



Center for  
Advancing  
Interprofessional  
Practice,  
Education and  
Research  
Arizona State  
University

CAIPER Interprofessional By Design™ Tool

# The Preceptor's Guide to the Nexus

*where interprofessional education  
meets collaborative practice*



Teri Kennedy

# The Preceptor's Guide to the Nexus

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## Acknowledgements

This guide was inspired by and is dedicated to practitioners across health professions who provide high quality, compassionate, person-, family-, and community-centered care every day, while contributing their time to serve as preceptors for health professions students and teams. My sincere thanks to my CAIPER colleagues who walk the talk of interprofessional collaborative practice!

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## About the Lead Author

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*Note: As of the date of publication of this guide, Teri Kennedy has accepted the position of Endowed IPE Professor at the University of Kansas School of Nursing.*

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-



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# Getting Started

## About this Guide

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### What's the purpose of this guide?

Welcome to the “The Preceptor’s Guide to the Nexus: *Where Interprofessional Education Meets Collaborative Practice*,” designed to support the important role played by practitioners across health professions who serve as preceptors for health professions students and teams. This guide pays not-so-subtle homage to Douglas Adams’ *The Hitchhiker’s Guide to the Galaxy* in both title and lesson: when preparing health professions students for interprofessional collaborative practice, “Don’t Panic!”



### Global Guide Objectives:

1. Orient preceptors to the historical context of IPE.
2. Introduce terms and concepts related to IPE and core competencies.
3. Identify core and site-specific interprofessional activities.
4. Describe how to transform a uni-professional student learning activity to an interprofessional activity.



### What will I find in the guide?

This guide is intended as a practical resource for interprofessional preceptors. It is designed to orient preceptors to concepts and strategies that advance interprofessional practice and education (IPE) and support the role of preceptors in guiding the development of skills, experiences, and competencies to prepare health professions students for interprofessional collaborative practice. Contents include:

- Scholarly literature
- Practical tools
- Core, tailored, and standard learning activities
- Evaluation instruments
- Additional resources

# About this Guide

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## How is this guide organized?

This section, titled *Getting Started*, contains all the background information for *The Preceptor's Guide to the Nexus Where Interprofessional Education Meets Collaborative Practice* and provides an orientation to the way materials are organized.

The guide is divided into *segments*, each of which is comprised of one or more *topics*. A segment is a self-contained portion of the guide, and usually includes three to four related topics. Topics are focused informational blocks, resources, or handouts.



## How are materials labeled in this guide?

Components of the guide are organized into text or content blocks like this one, with a margin icon, a title line, and the contents. The icons are designed to help catch your eye and draw quick attention to the type of materials that will be presented.

For example, the paper-and-magnifying-glass icon to the left indicates that this block of text provides an overview of materials. The bold title line gives a brief description, and is followed by the related instructions, information, key points, resources, or materials.

A complete glossary of the margin icons is provided on the next page.



## IMPORTANT NOTE

You may also occasionally find important notes such as this one in the text of this guide. These shaded boxes provide particularly important information in an attention-getting format.

# Icon Glossary

Glossary



Handouts



Important Note



Interprofessional Conferences



Online Resources



Overview of Materials



Purpose



Readings / References



Toolkits



# Meet CAIPER



## Overview

Building capacity in teamwork and collaboration – the science and art of working together effectively – is the cornerstone for innovation to drive excellence and transform healthcare locally, nationally, and globally for the purpose of optimizing the health of individuals, families, communities, and populations.

The ASU Center for Advancing Interprofessional Practice, Education and Research (CAIPER) operationalizes its values-based strategies to advance thinking, practice, education, and research amongst diverse health and health-related professions stakeholder groups and settings. Community-practice, education, organizational, national, and international partners are convened by the Center to:

- Leverage collaborative talents and expertise essential to the effective design, implementation, and evaluation of a multifaceted plan to accelerate and expand interprofessional practice, education, and research initiatives.
- Collaborate to provide practical knowledge, tools, and strategies for application in efforts to achieve excellence in teamwork and collaboration.
- Learn and work together across professions and settings.
- Support partners in designing, strengthening, and evaluating team-based practices including high-value processes such as care coordination, transitional care, and population-based care.
- Enable robust programs of research to increase understanding of team performance and its impact on important health and healthcare outcomes.

# Meet CAIPER

## Our Mission

The Center for Advancing Interprofessional Practice, Education and Research is a catalyst for transforming healthcare by driving excellence in teamwork and collaboration. The Center has a tripartite mission to advance:

- Competency-based interprofessional education of health professions and health-related professions students to prepare them for success as team members, innovators, and leaders.
- Opportunities and strategies to align and capitalize on strengths and capacities of education and practice.
- Research and evaluation initiatives to provide new insights and evidence-based strategies.

## Our Vision

Healthcare that values excellence in teamwork and collaboration to transform healthcare and optimize health and the experience of healthcare for individuals, families, communities and populations. The Center aspires to this vision by:

- Modeling the values and competencies of effective teamwork and collaboration;
- Engaging students, faculty, practitioners, and community partners in forward thinking dialogue about interprofessional practice, education, and research;
- Partnering with diverse stakeholder groups to advance interprofessional education, practice, and research initiatives; and,
- Disseminating knowledge, tools, and strategies to build teamwork and collaboration capacity.

## Connect with Us

 **Center for Advancing  
Interprofessional Practice,  
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**Arizona State University**

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 [@asucaiper](https://twitter.com/asucaiper)

# Foreword and Welcome



I am delighted to be asked to write the preface for *The Preceptor's Guide to the Nexus*. Preceptors are VIPs in the world of interprofessional practice and education. They are the vital connection between what students learn in the classroom and how they see it come alive in practice. They are role models for students and translators of the value and meaning of teamwork and collaboration. Preceptors are the bridge between faculty and healthcare teams across the care continuum.

Working at the intersection of education and practice in every setting, preceptors know the joys, the untapped opportunities and at times, overwhelming challenges of connecting classroom and clinical learning in meaningful and lasting ways.

In the *Preceptor's Guide*, Dr. Teri Kennedy offers an important window into interprofessional practice and the array of resources available to enhance interprofessional clinical thinking and experiences. Teri has designed the guide to be accessible and useful. It provides an outstanding menu of frameworks and tools for all preceptors, for those who are experienced and for those who are just starting to mentor students in interprofessional care delivery.

I am so pleased that Arizona State University's Center for Advancing Interprofessional Practice, Education and Research (CAIPER) has sponsored this work. CAIPER is dedicated to creating and disseminating robust educational resources to engage and invigorate all who contribute to preparing students and practitioners for outstanding teamwork. The Guide reflects our deep value for the work of preceptors and our belief in their importance to interprofessional practice and education.

**Gerri Lamb, PhD, RN, FAAN**

Founding Director, Center for Advancing Interprofessional Practice, Education and Research

July 2018

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# An Introduction to Interprofessional Practice and Education (IPE)

Just as in life, change is the only constant in healthcare, where the landscape continues to shift and evolve. New technologies and discoveries are leading to innovative treatment approaches to patient care. New reimbursement models shifting from volume to value are resulting in new models of care, a focus on the needs of communities, shifting health system alignments, and an increased focus on care coordination and transitions of care.

Despite dramatic changes brought about by new technologies and models of reimbursement and care, perhaps the greatest impact on healthcare improvement rests in its one constant, human capital: the healthcare team. Increasingly, a focus on interprofessional collaborative practice is seen as the route to improving the healthcare of individuals and communities, while reducing costs and increasing value.

Most health professionals were trained to demonstrate the skills and competencies specific to their own profession. Learning how to work in teams used methods not unlike parenting: example, trial, and error. To address this gap, health professions educators are preparing students to demonstrate skills and competencies both professionally and interprofessionally through *interprofessional practice and education (IPE)*, yet these students often enter practice environments that value, but don't yet reflect, interprofessional collaborative practice.

The role of clinical preceptor occupies the space often referred to as the nexus, where interprofessional education provided by educators in health professions programs meets the healthcare environment where interprofessional collaborative practice is essential.

This guide is intended to support the important role of preceptors in advancing the attainment of interprofessional skills and competencies of health professions students through guided, intentional experiences in interprofessional collaborative practice during the clinical portion of their professional education. It can also be useful to healthcare organizations seeking to interprofessionalize their team culture. Finally, it can serve as a resource for health professions educators seeking to infuse current healthcare trends and challenges into health professions curriculum.



## IMPORTANT NOTE

The role of clinical preceptor occupies the space often referred to as the nexus, where interprofessional education provided by educators in health professions programs meets the healthcare environment where interprofessional collaborative practice is essential.

# The Road to IPE: History, Philosophy, and Definitions

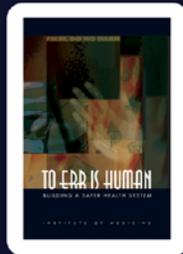
The road to interprofessional practice and education (IPE) was paved with several seminal reports on the status of healthcare in the United States. To understand the current state of IPE within health professions education and practice, it is useful to understand its historical underpinnings. As with most history, to understand where we are and where we're going, it's important to know where we've been.

Explore the timeline graphic on the following page, and then continue on to read about the specific reports and publications.

# TIMELINE

notable milestones on the road to interprofessional practice and education

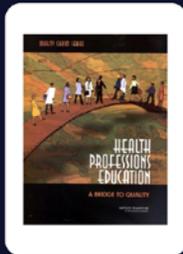
**2000**  
**Institute of Medicine**  
*To Err is Human:  
Building a Safer Health System*



**2001**  
**Institute of Medicine**  
*Crossing the Quality Chasm: A New  
Health System for the 21st Century*



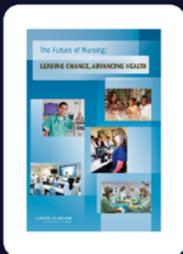
**2003**  
**Institute of Medicine**  
*Health Professions Education:  
A Bridge to Quality*



**2010**  
**World Health Organization**  
*Framework for Action on  
Interprofessional Education &  
Collaborative Practice*



**2011**  
**Institute of Medicine**  
*The Future of Nursing:  
Leading Change, Advancing Health*



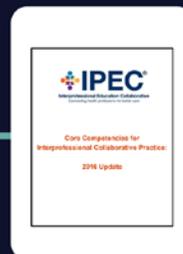
**2011**  
**Interprofessional  
Education Collaborative**  
*Core Competencies for  
Interprofessional Collaborative  
Practice*



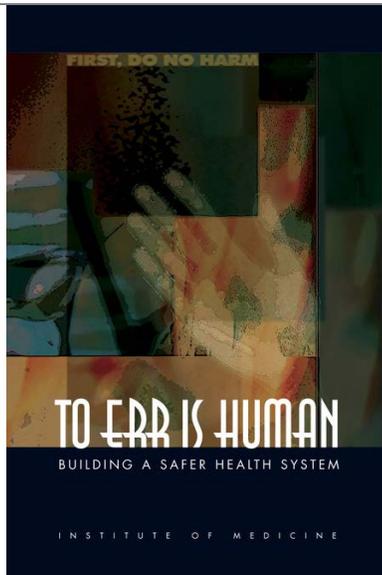
**2015**  
**Institute of Medicine**  
*Measuring the Impact of  
Interprofessional Education on  
Collaborative Practice and Patient  
Outcomes*



**2016**  
**Interprofessional  
Education Collaborative**  
*Core Competencies for  
Interprofessional Collaborative  
Practice: 2016 Update*



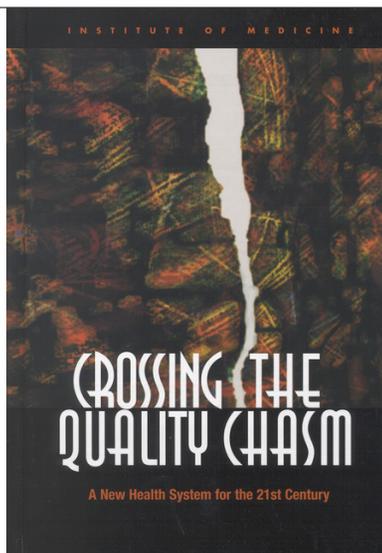
Timeline graphic compiled by and ©2018  
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## To Err is Human: Building a Safer Health System

In 2000, the first in a series of groundbreaking Institute of Medicine's (IOM) reports addressed the increased likelihood of adverse events and preventable medical errors in a health care system with increased complexity. In its call to action to improve serious concerns about patient safety in health care, the IOM posited that "a major force for improving patient safety is the intrinsic motivation of health care providers, shaped by professional ethics, norms and expectations" (p. 6).

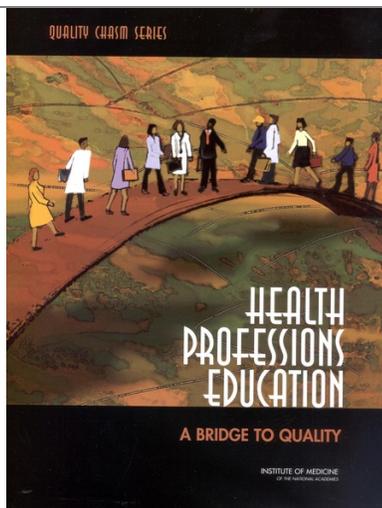
[Click here to read the report online.](#)



## Crossing the Quality Chasm: A New Health System for the 21<sup>st</sup> Century

In 2001, the IOM released a new report describing the chasm that exists between "the health care we have and the care we could have" (p. 1). They established six aims asserting that healthcare should be safe, effective, patient-centered, timely, efficient, and equitable (pp. 5-6) and recommended "new and more flexible roles and responsibilities for health care workers" (p. 138) as a strategy for managing change and fostering innovation for a newly envisioned health system.

