perceived identity of the interviewer will affect what kind of information healthcare professionals are willing to share.\(^5\)

**Insider:** Someone being interviewed may develop a better rapport with an interviewer who shares a similar professional background and experience (i.e. an “insider”) and may be more likely to disclose controversial or private views. However, a presumed understanding of issues between two healthcare professionals may prevent new insights.

**Outsider:** The “outsider” status of a non-clinician may prompt ICU staff to explain these “taken-for-granted” team dynamics in greater detail, but this status may also foster suspicion and reticence.

The advantages and disadvantages of different interviewer backgrounds, as well as available resources, should be considered when selecting an interviewer. For example, it may be more expensive to hire an outsider, but there may be workload implications for an insider who works on the unit.

Examples of interviewers:

- Advanced Practice Nurse (e.g. Clinical Nurse Specialist or Nurse Educator)
- Social Worker
- Other staff member with interviewing skills
- Graduate student
- External researcher

How do we decide whom to interview?

In order to learn how ICU staff understand IPC, it is important to talk to a range of the different professions working in who hold leadership and managerial positions within the unit.

The sample size for the assessment will depend on the size of your ICU and healthcare organization. As a rule of thumb, collect data until no new themes or information are emerging from the interviews. In general, 20% participation would be reasonable, ideally with each profession represented.

More information on conducting interviews can be found in Appendix 3: Facilitating Tool 2. Include a variety of different health and social care professionals who are involved with patient care in your ICU. Include participants with a range of experience working in this and other ICUs. Those who are newer to the team will bring different insights than those who have been around for a longer amount of time.

Should we transcribe interview recordings?

Often recorded interviews are transcribed verbatim with identifying interviewee information blacked out. Word-for-word transcription allows for there to be a clear audit trail, and can be helpful when analyzing the data.\(^6\)

Transcription may not be the best option in all situations because it is expensive, time consuming, and takes advanced clerical skills to ensure accuracy.\(^6,7\) Interviewers can transcribe their own interviews, or they can use a combination of taking notes during the interview and audio recording for future reference.\(^6\)

For more information on recording and concurrent note taking:

Interview Script

1. Introduction

When the participant arrives, introduce yourself and explain why they are being interviewed. You may find the following script helpful if you are an “outsider”:

“Hello, my name is [interviewer’s name] and I am a [interviewer’s position] at [interviewer’s institution]. You have been approached to speak with us today because you are a healthcare professional in the ICU at [Institution]. We are interested to learn more about how healthcare professionals understand the roles and responsibilities of different healthcare professionals in the ICU team. We are not trying to evaluate your techniques, experience or competencies as a healthcare professional. Rather, we are trying to learn about your perspective on the ICU team, which will hopefully inform future initiatives to improve teamwork and patient safety. In this interview, I will ask you questions about:

1. Your own role and scope of practice as a care provider in the ICU;
2. The other professionals that you work with in the ICU, and their scope of practice.”

You may find the following script helpful if you are an “insider”:

“Hello, my name is [interviewer’s name]. As you may know, I am [interviewer’s position] in the ICU. Right now we’re talking to various healthcare professionals to gain insight into how our team understands each other’s roles and responsibilities. We wanted to talk to you because of your role as a [interviewee’s profession] on our unit. The purpose of this interview is not to evaluate you, and any views you express in this interview will remain confidential. Rather, we are trying to learn about your perspective on the ICU team, which will hopefully inform future initiatives to improve teamwork and patient safety. In this interview, I will ask you questions about:

1. Your own role and scope of practice as a healthcare professional in the ICU;
2. The other professionals that you work with in the ICU, and their scope of practice.”

2. Questions

Please use the following questions to guide your discussion:

1. What is your role in the ICU?
2. What other healthcare professionals do you interact with?
   - In what ways?
3. How would you describe interprofessional collaboration in the ICU?
4. From your perspective what are the main responsibilities of:
   a. Nurses
   a. Attending physicians
   b. Fellows
   c. Respiratory therapists
   d. Social workers
   e. Occupational therapists
   f. Dieticians, etc.
5. How do you think other healthcare professionals would describe your role in the ICU?

3. Conclusion

Finish by thanking the participant for taking the time to speak with you, and let them know of any additional steps or contact you may have with them.
Interpreting the Results

Review your transcripts or notes/recordings to extrapolate information on whom the staff consider to be collaborating in the ICU, as well as the various perspectives on the roles of different professions in the ICU. These findings can be mapped into the matrices tables below. These tables are a way to analyze qualitative research data by clustering related items into rows and columns. These tables will help identify any trends in how healthcare professionals define and understand IPC in your ICU.

Example 1: Perception of roles matrix

This matrix compares how healthcare professionals conceptualize their role in the ICU versus how other professional groups conceptualize it. Below is an example of a partially filled out matrix using data from the study that informed the toolkit. Depending on your unit, you may have different healthcare professionals listed in this matrix.

<table>
<thead>
<tr>
<th>Role of Nurses</th>
<th>Nurse perspective</th>
<th>Physician perspective</th>
<th>Physiotherapist perspective</th>
<th>Social worker perspective</th>
<th>Pharmacist perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td>To care for the patient holistically.</td>
<td></td>
<td>Primary person taking care of the patient.</td>
<td>Point person between all healthcare professionals. Closest to the patient.</td>
<td>Administer medications.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Role of Physicians</th>
<th>Nurse perspective</th>
<th>Physician perspective</th>
<th>Physiotherapist perspective</th>
<th>Social worker perspective</th>
<th>Pharmacist perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leader.</td>
<td></td>
<td>Leader of the team.</td>
<td>Fellows: directs care, manages the unit. Staff: back up.</td>
<td>Directs team. Leader.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Role of Physiotherapists</th>
<th>Nurse perspective</th>
<th>Physician perspective</th>
<th>Physiotherapist perspective</th>
<th>Social worker perspective</th>
<th>Pharmacist perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get patient mobilized.</td>
<td></td>
<td>Mobilize patients.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Role of Social Workers</th>
<th>Nurse perspective</th>
<th>Physician perspective</th>
<th>Physiotherapist perspective</th>
<th>Social worker perspective</th>
<th>Pharmacist perspective</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Role of Pharmacists</th>
<th>Nurse perspective</th>
<th>Physician perspective</th>
<th>Physiotherapist perspective</th>
<th>Social worker perspective</th>
<th>Pharmacist perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicate medications.</td>
<td></td>
<td>Guardian of medications.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Example 2: Triangulation of perspectives on roles

This matrix compares how healthcare professionals perceive their role, how they think others perceive their role, and how others actually perceive their role in the ICU.

Below is an example of a partially filled out matrix using data from the study that informed the toolkit. Depending on your unit, you may have different healthcare professionals listed in this matrix.

<table>
<thead>
<tr>
<th>How they perceive their own role</th>
<th>How they think others perceive their role</th>
<th>How others actually perceive their role</th>
</tr>
</thead>
</table>
| Nurses                          | To care for the patient holistically.   | Primary person taking care of the patient.  
                             |                                          | Point person between all healthcare professionals. Closest to the patient. |
| Physicians                      |                                         |                                        |
| Physiotherapist                 |                                         |                                        |
| Social worker                   |                                         |                                        |
| Pharmacist                      |                                         |                                        |

Example 3: Who is in the team?

This matrix provides one way of mapping out how various professionals conceptualize the nature of IPC in the ICU. Depending on your unit, you may have different healthcare professionals listed in this matrix.

Who is collaborating with whom in the ICU?

<table>
<thead>
<tr>
<th>Nurse</th>
<th>Physicians, residents, nurses, RTs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician-Intensivist</td>
<td></td>
</tr>
<tr>
<td>Resident</td>
<td></td>
</tr>
<tr>
<td>Occupational Therapist</td>
<td></td>
</tr>
</tbody>
</table>
Applying the PROC Framework to Interview Transcripts

Another way to understand the data collected is to apply the four domains of the PROC Framework when analyzing your transcripts or notes/recordings. This framework examines processual, relational, organizational, and contextual (PROC) factors that healthcare professionals may encounter on a daily basis. The PROC Framework allows healthcare professionals to consider factors that are a part of their working environment and their effects on the delivery of care. This will allow healthcare professionals to gain a deeper understanding of their cultural context, and identifying areas that can contribute to increased patient risk.

By applying the PROC Framework, you can better understand some of the underlying issues that are impacting interprofessional teamwork and patient care in your ICU. (See Tool 3 for more information on the PROC Framework)

The following is a real example of a contextual factor as expressed by an intensivist:

“There are political factors involved in deferring to families. As government funding for hospitals has decreased, hospitals are increasingly dependent on the foundation to raise money for their day-to-day functioning which means hospitals are very sensitive to how they are perceived in the press and how they are perceived in the courts. And how they are perceived to any patient family that may be a potential donor whether large or small, and for better or worse that now plays a large role in how we interact with patient families which is the cynical side to patient-family-centered care.”

The follow is a real example of a relational factor expressed by an intensivist:

“I read the chart only when I can’t get in touch with the person to talk to them. But we, by our nature or by busyness or by something, don’t write everything in the chart and the nurses don’t write everything in the chart. And so, if you ask them what happened in the half hour before the person got intubated, they can tell you in precise detail and they know if they suctioned or not or gave meds or not or turned the patient or what. They’ll know all that but it won’t be written down because that’s not how our charting is designed to be recorded. So talking to the source I find you get better precision because with any oral history … Well, even when I tell you a story and you tell your friend and they tell their friend, the story is going to change a little bit. And we certainly have broken telephone at times in medicine, right, but the closer you are to the first story teller the more accurate your information tends to be.”

Next Steps

The information gathered at this stage will be presented to ICU staff during the subsequent Interprofessional Collaboration Workshop. Using PROC to analyze your data at this stage can also make it easier to selected effective team interventions in Tool 3: Identifying Interprofessional Issues that Affect Care Delivery.
What is observation?
Observation is a systematic approach to observing and describing events, activities, people and interactions within a social setting.

Purpose
To identify how healthcare professionals interact in practice, both within and between professional groups.

