

Interest Area

Each table is marked with one important characteristic of the optimal Clinical Learning Environment:

- Practicing Optimal Team Behaviors
- Promoting Shared Decision Making
- Fostering Distributed Team Leadership

Please choose a table
labelled with a topic you are interested in
exploring.





NATIONAL CENTER for
INTERPROFESSIONAL
PRACTICE and EDUCATION



JOINTLY ACCREDITED PROVIDER™
INTERPROFESSIONAL CONTINUING EDUCATION

This activity has been planned and implemented by the National Center for Interprofessional Practice and Education. *In support of improving patient care, the National Center for Interprofessional Practice and Education is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), the American Nurses Credentialing Center (ANCC), and the Association of Social Work Boards (ASWB) to provide continuing education for the healthcare team.*

Physicians: The National Center for Interprofessional Practice and Education designates this live activity for a maximum of **1 AMA PRA Category 1 Credits™**.

Physician Assistants: The American Academy of Physician Assistants (AAPA) accepts credit from organizations accredited by the ACCME.

Nurses: Participants will be awarded up to **1** contact hours of credit for attendance at this workshop.

Nurse Practitioners: The American Academy of Nurse Practitioners Certification Program (AANPCP) accepts credit from organizations accredited by the ACCME and ANCC.

Pharmacists: This activity is approved for **1** contact hours (.1 CEU) UAN: JA4008105-0000-19-042-L04-P

IPCE: This activity was planned by and for the healthcare team, and learners will receive **1** Interprofessional Continuing Education (IPCE) credits for learning and change



NATIONAL CENTER for
INTERPROFESSIONAL
PRACTICE and EDUCATION



JOINTLY ACCREDITED PROVIDER™
INTERPROFESSIONAL CONTINUING EDUCATION

Disclosures:

In accordance with the Accreditation Council for Continuing Medical Education's Standards for Commercial Support, adopted by the Joint Accreditors for Interprofessional Continuing Education, the National Center for Interprofessional Practice and Education has a **conflict of interest policy** that requires that all individuals involved in the development of activity content disclose their relevant financial relationships with commercial interests. All potential conflicts of interest that arise based upon these financial relationships are resolved prior to the educational activity.

**Andrea Pfeifle, Diane Bridges, Stephen Charles, Tina Gunaldo, Gail Jensen, Devin Nickol,
Mary Mauldin, and Loretta Nunez**

declare no vested interest in or affiliation with any commercial interest offering financial support for this interprofessional continuing education activity, or any affiliation with a commercial interest whose philosophy could potentially bias their presentation.

Research in the Clinical Learning Environment: Strategies for Collaboration

Presented by
AIHC Scholarship Committee



Learning Objectives

1. Translate relevant and important features of key learning concepts and learning theories central to the interprofessional community of practice as they apply to scholarship in the CLE.
2. Explore the research-practice gaps in the CLE.
3. Identify facilitators/barriers and interventions that are best aligned with addressing these gaps.
4. Generate 2-3 action steps to advance and support scholarship/career advancement.
5. Network with people who share similar research interests.)



NCICLE NATIONAL COLLABORATIVE
FOR IMPROVING THE CLINICAL
LEARNING ENVIRONMENT

Achieving the Optimal
Interprofessional Clinical
Learning Environment:

PROCEEDINGS FROM
AN NCICLE SYMPOSIUM



FIGURE 4:

Optimal IP-CLE Characteristics for Leadership in the Macro, Meso, and Micro Health Care Environments^a

Macro

- Modeling a Team-Oriented Approach
- Allocating Resources
- Advocating for Interprofessional Learning and Collaborative Practice

Meso

- Ensuring Ongoing Interprofessional Input
- Integrating Interprofessional Learning and Collaborative Care into the Strategic Plan
- Building Team-Oriented Infrastructures

Micro

- Practicing Optimal Team Behaviors
- Promoting Shared Decision Making
- Fostering Distributed Team Leadership

^a Macro environment = health systems; meso environment = hospitals and health clinics; micro environment = clinical care units and service lines.



Introductions at Table

- Name
- Organization
- Are you
 - Engaged in the clinical learning environment (CLE), IPE, or both?
 - Engaged in scholarship in IPE and/or the CLE?
 - Interested in becoming engaged in one or more of these areas?