[Click here to read the report online.](#)



## Health Professions Education: A Bridge to Quality

In 2003, the IOM released a follow-up report advancing the vision that "[a]ll health professionals should be educated to deliver patient-centered care as members of an interdisciplinary team, emphasizing evidence-based practice, quality improvement approaches, and informatics" (IOM, 2003, p. 3).

[Click here to read the report online.](#)



### Framework for Action on Interprofessional Education & Collaborative Practice

Fast-forward, shift perspectives from national to global, and change the language from interdisciplinary to interprofessional. In 2010, the World Health Organization (WHO) recognized the important role of “interprofessional education and practice as an innovative strategy that will play an important role in mitigating the global health workforce crisis” (WHO, 2010, p. 7).

[Click here to read the report online.](#)

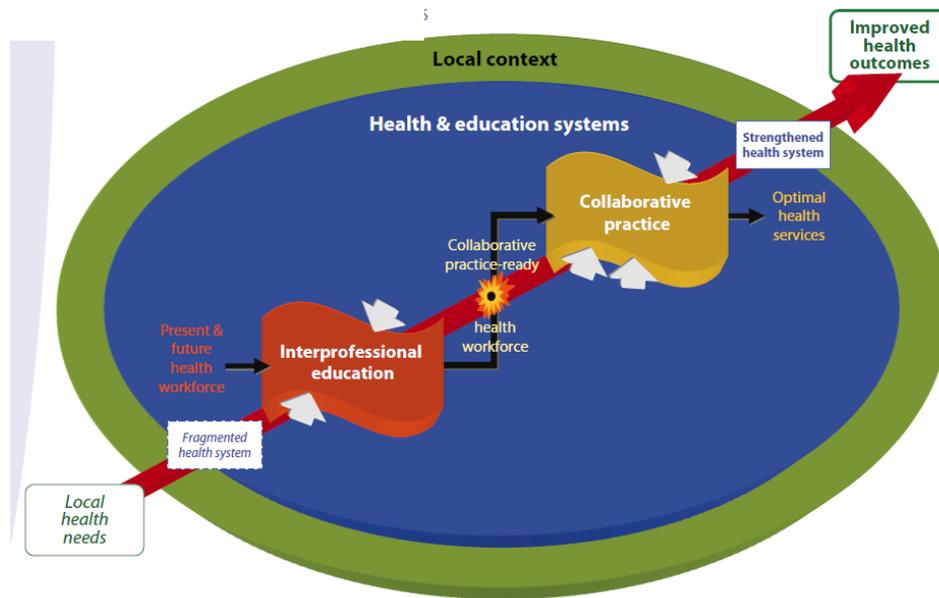


#### IMPORTANT NOTE

In 2010, the World Health Organization (WHO) recognized the important role of “interprofessional education and practice as an innovative strategy that will play an important role in mitigating the global health workforce crisis” (WHO, 2010, p. 7).

The WHO report also introduced a framework illustrating the ideal relationship between health and education systems (see Figure 1 on the following page). Whether intended or not, the connection depicted between interprofessional education and collaborative practice took on the appearance of a drive shaft, which applicably connects components “that cannot be connected directly because of distance or the need to allow for relative movement between them” (Wikipedia, 2018). The star-shaped figure at the center of the action is the torque or force that represents the nexus.

Figure 1: Health and education systems



(World Health Organization (WHO), 2010, Figure 6. Health and education systems, p. 18; Reprinted in IPEC, 2011, p. 10)

Figure 2: Drive Shaft



Finally, the WHO report established seminal definitions for *interprofessional education and collaborative practice* that are used to this day. To be a *collaborative practice-ready health worker* requires learning and introduces the notion of **competence**. Interprofessional education was found to be most effective when learning was “problem-based”, demonstrated “real world practice experiences,” and when “interaction occurs between students” (WHO, 2010, p. 24). Learning outcomes in the form of knowledge, skills (or applied knowledge), attitudes and behaviors (p. 25) were clustered around six domains:

- Teamwork
- Roles and responsibilities
- Communication
- Learning and critical reflection
- Relationship with, and recognizing the needs of, the patient [aka patient-centered care]
- Ethical practice (p. 26)

Table 1. Actions to advance interprofessional education for improved health outcomes

ACTION	PARTICIPANTS	LEVEL OF ENGAGEMENT	EXAMPLES	POTENTIAL OUTCOMES
1. Agree to a common vision and purpose for interprofessional education with key stakeholders across all faculties and organizations	<ul style="list-style-type: none"> <li>Decision-makers</li> <li>Policy-makers</li> <li>Health facility directors and managers</li> <li>Education leaders</li> <li>Educators</li> <li>Health workers</li> </ul>	CONTEXTUALIZE	<ul style="list-style-type: none"> <li>Vision: "Whether students are in the classroom or participating in practice education, interprofessional education will be encouraged and collaborative practice principles upheld"</li> </ul>	<ul style="list-style-type: none"> <li>All health-worker education is directed by an interprofessional vision and purpose</li> </ul>
2. Develop interprofessional education curricula according to principles of good educational practice	<ul style="list-style-type: none"> <li>Curriculum developers</li> <li>Educators</li> <li>Education leaders</li> <li>Researchers</li> </ul>	CONTEXTUALIZE	<ul style="list-style-type: none"> <li>Link with local researchers to understand how best practices in interprofessional education can be applied to their local context</li> <li>Develop curricula based on existing resources and local needs</li> </ul>	<ul style="list-style-type: none"> <li>An interprofessional education framework that is specific to the local region and takes into account culture, geography, history, challenges, etc.</li> <li>Engagement of numerous community layers, such as health workers, researchers and facilities</li> </ul>
3. Provide organizational support and adequate financial and time allocations for: <ul style="list-style-type: none"> <li>the development and delivery of interprofessional education</li> <li>staff training in interprofessional education</li> </ul>	<ul style="list-style-type: none"> <li>Health facility directors and managers</li> <li>Education leaders</li> </ul>	COMMIT	<ul style="list-style-type: none"> <li>Set aside a regular time for interprofessional champions, staff and others to meet</li> <li>Provide incentives for staff to participate in interprofessional education</li> </ul>	<ul style="list-style-type: none"> <li>A collaborative practice-ready health workforce</li> <li>Improved workplace health and satisfaction for health workers</li> </ul>
4. Introduce interprofessional education into health worker training programmes: <ul style="list-style-type: none"> <li>all pre-qualifying programmes</li> <li>appropriate post-graduate and continuing professional development programmes</li> <li>learning for quality service improvement</li> </ul>	<ul style="list-style-type: none"> <li>Government leaders</li> <li>Policy-makers</li> <li>Education leaders</li> <li>Educators</li> <li>Curricula developers</li> <li>Health facility directors and managers</li> </ul>	COMMIT	<ul style="list-style-type: none"> <li>Introduce new system-wide curricula</li> <li>Manage senior health worker resistance to 're-education'</li> </ul>	<ul style="list-style-type: none"> <li>A collaborative practice-ready health workforce</li> <li>Interprofessional education and collaborative practice embedded into health-system delivery</li> </ul>
5. Ensure staff responsible for developing, delivering and evaluating interprofessional education are competent in this task, have expertise consistent with the nature of the planned interprofessional education and have the support of an interprofessional education champion	<ul style="list-style-type: none"> <li>Educators</li> <li>Education leaders</li> </ul>	COMMIT	<ul style="list-style-type: none"> <li>Provide educators and training staff with opportunities to discuss shared challenges and successes</li> <li>Provide resources for educators and staff</li> <li>Focus on continuous improvement using appropriate evaluation tools</li> </ul>	<ul style="list-style-type: none"> <li>Strengthened education with a focus on interprofessional education and collaborative practice</li> </ul>
6. Ensure the commitment to interprofessional education by leaders in education institutions and all associated practice and work settings	<ul style="list-style-type: none"> <li>Education leaders</li> <li>Health facility directors and managers</li> </ul>	CHAMPION	<ul style="list-style-type: none"> <li>Allow educators, clinical supervisors and staff to share positive interprofessional experiences with their supervisors and leaders</li> </ul>	<ul style="list-style-type: none"> <li>Improved attitudes toward other health professions</li> <li>Improved communication among health workers</li> </ul>

(WHO, 2010, Table 1. Actions to advance interprofessional education for improved health outcomes, p. 27)

Table 1 presents actions, participants, and the level of engagement required at varying levels to advance interprofessional education and links IPE to improved health outcomes. It calls on health professions educators to develop interprofessional curriculum and link with researchers “to understand how best practices in interprofessional education can be applied to their local context” based on “local needs” (WHO, 2010, Table 1, p. 27). Healthcare organizations are called upon to “[p]rovide organizational support and adequate financial and time allocation,” including the “development and delivery of interprofessional education” and “staff training” in IPE. To accomplish this, health facility administrators are challenged to commit “regular time for interprofessional champions, staff and others to meet” and to “[p]rovide incentives for staff to participate” in IPE (p. 27). *This latter charge applies aptly to the necessary conditions within a healthcare organization to support the role of the interprofessional preceptor.*



#### IMPORTANT NOTE

■ ***Interprofessional education:***

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

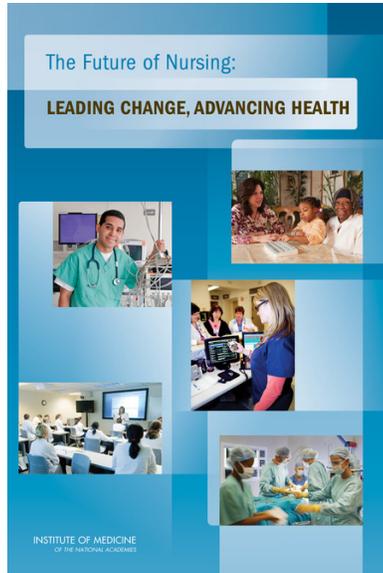
■ ***Collaborative practice:***

“...happens when multiple health workers from different professional backgrounds work together with patients, families, carers and communities to deliver the highest quality of care.”

■ ***Collaborative practice-ready health worker:***

“...is someone who has learned how to work in an interprofessional team and is competent to do so.”

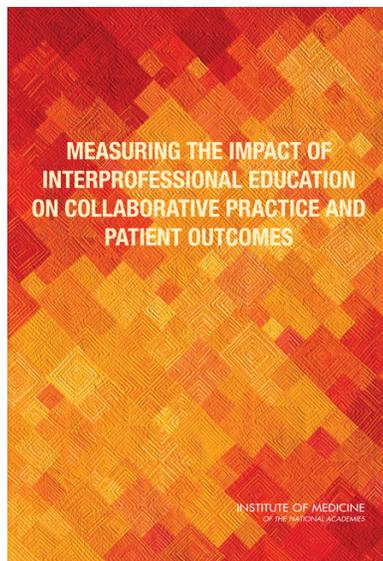
(World Health Organization (WHO), 2010, p. 7)



## The Future of Nursing: Leading Change, Advancing Health

In 2011, a new IOM report specifically addressed the role of nursing in redesigning health care in the United States. The report recommended that nurses should perform at the full scope of their practice, “achieve higher levels of [seamless] education and training,” and practice as “full partners, with physicians and other health professionals.” It also stressed the importance of data and “information infrastructure” in “workforce planning and policy making” (IOM, 2011, p. 4).