Who should observe?
The perceived identity of the observer will have implications on the kind of information that healthcare professionals share with you.

1. **Insider**: The people being observed may develop a better rapport with an observer who shares a similar professional background and experience (i.e. an “insider”). However, it is important for “insiders” to be aware of their own assumptions and make an effort to ask for explanations, even though they may feel that the answer is obvious.

2. **Outsider**: An observer from outside the healthcare organization may garner more detailed information about IPC and roles, since taken for granted assumptions about roles and division of labor will need to be explained in greater detail. Additionally, an outsider will take less for granted, and thus ask for more explanation.

It is also important to consider how authority and power could alter staff behaviors and clinical practices. For example, the unit manager would not be an ideal observer.

What should be observed?
- **Interprofessional interactions**: Interactions between professional groups
- **Intraprofessional interactions**: Interactions within professional groups
- **Formal events**: Rounds, family conferences
- **Informal events**: Coffee breaks, impromptu conversations in hallways

How much should be observed?
Ideally, observation will continue until no new or relevant information is revealed (data saturation), but given the condensed nature of this exercise, observation will be complete once the following questions (“what to make note of” below) are satisfactorily answered (approximately 20 hours over 2 week period during mornings, afternoons and evenings).

Ensure the observations are on different days and times (including day and night shifts) so you can capture the variety of issues encountered by many different staff members.
Field Notes

Writing up field notes

Writing up detailed notes is an integral part of observation, and should ideally occur soon after a period of observation to maximize the accuracy of recall. When writing up field notes, the researcher will want to keep two elements separate:

<table>
<thead>
<tr>
<th>What it is</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description of events</td>
<td>A non-evaluative description of what happened</td>
</tr>
<tr>
<td>Person x gave a report on the patient’s status, which was interrupted three times by person y”</td>
<td></td>
</tr>
<tr>
<td>Impressions</td>
<td>The observer’s impressions of events, including their feelings and sense of emerging patterns</td>
</tr>
<tr>
<td>“I felt like the contributions of person x were not valued in the rounds”</td>
<td></td>
</tr>
</tbody>
</table>

When writing up field notes, refer to individuals by their role and profession rather than their name. When necessary to distinguish a particular individual, use pseudonyms to protect anonymity. The aim of observation should be to identify patterns in interaction and teamwork rather than single out individual behavior.

An example of a field note can be viewed in Appendix 3: Facilitating Tool 2.

What to make note of:

1. Who interacts with whom the most?
   a. What kind of interactions?

2. Where do interprofessional interactions take place?
   a. Between whom?
   b. What kind of interactions?

3. Where do intraprofessional interactions take place?
   a. Between whom?
   b. What kind of interactions?
Once you have gathered and analyzed your data it is time to share it with your ICU colleagues. This can be done in the form of a workshop that provides healthcare professionals in your ICU with an overview of the key findings from the observations and interviews, as well as exploring their own perceptions of interprofessional collaboration. This workshop can be integrated into a preexisting bi/monthly meeting on the unit (e.g. in-service) as a compressed 45-60 minute activity, or run separately.

More details on facilitating this workshop can be found in Appendix 3: Facilitating Tool 2.

### Workshop Components

#### Part 1: Exploring the Different Professions and Interprofessional Dynamics

This workshop begins with asking the group to list all of the different healthcare professionals they work with. Participants will then discuss the dynamics that occur between different healthcare professions in the ICU.

#### Part 2: Share the Findings of the Interviews and Observations

This presentation highlights some key findings from the observations and interviews. This can be done by selecting some matrices, anonymous quotes or anonymous vignettes to share with the group. Spark a conversation around the selections by asking the participants how these findings resonate with their experience.

#### Part 3: Create an Interactions Chart

Upon hearing the results from the interviews and observations, participants will revisit the list of professionals and dynamics that they created in Part 1. Participants will arrange the different professions to depict the flows of communication and interaction within their ICU.

#### Part 4: Selecting Interprofessional Interventions (Optional)

Depending on the group and facilitator, this workshop may be an appropriate time to start a discussion around what kind of intervention would be most appropriate to address this issues that have been uncovered. Before selecting an intervention(s) it may also be appropriate to first complete Tool 3: Identifying Interprofessional Issues that Affect Care Delivery to further explore staff’s perceptions of which PROC issues are the priority in their ICU. Tool 3 contains a list of different types of interventions that can be used to address these concerns.

### Learning Outcomes

By the end of this workshop, participants will be able to:

1. List healthcare professionals in their ICU and describe how they work together.
2. Explain some of the findings from observations and interviews done on their unit.
3. Apply learning to creating an interaction chart.
4. Critique interprofessional communication and interaction in their ICU.

This session can be held more than once to accommodate for different patient care responsibilities amongst ICU staff. Alternatively, a poster summarizing the findings can be displayed in high-traffic areas so all staff members can see the results (e.g. nursing station, medication room, staff washrooms/change rooms, or the staff break room).
Phase 4: Evaluation

Evaluation is an important part of implementing interventions to ensure effectiveness. There are many ways you can measure the outcomes of this tool, such as:

- Run the workshop again, and assess for changes in healthcare professionals’ thoughts and attitudes between both sessions.
- Observation of ICU staff’s behavior.
- Interviews or focus groups.
- Surveys (online or paper-based).

Areas of interest in your evaluation may include:

- Changes in healthcare professionals’ perception of IPC.
- Increased IPC in clinical practice.

Examples of tools for evaluating IPC are described in Appendix 7: Existing Tools for Evaluating Interprofessional Collaboration.

For more information on planning your own evaluation, please view Appendix 8: Designing Your Own Evaluation of ICU Interventions.
This tool provides a process for identifying interprofessional issues that affect the delivery of care in the ICU. This tool considers the complex range of issues that health and social care professionals encounter in their daily practice, which we categorize into four domains: processual, relational, organizational, and contextual (PROC). The PROC Framework allows ICU staff to consider the factors that are a part of their working environment and their effects on the delivery of care. This allows ICU staff to gain a deeper understanding of their cultural context, and identify areas that can contribute to increased patient risk in the ICU.

**TOOL AT A GLANCE**

**Purpose**
Identify interprofessional issues that can impact the delivery of care and patient safety in the ICU

**User**
ICU staff

**Activities**
1. Identifying Interprofessional & Patient Family Member Issues
2. Intervention(s)

**Impact**
Unit-specific solutions to respond to interprofessional issues that may jeopardize patient safety.

**The PROC Framework**
This framework provides a conceptual framing of the key factors that healthcare professionals encounter on a daily basis in their interprofessional work. The PROC Framework allows ICU staff to consider the factors that are a part of their working environment and their effects on the delivery of care. This allows ICU staff to gain a deeper understanding of their cultural context, and identify areas that can contribute to increased patient risk in the ICU.

**FACTOR**

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relational</td>
<td>Factors which directly affect the relationships shared by professionals such as professional power and socialization</td>
</tr>
<tr>
<td>Processual</td>
<td>Factors such as space and time which affect how the work of the team is carried out across different workplace situations.</td>
</tr>
<tr>
<td>Organizational</td>
<td>Factors that affect the local organizational environment in which the interprofessional team operates.</td>
</tr>
<tr>
<td>Contextual</td>
<td>Factors related to the broader social, political and economic landscape in which the team is located.</td>
</tr>
</tbody>
</table>
Phase 1: Identifying Interprofessional & Patient Family Member Issues Workshop

This workshop gives health and social care professionals the opportunity to discuss issues impacting teamwork and patient care in their ICU. The goal of this workshop is to unveil the root cause of any identified issues so an effective, tailored intervention can be developed. This workshop can be integrated into a preexisting bi/monthly meeting in the unit (e.g. in-service continuing education session) as a compressed 45-60 minute activity, or run separately.

More details on facilitating this workshop can be found in Appendix 4: Facilitating Tool 3.

Workshop Outcomes

By the end of this workshop, participants will be able to:

1. Identify concerns that impact teamwork and/or patient care in the ICU.
2. Discuss facilitating and restraining forces that contribute to the identified issue.
3. Analyze the different levels that are involved in the issue, such as individual healthcare professions, team processes, and the organization of care.
4. Critically reflect on the issue’s impact on their clinical practice and patient family members.

Workshop Components

Collaborative Brainstorming

This activity will help healthcare professionals explore interprofessional and patient family issues in their ICU using a mind map.

A Mind Map is a type of diagram often used for brainstorming. A Mind Map has a central problem or concept in the middle, with major associated concepts branching out. From here, further related ideas branch out. For this activity, the Mind Map can be organized with the central problem identified by the group in the center, and the four components of the PROC Framework branching out. The group can then suggest factors influencing the central problem that stem from each of the PROC factors.

Using the PROC Framework to organize the group’s thoughts may make it easier to pick an effective intervention.

![Figure: Collaborative brainstorming using a mind map organized by the PROC Framework. The identified problem would be written in the center box with new ideas branching out from the PROC factors in different colors.](image-url)
Selecting Interventions for the ICU

Having assessed the issues connected with collaboration and family member involvement in Phase 1, the next stage is to consider intervention(s). The focus of this phase is to build on the strengths in your ICU to address areas needing improvement, as identified in Phase 1.

There are a number of factors to consider when selecting and/or designing an intervention, such as:

1. **Make sure the type of intervention matches the root issue.** For example, if you have identified a relational issue, you will need to select a relational intervention. Similarly, you want to ensure you are focusing on the appropriate intervention target, such as individual staff members, team processes, or the organization of care.

2. **Context specific.** You want to tailor the intervention to suit the specific context of your ICU setting.

3. **Cost-effectiveness.** It is important to assess cost and effectiveness of the intervention in relation to other possible interventions.

4. **Hierarchies and power.** It is crucial to think about how the intervention considers the power imbalances and hierarchies that often exist in healthcare teams. You should also consider who is designing and implementing the intervention in your ICU.

5. **Evaluation.** Consider how you will evaluate the intervention before selecting it. What outcomes will you be measuring? What evaluation method will you use?