IPE ENABLERS





Barriers and enablers that influence sustainable interprofessional education: a literature review

Tanya Rechael Lawlis, Judith Anson & David Greenfield

To cite this article: Tanya Rechael Lawlis, Judith Anson & David Greenfield (2014) Barriers and enablers that influence sustainable interprofessional education: a literature review, Journal of Interprofessional Care, 28:4, 305-310, DOI: [10.3109/13561820.2014.895977](https://doi.org/10.3109/13561820.2014.895977)

To link to this article: <https://doi.org/10.3109/13561820.2014.895977>



Published online: 13 Mar 2014.

Stakeholder level	Description
Government and professional	Encompasses the top-level stakeholders that influence the incorporation of IPE into higher education health professional degree programs, such as government organisations and accreditation boards.
Institutional	Refers to the areas within a higher education institution that influence the embedding of IPE into the health professional education, for example management.
Individual	Encompasses the staff, instructors (or educators or professors), and/or students that can impact both positively and negatively the embedding of IPE into the health professional curriculum.



Enablers to IPE

Government and professional

- Establishment of collaborative groups from different higher education institutions and organisations
- Stakeholder commitment
- Shared ownership and unified goals
- Government funding

Institution

- Funding by institutions
- Organisational structures within higher education institutions developed
- Faculty development programs

Individual

- Skill of the facilitator
 - Enthusiasm of facilitator/staff
 - Staff as role models
 - Champions
 - Commitment
 - Understanding of IPE and CP
 - Shared interprofessional vision
 - Showing of equal status regardless of position or background
-



Table II. Higher education institution barriers to IPE.

	Barriers to IPE
Government and professional	<ul style="list-style-type: none"> • Lack/limited financial resources • Changes within the organisations and higher education institutions involved
Institution	<ul style="list-style-type: none"> • Lack/limited financial resources • Lack/limited support • Limited faculty development initiatives • Scheduling of IPE within current program • Health professional degree calendars – different lengths of degree year • Different degree timetables • Rigid/condensed curriculum • Extra-curricula versus required course/unit • Differences in assessment requirements
Individual	<ul style="list-style-type: none"> • Faculty attitudes • Lack of reward for faculty • High workload (including teaching and administrative) • Lack/limited knowledge about other health professions • Not understanding IPE concept • Lack of perceived value • Different student learning styles • ‘Turf’ or professional battles • Bias towards own profession • Lack of respect towards other health profession/als



Individual

Enablers

- Skill of the facilitator
 - Enthusiasm of facilitator/staff
 - Staff as role models
 - Champions
 - Commitment
 - Understanding of IPE and CP
 - Shared interprofessional vision
 - Showing of equal status regardless of position or background
-

Barriers

- Faculty attitudes
 - Lack of reward for faculty
 - High workload (including teaching and administrative)
 - Lack/limited knowledge about other health professions
 - Not understanding IPE concept
 - Lack of perceived value
 - Different student learning styles
 - “Turf” or professional battles
 - Bias towards own profession
 - Lack of respect towards other health profession/als
-

