# Guidance on Global Interprofessional Education and Collaborative Practice Research: Discussion Paper

IPR.Global
The Global Network for Interprofessional Education and Collaborative Practice Research

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A joint publication by InterprofessionalResearch.Global and Interprofessional.Global

**October 18th, 2019**

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# Preface

The world is cognisant of the movement towards transforming systems for health through interprofessional education and collaborative practice (IPECP) with the purpose of improving care, population health, and providers' work experience, as well as to reduce the cost of services delivery and to realise universal health coverage. This awareness provides a unique opportunity for the global IPECP community to build upon and develop 'scientific confirmation' for 'the great truth of IPECP' (Gilbert, 2013, p. 283).

While there has been a substantial increase in published IPECP research in recent years, there is a need for high-quality cross-sectional and longitudinal research to inform the gap in knowledge that continues to exist. To stimulate further discussion on global IPECP research, InterprofessionalResearch.Global (IPR.Global) and Interprofessional.Global produced this IPECP Research Discussion paper. This paper offers perspectives to inform discussions around the global research agenda for IPECP by identifying research priorities and providing guidance on theoretical frameworks, research methodologies, and composition of research teams. A proposed lexicon for the interprofessional field is provided as an appendix. The lexicon serves as a working document towards developing consensus on terminology related to interprofessional education, learning, practice, and care.

IPR.Global is a special interest group of Interprofessional.Global: The Global Confederation for Interprofessional Education and Collaborative Practice. Interprofessional.Global aims to support and sustain regional and international networks of IPECP and facilitates communication and exchange between the IPECP networks. The confederation also oversees the planning and delivery of the biennial international conference All Together Better Health, now considered the premier global interprofessional meeting. Members of both Interprofessional.Global and IPR.Global represent multiple countries, regional networks, academia, professions and professional expertise.

We would like to thank all the members of the two taskforces who made this Discussion Paper possible. We would also like to thank the sponsors for their generous support.

This Discussion Paper provides a perspective around the current situation and the needs in IPECP Research. We make recommendations to advance IPECP theory and research by 2022 and invite collaborators to join us in this research.

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October 18th, 2019

# Executive summary

InterprofessionalResearch.Global (IPR.Global), a special interest group of Interprofessional.Global, provides global leadership in interprofessional education and collaborative practice (IPECP) research. IPR.Global promotes and advocates for evidence-informed policies and practices through fostering and facilitating theory-driven, methodologically rigorous IPECP research.

This Discussion Paper aims to provide guidance on IPECP research. We provide a perspective of the current situation and the needs in IPECP research around the globe, make recommendations for research teams to advance IPECP theory-informed research by 2022, and invite collaborators to join us in this initiative. The appendix provides a proposed lexicon for the interprofessional field based on the current interprofessional literature. This lexicon serves as a starting point in developing a global consensus on a set of definitions and descriptions related to interprofessional education, learning, practice, and care. In doing so, and in response to the Article 4 of the Sydney Interprofessional Declaration (All Together Better Health V, 2010), IPR.Global and Interprofessional.Global plan to conduct a web-based global Delphi panel in early 2020.

Over the past decades, the rationale and drivers for IPECP have been well described in the global health care literature (Barr, 2005, 2015; Frenk et al., 2010; Institute of Medicine, 2000; Meads & Ashcroft, 2005; Pollard, Sellman, & Thomas, 2014; Jill Thistlethwaite & GRIN Working Group, 2012; Wagner et al., 2001; World Health Organization, 2010). IPECP is widely recognized as a potential route to improving the quality of the patient's health care experience, improving the health of communities and populations, reducing the cost of health care delivery, and improving the work experience of service providers, known as the 'quadruple aim' (Berwick, Nolan, & Whittington, 2008; Brandt, Lutfiyya, King, & Chioreso, 2014). Looking forward, IPECP is poised to also facilitate the increasing demand of effective teamwork from health providers and its partners at the age of increasing complexity and technological advances in health diagnosis and management (Institute of Medicine, 2001, 2015).

While improvements in the quality of IPECP evaluative research studies have been noted, there is still much to be achieved. The research agenda for

IPECP should elevate the process of enquiry by shifting focus from that of programme- or project-specific level interrogation to determining the impact of IPECP.