6. **Results.** Consider what you will be doing with your results, and whom you will be sharing them with.

To complement the assessment processes in Phase 1, the interventions are organized around the PROC framework’s four factors – relational, processual, organizational and contextual.

### Relational Interventions

These interventions involve the use of *interprofessional learning* activities. These types of interventions should be considered if the assessment data in Phase 1 uncovers relational issues, such as a need for increased clarity of team roles or discrepancies in ICU staff members’ perceptions of patient family involvement.

Below is a range of interprofessional learning activities, which can help resolve relational issues. A description of each of these interventions can be found in *Appendix 4: Facilitating Tool 3*.

1. Simulation
2. Team Reflexivity
3. ICU Team Training
4. Team Retreats
5. Team Mind Mapping
6. Family Assessment Form (FAF)

### Processual Interventions

These interventions aim to improve collaborative processes linked to the interprofessional work undertaken in an ICU. In general, these interventions aim to address practice-based issues, such as the use of checklists to help enhance interprofessional communication.

Below is a range of interprofessional learning activities, which can help resolve processual issues. A description of each of these interventions can be found in *Appendix 4: Facilitating Tool 3*.

1. Team Policy
2. Team Meetings
3. Care/Clinical Pathways
4. Team Checklists
5. Patient Safety
6. Redeveloping ICU Information Pamphlets
7. ICU Diary/Journal
Organizational Interventions
These interventions focus on improving teamwork at an organizational level. We found three types of organizational interventions – quality improvement teams, accreditation and re-organizing the delivery of care – have been employed (indirectly) to enhance teamwork.

Below is a range of interventions that can help address organizational issues identified in your ICU. A description of each of these interventions can be found in Appendix 4: Facilitating Tool 3.

1. Nurse-Family Meetings
2. Re-organizing the Delivery of Care
3. Interdisciplinary Family Rounds
4. Introducing a New Role in the ICU: Family Support Coordinator (FSC)

Contextual Interventions
Contextual level interventions are broader in scope. Their implementation depends upon governments, and/or professional regulatory bodies intervening in the form of policies that directly foster teamwork or providing funding to support the development of local interprofessional activities.

Combining Interventions
One singular intervention may be ineffective in achieving sustained change in interprofessional collaboration and family involvement in the ICU. Lasting change may be achieved through multilayered interventions that strengthen and reinforce positive practices. This could be done through implementing collectively relational, processual, and organizational interventions.

The assessment of your ICU in this tool and Tool 2: Defining and Understanding Interprofessional Collaboration in the ICU will help you determine what combination of interventions will be most effective on your unit.
Phase 3: Evaluation

Evaluation is an important part of implementing interventions to ensure effectiveness. Your method of evaluation will depend on which intervention(s) you selected.

For more information on planning evaluations, please view Appendix 8: Designing Your Own Evaluation of ICU Interventions.
Cusp, or Comprehensive Unit Based Safety Program, is a five-step patient safety program designed to change workplace culture “through education, awareness, access to organizational resources and a toolkit of interventions.”

Ethnography is a type of qualitative research that studies people in their everyday life through observing their behaviors and interactions, interviewing, and document analysis. Ethnography in healthcare sheds light on the any (in)consistencies between what health and social care professionals say they do, and what they actually do in practice.

Interprofessional Collaboration (IPC) occurs when different health and social care professions regularly come together to solve problems or provide services.

Interprofessional Communication is the open and collaborative communication between health and social care professionals/students, and with patients and families.

Interprofessional Interventions involve two or more health and social care professions who learn and/or work together to improve their approach to collaboration.

Interprofessional Teamwork is a type of work which involves different health and/or social care professions who share a team identity and work closely together in an integrated and interdependent manner to solve problems and deliver services.

Patient Family Involvement is a highly subjective concept that varies depending on the individual(s). Involvement is a complex and dynamic concept that not only includes the visible activities and interactions between people, but also the thoughts, feelings and meanings that people associate with these activities and interactions.

PROC Framework is a framework for understanding the complex array of issues that interprofessional teams may encounter in their daily practice. It includes processual, relational, organization and contextual factors.

Processual Factors are factors such as space and time that affect how the work of the team is carried out across different workplace situation.

Relational Factors are factors that directly affect the relationships shared by professionals, such as professional power and socialization.

Organizational Factors are factors that affect the local organizational environment in which the interprofessional team operates.

Contextual Factors are factors related to the broader social, political and economic landscape in which the team is located.

Safety Culture includes healthcare professionals' value systems and their patterns of clinical behavior. For example, how healthcare professionals share physical space and team communication.


20. Delva D, Jamieson M. *High Performance Teams in Primary Care: The Basis of Interdisciplinary Collaborative Care*. Kingston, ON: Industrial Relations Centre, Queen’s University; 2005.

Modified CUSP: Five-Step Program

*Note: additions are bolded and in red.*

## Pre-CUSP
- Obtain leadership support
- Assemble a safety team (IP team, plus senior executive)
- Assess unit safety culture (survey)

## CUSP
- Educate staff on science of safety
  - Science of safety presentation (small groups) & online training
- Identify defects
  - Staff safety assessment form
  - **Tool 1: Defining & improving patient family involvement in the ICU**
  - **Tool 3: Identifying & addressing interprofessional issues that affect care delivery**
  - Collate responses and consider existing data
- Senior executive partnership
  - Identify senior executive
  - Unit safety team meets and orients
  - Monthly rounds
  - Safety rounds
  - Identify and manage improvement projects
- Learning from defects
  - Identify safety defect
  - Complete case summary
- Teamwork tools
  - Enable culture conducive to safety improvements:
    - Morning briefing tool
    - Shadowing professional tool
    - Daily goals tool
    - **Tool 2: Defining and improving interprofessional collaboration in the ICU**
Facilitating Tool 1: Defining & Improving Patient Family Involvement in the ICU

How This Tool was Developed

This tool was developed based on the findings from 2-year ethnographic study of 8 ICUs. Researchers at the various ICU sites conducted over 1000 hours of observation in total, and conducted 80 interviews with clinicians and 37 interviews with patient family members on the topics of interprofessional collaboration and patient family involvement in the delivery of care.

This research found wide variation in how patient family involvement is interpreted by different families, and by the various professional cultures at play in the ICU. Based on this work, we realized the importance of creating a tool that enabled individual ICU units to become aware of their own healthcare professionals’ views on patient family involvement, while also creating a tangible way for patient family members to reflect upon and express their own level of comfort with being involved in the delivery of care.

In this study, patient family involvement was seen in daily clinical work in a number of ways. For example:

- **Field note excerpt:** At bed 4, the senior RN is explaining the care plan and nutrition to the visitor, using very graphic description of feeding tube. He explains the doctors are using it “to give him more nutrition.” The visitor responds, “as long as he doesn’t feel a thing—do what needs to be done. I just want to see him walk out of here.”

- **Interview:** “You have the patient on this drug. So, the family Googles it. And they’ll come back with all these questions. And then, you have to really break it down into non-medical terms so they understand what you’re doing.”

- **Field note excerpt:** The nurse is walking by and notices that the patient’s wife is trying to suction him. She approaches and the wife says, “I’m just trying to...” and gestures to her neck. The nurse says that she can do it.

- **Field note excerpt:** A resident comments, “The report I got on days is that she is a little less winded.” Another resident makes notes in the chart. The nurse says, “The family is concerned that it’s cancer. Something else is brewing. They keep asking about cancer and her lungs.”

- **Interview:** “I have a patient right now, they’re from two and a half hours away, and they call once a day. They don’t call ten times a day, which is nice. That really helps because it’s a reminder because you’re dealing with the patient and the family is not in the room, so you almost lose sight of that sometimes.”

Facilitating Tips

Below are some tips for facilitating this workshop in particular. Please see Appendix 5: Facilitation Tips for more general suggestions and ideas on how to decrease the amount of time required for this workshop.

Choosing a Facilitator

- A staff member or external resource person can serve as a facilitator.
- If using in conjunction with CUSP, a member of the CUSP “safety team” can serve as a facilitator.
- It may also be beneficial to have the workshop co-facilitated by a patient/family representative if there is one available at your institution.

Materials

- Writing instruments
- Paper
- Sticky notes (two colors)
- Previously collected Patient Family Involvement Records

Time: 1.5 hours

Case Study: Conducting Interviews

**Urban Teaching Hospital**

Samira decides to facilitate the Patient Family Involvement Workshop herself because of her advanced training in education. She enlists the assistance of a patient/family representative at her hospital to provide a patient and family perspective.

**Urban Community Hospital**

Kierra is asked to facilitate the workshop, but she is concerned about the receptivity of having an intensivist lead the workshop given the current interprofessional tensions in their ICU. She enlists a respiratory therapist and registered nurse from the CUSP Safety Team to co-facilitate the workshop with her.

**Rural Community Hospital**

Ian decides to co-facilitate the workshop with one of the hospital’s social workers. He hopes the social worker will be able to provide a different perspective on issues impacting patients and families.
Suggested Process for Workshop Facilitation

1. Welcome the staff.

2. Introduce yourself and your role in this initiative.

3. Describe the purpose of the workshop:
   a. To explore different perceptions of patient family involvement, and discuss how patient family involvement can be enhanced in your ICU.

4. Review the agenda with the participants:
   a. Complete the Healthcare Professional Reflection Cards
   b. Review the Reflection on Family Involvement in the Delivery of Care cards
   c. Questions for reflection

5. Activity 1: Healthcare Professional Reflection Card
   a. Distribute a piece of paper to each participant.
   b. Ask participants to write down what role they see for family in the delivery of care. Ask them to keep their reflections anonymous.
   c. Once the participants are done writing, collect the cards. Inform the participants that you will be coming back to these cards closer to the end of the session.

6. Activity 2: Reviewing completed Patient Family Records
   a. Divide everyone into groups and distribute the Patient Family Records. Give the groups time to review the records.
   b. Ask participants to describe what emerging understanding they see. Have the participants write these key findings onto sticky notes.
   c. Bring the whole group together to arrange similar findings into themes by grouping similar sticky notes on the wall.
   d. Ask participants how these findings resonate with their experiences. What impact do these kinds of involvement have on their work?