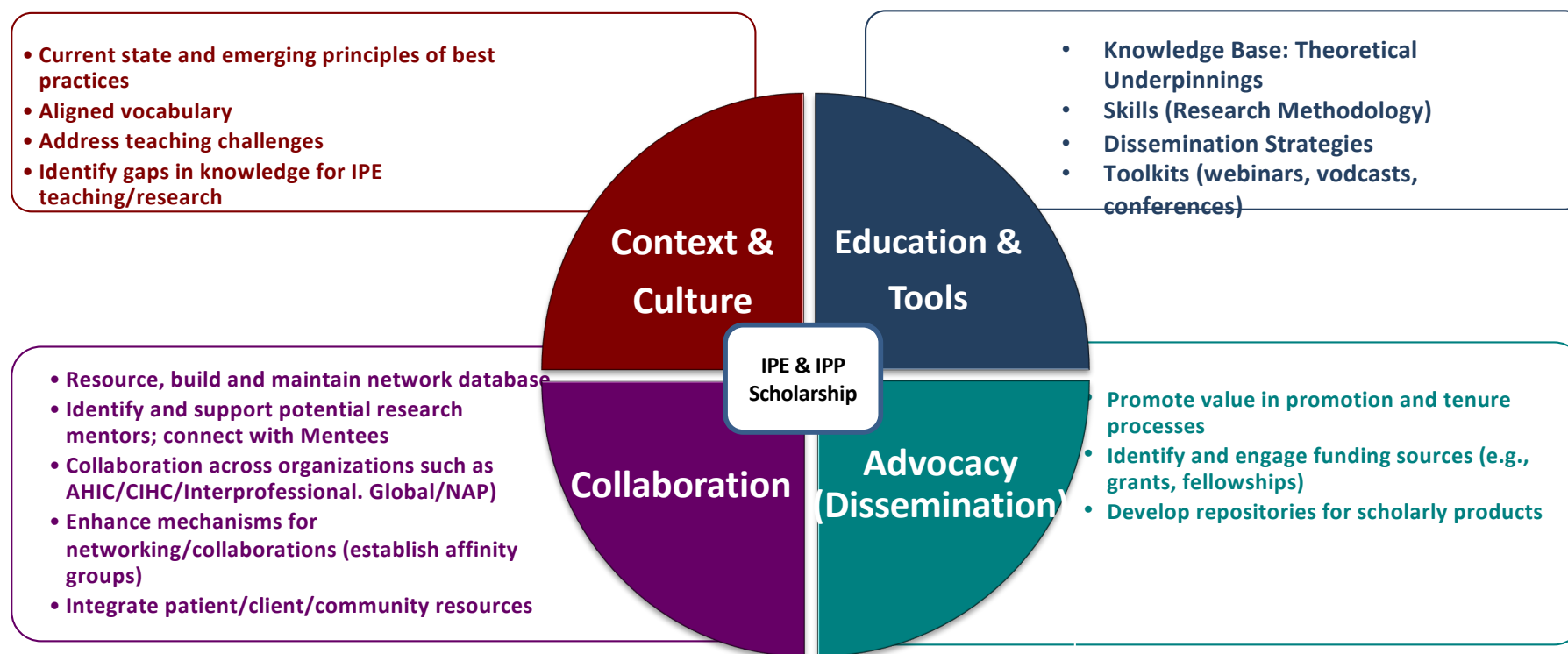


IPE IPCP SCHOLARSHIP ENABLERS



IPE & IPP Scholarship Enablers

Proposed Framework Based on Key Themes*



*Summary of Data Collected at: All Together Better Health IX, National Center Interprofessional Practice and Education 2017 & 2018 Summit Meetings, and 2017 CAB VI Meeting (Pfeifle AL, Gandy J, King S, Grymonpre R, Jensen G)