The current need is for research that produces significant and scientifically sound evidence determining the impact of IPECP on the improvement of health outcomes, quality care and safety of service users; lowering of health care costs; burden on human resources for health, including collaborative practice-readiness of health and social care professionals, resilience and work experience; and the eventual improvement in population health (Lutfiyya, Brandt, Delaney, Pechacek, & Cerra, 2016). In addition, current literature indicates that IPECP research requires improvements in the appropriateness and clarity of research questions, the selection of theoretical underpinnings, choice of research methodologies, and approaches to the dissemination of study findings to reach the broader interprofessional community (Lawn, 2016; Reeves, Boet, Zierler, & Kitto, 2015).

## Proposed interprofessional education and collaborative practice research priorities

To meet the challenges discussed above, we propose the following global IPECP research priorities:

1. Building the science and scholarship of IPECP through the discovery and integration of innovative evidence-informed strategies.
2. Identifying and applying innovative approaches that embrace and address the inherent complexity of interprofessional endeavours.
3. Developing evidence of impact along the continuum from interprofessional education to collaborative practice in person- and community-centred service delivery.

## Proposed recommendations for research teams

1. We recommend that IPECP research teams include diverse experts from various disciplines, e.g. health, social, education, economic, etc., as well as from the quantitative, qualitative and mixed-method research methodologies.

1. Research teams should strive for the inclusion of learners, service users, community members and civil society as partners (e.g. as informants, data interpreters, knowledge translators) in interprofessional research.
2. Research teams should ensure that studies/projects are underpinned by relevant theories, frameworks and/or models in order to produce meaningful contributions to the body of knowledge in IPECP.

We are committed to building and supporting a culture of global IPECP research, which is essential to generating evidence-based, theoretically-informed, and methodologically sound strategies. In leading the advancement of global IPECP research, we are committed to delivering the following key results before the All Together Better Health XI Conference in 2022:

1. A joint partnership exploration team including Interprofessional.Global and IPR.Global members.
2. A successful 4-day partnership development meeting.
3. Working groups of Interprofessional.Global and IPR.Global functioning effectively and in an integrated way.
4. Report on a global scan to identify (1) IPECP research and projects and (2) potential sources of research funding (globally, governmental, non-profit, profit).
5. Best practice guidelines in IPECP research.
6. Report on the models, theories and frameworks most useful and most commonly applied to IPECP research.
7. Report on a Delphi study at the All Together Better Health (ATBH) X conference (2020).
8. Release of consensus lexicon at ATBH XI conference (2022).
9. Global IPECP research excellence awards at ATBH X and ATHB XI conferences.
10. IPECP researchers web-based portal.

## Call for collaborative partners

To accomplish these strategic actions, IPR.Global and Interprofessional.Global continue to seek collaborative partnership and sponsorship from around the globe. For more information about, and to join visit:

- *www.research.interprofessional.global*
- *www.interprofessional.global*

# Introduction

This Discussion Paper aims to provide guidance on research related to interprofessional education and collaborative practice (IPECP). We provide a perspective on the current situation and the needs in IPECP research around the globe, make recommendations for research teams to advance IPECP theory and research by 2022, and invite collaborators to join us in this initiative.

## Background to interprofessional education and collaborative practice

In reaching for health equity in the 21st century and delivering on the Sustainable Development Goals, we are faced globally with multiple morbidities that require interacting with a wide range of health and social care professionals, generalists and specialists. Health service costs are increasing, but the evidence of concomitant improvement in outcomes or integration of services is still lacking (Bohmer, 2011; Institute of Medicine, 2015; National Academies of Sciences Engineering and Medicine, 2018).

To tackle this issue, stakeholders from around the world have renewed their commitment in strengthening primary health care within the context of sustainable development as mentioned in the Declaration of Astana (World Health Organization & United Nations Children's Fund (UNICEF), 2018). One of the main points of the declaration is to put public health and primary care at the centre of universal health coverage, where the health workforce works in teams with competence to address modern health needs. The declaration paved the way for IPECP implementation to be one of the core value of future health service.