7. Activity 3: Reviewing Healthcare Professional Reflection Cards
   a. Distribute the Healthcare Professional Reflection Cards and sticky notes (color not used in Activity 2) to the groups. Give the groups time to review their cards.
   b. Ask participants to describe what emerging understanding they see. Have the participants write these key findings onto sticky notes.
   c. Bring the whole group together to arrange similar findings into themes by grouping similar sticky notes on the wall. Some themes may be the same as those identified in Activity 3, or there may be new themes.

8. Ask the participants to reflect and share what they think the activity tells us about the way their ICU deals with patient family involvement.
   a. Are there differences between how patient family members describe their involvement and what healthcare professionals’ understanding are?
   b. What surprises you?
   c. What changes (if any) can you make in your clinical practice to facilitate patient family involvement?
Thank you for attending the Patient Family Involvement Workshop. Please complete this evaluation form and submit it to the facilitator.

<table>
<thead>
<tr>
<th>Statement</th>
<th>5 Excellent</th>
<th>4 Above Average</th>
<th>3 Average</th>
<th>2 Below Average</th>
<th>1 Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please rate your overall satisfaction with the workshop with respect to the following:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall evaluation of the workshop</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How useful is the workshop to you professionally?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How useful is the workshop to you personally?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did the workshop meet your expectations?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How effective was your group in working together during the activities?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Usefulness of the activities to achieving workshop goals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are there any other ways we can improve patient family member involvement?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Recommendations or Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Facilitating Tool 2: Defining & Understanding Interprofessional Collaboration in the ICU

How This Tool Was Developed

This tool was developed based on the findings from an ethnographic study of 8 ICUs across North America over a period of two years. This study highlighted the complexity of interprofessional interactions in the ICU, and found that health and social care professionals were sometimes confused about and misunderstood each others' roles. Role clarity and understanding how IPC happens in individual ICUs is an essential step in adapting and implementing successful interventions.

This tool fits into CUSP’s “Step 5: Teamwork tools: a) Enable culture conducive to safety improvements” (see Appendix 1).

Optional Compressed Version of Tool 2

This tool may be difficult to implement in ICUs that have limited time and resources. Alternatively, a less resource-intensive version of this tool can be implemented using interprofessional team huddles:

**Step 1:** Interviews with healthcare professionals (Phase 1 in the Tool).

**Step 2:** Team huddle to debrief, discuss major findings, and brainstorm questions for the interviews with ICU staff.

**Step 3:** Brief observation (Phase 2 in the Tool).

**Step 4:** Team huddle to debrief, discuss major findings, and discuss any major (in)consistencies between the observations and interviews.

**Step 5:** Report the findings to the ICU staff at the Interprofessional Collaboration Workshop (Phase 3 in the Tool).
Tips for Phase 1: Interviews with Healthcare Professionals

Preparing for an Interview

Ethics
Your hospital may require approval from a Research Ethics Board before conducting interviews with staff, particularly if you have any aspirations of publishing your findings. Consult your hospital’s policies before setting up any interviews.

Space
Ensure you have a private room booked for the interview. Set the room up before hand if you can (e.g. appropriate number of chairs). Make sure the interviewee knows how to get there.

What to Bring
- Interview script
- Pen
- Paper
- Consent form (if applicable)
- Recorder with extra batteries (if you are taping the interview)

Case Study: Conducting Interviews

<table>
<thead>
<tr>
<th>Urban Teaching Hospital</th>
<th>Samira decides to bring in an external researcher from the university (an “outsider”) to help conduct the interviews. REB forms are submitted so the findings can be published, and the hospital pays for interview transcription.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Community Hospital</td>
<td>One of Kierra’s residents is also completing a masters degree. Kierra employs him as a part-time research assistant, and he helps Kierra conduct interviews with staff. REB forms are submitted so the findings can be published, and a research grant helps pay for interview transcription.</td>
</tr>
<tr>
<td>Rural Community Hospital</td>
<td>Ian is concerned about the impact his role as a manager could have on interviewing staff. He approaches a staff member who has previously expressed an interest in conducting research. The staff member reads up on qualitative interviewing and conducts the interviews. The hospital cannot afford to transcribe the interviews, so she makes notes during the interview and records the interview so she can refer back to the conversations.</td>
</tr>
</tbody>
</table>

Quick Tips for Interviewing Success

Recruitment
- Seek out healthcare professionals from a variety of professional backgrounds.
- Keep in mind that clinicians have patient care responsibilities.
- Stress what is unique about this interview – they get to talk about their experience.

Conducting Interviews
- Dress professionally.
- Be on time.
- Use open body language and active listening skills. Paraphrase their answers to show you’re listening and to confirm that you’ve understood what they are saying.
- Resist the urge to fill any silences and pauses.
- Try to avoid reading directly off the interview script if possible, and really listen to their answers. You may find that the questions come naturally if you’re listening.
Tips for Phase 2: Observation

Preparing for Observations

Ethics

Ethical approval may not be required if your observations are being conducted to only gain information for internal quality improvement purposes. Consult your hospital’s policies before conducting and observations.

What to Bring

- Writing utensil
- Notebook
- Consent forms (if applicable)

Quick Tips for Success

- Take field notes regularly and promptly…
- …but, try to be inconspicuous so you don’t intimidate staff! At times you may want to retreat to a quiet area to write down your notes.
- Analyze your notes frequently. Are there any emerging findings you want to observe further? Are you missing anything substantial, such as night shifts?

Case Study: Choosing an Observer

Samira decides to have the observations conducted by the same external researcher who did the interviews.

Two members from the CUSP Safety Team agree to conduct the observations. They both take a workshop on conducting observations before starting.

Ian is hesitant about doing the observations himself because he is the manager. His authoritative role could influence staff member’s behaviors. One of the occupational therapists at his hospital has experience doing observations, and offers to do some observations in the ICU.
### Field Note Example

Below is an example of a real field note from the study that informed this toolkit. Key points for consideration are listed in the right column.

<table>
<thead>
<tr>
<th>Feld Note</th>
<th>Key Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>3:25pm&lt;br&gt;RN1 walks into the pnt2’s room, who is unresponsive, checks the monitors by the bedside and then begins talking to the two visitors. RN1 explains that visitor policy is 2 at a time and asks them to remind their family members of the policy. The pnt2 visitors speak amongst themselves in their native language (they speak Farsi and appear confused at the information they just received), RN1 looks at me and shrugs her shoulders (she seems to be indicating that she is trying her best to communicate).</td>
<td>-Periodically noting the time to give the reader a better sense of the events&lt;br&gt;-Use pseudonyms, such as RN1, to protect anonymity&lt;br&gt;-Include your impressions and added information in brackets&lt;br&gt;-Make note when your presence as an observer is acknowledged</td>
</tr>
<tr>
<td>3:35pm&lt;br&gt;RN2 (a senior nurse) walks by, pauses at the entrance way briefly and comes and stands beside RN1; they smile at each other and address each other by first name. RN1 says to RN2 that she is unsure of how much the visitors understand. RN2 says directly to the visitors “So, so far just antibiotics. Antibiotic. We might use a mask.” One of the visitors replies, in broken English, “Ok. More oxygen.” RN1 and RN2 both nod and confirm that is the plan. RN1 and RN2 move closer to the doorway and a side conversation (inaudible but their gestures to the patient file RN1 is holding, it appears to be about the care plan).</td>
<td>-Make note of intraprofessional interactions, here the RN2 sees that RN1 may be having a communication problem and comes to help and offer support without being asked. They work together to speak with the family and then discuss the care plan&lt;br&gt;-Use direct quotes when you can jot them down&lt;br&gt;-Note impressions if you are uncertain</td>
</tr>
<tr>
<td>3:45pm&lt;br&gt;Res5 approaches and says, to RN1 “I speak Farsi.” And RN1 says, “Oh good!” (she is visibly relieved). RN1 updates RN15 that the visitors know about the medications being administered and that she gave the antibiotics one hour ago. RN2 raises a medical question about the timing of medications: “I noticed that [technical information about IV] but I was wondering if maybe [technical issue, citing evidence]. But maybe that’s been considered already?” Res5 looks at patient as RN2 is talking and does not make eye contact, when she is finished he gestures to see the patient file.</td>
<td>-Make note of interpersonal interactions, here a resident and nurse coordinate their care efforts and the resident offers assistance with communicating with the family&lt;br&gt;-How medical information is communicated and received is just as important as the medical information itself</td>
</tr>
</tbody>
</table>
Facilitating Tips

Below are some tips for facilitating this workshop in particular. Please see Appendix 5: Facilitation Tips for more general suggestions and ideas on how to decrease the amount of time required for this workshop.

Choosing a Facilitator

- A member of the CUSP “safety team” (see Appendix 1), ideally a unit healthcare professional, should lead the session.