Table Topic Discussions

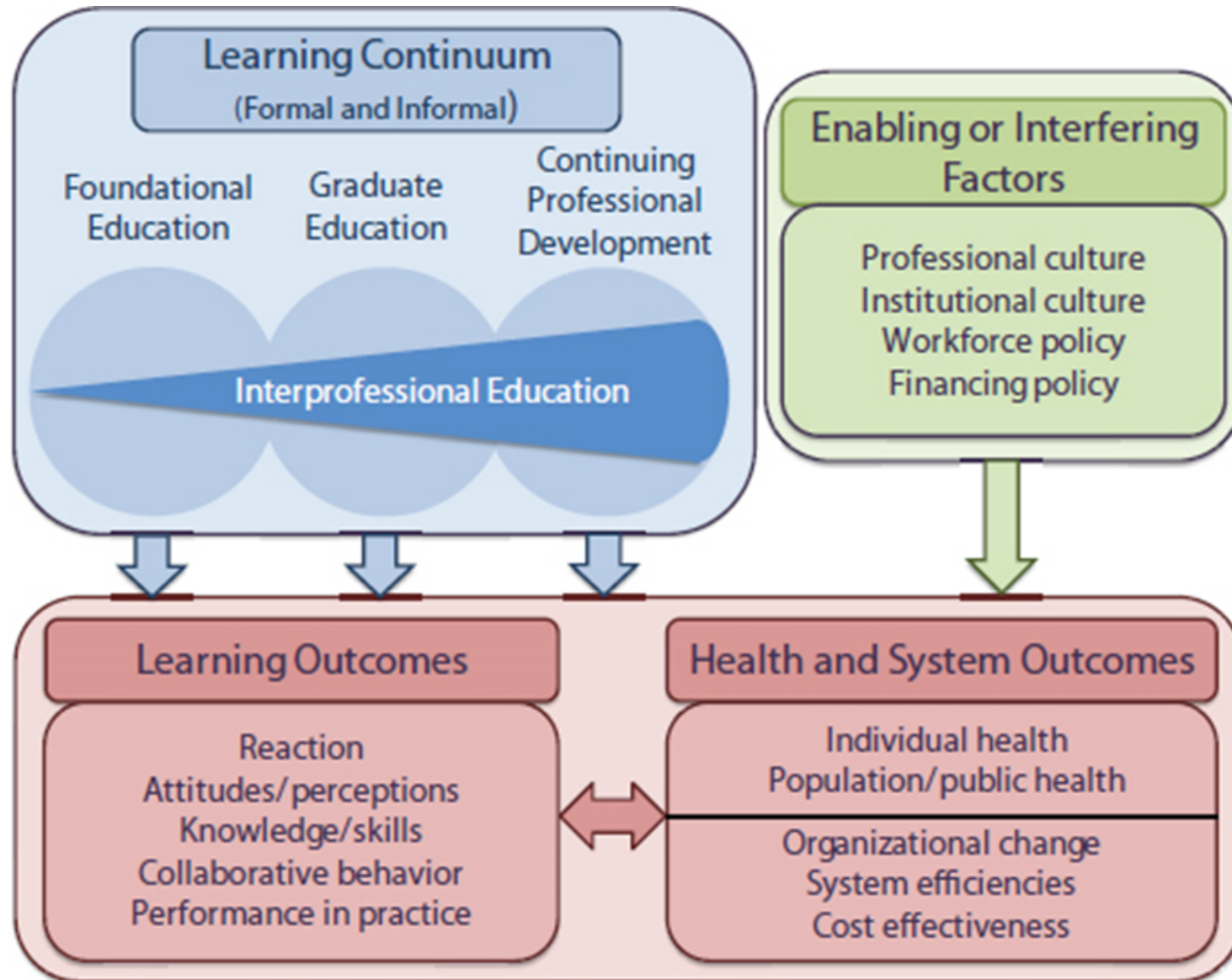
- **Relevant to your table topic, discuss:**
 - Enablers to scholarship in this area
 - Barriers to scholarship in this area
 - **(Especially)...**Strategies that you have used or observed working well for engaging in scholarship in this area
- Use the tear sheets and post-its to track key points
- Report Out



TOOLS AND RESOURCES



IOM Interprofessional Learning Continuum Model



Reprinted with permission from (*Measuring the impact of interprofessional education on collaborative practice and patient outcomes*), (2015) the National Academy of Sciences, Courtesy of the National Academies Press, Washington, D.C. IOM (Institute of Medicine).

Boyer's 4 Models of Scholarship

- Discovery
- Integration
- Application (also later called the [scholarship of engagement](#))
- Teaching and learning

Reference: Scholarship Reconsidered: Priorities of the Professoriate. The Carnegie Foundation for the Advancement of Teaching, 1990



Implementation Science and Boyer

	Models of Scholarship			
	Discovery	Integration	Application	Teaching & Learning
Gaps				
Facilitators & Barriers				
Interventions				
Implement & Evaluate Impact				

Towards a Greater Understanding of Implementation Science in Health Professions Education

Aliki Thomas, PhD, OT, School of Physical and Occupational Therapy, Centre for Medical Education, McGill University, Centre for Interdisciplinary Research in Rehabilitation of Greater Montreal, and André Bussi res, PhD, DC, School of Physical and Occupational Therapy, McGill University, Centre for Interdisciplinary Research in Rehabilitation of Greater Montreal, Department of Chiropractic, Universit  du Qu bec   Trois-Rivi res

In a previous AM Last Page, we advocated an evidence-informed approach to health professions education (HPE).¹ Here we examine implementation science (IS).