Over the past decades, the rationale and drivers for IPECP has been well described in the global health care literature (Barr, 2005, 2015; Frenk et al., 2010; Institute of Medicine, 2000; Meads & Ashcroft, 2005; Pollard et al., 2014; Thistlethwaite & GRIN Working Group, 2012; Wagner et al., 2001; World Health Organization, 2010). IPECP is recognized as a potential and plausible route to improving the quality of the patient's health care experience, improving the health of communities and populations, reducing the cost of health care delivery, and improving the work experience of service providers, known as the

'quadruple aim' (Berwick et al., 2008; Brandt et al., 2014). In areas with health inequity, IPECP is also focused on building workforce capacity, particularly for primary health care (Botma & Snyman, 2019; Mining, 2014; Paterno & Opina-Tan, 2014).

Looking forward, IPECP is poised to facilitate the increasing demand of effective teamwork from health providers and its partners at an age of increasing complexity and technological advances in health diagnosis and management (Institute of Medicine, 2001, 2015). Therefore, IPECP has to be flexible enough to incorporate technological advancement, such as predictive health care, in service delivery, which includes, but is not limited to, artificial intelligence systems, electronic health records, robotic assistance, and virtual health assistance (Jiang et al., 2017; Menon, 2018). The way in which such systems will be integrated into service user-driven initiatives that are promoting the democratisation of health services and health informatics provide an exciting challenge for the interprofessional workforce (Snyman et al., 2019).

To translate the demands into academic settings, the World Health Organization's *Framework for Action* (World Health Organization, 2010) stressed the importance of interprofessional education (IPE) for the development of a collaborative practice-ready health workforce. The document concluded that a high level of synergy between health workforce planning and health education systems is required to facilitate the sustainability of IPECP, including the transition of learners from the classroom to the workplace. In the same year, the Lancet Commission, a worldwide grouping of 20 professional and academic leaders, shared a vision and strategy for the future education of health professionals (Frenk et al., 2010). In a wide-ranging critique of current health professions' curricula, the Commission highlighted the importance of collaborative team-based care and the need for a 'new professionalism', with the recommendation to infuse IPECP throughout the continuum of health professions education. Indeed, there is wide agreement among many IPECP scholars and leaders that all health professional learners need to acquire interprofessional collaboration (IPC) competencies before graduation (2nd Interprofessional Education and Collaborative Practice for Africa Conference, 2019; All Together Better Health V, 2010; Canadian Interprofessional Health Collaborative, 2010; Centre for the Advancement of Interprofessional Education, 2019; Interprofessional Educational Collaborative, 2016; World Health Organization, 2010). These competencies serve to prepare learners to work in healthcare teams to provide

collaborative care (Thibault, 2013). One of the earliest sets of IPC competencies issued was the UK Interprofessional Capability Framework (Gordon & Walsh, 2005), and since then a number of these competency/ capability frameworks have been developed around the globe to answer various needs in the respective local setting (Thistlethwaite et al., 2014).

To drive the implementation of IPE throughout the globe, the World Health Organization (WHO) has developed the National Health Workforce Accords (World Health Organization, 2017). It identified accreditation of IPE as a standard indicator. This translates to the incorporation of IPE into the standards of accreditation for health professions education institutions in various countries and regions (Grymonpre, Bainbridge, Nasmith, & Baker, 2019).

Despite these global initiatives, the emphasis in health professions education remains predominantly focused on uniprofessional education where learners from individual fields are taught, and hence socialized, in isolation from those in other related professions (Frenk et al., 2010; Khalili, Hall, & Deluca, 2014; Price, Doucet, & Hall, 2014). To promote IPECP in some parts of the world, the facilitation of interprofessional socialisation (IPS) is used where interprofessional learners develop both professional and interprofessional beliefs, values, behaviours and commitments, also called dual identity development (Arvin, George-Paschal, Pitonyak, & Dunbar, 2017; Flood, 2017; Health Professions Accreditors Collaborative, 2019; Khalili, 2013).

## Rationale for establishing a global interprofessional education and collaborative practice research agenda

A robust research agenda articulates focus, and meaningful and robust questions, as well as theories of change within which outcomes are examined. Further, it identifies the area of inquiry it is interested in informing, and the types of study designs and analytic approaches amenable to carrying out the proposed work.