[Click here to read the report online.](#)



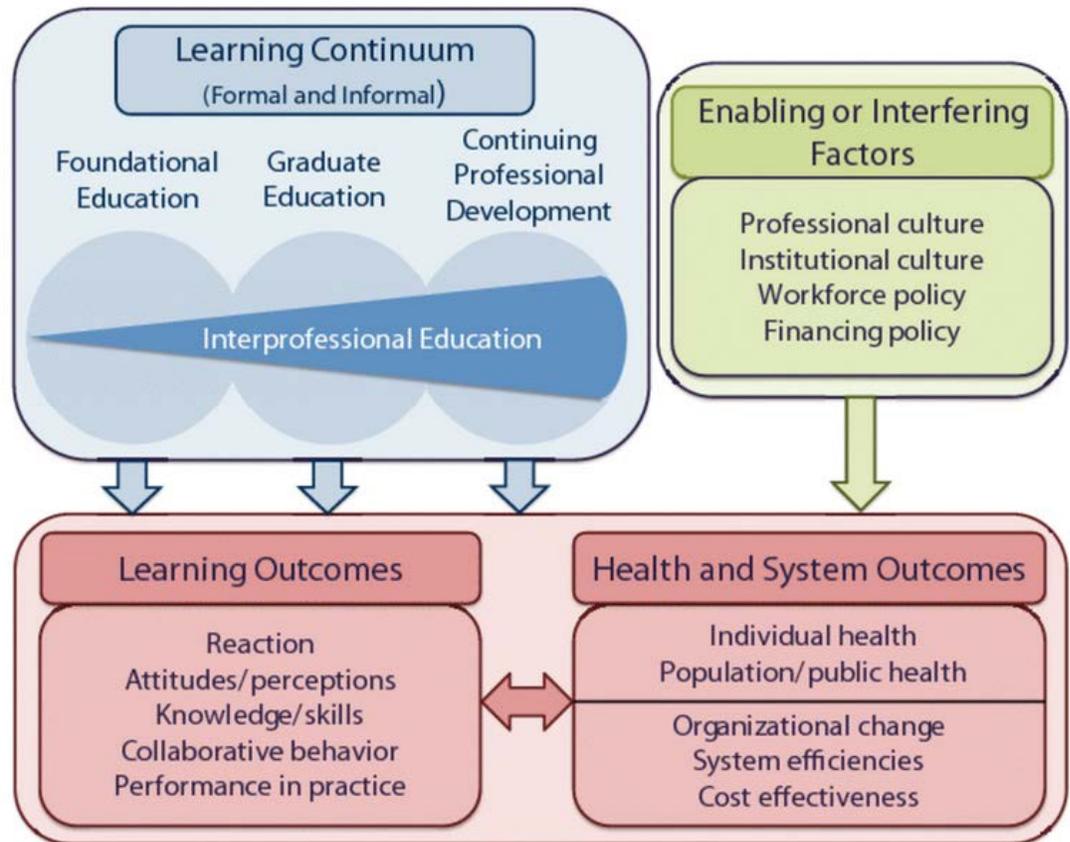
## Measuring the Impact of Interprofessional Education on Collaborative Practice and Patient Outcomes

In 2015, an IOM committee sought to identify methods for measuring the impact of IPE on health care delivery and systems (IOM, 2015, pp. 1-2). They developed a conceptual model “that encompasses the education-to-practice continuum, a broad array of learning- and health-related outcomes, and major enabling and interfering factors” (p. 4). Figure 3 shows the resulting model. The blue area illustrates the importance of interprofessional education for professional

development from formal (classroom) to informal (workplace) contexts and across the “education-to-practice continuum” (p. 28) from foundational, to graduate, to continuing professional development. The green area presents opportunity structures, factors that foster or hinder interprofessional learning, including professional and institutional culture and workforce and financing policy. The pink area addresses learning outcomes on a continuum moving from attitudes to performance, as well as health and system outcomes which relate to the Triple Aim, which will be described next.

[Click here to read the report online.](#)

Figure 3. The interprofessional learning continuum (IPLC) model



(IOM, 2015, p. 29)

## Triple and Quadruple Aim

In an effort to address system issues brought forward by the Institute on Medicine and improve the health care system in the United States, in 2007 the Institute for Healthcare Improvement (IHI) introduced the concept of the *Triple Aim*, which includes the simultaneous pursuit of three aims: improving the patient experience of care, including quality and satisfaction; improving the health of populations; and reducing the per capita cost of healthcare (Berwick, Whittington, 2008, May/June), which concomitantly increases the value of healthcare.

In 2014, Bodenheimer & Sinsky expanded the concept of the Triple Aim to the *Quadruple Aim*, adding an additional aim: improving the experience of the healthcare provider. The latter aim recognizes the impact of professional stress, resulting in burnout and dissatisfaction, which contributes to reduced quality of and satisfaction with care, as well as increased cost of care (Bodenheimer & Sinsky, 2014). Health professions students are encouraged to learn effective self-care skills to prevent burnout and promote mindfulness and wellness, as “behaviors established during this important time tend to be the same behaviors practiced throughout the[ir] entire...career” (Bureau of Health Workforce, webinar, webinar, 2018).

Figure 4. The Triple and Quadruple Aims of healthcare



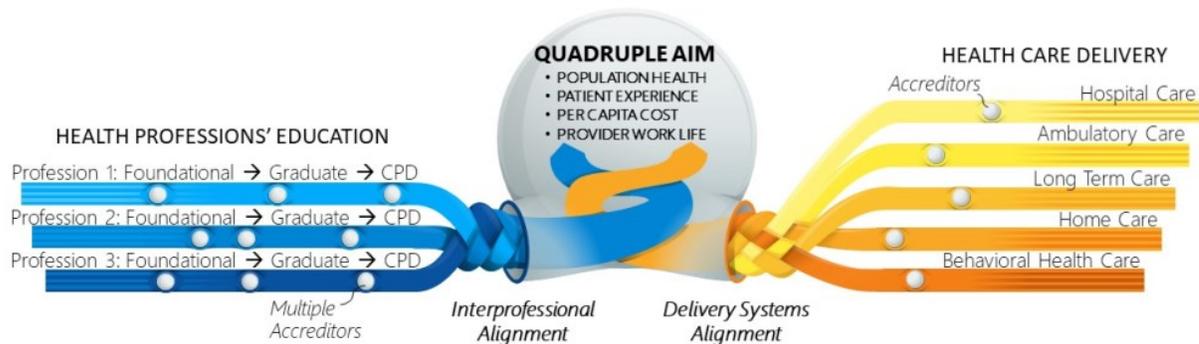
(Kennedy, T. Adapted from Berwick, Nolan, & Whittington, 2007; Bodenheimer & Sinsky, 2014)

## Triple and Quadruple Aim

Accompanying the adoption of interprofessional education across the continuum from classroom to workplace within health professions education is an “acknowledgement that collaboration and harmonization among accreditors [across health professions programs] could facilitate a common goal within all the health professions of achieving the Quadruple Aim” (Cox, Blouin, Cuff, Paniagua, Phillips, & Vlasses, 2017, p. 5).

Accreditors of health professions and health care delivery play a role in fostering the Quadruple Aim as illustrated in Figure 4. The key to achieving this aim is interprofessional alignment within and across health professions accreditors and delivery system alignment within and across health care delivery accreditors. (Additional information about interprofessional collaboration between accreditors can be found under HPAC: Moving from Uni-Disciplinary to Interprofessional.)

**Figure 5. Role of accreditors within and across health professions and health care delivery for fostering the Quadruple Aim**



(Cox et al, 2017, p. 3)

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# Core Competencies for Interprofessional Collaborative Practice



The road to IPE led from national to global, from interdisciplinary to interprofessional, and from a focus on knowledge and attitudes toward the demonstration of performance in practice, or practice competencies. The six domains identified by WHO in 2010 (i.e., “teamwork; roles and responsibilities; communication; learning and critical reflection; relationship with, and recognizing the needs of, the patient [aka patient-centered care]; and ethical practice”) (p. 26) have been further

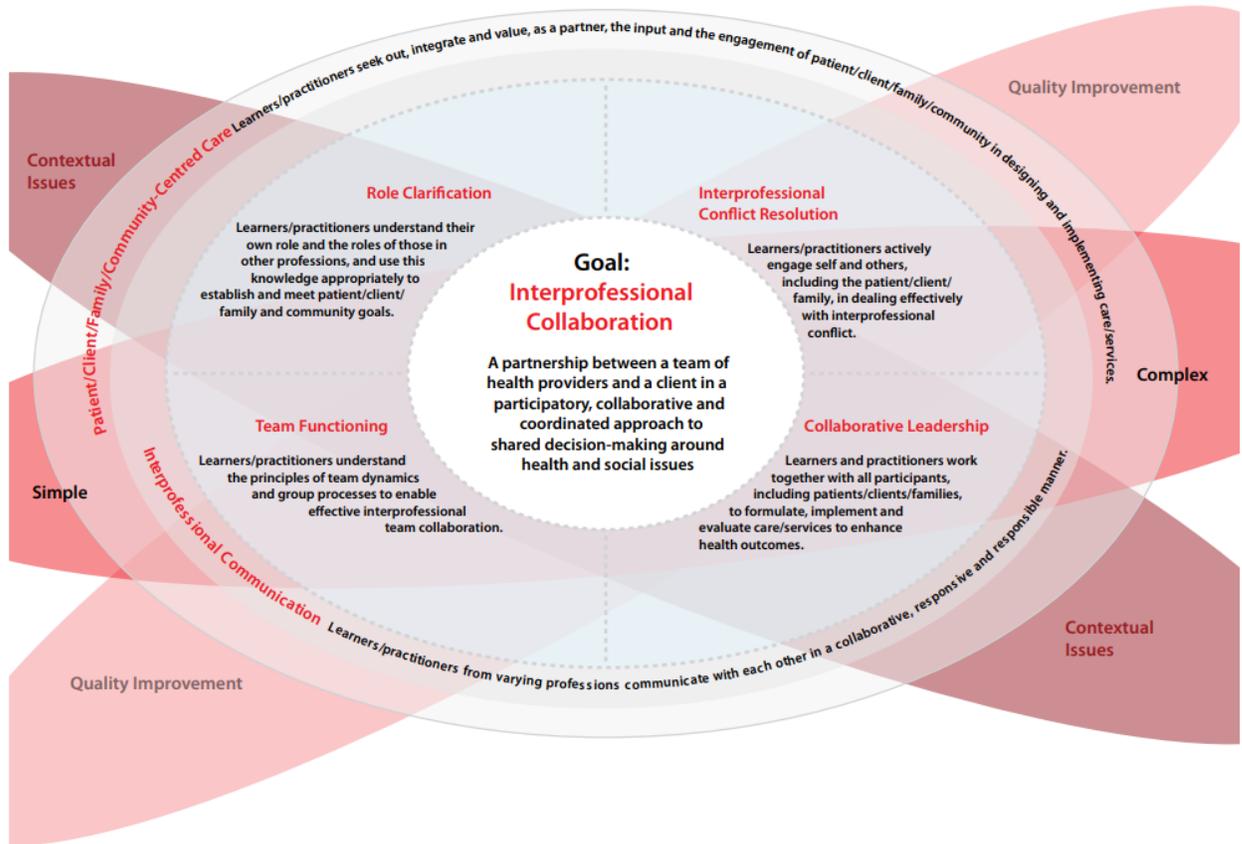
refined into a national competency framework in Canada (Canadian Interprofessional Health Collaborative, 2010, February) and core competencies for interprofessional collaborative practice in the United States (Interprofessional Education Collaborative (IPEC), 2011; 2016).

## Canada: The National Competency Framework

The same year that the World Health Organization released its 2010 *Framework for Action on Interprofessional Education & Collaborative Practice*, the Canadian Interprofessional Health Collaborative developed the National Competency Framework. The model, as seen in Figure 6 below, includes six core competency domains supporting the goal of interprofessional collaboration moving from simple (i.e., role clarification; team functioning) to complex (i.e., interprofessional conflict resolution; collaborative leadership) and recognizing contextual issues and quality improvement processes (2010, p. 11).

# Canada: The National Competency Framework

Figure 6. The national competency framework

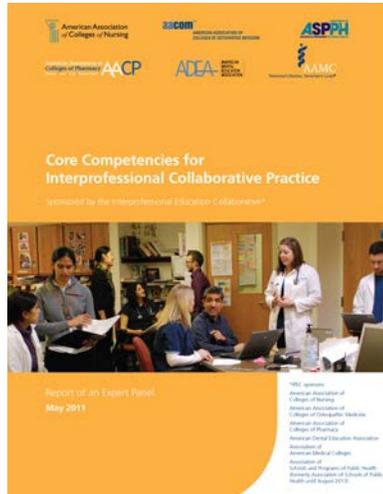


(Canadian Interprofessional Health Collaborative, 2010, February, Figure 1, p. 11)

# United States: Interprofessional Education Collaborative (IPEC®)



## Core Competencies for Interprofessional Collaborative Practice



In 2011 in the United States, the Interprofessional Education Collaborative (IPEC) convened an expert panel with the intent of “build[ing] on each profession’s expected disciplinary competencies in defining competencies for interprofessional collaborative practice” (IPEC, 2011, p. i). As a result, the following four core competencies were adopted for interprofessional practice:

- Value/Ethics for Interprofessional Practice
- Roles/Responsibilities
- Interprofessional Communication
- Team and Teamwork (IPEC, 2011, p. 16)

[Click here to read the report online.](#)

Figure 7 illustrates the relationship between and intersection of disciplinary competencies, including common (or overlapping) competencies that cross disciplines, and interprofessional collaborative competencies, or “those that each profession needs to work together with others” (IPEC, 2011, p. 13, based on Barr, 1998).