- Educators are faced with the responsibility of ensuring that current best evidence in HPE is routinely used to inform decision-making processes.
- Knowledge translation (KT) is a process used to facilitate the uptake and application of best evidence.²
- IS is the scientific study of KT; it encompasses all aspects of research relevant to the study of the methods, theories, and models to promote the uptake of research findings into educational and policy contexts.^{3,4}
- IS seeks to answer questions such as:
 - Why are some teachers more likely than others to adopt a new practice?
 - Why do certain faculty development programs lose effectiveness over time?
 - How can multiple educational interventions be effectively packaged to capture cost efficiencies and reduce suboptimal practices?

We present IS as a **four-step process**: (1) *identify research–practice gaps*; (2) *identify facilitators and barriers to the uptake of new knowledge/evidence*; (3) *design interventions to promote uptake*; and (4) *implement and evaluate impact*. For each step, we describe the purpose, methods, and expected deliverables/outcomes. The implementation process should consider the context (e.g., school, clinic, community, emergency department, surgery) and identify the target audience and stakeholders (e.g., learners, faculty, program directors, administrators) early and involve them throughout all stages of the process.

Four-Step Implementation Process

Step	Purpose	Methods	Outcome	Example
1. Identifying research–practice gaps	<ul style="list-style-type: none"> • Describe current practice • Identify best practices from best available evidence • Identify the nature and magnitude of research–practice gaps • Adapt evidence to intended audience and local context 	<ul style="list-style-type: none"> • Knowledge syntheses • Portfolios • Surveys • Guided interviews • Focus groups • Curriculum and accreditation document reviews 	<ul style="list-style-type: none"> • List of important gaps • List of current teaching, assessment, and program development activities 	<ul style="list-style-type: none"> • Review evidence on strategies for giving residents effective feedback • Identify current feedback practices in residency training programs using questionnaires and focus groups • Confirm presence and nature of the gap between current feedback practices and best practice strategies
2. Identifying facilitators and barriers	<ul style="list-style-type: none"> • Identify level of the facilitator/barrier: <ul style="list-style-type: none"> – <i>Individual</i>: knowledge, attitudes, motivation, skills, etc. – <i>Organizational</i>: availability of resources, culture, readiness to change, etc. – <i>System</i>: health care reforms, regulations and laws, etc. • Identify theoretical framework to explain reasons for the gaps: Theoretical Domains Framework (TDF), Consolidated Framework for Implementation Research, etc. 	<ul style="list-style-type: none"> • Use theories to identify and understand facilitators and barriers: <i>motivational, social-cognitive, action theories</i>, etc. • Data sources: <ul style="list-style-type: none"> • Qualitative (interviews, focus groups) • Quantitative (surveys) • Mixed approaches 	<ul style="list-style-type: none"> • List of facilitators and barriers with explanatory components • Data to inform the design of targeted strategies to improve educational practices and policies 	<ul style="list-style-type: none"> • Interviews among clinical teachers underpinned by the TDF to identify the individual and organizational supports (e.g., <i>readiness to change, residency training program with resources to support uptake of new practices, protected time to read and discuss evidence on feedback</i>) and barriers (e.g., <i>lack of knowledge on effective feedback strategies, heavy patient caseloads</i>) to effective feedback practices
3. Designing interventions	<ul style="list-style-type: none"> • Design interventions that are: <ul style="list-style-type: none"> • Theory-based and aligned with facilitators and barriers • Targeted to appropriate audience • Contextualized to local learning environment • Feasible, acceptable, sustainable • Developed and implemented in partnership with relevant stakeholders 	<ul style="list-style-type: none"> • Select intervention components: <ul style="list-style-type: none"> • <i>Map practice change techniques to facilitators and barriers</i> (modeling, self-monitoring, graded task, skill rehearsal, etc.) • <i>Use evidence supporting the effect of the intervention?</i> <ul style="list-style-type: none"> – Individual (feedback, outreach visits, faculty development) – Organizational – System • <i>Operationalize the intervention</i> (targeted to whom, why, when, where, what, how often, and by whom) • <i>Select mode of delivery</i> (must be feasible, acceptable, guided by local context) 	<ul style="list-style-type: none"> • Theory-based tailored intervention ready for implementation 	<ul style="list-style-type: none"> • Consider who needs to do what differently, why, when, and how? • Involve teachers, department chairs, and residents in designing the KT interventions to promote uptake of new feedback strategies • For example, intervention (<i>feedback</i>) mapped to previously identified barrier (<i>a specific knowledge gap</i>) delivered (<i>online biweekly over four months</i>) by (<i>supervisory clinician</i>) to (<i>a new group of residents</i>)
4. Implementing and evaluating impact	<ul style="list-style-type: none"> • HPE researchers, implementation scientists, and other stakeholders evaluate intervention outcomes at three levels: <ul style="list-style-type: none"> • <i>Individual</i>: learners, teachers, etc. • <i>Organizational</i>: school, hospital ward, etc. • <i>System</i>: education, health, etc. 	<ul style="list-style-type: none"> • Pre–post studies • Quasi-experimental • Controlled trials • Case studies • Cohort studies • Mixed methods 	<ul style="list-style-type: none"> • Individual outcomes • Organizational outcomes • System outcomes 	<ul style="list-style-type: none"> • Measurable changes in: <ul style="list-style-type: none"> • Knowledge, attitudes, skills, and behaviors regarding effective feedback strategies in residency training programs • Cost-effective and streamlined residency programs, improved learner outcomes, etc. • Accreditation, licensure, quality of care, safety, etc.