Materials

- Writing instruments
- Sticky notes
- Chart paper

Time

- 1.5 hours

Case Study: Choosing a Facilitator

<table>
<thead>
<tr>
<th>Urban Teaching Hospital</th>
<th>Samira and the external researcher decide to co-facilitate the workshop together.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Community Hospital</td>
<td>Kierra enlists many team members to help with this workshop. The resident who conducted the interviews and the two observers present on their findings. Kierra and a dietician on the CUSP Safety Team lead the group through the activities.</td>
</tr>
<tr>
<td>Rural Community Hospital</td>
<td>The staff members who did the interviews and observations present the findings. The occupational therapist and Ian team up to lead the group through the activities.</td>
</tr>
</tbody>
</table>
Suggested Process for Workshop Facilitation

1. Welcome the staff.
2. Introduce yourself and your role in this initiative.
3. Describe the purpose of the workshop:
   a. To share the findings of the interviews and observation, and explore different perceptions of interprofessional communication/interactions within their ICU.
4. Review the agenda with the participants:
   a. Discuss the types of health professions we work with and how we work together.
   b. Explore the flow of interprofessional communication and interaction in our ICU.
   c. Questions for reflection
5. Give each participant pens/markers, a stack of blank card and a large sheet of paper. If you have a large group, have everyone split into interprofessional groups of approximately five people.
6. Defining the healthcare professionals.
   a. Ask the participants to use the cards provided to write down all the healthcare professionals that work in the ICU.
   b. Ask participants to explain and compare their lists.
7. Defining interprofessional dynamics.
   a. Ask the participants to create a pile from the list of healthcare professionals that represents staff in their unit that work together.
   b. Ask participants to explain how they made their selections. Who did you include? Who did you leave out?
8. Share the findings from observations and interviews.
   a. Share examples from the observations and interviews.
   b. Ask participants how these examples and findings resonate with their experience.
9. Creating an interaction chart.
   a. Ask the participants to revisit their cards. Has their perception changed at all since hearing the results of the interviews and observations? How, or why not?
   b. Ask the participants to arrange the cards to depict flows of communication and interaction within their ICU. Encourage them to arrange the cards on top of the blank sheet and use markers to signify flows of information and add in any additional information about interactions.
   c. Facilitate a discussion on how the participants have arranged their interaction charts.
10. Reflection and discussion
    a. Ask the participants to reflect and share what they think the activity says about the way different professionals in their unit work together.
    b. Did anything surprise them?
    c. What changes (if any) can they make to how they work with other healthcare professions?
Thank you for attending the Interprofessional Collaboration Workshop. Please complete this evaluation form and submit it to the facilitator.

<table>
<thead>
<tr>
<th>Statement</th>
<th>5 Excellent</th>
<th>4 Above Average</th>
<th>3 Average</th>
<th>2 Below Average</th>
<th>1 Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please rate your overall satisfaction with the workshop with respect to</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the following:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall evaluation of the workshop</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How useful is the workshop to you professionally?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How useful is the workshop to you personally?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did the workshop meet your expectations?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Activities                                                                |             |                 |           |                 |       |
| How effective was your group in working together during the activities? |             |                 |           |                 |       |
| Usefulness of the activities to achieving workshop goals                  |             |                 |           |                 |       |
| Comments:                                                                |             |                 |           |                 |       |

| What changes (if any) will you make in your interactions with other       |             |                 |           |                 |       |
| healthcare professionals?                                                |             |                 |           |                 |       |

| General Recommendations or Comments:                                    |             |                 |           |                 |       |
Facilitating Tool 3: Identifying Interprofessional Issues that Affect Care Delivery

How This Tool Was Developed

The factors identified in the checklist were key factors identified in our data. Informed by the PROC framework, these findings were further examined in relation to the wider literature on interprofessional work in critical care in order to distill key issues that could be used to help individual units assess their own unit’s clinical context. This information was streamlined into a checklist (Appendix 6) to provide Facilitators with a straightforward and tangible way to begin assessing their unit’s interprofessional issues.

Below are some real examples of how clinician’s perspectives can be interpreted as per the PROC Framework. In the first quote, a nurse describes a processual factor:

“It depends on how busy the day is. Usually what happens is if you notice your patient needs something, certain things you will go ahead and do because they don’t really require authorization or you wait until rounds to bring it up. But other things you’ll just go to the doctor and speak to them for a moment and quickly say what the problem is and what you think you need. In most cases, they’ll say ‘yes, go ahead and do that’. It’s more so just a formality just getting that approval but that’s typically how things can happen.”

In the following quote, a fellow describes some organizational factors that impact interprofessional teamwork and patient care:

“So, for example, when there are conflicts about whether patients should be aggressively resuscitated when, medically, it’s very difficult to foresee any good outcomes for them, other hospitals might have a culture saying we are not going to do this. This is not medically indicated and we’re willing to stand on this line and fight it all the way to the Supreme Court, for example, versus, [here], what I’ve been told at least, is don’t even bother. The culture here is to do whatever the family says, and not fight those fights, because they don’t think it’s worthwhile. That’s been my experience, as well. If you look at our list, almost all of our patients are for resuscitation, even if they have two metastatic cancers, and obviously, no real chance of a great outcome, the decision has been made to respect the family’s choice and the patient’s choice, and not add extra stress and just go with it. And, as a trainee who rotates through, you go with the flow of the culture, you don’t try to change it.”

Facilitating Tips

Below are some tips for facilitating this workshop in particular. Please see Appendix 5: Facilitation Tips for more general suggestions and ideas on how to decrease the amount of time required for this workshop.

Choosing a Facilitator

- A member of the CUSP “safety team” (see Appendix 1), ideally a unit healthcare professional, should lead the session.

Materials

- Different colored markers
- Chart paper

Time: 1.5 hours

Case Study: Choosing a Facilitator

<table>
<thead>
<tr>
<th>Urban Teaching Hospital</th>
<th>Samira decides to facilitate this workshop herself because of her advanced training in education.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Community Hospital</td>
<td>In a CUSP Safety Team meeting, a dietician and social worker volunteer to lead this workshop.</td>
</tr>
<tr>
<td>Rural Community Hospital</td>
<td>Ian is very keen to explore interprofessional and patient family issues in his ICU, particularly what he as a manager can do to improve patient family involvement on his unit. He decides to lead the workshop himself.</td>
</tr>
</tbody>
</table>
Preparation for Workshop Preparation

It is recommended that the facilitator consult the Checklists for Identifying Interprofessional Issues (see Appendix 6) before meeting with the group. Previous reflection on some of the underlying issues impacting interprofessional teamwork will allow for enhanced workshop facilitation.

Suggested Process for Workshop Preparation

1. Welcome the staff.
2. Introduce yourself and your role in this initiative.
3. Describe the purpose of the workshop:
   a. To identify an interprofessional / patient family problem on our unit and take the first steps towards resolving it.
4. Review the agenda with the participants:
   a. Identification of issues impacting teamwork and/or patient care on our unit.
   b. Creation of a mind map through collaborative brainstorming to explore what is contributing to the problem.
   c. Examine the connections between these factors.
   d. Discuss where an intervention would be most effective.
   e. Questions for reflection.
5. Ask the participants to consider the following questions:
   a. What are some issues that are impacting teamwork and/or patient care on our unit?
   b. Why might these issues exist?
6. Invite the participants to share some of the concerns they have identified, and make a list on the chart paper.
7. Ask the participants to select the issue that they believe it is most important to focus on for the rest of the session. Depending on the size of the group, you may be able to split everyone into two groups to explore two issues.
8. Collaborative Brainstorming.
   a. Write the identified problem into the middle of the mind map.
   b. Ask the participants to consider what forces may be facilitating or restraining the problem.
   c. Record participant’s ideas into the mind map, organized by the PROC framework – processual, relational, organizational and contextual.
   a. Ask the participants if they see any connections between the factors listed on the mind map.
   b. Ask the participants who is involved in the issue and the major factors contributing to it. Who should the intervention target – frontline staff, team processes, organization of care?
10. Reflection and discussion.
   a. How do these issues impact your clinical practice?
   b. How do these issues impact patients and families?
**EIC-ICU Toolkit – Workshop Evaluation**  
"Identifying Interprofessional & Patient Family Member Issues Workshop"

Thank you for attending the Interprofessional & Patient Family Member Issues Workshop. Please complete this evaluation form and submit it to the facilitator.

<table>
<thead>
<tr>
<th>Statement</th>
<th>5 Excellent</th>
<th>4 Above Average</th>
<th>3 Average</th>
<th>2 Below Average</th>
<th>1 Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please rate your overall satisfaction with the workshop with respect to</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the following:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall evaluation of the workshop</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How useful is the workshop to you professionally?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How useful is the workshop to you personally?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did the workshop meet your expectations?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Activities**

| How effective was your group in working together during the activities? |             |                 |           |                 |       |
| Usefulness of the activities to achieving workshop goals                |             |                 |           |                 |       |
| Comments:                                                               |             |                 |           |                 |       |

What other interprofessional or patient family issues would you like to see addressed in our ICU?

General Recommendations or Comments:
Phase 2: Identifying Related Interventions

Relational Interventions

1. Simulation

**Description:** Simulated learning ranges from low-tech (e.g. role play exercises) to high-tech (e.g. computerized manikins, simulated clinical environments) activities. They can allow professionals to practice near real-life teamwork/family member involvement issues.

For all types of simulation:
- Develop the simulation scenarios so they are well connected to the findings in your ICU.
- Debrief on the simulation.

Ensure time is available for shared reflection at the end of each workshop to review the content of the learning and develop action plans that will be taken back to the ICU.

**Duration:** In general, run a single interprofessional simulation activity for an hour: 20 minutes for the scenario and 40 minutes for the debriefing activity.

**Costs:** Low-tech simulation is an inexpensive option, as it can be developed by healthcare professionals and delivered in seminar rooms near the ICU. In contrast, while high-tech simulations are more expensive as simulation labs need to be rented, they may be more appropriate depending on the outcome you are hoping to achieve.

**Facilitator:** Simulation can be facilitated by an external facilitator (if resources allow) or delivered by an internal healthcare professional with teaching experience.

**Useful resources:**


2. Team Reflexivity

**Description:** An ICU team that spends time together reflecting upon their collaborative work can develop a ‘reflexive’ (e.g. integrated and well coordinated) way of working together. The development of a reflexive team approach can help ensure that members are able to adapt and respond effectively to any changes they encounter. This is an important quality to have for health and social care teams working together, as change is an on-going factor that needs to be managed by students and staff. A key aspect to achieving a reflexive approach is the creation of an environment where members value the contributions of all team members, feel safe to openly share their ideas, and trust one another to acknowledge their shortfalls and mistakes.

**Useful resources:**

Team Reflexivity Questionnaire: [www.wales.nhs.uk/hi-profile/opendoc/210006](http://www.wales.nhs.uk/hi-profile/opendoc/210006)

3. **ICU Team Training**

*Description:* This can consist of interactive workshops where healthcare professionals come together to discuss and problem-solve the issues identified by the Tool. Such interventions should involve a combination of exploration, examination and reflection aimed at addressing the relational difficulties from the assessment of ICU collaboration and/or family member involvement:

- Develop real-life clinical case(s) linked to the findings from the diagnostics tool.
- Aim to facilitate exploratory discussion of the case(s) from different professional perspectives of all participating healthcare professionals.
- Encourage healthcare professionals to reach a consensus in resolving the case under discussion.
- Ensure time is available for shared reflection at the end of each workshop to review the content of the learning and develop action plans that can be taken back to the ICU.