IPECP research should be delivered with well-designed and focused multimethod research studies, underpinned by sound theoretical frameworks and models. It should be conducted with methodological rigour that is targeted to identifying the contribution of IPECP to achieving the ‘quadruple aim’ (Bodenheimer & Sinsky, 2014), WHO’s triple billion targets, Universal Health Coverage and in reaching the Sustainable Development Goals (Gilbert, 2013;

Khalili, 2019; World Health Organization, 2019). Along with well-designed studies, the data need to be rigorously generated and analysed to ascertain the contributions of IPECP to current health care reform efforts, including IPECP programme evaluation and quality improvement.

Current literature indicates that IPECP research requires improvements in the appropriateness and clarity of research questions, the selection of theoretical underpinnings, choice of research methodologies, and approaches to the dissemination of study findings to reach the broader interprofessional community (Lawn, 2016; Reeves et al., 2015).

The volume of literature pertaining to IPECP has grown significantly over the last few decades. With a large number of literature and systematic reviews conducted in the field, several common issues are evident. Five key themes have been echoed throughout these reviews:

- *The majority of IPE programmes have not been guided by theoretical or conceptual frameworks (Institute of Medicine, 2015; McNaughton, 2018).*
- *There has been inconsistency in the reporting of detailed descriptions of key research components making it difficult to replicate or compare results.*
- *There are limited follow-up studies that indicate whether previous recommendations were followed or whether they have been implemented, and if implemented, whether sustained.*
- *There are limited longitudinal studies assessing the long-term impact of IPE on professional practice and collaboration (Abu-Rish et al., 2012; McNaughton, 2018).*
- *Longer-term interventions and longitudinal follow-up of learning outcomes are needed to identify enduring outcomes that may lead to behaviour changes and potential positive impacts on service user health outcomes and the strengthening of systems for health (Abu-Rish et al., 2012; Brandt et al., 2014; Institute of Medicine, 2015; McNaughton, 2018).*

Consensus and guidelines do not yet exist as to when and how it may be best to integrate IPE into the curriculum, core content, or best practices in IPE professional development (Thibault, 2013). Limited attention has been given to the latter, which is a crucial element. Without focused professional development to support teaching and learning in IPE, faculty, staff, preceptors and facilitators will not have the necessary knowledge, skills and attitudes to develop and deliver IPE curricula to facilitate learning between learners from various professions (Abu-Rish et al., 2012; Grymonpre et al., 2016). In addition, while there are many models of IPE, the best practices for translating IPE into collaborative practice and team-based care are not well defined (Abu-Rish et al., 2012; Grymonpre et al., 2016). On the positive side, recent advancement in interprofessional practice in several countries is producing rich data. This data needs to be examined and utilized in order to develop IPECP best practice guidelines.

While improvements in the quality of IPECP evaluative research studies have been noted, there is still much to be achieved. The research agenda for IPECP should elevate the process of enquiry by shifting focus from that of programme- or project-specific level interrogation to determining the impact of IPECP. The current need is for research that produces significant and scientifically sound evidence determining the impact of IPECP on the improvement of health outcomes, quality care and safety of service users; lowering of health care cost; burden on human resources for health, including 'collaborative practice-readiness' of health and social care professionals, resilience and work experience; and the eventual improvement in population health (Lutfiyya et al., 2016).

# Proposed interprofessional education and collaborative practice research priorities

**To meet the challenges discussed above, we propose the following global IPECP research priorities:**

1. **Building the science and scholarship of IPECP through the discovery and integration of innovative evidence-informed strategies by:**

    - *Continuously evaluating and integrating the perspectives and expectations of the learner related to IPECP outcomes.*
    - *Continuously evaluating and integrating the perspectives and expectations of patients, clients, and caregivers related to IPECP.*
    - *Exploring the impact of educational preparation to advance capacity-building among scholars whose focus is on the scientific and theoretical basis for IPECP.*
    - *Evaluating the effectiveness of continuing interprofessional education models for service providers, learners, faculty, staff, facilitators of learning and preceptors.*
    - *Developing and testing instruments for IPECP research to measure learning outcomes (including high cognitive skills) and linkages to better care, better health, better value and better work experience (also called 'quadruple aim').*
    - *Creating robust multi-site, multi-method, longitudinal research designs that address critical IPECP issues.*
    - *Conducting high-quality meta-analysis and meta-synthesis informing IPECP.*
    - *Translating research outcomes into evidence-informed best practice guidelines.*
    - *Evaluating the impact of evidence generation and translation on learner preparation and on their practice.*