Key messages:

- KT and IS are iterative processes targeted at specific populations, settings, and contexts to promote the systematic uptake of research findings and other evidence-based practices into HPE
- KT and IS can foster environments conducive to building teaching and assessment capacity and students' lifelong learning
- Added value of medical education must be proven via robust scientific methods employed in IS

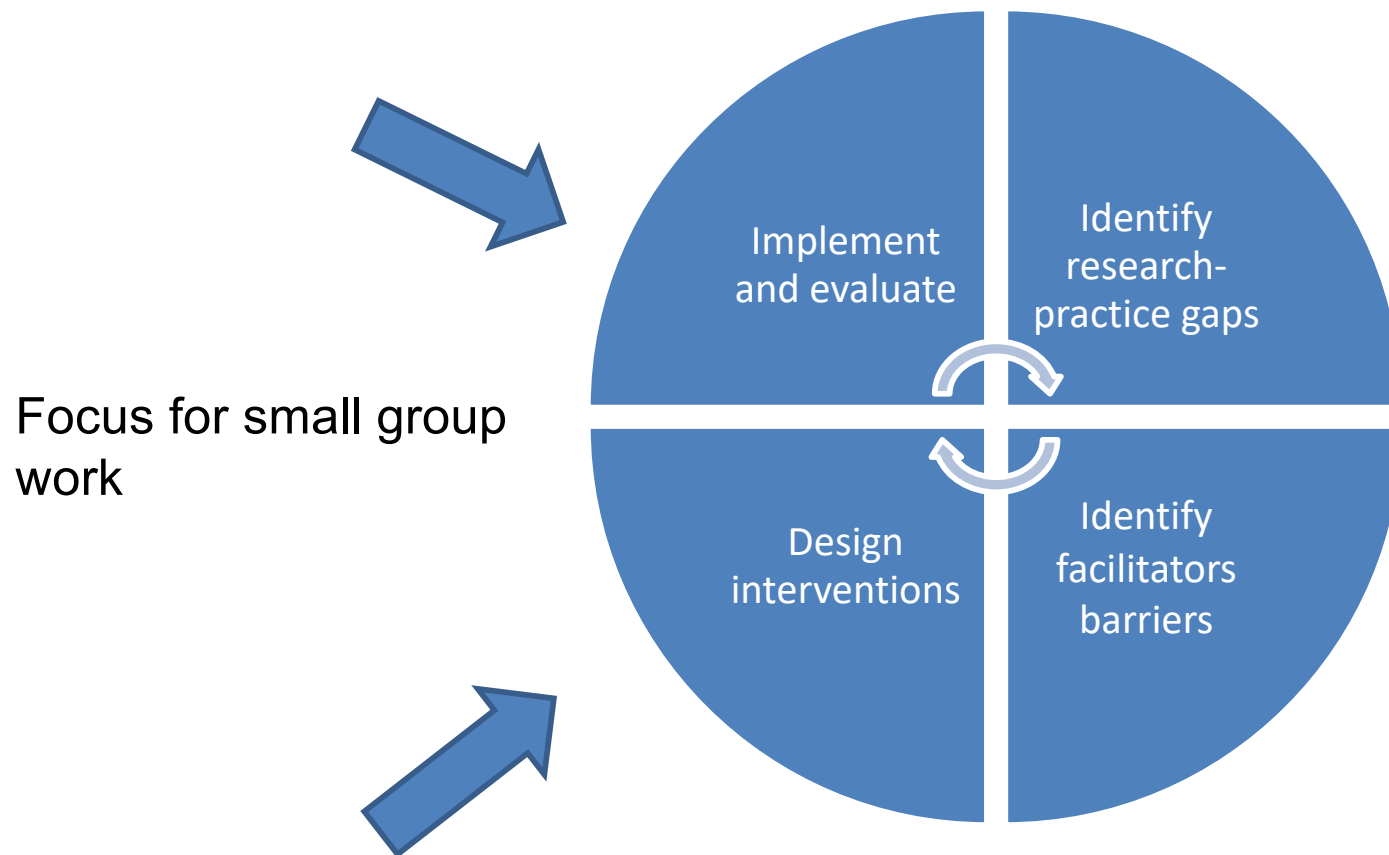
References:

1. Thomas A, Bussi res A. Knowledge translation and implementation science in health professions education: Time for clarity. *Acad Med*. 2016;91.
2. Straus SE, Tetroe J, Graham ID. *Knowledge Translation In Health Care: Moving From Evidence to Practice*. 2nd ed. Chichester, UK: John Wiley & Sons; 2013.
3. National Institutes of Health, US National Library of Medicine. Health Services Information Central. 2016. www.nlm.nih.gov/hsinfo/implementation_science.html. Accessed July 29, 2016.
4. Moore GE, Audrey S, Barker M, et al. Process evaluation of complex interventions: Medical Research Council guidance. *BMJ*. 2015;350.

Author contact: aliki.thomas@mcgill.ca

Refer to Handout

Framing our Collaborative Conversation: Implementation Science



Time to Collaborate!



- Develop a single project for your table
- Focus on possible **design of an intervention and implementation/evaluating the impact**

CollaboRATE



5 point anchor scale

Thinking about the appointment you have just had ...

1. How much effort was made to help you understand your health issues?

0	1	2	3	4
No effort was made.	A little effort was made.	Some effort was made.	A lot of effort was made.	Every effort was made.

2. How much effort was made to listen to the things that matter most to you about your health issues?

0	1	2	3	4
No effort was made.	A little effort was made.	Some effort was made.	A lot of effort was made.	Every effort was made.

3. How much effort was made to include what matters most to you in choosing what to do next?

0	1	2	3	4
No effort was made.	A little effort was made.	Some effort was made.	A lot of effort was made.	Every effort was made.

Alternate opening statements:*

Thinking about the visit you had with your health care provider today ...

Thinking about the conversation you had with your [insert health-care provider] today about [insert issue]...

Thinking about the appointment you have just had, please show how you feel by choosing a number from 0 to 4.

*Please note that these alternate opening statements have not undergone psychometric validation.

Inquires about shared decision making during healthcare appointments
(Barr, et al., 2014)

Website -

<http://www.glynelwyn.com/collaborate-measure.html>



IntegRATE



Receiving health care often means seeing different people, such as office staff, nurses, doctors, and other health professionals. Please think about a health issue that has led you to see different people over the last few weeks or months and answer the following questions.

1. How often did you have to do or explain something because people did not share information with each other?

☐ Never ☐ A little ☐ A lot ☐ Always

2. How often were you confused because people gave you conflicting information or advice?

☐ Never ☐ A little ☐ A lot ☐ Always

3. How often did you feel uncomfortable because people did not get along with each other?

☐ Never ☐ A little ☐ A lot ☐ Always

4. How often were you unclear whose job it was to deal with a specific question or concern?

☐ Never ☐ A little ☐ A lot ☐ Always

Inquires about the level of healthcare delivery integration by a team (Elwyn, et al., 2015).