Where appropriate, involve patient family members to provide their perspective on the delivery of care.

*Frequency:* Depending upon the extent of the issues identified in the ICU, these workshops may be offered as a single event (with at least a 3 and 6 month follow-up), or offered a series of weekly or monthly events.

*Attendance:* To help encourage good attendance, a 1-hour time slot is recommended. Look for seminar rooms close to the ICU. If possible offer snacks and refreshments.

*Costs:* To keep costs down, these workshops should be developed and implemented by an internal healthcare professional with experience of small group facilitation.

*Useful resources:*

- University of Toronto Center for Interprofessional Education, *Curriculum Tools and Resources*: [http://ipe.utoronto.ca/curriculum/facilitators/tools-resources](http://ipe.utoronto.ca/curriculum/facilitators/tools-resources)

4. **Team Retreats**

*Description:* If the relational issues identified by the diagnostics tool require a more in-depth response, an ICU team retreat may be considered. A team retreat gives staff time to carefully review the collaborative and family member involvement issues that have been identified – away from the distractions of clinical practice.

*Duration:* Retreats are usually held for a half-day or full-day. They can be extended to two days (if appropriate and feasible) depending upon the complexity of the issues identified, as well as available resources.

*Frequency:* Short follow-up meetings should be held at three and six months to discuss progress made since the original retreat.

*Useful resources:*

- University of Oregon, Holden Leadership Center: [http://leadership.uoregon.edu/resources/exercisesTips/events/organize_a_retreat](http://leadership.uoregon.edu/resources/exercisesTips/events/organize_a_retreat)
5. Team Mind Mapping

**Description:** This approach allows the graphic reconstruction of shared team knowledge. It has been argued that the increasingly complex task environment in education and work settings combined with high-density information requires new learning and knowledge retention strategies. It draws on mind mapping as a way of helping organize information via hierarchies or branches. At the center is an image (concept map, conceptual diagram) displaying the key topic to be explored. Branches labeled with key words indicating major topics associated with the central topic radiate from the central image. This activity may be used by ICU staff to introduce new concepts or explore issues related to their relational work linked to collaboration and family member involvement.

6. Family Assessment Form (FAF)

**Description:** A family assessment form (FAF) allows family members and visitors to describe their connection to the patient and gives the care team the opportunity to learn and understand about the patient as an individual within their family. It provides family members with a place to write background information on the patient and their preferences while in the ICU.

Previous research has found the FAF can act as a tool that sheds light on the taken for granted assumptions clinical staff may make about families. For example, Blanchard and Alavi (2008) noted that nurses in their study expressed surprise at how kinship was described in the FAF by some family members. The FAF can also act as a reminder for staff to be more inclusive of families.

**Useful resources:**
Processual Interventions

1. Team Policy

**Description:** A team policy explicitly records the collective aims, roles and responsibilities of the team. It also helps to ensure that a team has a formal document that provides members with details of how they operate. Each team policy should contain a number of key elements:

- An outline of the overall purpose of the team.
- Information on team membership.
- Clarification of individuals’ roles within the team.
- Details on the processes of teamwork.
- Shared targets/milestones.

**Frequency:** On-going discussion between team members is required to ensure that their team policy is regularly updated and amended. For example if a new member joins there may be a need to modify a previously agreed policy.

**Useful resources:**

2. Team Meetings

**Description:** Designing and implementing team meetings attempt to improve awareness and understanding of each other’s roles, responsibilities and shared goals. Introduction of weekly interprofessional rounds or morning meetings can promote communication.

**Useful resources:**

3. Care/Clinical Pathways

**Description:** Care or clinical pathways are interventions in which the course of events and activities involved in a patient’s care trajectory are specified within a certain time period. The aim is to standardize the delivery of care, the length of stay and the clinical management of the patient. They can be particularly useful for relatively simple and predictable patient conditions. As a result, they can only be employed for a small fraction of the work undertaken by interprofessional teams.

**Useful resources:**
Scottish Pathways Association workbook: [http://www.icptoolkit.org/home.aspx](http://www.icptoolkit.org/home.aspx)
4. Team Checklists

**Description:** These can help healthcare professionals focus on often routine tasks they need to perform together. They can also help trigger communication and dialogue between members that can in turn improve their relationships.

5. Patient safety

**Description:** The following activities are designed to prevent, detect and rectify errors related to improving patient safety practices in an ICU.

- Identify the protocol to be used or develop a plan – it must be clear to everyone on the team what protocol or plan is being used.
- Prioritise tasks for a patient – team members must understand how their individual tasks fit into the overall task.
- Speak up – professionals must be prepared to speak up when patients are at risk. Team leaders must foster a climate which makes this possible.
- Cross-monitor within the team – team members should watch each other for errors and problems. This should be seen not as criticism but as support for fellow members and an additional defense for patients.
- Give and accept feedback – feedback should not be restricted to team leaders; any member should be able and prepared to give feedback to any other. But for this to be helpful, team members need to understand each other’s roles.
- Use closed loop communications – communications must be acknowledged and repeated by their recipients and even their senders. This provides an additional check and defense.
- Back up other team members – members need to be aware of each other’s actions and be ready to step in with support and assistance.

**Useful resources:**
Canadian Patient Safety Institute:
http://www.patientsafetyinstitute.ca/English/toolsResources/Pages/default.aspx

6. Redeveloping ICU Information Pamphlets

**Description:** Pamphlets with details about the environment, team members and formal and informal practices of the ICU are a simple, yet helpful, resource that can provide informational support for patients and family members. Having this information in a written format allows family members to refer back to the pamphlet at their leisure. It is best practice to write pamphlets in plain language in an accessible format that can be translated to suit diverse audiences. The content can include formal details about the hospital and ICU, as well as informal practices or unspoken ‘rules’ that are unique to the specific ICU that the patient is currently in. Blanchard and Alavi (2008) note that at times ad hoc rules may emerge in the clinical context.

**Frequency:** To prevent these from creating misunderstandings between family members and staff, information should be reviewed and updated frequently.

**Useful resources:**
7. ICU Diary/Journal

**Description:** A diary or journal is an ongoing record of a patient’s stay in the ICU, which is kept by a third party. Family members, healthcare worker and student can contribute to the journal, which may include photos, notes and letters.

The journal can function as a therapeutic resource for psychosocial recovering and follow-up after discharge. Additionally, it has the potential to serve as a communication device between patients, families and healthcare professionals. The narratives provided by family members and nonverbal patients themselves provide clinical staff with insight and understanding into the needs, values and perceptions held by the family. ICU staff may also benefit from the positive acknowledgement and feedback the journal may contain.

**Useful resources:**


Organizational Interventions

1. Nurse-Family Meetings

**Description:** Family members report that it is beneficial and comforting to organize routine nurse-family meetings with the specific goal of bringing families together as a group to discuss their critical care experiences (Nelms, & Eggenberger, 2010). Nurse-family meetings in this context are adapted from stage one of the Family Intervention and Therapeutic Change Model developed by Robinson and Wright (1995). This model is founded on the principle that multiple realities exist for both family members and nurses, but that coming together as a group will foster the development of a relational, collaborative, consultative, and nonhierarchical relationship (Wright & Leahey, 2009). Regular meetings provide the space where families can have intentional interactions with their loved one’s nurse in the hopes of developing deeper and more meaningful conversations. Nelms and Eggenberger (2010) note that these meetings also serve as an acknowledgement to the family of the significance of having a loved one as critical care patient.

**Useful resources:**


2. Re-Orgaizing the Delivery of Care

**Description:** Changing the way care is organized within an ICU is one way to improve the quality of interprofessional teamwork. Such interventions usually involve managers working with professions to introduce new organizational policies or procedures which aim to, for instance, integrate the way care is delivered by different groups of professionals.

3. Interdisciplinary Family Rounds

**Description:** Rounds within the ICU context usually refer to a gathering of the interdisciplinary healthcare team to discuss patients’ medical conditions. Typically bidirectional communication between family members and the healthcare team has not been considered a priority during rounds, and some ICU’s employ policies that restrict visiting hours during this timeframe. Interdisciplinary family rounds emphasize the patient and family member as the focal point of the discussion and encourage family member presence and participation. This configuration allows for a diversity of perspectives and gives the clinical staff an opportunity to answer any questions. Family members included in rounds report that they have a better understanding of patients’ treatment plan as they have been involved in its development and daily refinement.

**Useful resources:**


4. Introducing a New Role in the ICU: Family Support Coordinator (FSC)

**Description:** Patients and family members in the ICU often encounter a myriad of changing healthcare professionals, which can make continuity of care difficult to achieve. The purpose of the FSC role is to provide family members with one point of contact whose responsibility it is to manage the flow of medical information and to continually assess the unmet needs of the family. The FSC assists families in navigating the ICU setting by acting as a liaison between the family and medical team, clarifying complex medical information, and promoting family-centered decision-making. Shelton and colleagues (2010) report that introducing this new role in the ICU increased family satisfaction in all areas of communication and care. Additionally, having a FSC on the unit improves the degree to which the ICU team considers the needs of each family member.

**Useful resources:**

Facilitation Tips

Before the Workshop

**Time:** Consider the amount of time the group can feasibly spend together. Depending on the group and workshop, you may need to decrease the amount of time spent in each workshop. Some ideas for decreasing workshop time include:

- Use dedicated time where you can, such as in-service training sessions and bi/monthly meetings.
- Split up the workshop into two shorter sessions.
- Ask participants to complete some of the more self-reflective work ahead of time. Make sure participants are given ample notice and clear instructions for any pre-work.