**Figure 7. Barr’s (1998) three types of professional competencies**



(Interprofessional Education Collaborative (IPEC), 2011, Figure 4: Barr’s (1998) three types of professional competencies, p. 13)

# United States: Interprofessional Education Collaborative (IPEC®)



## IMPORTANT NOTE

- ***Interprofessional teamwork:***

“The levels of cooperation, coordination and collaboration characterizing the relationships between professions in delivering patient-centered care”

- ***Interprofessional team-based care:***

“Care delivered by intentionally created, usually relatively small work groups in health care, who are recognized by others as well as by themselves as having a collective identity and shared responsibility for a patient or group of patients, e.g., rapid response team, palliative care team, primary care team, operating room team”

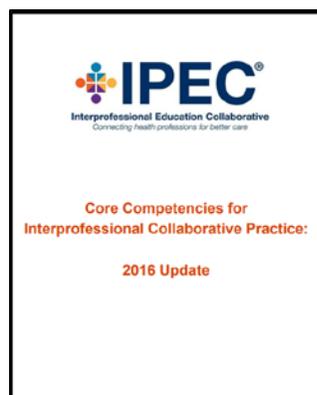
- ***Professional competencies in health care:***

“Integrated enactment of knowledge, skills, and values/attitudes that define the domains of work of a particular health profession applied in specific care contexts”

- ***Interprofessional competencies in health care:***

“Integrated enactment of knowledge, skills, and values/attitudes that define working together across the professions, with other health care workers, and with patients, along with families and communities, as appropriate to improve health outcomes in specific care contexts”

(IPEC, 2011, p. 2)



## Core Competencies for Interprofessional Collaborative Practice: 2016 Update

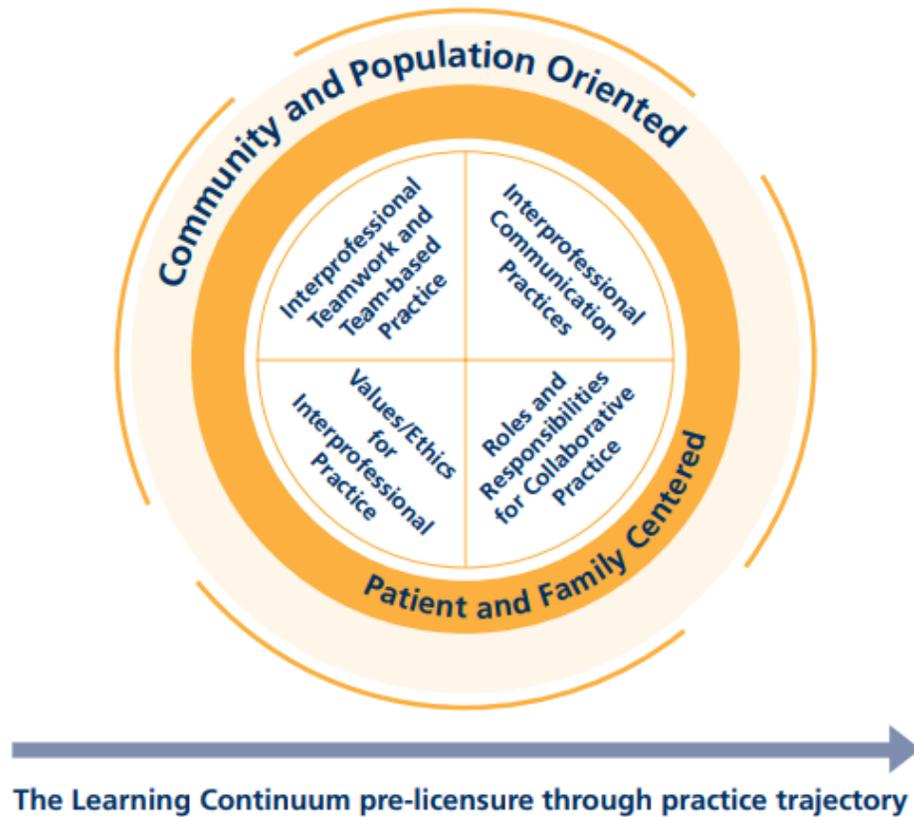
In 2016, IPEC updated the core competencies for interprofessional collaborative practice developed in 2011. The update reimagined the original four core competencies as falling under the overarching domain of interprofessional collaboration. It also responded to the better integration of population health competencies resulting from a focus on the Triple Aim and health system reforms through the Patient

Protections and Affordable Care Act in 2010 (IPEC, 2016, p. 9).

[Click here to read the report online.](#)

# United States: Interprofessional Education Collaborative (IPEC®)

Figure 8. Interprofessional collaborative practice domains



(IPEC®, 2011, p. 15)

## IPEC® 2011-2016 Crosswalk Table



Table 2 developed by Saewert (2016) provides a useful and user-friendly crosswalk demonstrating the similarities and differences between the Interprofessional Education Collaborative Core Competencies for Interprofessional Collaborative Practice, versions 2011 and 2016.

CAIPER Interprofessional By Design™ Tool  
Crosswalk Table

Comparing the Interprofessional Education Collaborative (IPEC)® Core Competencies for Interprofessional Collaborative Practice (2011) and Core Competencies for Interprofessional Collaborative Practice (2016)

Values and Ethics for Interprofessional Practice		2011	2016
Work with individuals of other professions to maintain a climate of mutual respect and shared values.		Work with individuals of other professions to maintain a climate of mutual respect and shared values.	Work with individuals of other professions to maintain a climate of mutual respect and shared values.
VE1	Place interests of patients and populations at center of interprofessional health care delivery.	Place interests of patients and populations at center of interprofessional health care delivery.	Place interests of patients and populations at center of interprofessional health care delivery and population health programs and policies, with the goal of promoting health and health equity across the life span.
VE2	Respect the dignity and privacy of patients while maintaining confidentiality in the delivery of team-based care.	Respect the dignity and privacy of patients while maintaining confidentiality in the delivery of team-based care.	Respect the dignity and privacy of patients while maintaining confidentiality in the delivery of team-based care.
VE3	Embrace the cultural diversity and individual differences that characterize patients, populations, and the health care team.	Embrace the cultural diversity and individual differences that characterize patients, populations, and the health care team.	Embrace the cultural diversity and individual differences that characterize patients, populations, and the health team.
VE4	Respect the unique cultures, values, roles/responsibilities, and expertise of other health professions.	Respect the unique cultures, values, roles/responsibilities, and expertise of other health professions.	Respect the unique cultures, values, roles/responsibilities, and expertise of other health professions and the impact these factors can have on health outcomes.
VE5	Work in cooperation with those who receive care, those who provide care, and others who contribute to or support the delivery of prevention and health services.	Work in cooperation with those who receive care, those who provide care, and others who contribute to or support the delivery of prevention and health services.	Work in cooperation with those who receive care, those who provide care, and others who contribute to or support the delivery of prevention and health services and programs.
VE6	Develop a trusting relationship with patients, families, and other team members (CIHC, 2010).	Develop a trusting relationship with patients, families, and other team members (CIHC, 2010).	Develop a trusting relationship with patients, families, and other team members (CIHC, 2010).
VE7	Demonstrate high standards of ethical conduct and quality of care in contributions to team-based care.	Demonstrate high standards of ethical conduct and quality of care in contributions to team-based care.	Demonstrate high standards of ethical conduct and quality of care in contributions to team-based care.
VE8	Manage ethical dilemmas specific to interprofessional patient/population centered care situations.	Manage ethical dilemmas specific to interprofessional patient/population centered care situations.	Manage ethical dilemmas specific to interprofessional patient/population centered care situations.
VE9	Act with honesty and integrity in relationships with patients, families, and other team members.	Act with honesty and integrity in relationships with patients, families, and other team members.	Act with honesty and integrity in relationships with patients, families, communities, and other team members.
VE10	Maintain competence in one's own profession appropriate to scope of practice.	Maintain competence in one's own profession appropriate to scope of practice.	Maintain competence in one's own profession appropriate to scope of practice.

CAIPER Interprofessional By Design™ Tool  
Crosswalk Table

Comparing the Interprofessional Education Collaborative (IPEC®) Core Competencies for Interprofessional Collaborative Practice (2011) and Core Competencies for Interprofessional Collaborative Practice (2016)

Roles/Responsibilities		2011	2016
		Use the knowledge of one's own role and those of other professions to appropriately assess and address the healthcare needs of the patients and populations served.	Use the knowledge of one's own role and those of other professions to appropriately assess and address the health care needs of patients and to promote and advance the health of populations.
RR1	Communicate one's roles and responsibilities clearly to patients, families, and other professionals.	RR1 Communicate one's roles and responsibilities clearly to patients, families, and other professionals.	RR1 Communicate one's roles and responsibilities clearly to patients, families, community members, and other professionals.
RR2	Recognize one's limitations in skills, knowledge, and abilities.	RR2 Recognize one's limitations in skills, knowledge, and abilities.	RR2 Recognize one's limitations in skills, knowledge, and abilities.
RR3	Engage diverse professionals who complement one's own professional expertise, as well as associated resources, to develop strategies to meet specific patient care needs.	RR3 Engage diverse professionals who complement one's own professional expertise, as well as associated resources, to develop strategies to meet specific patient care needs.	RR3 Engage diverse professionals who complement one's own professional expertise, as well as associated resources, to develop strategies to meet specific health and healthcare needs of patients and populations.
RR4	Explain the roles and responsibilities of other providers and how the team works together to provide care.	RR4 Explain the roles and responsibilities of other providers and how the team works together to provide care.	RR4 Explain the roles and responsibilities of other providers and how the team works together to provide care, promote health, and prevent disease.
RR5	Use the full scope of knowledge, skills, and abilities of available health professional and healthcare workers to provide care that is safe, timely, efficient, effective, and equitable.	RR5 Use the full scope of knowledge, skills, and abilities of available health professional and healthcare workers to provide care that is safe, timely, efficient, effective, and equitable.	RR5 Use the full scope of knowledge, skills, and abilities of professionals from health and other fields to provide care that is safe, timely, efficient, effective, and equitable.
RR6	Communicate with team members to clarify each member's responsibility in executing components of a treatment plan or public health intervention.	RR6 Communicate with team members to clarify each member's responsibility in executing components of a treatment plan or public health intervention.	RR6 Communicate with team members to clarify each member's responsibility in executing components of a treatment plan or public health intervention.
RR7	Forge interdependent relationships with other professions to improve care and advance learning.	RR7 Forge interdependent relationships with other professions to improve care and advance learning.	RR7 Forge interdependent relationships with other professions within and outside of the health system to improve care and advance learning.
RR8	Engage in continuous professional and interprofessional development to enhance team performance.	RR8 Engage in continuous professional and interprofessional development to enhance team performance.	RR8 Engage in continuous professional and interprofessional development to enhance team performance and collaboration.
RR9	Use unique and complementary abilities of all members of the team to optimize patient care.	RR9 Use unique and complementary abilities of all members of the team to optimize patient care.	RR9 Use unique and complementary abilities of all members of the team to optimize health and patient care.
			RR10 Describe how professionals in health and other fields can collaborate and integrate clinical care and public health interventions to optimize population health.



**CAIPER Interprofessional By Design™ Tool  
Crosswalk Table**

Comparing the Interprofessional Education Collaborative (IPEC®) Core Competencies for Interprofessional Collaborative Practice (2011) and Core Competencies for Interprofessional Collaborative Practice (2016)

Interprofessional Communication		2011	2016
Communicate with patients, families, communities, and other health professionals in a responsive and responsible manner that supports a team approach to the maintenance of health and the treatment of disease.		Communicate with patients, families, communities, and professionals in health and other fields in a responsive and responsible manner that supports a team approach to the promotion and maintenance of health and the prevention and treatment of disease.	Communicate with patients, families, communities, and professionals in health and other fields in a responsive and responsible manner that supports a team approach to the promotion and maintenance of health and the prevention and treatment of disease.
CC1	Choose effective communication tools and technique, including information systems and communication technologies, to facilitate discussions and interactions that enhance team function.	Choose effective communication tools and technique, including information systems and communication technologies, to facilitate discussions and interactions that enhance team function.	Choose effective communication tools and technique, including information systems and communication technologies, to facilitate discussions and interactions that enhance team function.
CC2	Organize and communicate information with patients, families, and healthcare team members in a form that is understandable, avoiding discipline-specific terminology when possible.	Organize and communicate information with patients, families, and healthcare team members in a form that is understandable, avoiding discipline-specific terminology when possible.	Communicate information with patients, families, community members, and health team members in a form that is understandable, avoiding discipline-specific terminology when possible.
CC3	Express one's knowledge and opinions to team members involved in patient care with confidence, clarity, and respect, working to ensure common understanding of information and treatment and care decisions.	Express one's knowledge and opinions to team members involved in patient care with confidence, clarity, and respect, working to ensure common understanding of information and treatment and care decisions.	Express one's knowledge and opinions to team members involved in patient care and population health improvement with confidence, clarity, and respect, working to ensure common understanding of information, treatment, care decisions, and population health programs and policies.
CC4	Listen actively, and encourage ideas and opinions of other team members.	Listen actively, and encourage ideas and opinions of other team members.	Listen actively, and encourage ideas and opinions of other team members.
CC5	Give timely, sensitive, instructive feedback to others about their performance on the team, responding respectfully as a team member to feedback from others.	Give timely, sensitive, instructive feedback to others about their performance on the team, responding respectfully as a team member to feedback from others.	Give timely, sensitive, instructive feedback to others about their performance on the team, responding respectfully as a team member to feedback from others.
CC6	Use respectful language appropriate for a given difficult situation, crucial conversation, or conflict.	Use respectful language appropriate for a given difficult situation, crucial conversation, or conflict.	Use respectful language appropriate for a given difficult situation, crucial conversation, or conflict.
CC7	Recognize how one's uniqueness, including experience level, expertise, culture, power, and hierarchy within the healthcare team, contributes to effective communication, conflict resolution, and positive interprofessional working relationships (University of Toronto, 2008).	Recognize how one's uniqueness, including experience level, expertise, culture, power, and hierarchy within the healthcare team, contributes to effective communication, conflict resolution, and positive interprofessional working relationships (University of Toronto, 2008).	Recognize how one's uniqueness (experience level, expertise, culture, power, and hierarchy with the health team) contributes to effective communication, conflict resolution, and positive interprofessional working relationships (University of Toronto, 2008).
CC8	Communicate consistently the importance of teamwork in patient-centered and community-focused care.	Communicate consistently the importance of teamwork in patient-centered and community-focused care.	Communicate the importance of teamwork in patient-centered care and populations health programs and policies.