Website -

<http://www.glynelwyn.com/integrate.html>



Kotter's Accelerated Model of Change: The Accelerator Network



Action is focused around the Big Opportunity
Motivated volunteers from the hierarchy are recruited to the network to realize the vision.

Reference: Kotter, John B. (2014). Accelerate: Building Strategic Agility for a Faster-Moving World. Harvard Business Review Press.

AIHC Scholarship Committee

- **Scholarship Committee:** Community of practice to support the generation of scholarship along the continuum; facilitate specific scholarly activities; promote and select national IPE awards
- **2019-2020 Scholarship Committee Goals**
 - Develop programming to enhance scholarship engagement among members at Nexus Summit and Collaborating Across Borders conferences
 - Develop and deliver 1 or 2 webinars
 - Enhance a community of practice around IPE Scholarship
 - Collaborate with other Committees to continue to develop and promote IPE Scholarship through awards, communications, and membership engagement.



Scholarship Committee

- Anthony Breitbach, PhD, ATC; Saint Louis University
- Diana Bridges, PhD, MSN, RN, CCM, Rosalind Franklin University
- Stephen Charles, PhD, East Carolina University
- Tina Gunaldo, PhD, DPT, MHS; Louisiana State University Health-New Orleans
- Gail Jensen, PhD, PT, FAPTA, FNAP; Creighton University
- Mary Mauldin, EdD; Medical University of South Carolina
- Loretta Nunez, MA, AuD, CCC-A/SLP, FNAP; American Speech Language Hearing Association
- Devin Nickol, MD, FNAP; University of Nebraska Medical Center
- Andrea Pfeifle, EdD, PT, FNAP; Indiana University
- Terri Poirier, PharmD, MPH, FASHP, FCCP, BCPS, Southern Illinois University Edwardsville



Advancing Interprofessional Education and Collaborative Practice (IPECP) Scholarship

Resources:

- "How to Keep Up – Create a Google Scholar Alert"
https://scholar.google.com/scholar_alerts?view_op=list_alerts&hl=en

Journal Articles:

- "Academic medicine last pages: An Infographic collection" [PDF]. Washington, DC: AAMC. <https://www.aamc.org/download/355222/data/giaamlastpage.pdf>
Chapters on educational research, health policy, and final chapter on a variety of health professions.
- [Atluru, A.](#), [Wadhwani, A.](#), [Maurer, K.](#), [Kochar, A.](#), [London, D.](#), [Kane, E.](#), & [Spear, K.](#) (2015, April). "Research in medical education: A primer for medical students" [PDF]. Washington, DC: AAMC. <https://www.aamc.org/download/429856/data/mededresearchprimer.pdf>
Overview of [MedEd Research](#), why important, how to get started, how projects are structured, and strategies to publish/present findings.
- [Artino, A.](#) (2016). "Academic Medicine last pages 2010 - 2016: Conducting research in health professions education: From idea to publication" [PDF]. Washington, DC: AAMC.
Excellent resource on conducting research in health professions education.



Your Personal Action Plan

- What 1-2 steps can you take to move the scholarship agenda forward in **your CLE**?
- Who did you talk to today that could be a good sounding board or collaborator?
- What resources did you learn about that could be useful?



AIHC Membership

Join us as a member of this exciting new professional society – the first member-based organization in the growing field of interprofessional practice and education.

- Go to Our Website: <http://www.aihc-us.org/>

AIHC Annual Membership Dues:	
Individual	\$150
Student	\$30



Presenters' Contact Information

- Tina Gunaldo, PhD, DPT, MHS
 - tgunal@lsuhsc.edu
- Loretta Nunez, MA, AuD, CCC-A/SLP, FNAP
 - lnunez@asha.org
- Gail Jensen, PhD, PT, FAPTA, FNAP
 - GailJensen@Creighton.edu
- Andrea Pfeifle, EdD PT FNAP
 - apfeifle@iu.edu



Thank you!

Please visit us at
www.aihc-us.org
for more information