**Space:** Make sure the room you are using for the workshop is appropriate for the workshop. Some things to consider:

- Is it an appropriate size for the number of people?
- Does the space work for the kind of activities you are going to be doing?
- If any of the participants have patient care responsibilities (e.g. on-call), is the space close to the ICU?

**Materials:** Make sure you have all of the materials you will need, such as paper, markers, and any audiovisual equipment you wish to use. Ensure all materials are working beforehand.

**Facilitator:** Consider who will be leading the workshop, and the implications this could have on the success of the workshop. For example, would your staff be willing to share examples of controversial behaviors and views if the ICU manager is in the room? Could there be interprofessional conflict if the workshop is led by a physician? A nurse?

Consider others who can add richness to the workshop. For example, it would be advantageous to involve a Patient/Family Representative in Workshop 1. From an interprofessional standpoint, it would also be beneficial to have various professions involved in the planning and delivery of the workshops.

During the Workshop

**Time Management:** Keep track of time during the workshop. For group activities, tell participants how long they will have to complete the activities, and give them warning before moving on to the next item.

**Active Listening:** Use active listening skills to show participants that you are listening and to ensure you understand their message. Repeat back what participants are saying by paraphrasing, and request clarification and confirmation as necessary.

**Evaluation Forms:** Remember to distribute your evaluation forms. The feedback received here can be useful in planning future workshops. Additionally, some participants may feel more comfortable sharing some of their ideas anonymously.

If you are rushed for time, you can also use an online survey tool.

After the Workshop

**Evaluation Forms:** Remember to collect your evaluation forms. If you used an electronic format, send out a follow-up email a few days to a week after the evaluation form/survey was sent out. Remind the participants to complete the evaluation form, and thank them for their participation.

**Record Keeping:** Make sure you keep a record of the ideas and thoughts shared during the workshop before disposing of any workshop material.

**Clean Up:** Make sure you leave the room in the condition you found it.
# Checklist for Identifying Interprofessional & Patient Family Member Issues

<table>
<thead>
<tr>
<th>Domain</th>
<th>Factors</th>
<th>Example</th>
<th>How is this manifested on our unit?</th>
<th>Are there any related risks?</th>
<th>What are some possible solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Processual Teamwork Factors</strong></td>
<td><strong>Time and space</strong></td>
<td>An off-site physician communicates a change in patient care plan verbally and by electronic medical record to nurse during a nighttime shift.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Routines and ritual</strong></td>
<td>Rounds geared to medical teaching limit opportunity for interprofessional interactions.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Information technology</strong></td>
<td>Physicians’ use of workstations on wheels during rounds affects face to face communication needs.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Unpredictability</strong></td>
<td>Physician, pharmacist and nurse communicate about medication management plan in anticipation of an unpredictable patient.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Urgency</strong></td>
<td>An emergency medical procedure is prioritized over interprofessional communication needs.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Complexity</strong></td>
<td>A respiratory therapist and physician have different perspectives of patient care plan in a complex patient.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Task shifting</strong></td>
<td>A respiratory therapist has greater latitude for decision making and doing procedures in one hospital compared to another hospital.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Processual Patient Family Factors</strong></td>
<td><strong>Physical environment</strong></td>
<td>Technologically invasive landscape of ICU can inhibit or intimidate family members</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Complexity</strong></td>
<td>Multiple specialists involved in the care of a patient can be confusing for patient family members</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Routines and rituals</strong></td>
<td>Rounds where HCPs discuss daily care plans can provide valuable information for patient family members but may also feel intimidating or exclusionary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domain</td>
<td>Factors</td>
<td>Example</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>---------</td>
<td>---------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Relational Teamwork</strong></td>
<td>Professional power</td>
<td>Physician decision to discharge a patient is in tension with a nurse’s perspective that patient is not suitable for discharge.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hierarchy</td>
<td>A nurse is not comfortable questioning a medical decision by a physician.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Socialization</td>
<td>A respiratory therapist and physician have different professional readiness for education.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Team composition</td>
<td>The presence of healthcare professionals such as social workers and pharmacists on a unit create opportunities for teamwork.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Team roles</td>
<td>A speech language pathologist's role is not understood by other healthcare professionals and is therefore not referred to.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Team processes</td>
<td>Physicians and nurses working together over time develop trust and respect in contrast to temporary workers.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Relational Patient Family</strong></td>
<td>Professional power</td>
<td>Different opinions expressed by different HCPs can be confusing or unsettling to family members.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hierarchy</td>
<td>Nurses have limited ability to respond to patient family member preferences during critical situations when physicians are not present.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Socialization</td>
<td>The boundaries of professional roles may be unclear to patient family members.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Team composition</td>
<td>The presence of family members and healthcare providers can foster and inhibit previously shared interactions.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**RELATIONAL FACTORS**
<table>
<thead>
<tr>
<th>Domain</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ORGANIZATIONAL FACTORS</strong></td>
<td></td>
</tr>
<tr>
<td>Organizational Teamwork Factors</td>
<td>Affect the local environment in which the interprofessional team operates.</td>
</tr>
<tr>
<td>Professional representation</td>
<td>Clinical leaders promote linkages across professional groups.</td>
</tr>
<tr>
<td>Fear of litigation</td>
<td>Concerns of litigation hamper interprofessional decision-making.</td>
</tr>
<tr>
<td>Fear of litigation</td>
<td>Communication between HCPs and patient family members could be shaped by larger concerns (or threats from the patient family members).</td>
</tr>
<tr>
<td>Unit specific policies</td>
<td>Organizational policies relating to the unit (e.g., visiting hours) may not be apparent to patient family members or enforced uniformly by HCPs.</td>
</tr>
<tr>
<td>Domain</td>
<td>Factors</td>
</tr>
<tr>
<td>------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Contextual Teamwork Factors</td>
<td>Culture</td>
</tr>
<tr>
<td></td>
<td>Diversity</td>
</tr>
<tr>
<td></td>
<td>Gender</td>
</tr>
<tr>
<td></td>
<td>Political will</td>
</tr>
<tr>
<td></td>
<td>Economics</td>
</tr>
<tr>
<td>Contextual Patient Family Factors</td>
<td>Diversity</td>
</tr>
<tr>
<td></td>
<td>Gender</td>
</tr>
<tr>
<td></td>
<td>Political will</td>
</tr>
<tr>
<td></td>
<td>Economics</td>
</tr>
</tbody>
</table>
**Interprofessional Collaboration Scale**

This 13-item scale aims to measure perceptions of interprofessional collaboration between nurses, physicians, and other health professionals. The items were written from the perspective of respondent groups to name other professionals as targets of the item concepts (e.g. ‘nurses have a good understanding with physicians about our respective responsibilities’). Items were adapted from the Nurses’ Opinion Questionnaire.\(^{17}\) The scale’s items were written in a round-robin format to specify ‘target’ groups and ‘rater’ groups. The three underlying subscales address communication with other groups, accommodation and isolation/autonomy.\(^{18}\)

**Role Perception Questionnaire**

Developed by Mackay (2004), this 20-item scale aims to measure perceptions of different health and social care professionals’ views of their own and others roles.\(^{19}\)

**The Team Survey**

Developed within a primary care context, this tool has 25 items.\(^{20}\) Questions are based on the following four factors – team identification and communication, meta-cognition of team goals and performance, team potency and shared mental models of team roles.

Other possible tools can be found at: [https://nexusipe.org/informing/resource-center](https://nexusipe.org/informing/resource-center)
Introduction

It is becoming increasingly important to provide evidence for the interventions that are designed and implemented in health sciences to show managers, insurers and regulators whether limited resources are being used in an effective manner.

In this part of the toolkit we provide a brief overview of how you can plan to evaluate the intervention(s) developed/implemented in your ICU.

What is Evaluation?

Evaluation has been defined as a process of “appraising human activities in a formal, systematic way” (Kelly, 2004). A key purpose of evaluation is to make judgments about the usefulness of health and social programs. Evaluation is therefore focused on assessing change in activities or programs; addresses pre-specified questions in a transparent way; and is based on the systematic collection and analysis of data.

Evaluation Purpose

The purpose of an evaluation may be to provide formative information, summative information or both. An evaluation that is undertaken early in the development of a new or modified intervention may be useful in understanding the context in which an intervention is to be implemented as well as in improving the design of the intervention.

An evaluation undertaken once the intervention has been implemented may shift towards issues such as the overall worth of the new approach, including its effectiveness and efficiency, in comparison with usual care, existing approaches or alternatives. Evaluation for this purpose is summative and may include data on: perceptions of those participating in and experiencing care; processes of care that have changed as a consequence of the intervention; impacts on practitioners, resource use or patient outcomes.

Methodological Considerations

Evaluation Aim

Formulating concise evaluation aim(s) is important because they will provide direction on which evaluation design you select (see below), which in turn will produce different results and conclusions.

Examples of possible evaluation aims are:

- To determine whether a team intervention improved team role clarity;
- To study whether an intervention aimed at promoting a ‘speak up’ culture led to more transparency in the reporting of adverse events.

Evaluation Designs

There are a number of quantitative and qualitative evaluation designs available for use, as well as the option to combine approaches to produce a mixed methods evaluation. In this section we review each of the main evaluation designs.

1. Quantitative Designs. Below are the key quantitative designs that can be employed relatively inexpensively in an ICU setting when evaluating ICU intervention(s).

   - Post-intervention study: This is the most simplistic type of design. It involves gathering data immediately after an intervention (e.g. team training, a new ICU checklist) has been implemented to gather an insight of the participants’ perceptions about the effects of the intervention(s)

* To minimize the costs of evaluation work, we have not included any experimental designs such as randomized controlled trials, which involve the inclusion of control groups (i.e. comparison unit that do not receive the intervention), as these types of design are complex and resource-hungry.
Before-and-after study: This design involves the collection of data before and after the intervention. This design helps detect changes resulting from an intervention more accurately as there is data collection at two points in time: before and after the intervention.


Interrupted times series study: This design aims to obtain a longitudinal account of the effects of an intervention over time. It uses different data collection points before and after an intervention to determine if it has an effect that is greater than any underlying trends. This design usually requires multiple time points (usually 2-3) before the intervention to identify any underlying trends, and multiple points (usually 2-3) afterwards to see if there is any change in the trend measured previously.