CAIPER Interprofessional By Design™ Tool  
Crosswalk Table

Comparing the Interprofessional Education Collaborative (IPEC®) Core Competencies for Interprofessional Collaborative Practice (2011) and Core Competencies for Interprofessional Collaborative Practice (2016)

Teams and Teamwork		2011	2016
Apply relationship-building values and the principles of team dynamics to perform effectively in different team roles to plan and deliver patient-/population-centered care that is safe, timely, efficient, effective, and equitable.		Apply relationship-building values and the principles of team dynamics to perform effectively in different team roles to plan, delivery, and evaluate patient/population-centered care and population health programs and policies that are safe, timely, efficient, effective, and equitable.	Apply relationship-building values and the principles of team dynamics to perform effectively in different team roles to plan, delivery, and evaluate patient/population-centered care and population health programs and policies that are safe, timely, efficient, effective, and equitable.
TT1	Describe the process of team development and the roles and practices of effective teams.	TT1	Describe the process of team development and the roles and practices of effective teams.
TT2	Develop consensus on the ethical principles to guide all aspects of patient care and team work.	TT2	Develop consensus on the ethical principles to guide all aspects of team work.
TT3	Engage other health professionals – appropriate to the specific care situation – in shared patient-centered problem-solving.	TT3	Engage health and other professionals in shared patient-centered and population-focused problem-solving.
TT4	Integrate the knowledge and experience of other professions – appropriate to the specific care situation – to inform care decisions, while respecting patient and community values and priorities/preference for care.	TT4	Integrate the knowledge and experience of health and other professions to inform health and care decisions, while respecting patient and community values and priorities/preferences for care.
TT5	Apply leadership practices that support collaborative practice and team effectiveness.	TT5	Apply leadership practices that support collaborative practice and team effectiveness.
TT6	Engage self and others to constructively manage disagreements about values, roles, goals, and actions that arise among healthcare professionals and with patients and families.	TT6	Engage self and others to constructively manage disagreements about values, roles, goals, and actions that arise among health and other professions and with patients, families, and community members.
TT7	Share accountability with other professions, patients, and communities for outcomes relevant to prevention and health care.	TT7	Share accountability with other professions, patients, and communities for outcomes relevant to prevention and health care.
TT8	Reflect on individual and team performance for individual, as well as team, performance improvement.	TT8	Reflect on individual and team performance for individual, as well as team, performance improvement.
TT9	Use process improvement to increase effectiveness of interprofessional teamwork and team-based services, programs, and policies.	TT9	Use process improvement to increase effectiveness of interprofessional teamwork and team-based services, programs, and policies.
TT10	Use available evidence to inform effective teamwork and team-based practices.	TT10	Use available evidence to inform effective teamwork and team-based practices.
TT11	Perform effectively on teams and in different team roles in a variety of settings.	TT11	Perform effectively on teams and in different team roles in a variety of settings.



### CAIPER Interprofessional By Design™ Tool Crosswalk Table

Comparing the Interprofessional Education Collaborative (IPEC®) Core Competencies for Interprofessional Collaborative Practice (2011) and Core Competencies for Interprofessional Collaborative Practice (2016)

#### Resource Acknowledgements

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Used with permission. (Saewert, K. J., 2016) Retrieved from <https://ipe.asu.edu/tool/ipec-2011-2016-crosswalk-table>

# Core Competencies of Interprofessional Collaborative Practice: United States and Canada Compared

Table 3 below provides a comparison between the United States' (IPEC, 2016) and Canadian (National Competency Framework, 2010) core competencies. Roles and Responsibilities and Team and Teamwork (US) lines up the Role Clarification and Team Functioning (Canada), respectively. Communication (US) maps to Interprofessional Communication\* (Canada), but this CIHC domain along with Patient/client/family/community-centered care\* (Canada) are described as supporting and influencing the other four. Values and Ethics (US) doesn't have a direct crosswalk to a Canadian counterpart.

**Table 3. Comparison between United States and Canadian frameworks**

<i>IPEC®, United States</i>	<i>National Competency Framework, Canada</i>
Roles and Responsibilities	Role Clarification
Teams and Teamwork	Team Functioning
Communication	Interprofessional Communication*
Values and Ethics	
	Patient/client/family/community-centred care*
	Collaborative Leadership
	Interprofessional Conflict Resolution

(Kennedy, 2018)

The domain of Collaborative Leadership, which includes appreciative inquiry (discover, dream, design, and destiny) as a core concept, is a unique feature of the Canadian model. In the US, a Health Leadership Competency Model (HLCM) was developed evaluating leadership skills across professions and career stages (Calhoun et al, 2008).

Interprofessional by Design™: Meeting at the Crossroads to Accelerate Leadership Competency and Readiness for Transition to Interprofessional Practice (Harrell & Saewert, 2016-2018) is currently developing interprofessional leadership training “to accelerate student readiness of transition to team-based community practice” (<https://ipe.asu.edu/research/arizona-nexus>) and Sanborn (2017-2018) is conducting research on Interprofessional Leadership in the Clinical Setting, currently focusing on an interprofessional, tri-university student-led health clinic serving homeless adults in the greater Phoenix area.

# Patient-Centered versus Person-Centered Care: Similarities/Differences

According to the Institute of Medicine (2003), providing *patient-centered care* means to “identify, respect, and care about patients’ differences, values, preferences, and expressed needs; relieve pain and suffering; coordinate continuous care; listen to, clearly inform, communicate with, and educate patients; share decision making and management; and continuously advocate disease prevention, wellness, and promotion of healthy lifestyles, including a focus on population health” (p. 4). Provision of person-centered care “[m]eans that people’s values and preferences are obtained and, once expressed, guide all aspects of health care and support realistic health and life goals” (The American Geriatrics Society, 2015, p. 16).

Both patient- and person-centered care use a patients’ values and preferences to guide the provision of health care. Still, Table 4 below points out important differences between these concepts. The Preceptors Guide to the Nexus recommends a person-centered approach to care as a more comprehensive and responsive approach to care.

**Table 4. Differences between patient-centered care and person-centered care**

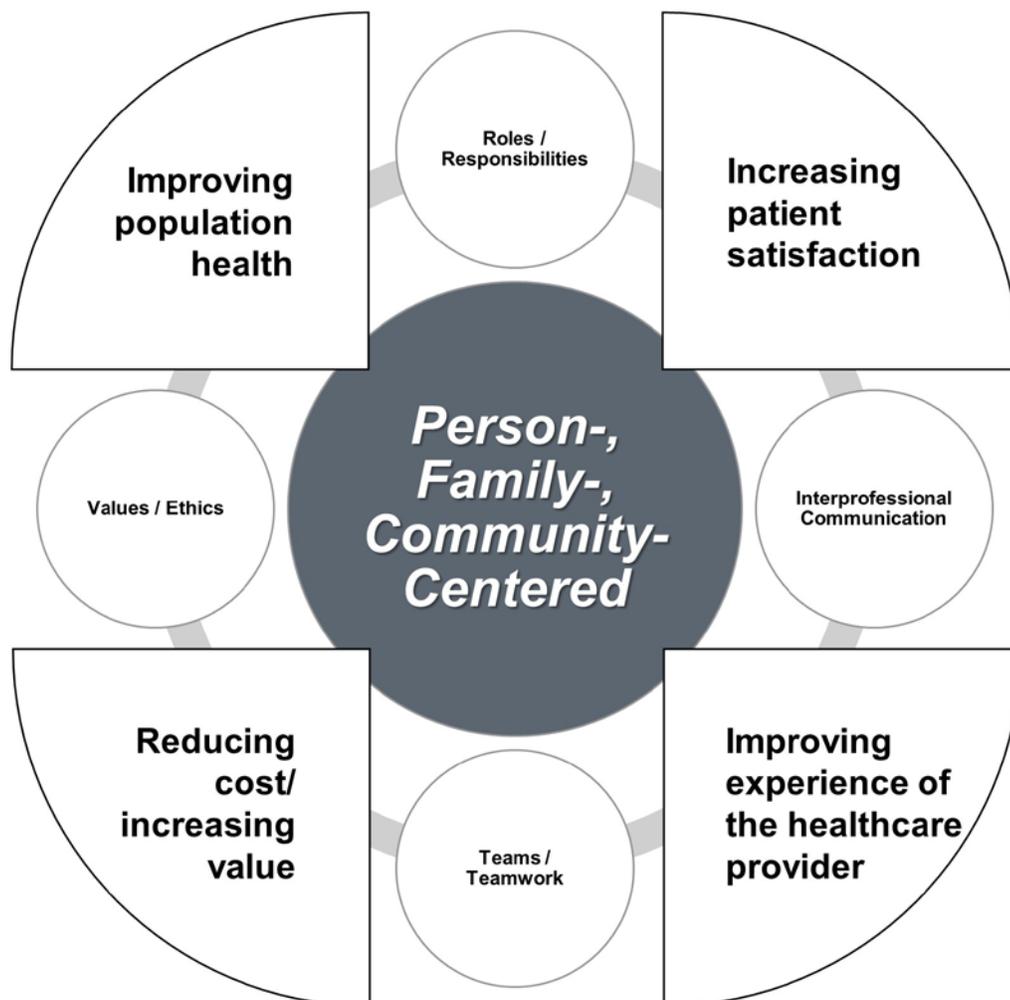
<i>Patient-centered care</i>	<i>Person-focused care</i>
Generally refers to interactions in visits	Refers to interrelationships over time
May be episode oriented	Considers episodes as part of life-course experiences with health
Generally centers around the management of diseases	Often considers morbidity as combinations of types of illnesses (multimorbidity)
Generally views body systems as distinct	Views body systems as interrelated
Uses coding systems that reflect professionally defined conditions	Uses coding systems that also allow for specification of people’s health concerns
Is concerned primarily with the evolution of patients’ diseases	Is concerned with the evolution of people’s experienced health problems as well as with their diseases

(Starfield, 2011, p. 63)

# Patient-Centered versus Person-Centered Care: Similarities/Differences

Figure 9 brings together a person-, family-, and community-centered approach to care; core competencies of interprofessional collaborative practice (IPEC® 2016), and the Triple and Quadruple Aim.

Figure 9. Putting it all together...



Kennedy, T. (2017, April 21). *Advancing interprofessional competencies in person-, family, & community-centered care: The role of the geriatric healthcare team*. Keynote Address: 10th Annual Spring Geriatric Mental Health & Aging Conference. Tucson, AZ: Arizona Geriatrics Society.

# CAIPER's Teaching and Learning Resources Built Upon IPEC® Core Competencies

The IPEC® core competencies for interprofessional collaborative practice serve as the foundation to developing and functioning as a member of an effective, high functioning interprofessional team. While it's important to learn the core competencies, it's essential to move from education to application, understanding how these competencies are contextualized within a practice environment and within a team-based practice setting.

The following CAIPER interprofessional eLearning modules for Interprofessional Competencies and Team-Based Primary Care facilitate a practice-situated comprehension and application of the core competencies.



## Interprofessional eLearning Modules

The CAIPER interprofessional eLearning modules for Interprofessional Competencies and Team-Based Primary Care cover important topics in IPE and collaborative practice.

Developed by experts and extensively reviewed by interprofessional student and faculty teams, each module is an interactive experience that takes the learner through clinical and case-based scenarios to teach core teamwork knowledge and skills.

These universal and easily accessible eLearning modules reflect Interprofessional Education Collaborative (IPEC®) core competencies as well as key team-based applications for primary care, including when to involve team members, integrated care and care coordination, and team member roles and responsibilities.

See <https://ipe.asu.edu/caiper-elearning-modules> for more information.

## Core Interprofessional Modules\*



### *What is Interprofessional Education?*

This module defines interprofessional education and describes its value to collaborative practice. The module includes a case study and several interactive activities that highlight practical ways to recognize and optimize teamwork experiences.

Lamb, G. (2015, September). *What Is Interprofessional Education?* (Y. Price, Designer.) [Interactive video module]. Center for Advancing Interprofessional Practice, Education & Research, Arizona State University, Phoenix.

# CAIPER's Teaching and Learning Resources Built Upon IPEC® Core Competencies



## *Interprofessional Communication: Communication in Healthcare Settings*

This module provides examples of effective and ineffective communication and their impact on patient outcomes. A number of helpful tools for team communication are illustrated as well as strategies for communicating during difficult clinical situations.

Bonifas, R. (2015, September). *Interprofessional Communication: Communication in Healthcare Settings*. (Y. Price, Designer.) [Interactive video module]. Center for Advancing Interprofessional Practice, Education & Research, Arizona State University, Phoenix.



## *Roles and Responsibilities: It Takes a Team!*

This module provides an introduction to the roles and responsibilities of interprofessional primary care team members. It includes interactive activities to assist team members in explaining their roles and responsibilities to patients, families, and team members.

Kennedy, T. (2016, February). *Roles and Responsibilities: It Takes a Team!* (Y. Price, Designer.) [Interactive video module]. Center for Advancing Interprofessional Practice, Education & Research, Arizona State University, Phoenix.



## *Four Habits of High Performance Teams & Teamwork from a Person-Centered Perspective†*

What personal values characterize members of high performance teams? What core principles are associated with high quality team-based health care? What is a person-centered perspective? With emphasis on a person-centered perspective, these and other questions are explored in this interactive eLearning module to illustrate the alignment of personal values and core principles with practice habits – competency behaviors – associated with high performance teams and teamwork in health care.

Saewert, K. J. (2017, May). *Four Habits of High Performance Teams & Teamwork from a Person-Centered Perspective*. (Y. Price, Designer.) [Interactive video module]. Center for Advancing Interprofessional Practice, Education & Research, Arizona State University, Phoenix.

# CAIPER's Teaching and Learning Resources Built Upon IPEC® Core Competencies

## Interprofessional Primary Care Modules\*\*



### *Introduction to Team Decision-Making in Primary Care*

This interactive eLearning module provides an introduction to everyday decisions about teamwork in primary care. Clinical scenarios facilitate decisions about who, what, when, where, and how to involve team members in patient care and explore how different teamwork models may support effective decision-making.

Lamb, G. (2017, March). *Introduction to Team Decision-Making in Primary Care*. (Y. Price, Designer.) [Interactive video module]. Center for Advancing Interprofessional Practice, Education & Research, Arizona State University, Phoenix.



### *Involving Team Members in Primary Care Practice*

This module is part of the series on team decision-making in primary care. It uses a patient scenario to explore when and how to involve different team members in primary care visits.

Lamb, G., & Watkins, K. (2015, October). *Involving Team Members in Primary Care Practice*. (Y. Price, Designer.) [Interactive video module]. Center for Advancing Interprofessional Practice, Education & Research, Arizona State University, Phoenix.



### *Developing an Integrated Plan of Care*

This module is part of the series on team decision-making in primary care. It examines the processes team members may use to deliver comprehensive care to individuals and populations of patients seen in primary care settings. The module includes specific steps to design and evaluate an integrated and comprehensive team plan of care.

Manson, L. (2015, November). *Developing an Integrated Plan of Care*. (Y. Price, Designer.) [Interactive video module]. Center for Advancing Interprofessional Practice, Education & Research, Arizona State University, Phoenix.

# CAIPER's Teaching and Learning Resources Built Upon IPEC® Core Competencies



## *Care Coordination in Interprofessional Primary Care Practice*

Care coordination is an important team-based process for improving the quality and value of health care. This interactive eLearning module provides an introduction to care coordination, common tools and strategies for care coordination in primary care, and practical ways to work with care coordination professionals and evaluate success.

Lamb, G. (2017, April). *Care Coordination in Interprofessional Primary Care Practice*. (Y. Price, Designer.) [Interactive video module]. Center for Advancing Interprofessional Practice, Education & Research, Arizona State University, Phoenix.

\*Supported (in part) by the Josiah Macy Jr. Foundation as part of the Interprofessional Primary Care Project (The Macy Project)

\*\*Supported (in part) by the Scottsdale Healthcare Hospitals (SHC) as part of the Graduate Nurse Education Development Project and by the Josiah Macy Jr. Foundation as part of the Interprofessional Primary Care Project (The Macy Project).

†Note: The *Four Habits of High Performance Teams & Teamwork from a Person-Centered Perspective* module is considered to have overlap significance for both the “**Core**” and “**Primary Care**” sets of modules.

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# Readiness for IPE

Health professions students often enter practice environments that value, but don't necessarily reflect, interprofessional collaborative practice. To effectively prepare the future healthcare workforce, it is important for practice sites to value interprofessional team-based care and for teams to demonstrate skills and competencies that reflect both professional and interprofessional practice.

The degree to which a site is prepared to serve as an interprofessional practice and education site depends upon this delicate balance between site and team readiness.

Fortunately, there are practical tools and helpful resources available to evaluate readiness to serve as an interprofessional education site for health professions students.

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The **Interprofessional Education Site Evaluation Instrument (InSite)** assesses site readiness using five (5) domains:

1. Learner experience while at the site
2. Preceptor or supervisor qualities
3. Site infrastructure
4. Site culture
5. Organizational structure (Sick, n.d.)

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In 2012, an expert panel conducted a review of the literature and interviewed members of team-based health care practices across the United States. The resulting Institute of Medicine discussion paper identified core principles of team-based health care that embodied the concept of "teamness" (p. 6):

**Table 5. Principles of Team-Based Health Care**

<u>Principle</u>	<u>Definition</u>
<b>Shared Goals</b>	The team – including the patient and, where appropriate, family members or other support persons – works to establish shared goals that reflect patient and family priorities, and can be clearly articulated, understood, and supported by all team members.
<b>Clear Roles</b>	There are clear expectations for each team member's functions, responsibilities, and accountabilities, which optimize the team's efficiency and often make it possible for the team to take advantage of division of labor, thereby accomplishing more than the sum of its parts.

Table 5. Principles of Team-Based Health Care (continued)

<u>Principle</u>	<u>Definition</u>
<b>Mutual Trust</b>	Team members earn each others' [sic] trust, creating strong norms of reciprocity and greater opportunities for shared achievement.
<b>Effective Communication</b>	The team prioritizes and continuously refines its communications skills. It has consistent channels for candid and complete communication, which are accessed and used by all team members across all settings.
<b>Measureable Processes and Outcomes</b>	The team agrees on and implements reliable and timely feedback on successes and failures in both the functioning of the team and achievement of the team's goals. These are used to track and improve performance immediately and over time.

(Mitchell, Wynia, Golden, McNellis, Okun, Webb, Rohrbach, & Von Kohorn, 2012, p. 6)

The **Assessment for Collaborative Environments (ACE-15)** assesses team readiness or *teamness* using core principles and values of team-based health care:

1. Shared Goals
2. Clear Roles
3. Mutual Trust
4. Effective Communication
5. Measureable Processes and Outcomes
6. Organizational Support (Tilden, Eckstrom, & Dieckmann, 2016)



#### **InSITE: Interprofessional Education Site Evaluation Instrument**

A validated tool that helps practice sites self-assess their readiness to serve as an interprofessional education site for health professions students. (Sick, n.d.)

[Contact Brian Sick, MD for further information and permission for use.](#)



#### **ACE-15: Assessment for Collaborative Environments**

A validated 15-item, self-report survey that facilitates a rapid assessment of the quality of interprofessional teamwork in clinical sites. (Tilden, Eckstrom, & Dieckmann, 2016, p. 290)

[Click here to learn more.](#)

Assessing the readiness of a site and team to serve as an interprofessional learning site for health professions students reveals both challenges and opportunities. The following key elements have been demonstrated to foster a successful student IPE placement program:

**Table 6. Key elements for a successful student IPE placement program**

• Strong administrative and practice support
• Ability to build upon strong interprofessional teams, education programs
• Partners (Academic, leaders in other facilities)
• Recognition, support and mentorship of local champions
• Starting small and celebrating successes
• Being prepared to creatively address challenges (e.g., scheduling)
• Leadership that explicitly supports IPE and collaborative practice
• Allocation of resources for leadership roles (e.g., IPE Leader)

(Sinclair, Lowe, Paulenko, & Walczak, 2007, p.2)

## Readiness for Establishing a Clinical Partnership

It is also important for clinical sites evaluating readiness for IPE to consider the perspective of health professions educators. In an exploration of the “process for developing effective relationships with selected clinical partners,” Saewert and Lamb (2014) identified the following criteria for selection of interprofessional clinical partner sites:

- Current clinical placements for students of two or more different professions;
- Commitment of the practice site to interprofessional practice; and
- interest in preparing students for collaborative practice models (Saewert & Lamb, 2014)

# Building Preceptor Capacity: Preceptors in the Nexus Toolkit



## Preceptors in the Nexus Toolkit

The University of Kansas, in collaboration with the National Center for Interprofessional Practice and Education, provides a free Preceptors in the Nexus Toolkit at <https://nexusipe.org/engaging/learning-system/preceptors-nexus-toolkit>. The toolkit is designed to support the work of healthcare professionals interested in serving as a preceptor for interprofessional learners. It is also useful for professionals interested in championing interprofessional collaborative practice with other professionals at their site. As shown in Table 7, the kit includes web-based modules, active-learning materials, facilitator guides for face-to-face workshops, interprofessional education materials to be used with learners to enhance their practice experiences, and interprofessional collaborative practice materials and other resources.

**Table 7. Preceptor as learner, interprofessional educator, or champion**

Preceptor as **Learner** ?

Online Modules	Group Learning Materials
An Introduction to Interprofessional Collaboration	Madness to Methods
Facilitating Interprofessional Discussions: Best Practices	Role Play Cards
Interprofessional Precepting: Best Practices	Objective Structured Teaching Experience (OSTE)
Enhancing Interprofessional Practice and Education at Your Site	Madness to Methods

Preceptor as **Interprofessional Educator** ?

Educational Tools
Interprofessional Crucial Conversations/Conflict Resolution
Interprofessional Agents of Change
Interprofessional Team Evaluation
Interprofessional Journal/Book Club
Interprofessional Pandora's Box
Interprofessional Standardized Patient Simulation
Interprofessional Quality Improvement
Interprofessional Debriefing Guides

Preceptor as **Interprofessional Champion** ?

Practice Transformation Tools
Interprofessional Group Visit and Home Visit Guides
National Models and Resources for Interprofessional Practice Transformation

(to access modules and resources directly, go to

<https://nexusipe.org/engaging/learning-system/preceptors-nexus-toolkit>)

# Optimizing Team-Based Interventions for Interprofessional Learning

In addition to providing interprofessional clinical learning opportunities for the future workforce, sites can facilitate the preparation of the future and current workforce through educational events. [The following tips](#) facilitate planning for an interprofessional education event supporting team-based care (Lowe, McLaney, & Peranson, 2017):

1. Build an interprofessional planning team for the needs assessment
2. Identify stakeholders based upon principles of inclusivity
3. Be purposeful about modeling interprofessional collaboration within the planning team
4. Contemplate interprofessional ways of capturing misperceived and/or underserved needs
5. Consider your stakeholders in selecting methods for your needs assessment
6. Incorporate effective interprofessional group facilitation strategies throughout the needs assessment (e.g., for planning committee meetings, focus groups, key informant dialogues)
7. Leverage existing interprofessional forums/positions within your organization (e.g., for consultation, planning, feedback)
8. Identify unique and shared learning needs across professions and roles
9. Consider the facilitators and resources that have enabled past interprofessional initiatives to be successful, and how this learning may inform new opportunities for IPE
10. Recognize the generative potential of needs assessments to initiate change and begin your education intervention
11. It's iterative....Be open to the possibility that emerging needs may become apparent at any time in design, implementation and program evaluation activities
12. Reflect on key learnings at the end of the program

# Optimizing Team-Based Interventions for Interprofessional Learning

Simulation represents a specific type of interprofessional educational event that is case-based and facilitates contextually situated learning. It also provides an opportunity to practice high-stakes clinical skills and critical thinking in a low-risk environment.



## Facilitating a Video-Assisted Interprofessional Simulation Event: Meet Olivia Buffington

Interprofessional simulation events often leverage the expertise of clinicians and trained standardized patients. However, scheduling, coordinating, preparing, and compensating these professionals can be costly, complicated, and time-intensive. Implementing a blended, video-assisted approach is well-suited to address these bottlenecks. This interprofessional simulation package was developed by an expert team of health professions educators and instructional media specialists.

[Click here to access the facilitator guide and resources online.](#)

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# The Interprofessional Preceptor: Balancing Uni-disciplinary and Interprofessional Approaches

## Moving from Uni-disciplinary to Interprofessional Precepting

Precepting health professions students is both a science and an art. Eligibility for this role is often prescriptive including specific disciplines, degree levels, and a required number of supervision hours per week. Precepting interprofessional students currently requires being mindful of existing discipline-specific precepting requirements, while identifying and creating opportunities to prepare interprofessional students from two or more disciplines to develop knowledge, skills, experience, and ultimately competencies in interprofessional collaborative practice.

Working as co-preceptors with at least one colleague from other disciplines and supervising student teams representing at least two disciplines are strategies that can begin to build a practice of interprofessional precepting. The introduction of audio and video-supported technology, including telemedicine, can serve to expand options for both face-to-face and remote, technology-supported interprofessional supervision.