2. Qualitative Designs. Below are some examples of qualitative designs, which can be employed relatively inexpensively. In general, these types of design gather observational, interview and/or documentary data from the participants of the intervention:

Phenomenology: This form of inquiry brings individuals' perceptions of human experience with all types of phenomena. In an ICU context, phenomenology is an approach that allows for the exploration and description of phenomena important to staff, patients and their families through a small number of interviews with the intervention participants.


Ethnography: This type of design aims to study the interactions, behaviors and perceptions that can occur within an ICU. The central aim of ethnography is to provide an in-depth insight into people’s views and actions, as well as the nature of the workspaces they inhabit, through the collection of observations and interviews. To keep costs down, it is encouraged that a rapid ethnographic approach is used – involving gathering data over a period of few days over 2-3 week period.

For further reading see: Bernard, R. *Research Methods in Anthropology: Qualitative and Quantitative Approaches.* Walnut Creek, CA: AltaMira Press, 2002.

Action research: This type of design is a form of research that involves people in a process of change, which is based on professional and organizational action. It adopts a more collaborative approach than the designs described above, where the evaluators also work with intervention participants in processes of planning, implementing and evaluating change.


3. Mixed Methods. If it is decided that a more comprehensive insight is needed, both quantitative and qualitative data should be gathered in a mixed methods approach:

Mixed methods: This type of design aims to gather different types of quantitative and qualitative data (e.g. surveys, interviews, documents, observations) to provide a more detailed understanding of the processes and outcomes associated in an intervention. Comparing results between the different types of data can help generate more insightful findings of the effects of the intervention(s).
Other Methodological Considerations

‘Internal’ versus ‘External’ Evaluations. An ‘inside’ evaluator can benefit from extensive knowledge of the history and context of a study setting, but that can make it difficult to stand back from the data and interpret it in a neutral manner.

In contrast, external evaluators may find it easier to view their work from a more neutral viewpoint. This neutrality is also helpful for eliciting more candid data from participants. However, they often have to spend time, and money developing an in-depth understanding of contextual issues.

Reactivity. Reactivity, also known as The Hawthorne Effect, refers to a phenomenon where the presence of the evaluator positively changes research participants’ behavior. Assessing the level of reactivity on an evaluation is difficult, but you need to be aware of its presence and its possible effects. Overtime, reactivity issues diminish, as individuals cannot usually alter their behavior for long due to managing busy clinical workloads.

Dissemination Considerations

Disseminating the results from an evaluation is an important part of the process. It provides participants, managers, employers, funders, etc. with important information about the success (or not) of intervention(s). There are a number of different routes of dissemination to consider, including:

- **Local meetings**: useful for updating colleagues, clinical managers and family members about the evaluation work.

- **National or international conferences or meetings (posters, papers)**: these are useful places to discuss early work to elicit feedback on processes and/or outcomes.

- **Short reports in professional journals**: these are particularly useful for describing work in progress and/or directing readers to a more lengthy report.

- **Peer reviewed papers**: these can provide more information on the intervention and evaluation, usually for an academic audience.

- **Websites/social media**: these can provide rapid, easily updated, low cost access to evaluation information. Feedback can also be obtained from those who use the site.

Ethical Considerations

Evaluating interprofessional collaboration and/or family involvement interventions inevitably requires ethical clearance. However, if your evaluation is to gain information for internal quality improvement purposes and will not be disseminated to external audiences, ethical approval may not be required. If you wish to disseminate your work further, it is recommended that ethical approval be obtained from all relevant research ethic boards.

Practical Considerations

Managing Stakeholders

Evaluation often involves a wide range of stakeholders with an interest in the conduct and findings of the evaluation. Evaluation aims and methods may need to be negotiated with these groups.

Preparing for Change

Change is a constant within an ICU setting. As a result, any evaluation can be difficult to control, as both context and intervention may be changing as the evaluation progresses. Evaluations are also often limited by a range of local changes, such as time and funding constraints, or the loss of local intervention champion(s), which can undermine ongoing evaluation work.

Consider the Resources

Finding time and money for evaluating interventions can be difficult. Wherever possible one should consider where to secure funding for some or all stages of the evaluation process – formulation of evaluation aims, selection of designs, ethical approval, data collection/analysis and dissemination of results.

Further Reading


### Interprofessional Teamwork Evaluation Checklist

#### Methodological Considerations

<table>
<thead>
<tr>
<th></th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>1. What intervention(s) are to be evaluated and why?</td>
</tr>
<tr>
<td>☐</td>
<td>2. What evaluation design will be employed?</td>
</tr>
<tr>
<td>☐</td>
<td>3. Who will be undertaking the evaluation?</td>
</tr>
<tr>
<td>☐</td>
<td>4. How will we deal with bias (e.g. reactivity) in our evaluation?</td>
</tr>
<tr>
<td>☐</td>
<td>5. What is our dissemination plan?</td>
</tr>
</tbody>
</table>

#### Ethical Considerations

<table>
<thead>
<tr>
<th></th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>1. Have we considered all ethical dimensions?</td>
</tr>
<tr>
<td>☐</td>
<td>2. If appropriate, have we secured ethical approval from the local IRB?</td>
</tr>
</tbody>
</table>

#### Practical Considerations

<table>
<thead>
<tr>
<th></th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>1. How have we involved our stakeholders in this evaluation development and implementation?</td>
</tr>
<tr>
<td>☐</td>
<td>2. What are the costs to undertake the evaluation:</td>
</tr>
<tr>
<td></td>
<td>• Financial</td>
</tr>
<tr>
<td></td>
<td>• Resources</td>
</tr>
<tr>
<td></td>
<td>• Time</td>
</tr>
<tr>
<td>☐</td>
<td>3. What resources are available for the use of the evaluation?</td>
</tr>
</tbody>
</table>
Supporting Research

The EIC-ICU Toolkit is a product of a two-year, multisited ethnographic study entitled, "Understanding the Nature of Team-Based Care and Patient and Family Involvement in Intensive Care Settings: A Multi-Site Study".

This project had three major objectives:

1. Through ethnographic research, to explore interprofessional care and family involvement in North America;
2. To develop an empirically based tool to assess the quality of team-based care and patient and family involvement;
3. To develop a package of interventions to strengthen team-based care and patient and family involvement.

Project Highlights

• 8 ICUs across North America
• Over 1,000 hours of observation of interprofessional work, communication and collaboration, as well as interactions between healthcare providers and patient family members
• 80 clinician interviews
• 37 patient and family member interviews

Publications

A number of articles have already been published on this study, and many more are currently being written.


Questions and Further Information

Anyone with specific questions about this study or the EIC-ICU Toolkit is encouraged to contact the study’s Co-Principal Investigators:

Dr. Scott Reeves: S.Reeves@sgul.kingston.ac.uk
Dr. Simon Kitto: skitto@uottawa.ca
About the Authors

Scott Reeves, PhD
Co-Principal Investigator
Professor of Interprofessional Research, Centre for Health and Social Care Research
Faculty of Health, Social Care and Education, Kingston University & St. George’s, University of London, UK
s.reeves@sgul.kingston.ac.uk

I am a social scientist who has been undertaking health professions education and health services research for over 20 years. I am Professor in Interprofessional Research at the Centre for Health and Social Care Research, Faculty of Health, Social Care and Education at Kingston University and St George’s, University of London, and also Editor-in-Chief, Journal of Interprofessional Care.

My main interests are focused on developing conceptual, empirical and theoretical knowledge to inform the design and implementation of interprofessional education and practice activities. I have published numerous peer-reviewed papers, book chapters, textbooks, editorials and monographs. An increasing amount of my work has been translated from English into other languages including French, Spanish, German, Japanese, Norwegian and Russian.

Simon Kitto, PhD
Co-Principal Investigator
Associate Professor, Department of Innovation in Medical Education
Director of Research, Office of Continuing Professional Development
Faculty of Medicine, University of Ottawa, Canada
skitto@uottawa.ca

I am a medical sociologist who has been working in health professions education research since 2002. I am an Associate Professor at the University of Ottawa’s Department of Innovation in Medical Education, as well as the Director of Research in the Office of Continuing Professional Development.

My main research interests are studying how structural, historical and socio-cultural variables shape interprofessional clinical practice, educational settings and activities. My current research focuses on the nature and role of continuing interprofessional education and practice within the nexus of patient safety, QI and implementation science intervention design and practice.

Janet Alexanian, PhD
Research Lead
Research Associate, Department of Surgery, Faculty of Medicine, University of Toronto, Canada
janet.alexanian@utoronto.ca

In 2009 I completed my doctorate in Anthropology, entitled “Constructing Iran: Transnational Cultural Production and the Politics of Representation in the Digital Age” at the University of California, Irvine. My work has been published in the Journal for Comparative Studies of South Asia, Africa, and the Middle East (26.1, 31.2) and the Journal of the Society for the Study of the Multi-Ethnic Literature of the United States (33.2).

I am the Research Lead and one of the ethnographers on the study that informed this toolkit. In this study I oversaw research being conducted in multiple ICUs in the USA and Canada to examine interprofessional collaboration and patient and family involvement in the delivery of care in intensive care units.

Rachel E. Grant, MN, BScN, RN
Educationalist & Graphic Designer
Social Sciences and Humanities Research Associate, Department of Innovation in Medical Education, and Office of Continuing Professional Development
Faculty of Medicine, University of Ottawa, Canada
RachelGrantRN@gmail.com

I am a Registered Nurse who has been involved in health professions’ education since 2008 and research since 2013. I am a Social Sciences and Humanities Research Associate at the University of Ottawa’s Department of Innovation in Medical Education, as well as in the Office of Continuing Professional Development.

My research interests primarily concern the cultural, historical and structural factors that influence interprofessional learning and collaboration. I continue to engage in a variety of interdisciplinary teaching activities, such as delivering lectures, team training sessions, and facilitating workshops for undergraduate and graduate health sciences students.