A recent review of best practices for interprofessional precepting was compiled by Shrader and Zaudke based upon their experiences training interprofessional preceptors and a review of the literature:

**Table 8. Top ten best practices for interprofessional precepting**

<i>Precepting Principle</i>	<i>Supporting Behaviors</i>
Set the Stage	<ul style="list-style-type: none"> <li>■ Psychological Safety</li> <li>■ Physical Space</li> <li>■ Get to Know All Learners</li> </ul>
Role Model Interprofessional Collaboration	<ul style="list-style-type: none"> <li>■ Explicitly Verbalize the Value of Other Team Members</li> <li>■ When Communicating with Other Team Members Include the Learners</li> <li>■ Think Before You Speak and Act - the Learners are Watching</li> </ul>

# Moving from Uni-disciplinary to Interprofessional Precepting

Table 8. Top ten best practices for interprofessional precepting (continued)

<i>Precepting Principle</i>	<i>Supporting Behaviors</i>
Be Aware of Professional Sensitivities	<ul style="list-style-type: none"> <li>■ Consider Professional Identities, Stereotypes, Hierarchy, and Culture</li> <li>■ Choose Your Words Carefully – What is Acceptable Language in One Profession May Not Be in Another</li> </ul>
Keep it Patient-Centered	<ul style="list-style-type: none"> <li>■ Acknowledge Role of Patient and Family on the Team</li> <li>■ Explain Team-based Care to Patients and How it Will Impact Their Care</li> </ul>
Participate in Different Interprofessional Precepting Models	<ul style="list-style-type: none"> <li>■ Consider the Co-Precepting Model</li> <li>■ Consider the Interchangeable Precepting Model</li> </ul>
Rethink Patient Presentations	<ul style="list-style-type: none"> <li>■ Rotate the Lead Presenter Between Learners of All Professions</li> <li>■ Shared Presentations Where Learners from All Professions Contribute</li> <li>■ Presentations Include All Learners and the Patient at the Bedside/Clinic Room</li> </ul>
Ask Teaching Questions to All Learners on the Team and Facilitate Learning	<ul style="list-style-type: none"> <li>■ Frame Your Questions and Discussions for All Learners</li> <li>■ Explicitly Invite All Learners to Participate</li> <li>■ Facilitate Team Dynamics to Ensure Balance Between Professions</li> </ul>

# Moving from Uni-disciplinary to Interprofessional Precepting

Table 8. Top ten best practices for interprofessional precepting (continued)

<i>Precepting Principle</i>	<i>Supporting Behaviors</i>
Develop a Process for All Team Members to Document	<ul style="list-style-type: none"> <li>■ Create a Shared Care Plan in the Health Record</li> <li>■ Document the Team-based Care Plan and Include Professions that Contributed</li> </ul>
Create a Process for Reflection and Debriefing About Interprofessional Collaboration	<ul style="list-style-type: none"> <li>■ Be Explicit about Interprofessional Collaboration</li> <li>■ Use the Team Competencies of Values and Ethics, Roles and Responsibilities, Communication, and Teamwork as a Guide</li> </ul>
Develop Methods of Interprofessional Evaluation	<ul style="list-style-type: none"> <li>■ Consider Validated Tools from the Literature Evaluating Collaborative Behaviors</li> <li>■ Consider Self-Evaluation, Peer-Evaluation, and 360-Evaluation From all Preceptors</li> </ul>

*Used with permission. (Shrader & Zaudke, 2018, Table 1, p. 57)*

## HPAC: Moving from Uni-disciplinary to Interprofessional

During 2017, the Council on Academic Accreditation (HPAC) expanded its membership from six to twenty-three member organizations. HPAC is currently working with the National Center for Interprofessional Practice and Education to “draft a document on opportunities for IPE harmonization across accreditors” which will “provide guidance on IPE opportunities for the consideration, revision, and approval by all the HPAC members” with a target date of 2018 (Kirsch, 2017, para 4). Such efforts will further support the efforts of preceptors seeking to shift from a uni-disciplinary to an interprofessional perspective.

# Moving from Multidisciplinary/Interdisciplinary to Interprofessional

It is not uncommon to hear teams use terms like multidisciplinary, interdisciplinary, and interprofessional interchangeably, as if they share equivalent meanings. From the perspective of communication and clinical reasoning, it turns out that language matters.

In an analysis of interview data from two teams, (Sheehan, Robertson, and & Ormond, 2007) found interesting distinctions in communication patterns and clinical reasoning between teams described as multidisciplinary versus interprofessional. Multidisciplinary team members were observed to work “in parallel, drawing information from one another,” but not sharing a “common understanding of issues that could influence intervention.” On the other hand, interprofessional teams demonstrated “inclusive language, continual sharing of information between team members and a collaborative working approach” (p. 17).



## IMPORTANT NOTE

“...working in a multidisciplinary team is based on recognizing professional expertise and dividing the labour accordingly, whereas working in an interprofessional team requires greater sensitivity to social issues within the team and willingness to share roles to develop collaborative ways of work.”

(Sheehan, Robertson, & Ormond, 2007, p.29)

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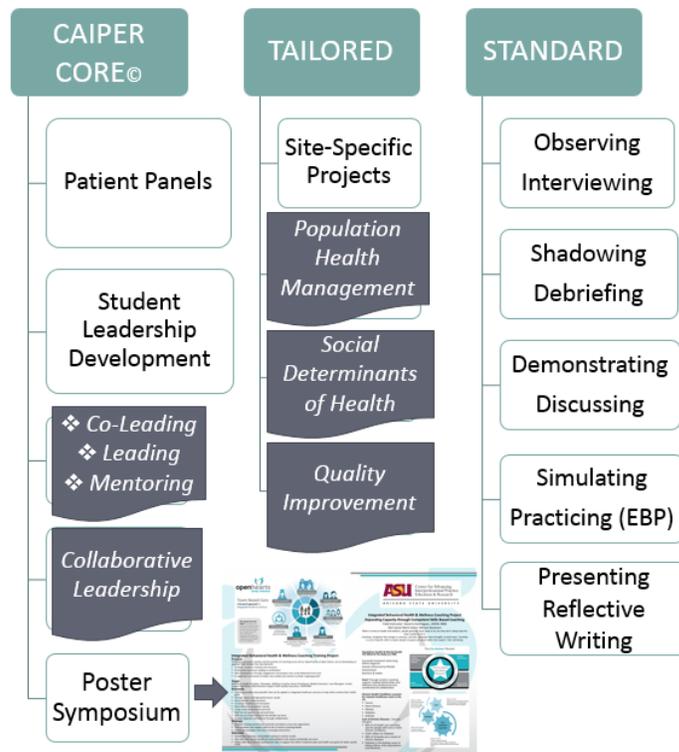
# The CAIPER Model: Interprofessional Student Learning Activities

## Origin of CAIPER Model

To advance interprofessional collaborative team practice in Arizona, CAIPER and community healthcare providers in the Phoenix metro area have established pilot interprofessional practice sites where health professions students from different disciplines and universities are learning to work together as members of high-quality collaborative teams. Visits to these sites and interviews with preceptors and students over a two-year period between 2016 and 2017 led to the identification of site-specific tailored approaches to interprofessional collaborative practice, as well as core interprofessional learning opportunities common to all sites, referred to as the CAIPER Core©.

## Overview of CAIPER Model

Figure 10. CAIPER Core Interprofessional Learning Activities



Kennedy (2017)

The CAIPER model for preparing students for interprofessional collaborative practice is based on the premise of leveraging place. Each practice site provides fertile ground for students to bloom where they are planted.

The basic assumption is that it is important that health professions students be exposed to core interprofessional learning experiences, and that these experiences are portable and can be replicated across the wide variety of practice sites and contexts in which students receive their clinical training. Figure 10 illustrates the core, tailored, and standard interprofessional learning activities that make up the CAIPER model. Each will be described below.

# CAIPER Core© Interprofessional Learning Activities

## Patient Panels

All clinical sites employ some version of a periodic review of patient care variously referred to as patient panels, case conferences, staffings, or rounds. Such reviews are ideally conducted with representatives from various health professions making up an interprofessional team. A collaborative approach to patient care can “improve communication, reduce errors, increase health care provider efficiency, and improve the patient’s perception of care” (Burns, 2011, p. 194). Approaching patient case conferences through an interprofessional approach is effective in addressing high risk/high need patients (VA Office of Academic Affiliations Coordinating Center and Centers of Excellence in Primary Care Education, 2017, Case Study #1, pp. 1-16). Using an interprofessional shared governance model applied to patient panels can “improve patient outcomes and overall care” (Edwards, 2008, p. 256). Interprofessional collaborative care improves quality of care (Gonzalo, Wolpaw, Lehman, & Chuang, 2014, p. 1040).

*Interprofessional Patient Panels* are one of three CAIPER Core © Interprofessional Learning Activities. This activity involves an intentional shift from a multidisciplinary to an interprofessional approach to patient rounds. Ideally, the patient and family are included as part of the team, providing students with valuable experiences with person- and family-centered care. Health professions students participate by contributing to the review of patient care from their disciplinary and specialized training perspective where applicable (e.g., diabetes educator), while learning to navigate areas of role differentiation and overlap with other team members. Students also gain experience participating in and leading patient care discussions, guided by which discipline has a natural leadership role if applicable to particular care situations.

Preceptors maximize opportunities to deepen students’ interprofessional learning experience following Interprofessional Patient Panels through debriefing, oral or written reflection, and discussion to unpack experiences navigating areas of role differentiation and overlap encountered during the team review of patient care.

Additional models for interprofessional case reviews, including a Panel Management Model (Kaminetzky, Poppe, & Wipf, 2017, pp. 46-58), “to address high-risk Veterans with chronic care needs and the assessment and management of these patients using population based data,” may be found at <https://www.va.gov/OAA/docs/VACaseStudiesCoEPCE.pdf>

# CAIPER Core© Interprofessional Learning Activities

## Student Leadership Development

The development of skills and experience in Interprofessional Leadership Development is the second core competency making up the CAIPER Core © Interprofessional Learning Activities. In its 2001 report, the IOM encouraged “members of teams to engage in deliberate inquiry,” recognizing that the “individual who serves as leaders may not be constant over time or across innovative efforts, or be associated with a particular discipline” (IOM, 2001, p. 138). Students are encouraged to work with their preceptor to identify opportunities to gain leadership experiences while in their internships. Such experiences can include taking a lead role in presenting a client case during rounds or patient panels, taking a chair role in a business meeting, taking the lead on a project, delivering a continuing education presentation to staff, sharing a journal article with colleagues, and orienting or mentoring a new student to a site procedure or task. It is useful at the beginning of each internship to ask students to look for potential leadership opportunities, and to debrief students during and following internships about their observations and experiences related to leadership development, as they can offer a fresh perspective to an internship site.

## Poster Symposium

An interprofessional poster symposium provides an opportunity for students representing interprofessional teams to share experiences gained in interprofessional collaborative practice while completing a tailored project during an agency internship. Students are encouraged to identify a project in which they can engage with an interprofessional team of students to advance some aspect of agency practice including, but not limited to, population health management, social determinants of health, and quality improvement. Students are encouraged to obtain permission from their preceptor to present their project and findings, to acknowledge their preceptor and interprofessional team on their poster, and to invite their preceptor and team to co-present.

Students are provided with poster specifications (e.g., 40 inches wide; 30 inches high) using a PowerPoint template. Instructions are provided to assist students with preparation of their posters. The following poster outline provides students with the focus of the project-based poster as opposed to a research-based poster. Planning can be facilitated, and resources and efforts shared by partnering with other programs and colleges to hold a collaborative poster symposium. It is helpful to identify a printing company that delivers posters to the symposium site. Depending on available facilities and resources, posters can be paper or cloth and attached to a wall or board by adhesive or thumb tacks, or presented on pressboards held up with easels. It is helpful to explore funding options to support the cost of student posters, such as encouraging practice sites to underwrite student posters.

# Tailored Interprofessional Learning Activities

## Site-Based Tailored Approaches to Interprofessional Collaborative Practice

The following practice sites are part of CAIPER's goal to integrate competency-based teamwork and collaborative education in which students are actively engaged in practice-based initiatives to improve person-, family-, community-, and population-based outcomes. Each CAIPER site was found to practice a tailored approach to interprofessional collaborative care unique to their mission, target population, and context of care.

**Table 9. Sites by tailored approach to interprofessional collaborative practice**

<i>Clinical Site</i>	<i>Tailored Approach to IPE</i>	<i>CAIPER Student Connection</i>
Wesley Community & Health Centers	Addressing Social Determinants of Health	<a href="https://ipe.asu.edu/webinar/wesley-health-center-addressing-social-determinants-health-through-interprofessional">https://ipe.asu.edu/webinar/wesley-health-center-addressing-social-determinants-health-through-interprofessional</a>
Open Hearts Family Wellness	Wellness Coaching	<a href="https://ipe.asu.edu/webinar/open-hearts-family-wellness-integrated-care-and-co-active-coaching-through-interprofessional">https://ipe.asu.edu/webinar/open-hearts-family-wellness-integrated-care-and-co-active-coaching-through-interprofessional</a>
Student Health Outreach for Wellness (SHOW)	Student-Led Clinic: Learning Laboratory	<a href="https://ipe.asu.edu/webinar/student-outreach-wellness-show-serving-homeless-through-interprofessional-collaborative-team">https://ipe.asu.edu/webinar/student-outreach-wellness-show-serving-homeless-through-interprofessional-collaborative-team</a>
Cigna Medical Group	Chronic Disease Management	<a href="https://ipe.asu.edu/webinar/cigna-medical-group-fostering-population-health-management-through-interprofessional">https://ipe.asu.edu/webinar/cigna-medical-group-fostering-population-health-management-through-interprofessional</a>
Dignity Health Center for Transitional Care, St. Joseph's Hospital & Medical Center	Transitional Care with High Need Patients/Families	N/A – contact <a href="mailto:caiper@asu.edu">caiper@asu.edu</a> for more information.
ASU Collaboratory on Central	Meeting the Needs of Older and Disabled Adults Living in Public Housing	<a href="https://ipe.asu.edu/webinar/asu-collaboratory-central-meeting-needs-older-and-disabled-adults-living-public-housing">https://ipe.asu.edu/webinar/asu-collaboratory-central-meeting-needs-older-and-disabled-adults-living-public-housing</a>

(Retrieved from <https://ipe.asu.edu/resource-hub/webinars>)

# Tailored Interprofessional Learning Activities

## Site-Specific Projects

Students participate in collaborative projects designed to improve the quality of care (Shojania & Grimshaw, 2005), attend to population health (Long, Abrams, Milstein, Anderson, Lewis Aptin, Lund Dahlberg, & Whicher, 2017) and address social determinants of health (National Academies of Science, Engineering, and Medicine, 2016). Projects are tailored to each site’s model of care and unique approach to interprofessional collaborative practice and form the basis of interprofessional project-based posters.

### Developing Project Posters

- For a guide to poster session preparation, including *What is a poster session?* and *Guides to Preparing a Presentation Poster*, go to <http://libguides.asu.edu/postersessions>.
- To see sample posters, go to <http://phdposters.com/gallery.php>.
- For a YouTube video (Andrew, 2017) describing how to make a poster, go to <https://youtu.be/ZSFJpWTcZTo> (21:50). Please note that the video describes how to create a research poster. To create a project-based poster, please see Table 10 below.

**Table 10. Poster Outlines: Research vs. Project Based**

 <b>Poster Outlines</b> 	
<b>Research Based</b> <i>(Applies to Research Studies)</i>	<b>Project Based</b> <i>(Applies to Agency/Community Projects)</i>
<ul style="list-style-type: none"> <li>• Purpose</li> <li>• Conceptual Framework</li> <li>• Method</li> <li>• Data Analysis</li> <li>• Findings</li> <li>• Conclusion/ Implications</li> </ul>	<ul style="list-style-type: none"> <li>• Innovation Description</li> <li>• Outline of Objectives</li> <li>• Process Description/ Possible Outcomes</li> <li>• Value to Interprofessional Collaborative Practice</li> <li>• Suggestions for Implementation</li> </ul>
where interprofessional education meets collaborative practice	

Kennedy, T. (2017, Slide 5)

# Standard Interprofessional Learning Activities

## Bloom Where You Are Planted

Start with where you are and what you are already doing. Inventory the activities that are a routine part of your daily experience at your site. Think about how you currently interface with patients, families, groups, the community, and colleagues. Consider different service types that are part of your regular work such as health, behavioral health, or integrated care, as well as the types of interventions you typically provide such as psycho-education, crisis intervention, primary prevention, or harm reduction.



### IMPORTANT NOTE

*By intentionally adding one additional discipline to the services, interventions, and other activities that are part of your regular day, and considering how these activities relate to the core competencies for interprofessional collaborative practice, you can create an interprofessional learning experience.*

*Likewise, if you apply an interprofessional lens to existing instructional methods, you can turn observing, interviewing, shadowing, debriefing, demonstrating, discussing, simulating, practicing (evidence-based practice), presenting, and reflective writing into an interprofessional learning experience.*

## Look for Low-Hanging Fruit

*Cooperative or Collaborative Learning* is an instructional approach in which students work together in small groups to accomplish a common learning goal. As you go through your day, look for potential projects that would, improve a clinical process or outcome, solve a vexing problem, or advance your mission and vision. Better yet, assign an interprofessional student team to look for project opportunities, work in groups to learn about a subject, and creatively address a problem, also known as *problem-based learning*.



# Standard Interprofessional Learning Activities

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## IMPORTANT NOTE

*Consider assigning students and/or colleagues from at least two or more health professions disciplines to work together to address the project or challenge using cooperative, or collaborative, problem-based learning. By noticing opportunities that are within your reach, you can create an interprofessional learning experience.*

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## Seek Opportunities to Branch Out

Put on your interprofessional lens and consider who else you might be able to invite to participate in your practice, including just in time team formation. Look at the current practices at your site and consider if there may be some team-based practice approaches you could add to your day. For example, if you're not already doing so, consider holding an interprofessional team huddle in the morning and perhaps one midday. Consider holding an interprofessional debrief following appointments, interviews, and evaluations.



## IMPORTANT NOTE

*You can change your organizational culture by inviting in a new team member representing a different discipline or by introducing a new activity that encourages interprofessional collaborative practice. By inviting a new team member and introducing a new team-based activity, you can create an interprofessional learning experience.*

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# Student Learning and Evaluation

## The Student Learning Contract

### Andragogy and Adult Learning

The term pedagogy is often applied to learning across age groups, but a concept referred to as *andragogy* has a better fit with adult learning which tends to approach learning as problem solving rather than the study of subjects. Learning is experienced as situational learning in which problems are contextualized (Ozuah, 2005, p. 83), which supports the development of critical thinking. Consistent with the theme of adult learning, Table 11 presents a summary of principles of adult learning that can be considered when evaluating learning opportunities within the context of interprofessional collaborative practice.

**Table 11. A summary of principles of adult learning**

**Adults learn best:**

- When they want or need to learn something
- In a non-threatening environment
- When their individual learning style needs are met
- When their previous experience is valued and utilized
- When there are opportunities for them to have control over the learning process
- When there is active cognitive and psychomotor participation in the process
- When sufficient time is provided for assimilation of new information
- When there is an opportunity to practice and apply what they have learned
- When there is a focus on relevant problems and practical applications of concepts
- When there is feedback to assess progress toward their goals

(Ouzah, 2005, Table 1. A summary of principles of adult learning, p. 86)

## Evaluating Interprofessional Competencies

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A plethora of tools have been developed to evaluate interprofessional competencies and dimensions of teamwork. The challenge is that such tools often evaluate individual performance within teams, rather than the actual team performance. The National Center for Interprofessional Practice and Education has developed a series of practical guides that examine and assess teamwork across the education and practice continuum:

- Volume 1: What is Teamwork in Interprofessional Collaborative Practice
- Volume 2: Assessing Interprofessional Collaborative Practice Teamwork
- Volume 3: Steps for Developing an Assessment Plan
- Volume 4: Assessing Teamwork: Stories from the Field
- Volume 5: Incorporating IPCP Teamwork Assessment into Program Evaluation

[Click here to review excerpts.](#)

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# Sustaining IPE within Your Site

## Kennedy Model of Sustainability ©2008

For fifty years the long and winding road of Interprofessional Practice and Education (IPE) has been fraught with grant-funded projects that are not sustained past the end date and, therefore, do not build a vibrant IPE program. One problem is that planning for sustainability should accompany program implementation, but in reality it is often addressed well after an interprofessional program or initiative is underway or nearing the end of the grant period.

The Kennedy Model for Sustainability © 2008 evolved from a national study of Geriatric Education Centers and provides a practical way to address sustainability to support strategic planning. The Model is being used in multiple initiatives such as interprofessional university/community efforts, a new interprofessional academic center, and energizing a statewide interprofessional geriatrics society. The model and provides real-life examples from current interprofessional practice and education initiatives.



To learn how to plan for the sustainability of your interprofessional education and/or practice initiative, [please click here to view](#) the following webinar archive:

**Avoiding One and Done:  
A Practical Model for Sustaining IPE Programs**

**Teri Kennedy, PhD, MSW, LCSW, ACSW, FGSA, FNAP**  
 Director, Office of Gerontological & Interprofessional Initiatives  
 School of Social Work, College of Public Service & Community Solutions  
 Faculty Lead: Clinical Partnerships, Center for Advancing Interprofessional Practice, Education & Research (CAIPER), College of Nursing & Health Innovation  
 Arizona State University

National Center for Interprofessional Practice and Education  
 Webinar  
 November 29, 2017



Center for Advancing  
Interprofessional Practice,  
Education and Research  
Arizona State University



NATIONAL CENTER for  
INTERPROFESSIONAL  
PRACTICE and EDUCATION



ASU School of  
Social Work  
ARIZONA STATE UNIVERSITY

where interprofessional education meets collaborative practice

Participants will be able to:

1. Define four approaches to sustainability
2. Identify factors that foster and hinder sustainability
3. Discuss current interprofessional practice and education initiatives using the Kennedy Model of Sustainability © 2008

# Kennedy Model of Sustainability ©2008

Figure 11. Kennedy Model of Sustainability © 2008



(Kennedy, 2008; 2009)

Figure 12. Kennedy Model of Sustainability Worksheet

## Sustainability Worksheet

Types of Sustainability	Strategies to Foster Sustainability
Maintenance of mission and activities	
Institutionalization of organizational infrastructure	
Community visibility	
Strategic response to change	

(Kennedy, 2008; 2009)

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# The Magic of IPE

A medical educator once described interprofessional education as the “magical mystery tour,” magical because “it offered the possibility of magical results; a mystery because the outcome was uncertain and the seas to be travelled were relatively uncharted” (Harden, 2015, p. 291). Another health professions educator recently described the magic of teams as the journey, “From I to We” (Lamb, 2017).

Before our journey through the *Preceptors Guide to the Nexus* draws to a close, let’s take a moment to relish the rich promise of interprofessional collaborative practice and team-based care to address the Quadruple Aim: people, population, price, and providers. Let’s hold on to teamwork’s potential to be “exhilarating...Being part of creating something larger than our individual self, touches our souls, connects us to people, and brings a bone-deep sense of career satisfaction and strong workplace culture” (Biro, 2013, as cited in Harden, 2015, p. 291).

I am reminded of a story shared by a colleague and mentor who was preparing a presentation on IPE for a national audience. Rather than telling her individual story from only her perspective, she invited in the experiences and voices of the team. A simple outline grew into a rich team story. She captured the experience in this way:

“This is teamwork in living, breathing colors. We often use the pithy phrase “teams are more than a sum of their parts” to extoll the benefits of teamwork to our students and each other. This experience was definitely greater than one plus one – even more than exponential. It reminded me of why I believe in teamwork. It has the potential for magic!” ([Lamb, 2017](#))



# Glossary



- **Collaborative practice-ready health worker:** "...someone who has learned how to work in an interprofessional team and is competent to do so." (WHO, 2010, p. 7)
- **Interprofessional collaborative practice:** "...when multiple health workers from different professional backgrounds work together with patients, families, carers and communities to deliver the highest quality of care." (WHO, 2010, p. 7)
- **Interprofessional competencies in health care:** "Integrated enactment of knowledge, skills, values, and attitudes that define working together across the professions, with other health care workers, and with patients, along with families and communities, as appropriate to improve health outcomes in specific care contexts." (IPEC, 2016, p. 8)
- **Interprofessional education:** "...when students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes." (WHO, 2010, p. 7)
- **Interprofessional team-based care:** Care delivered by intentionally created, usually relatively small work groups in health care who are recognized by others as well as by themselves as having a collective identity and shared responsibility for a patient or group of patients (e.g., rapid response team, palliative care team, primary care team, and operating room team)." (IPEC, 2016, p. 8)
- **Interprofessional teamwork:** "The levels of cooperation, coordination and collaboration characterizing the relationships between professions in delivering patient-centered care." (IPEC, 2016, p. 8)
- **Professional competencies in health care:** "Integrated enactment of knowledge, skills, values, and attitudes that define the areas of work of a particular health profession applied in specific care contexts." (ICEC, 2016, p. 8)

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# IPE Resources

## Websites



- American Interprofessional Health Collaborative. (2015). Retrieved from <https://aihc-us.org/>
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- National Center for Interprofessional Practice and Education. (2017). Minneapolis, MN: University of Minnesota. Retrieved from <https://nexusipe.org>

## Interprofessional Conferences



- **All Together Better Health (Biennial)**. September 3-6, 2018, Transforming the Landscape of Healthcare, Auckland University of Technology (AUT), Auckland, New Zealand. Retrieved from <http://www.atbhix.co.nz/>
- **Collaborating Across Borders (CAB) (Biennial)**. Next conference 2019. TBD, Canadian Interprofessional Health Collaborative and American Interprofessional Health Collaborative.
- **Nexus Summit (Annual)**. July 29-31, 2018, National Center for Interprofessional Practice and Education, Minneapolis, MN. Retrieved from <https://summit.nexusipe.org/>

## Toolkits/Resources



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## Modules / Webinars / Presentations

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- Kennedy, T., Harrell, L., Senecal, J., Lamb, G., Saewert, K., Karamehmedovic, N., Moramarco, M., & Price, Y. (2017, October 1-4). *Achieving New Heights in Interprofessional Clinical Sites: Developing Core Models of Interprofessional Collaborative Practice.* Interactive Poster. *Exploring New Heights, Collaborating Across Borders VI (CAB VI)*, Banff, Alberta BC, Canada.
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