- *Encouraging open and engaging approaches to interprofessional research, drawing on innovative approaches that include citizens, learners and service users in informing research questions, research designs, data analysis and translation strategies.*

2. **Identifying and applying innovative approaches that embrace and address the inherent complexity of interprofessional endeavours by:**

   - *Asking a wider range of questions to illuminate these complexities.*
   - *Determining the role and limits of IPECP in the complexities and nuances of regional, national and global (and other) systems for health by applying methods that recognize these challenges.*
   - *Providing support for the adoption of various methodological approaches that permit increased understanding of the complexities of IPECP endeavours. (See Table 1 for proposed methods and methodologies for IPECP research)*

3. **Developing evidence of IPECP impact along the continuum from interprofessional education to collaborative practice in service delivery by:**

   - *Developing evidence for those aspects of IPE and socialisation that result in desired outcomes, such as changes in knowledge, skills, attitudes, identity and behaviours of learners (from novice to expert) with respect to identified interprofessional collaborative competencies, capabilities and capacities.*
   - *Developing evidence for those aspects of interprofessional collaborative practice that result in desired positive changes for service users, populations, service providers, learners, communities, and systems.*
   - *Examining the application and function of technology, simulation, informatics, and virtual experiences on IPECP resulting*

*in desired positive outcomes for service users, populations, service providers, learners and systems.*

- *Challenging, creating, and advancing policies (global to local) that support IPECP and results in desired positive changes for service users, populations, service providers, learners and systems.*

*Table 1: Proposed methods/methodologies for IPECP research*

| Methods/ methodologies | Description |
|---|---|
| **Applied/Action Research** | Discovering solutions for pressing practical problems |
| **Fundamental and Basic research** | Finding philosophical and theoretical information with a broad base of applications to advance the scientific knowledge of IPECP |
| **Conceptual research** | Developing new concepts or to reinterpret existing ones |
| **Empirical research** | Relying on experiences or observations |
| **Critical research** | Interdisciplinary methods from beyond the sciences and social sciences to challenge the interprofessional field and its assumptions and practices that constitute IPECP |
| **Quantitative research** | Discover cause and effect relationships |
| **Qualitative research** | Discover the underlying motives and desires |
| **Mixed Methods research** | Develop a more comprehensive understanding of the research problem |
| **Descriptive research** | Surveys, fact-finding inquiries, comparative and correlational studies |
| **Analytical research** | Analysing facts or information already available to make a critical evaluation of the material |

| | |
|---|---|
| **Other research methods and methodologies needed in IPECP.** | ■ Longitudinal and Comparative Research<br>■ Narrative and Case Study Research<br>■ Discourse & Social Network Analysis<br>■ Program Evaluation and Quality Improvement Initiatives<br>■ Higher-Order Thinking Skills and Behavioural Data Assessment<br>■ Economic Evaluation and Cost-Effectiveness |

# Proposed recommendations for research teams

1. We recommend that IPECP research teams include diverse experts from various disciplines, e.g. health, social, education, economic, etc., as well as from the quantitative, qualitative and mixed-method research methodologies.
2. Research teams should strive for the inclusion of learners, service users and civil society as partners in interprofessional research. Not only as 'consumers' of health services but as experts in living with circumstances that require navigation of complex systems and public services. The inclusion of learners and service users in IPECP research teams will also strengthen research studies by ensuring the relevance of the work and adding an important perspective which will help to integrate person-centred practice within the interprofessional research field (e.g. as informants, data interpreters, knowledge translators).

3. Research teams should ensure that studies are underpinned by and translated in the context of relevant theories, frameworks and/or models in order to produce meaningful contributions to the body of knowledge in IPECP. The Best Evidence in Medical Education (BEME) reviews on the contribution of theory to IPE research have revealed a variety in approaches to the use of theory within the interprofessional field (Hean et al., 2018; Lawn, 2016; Reeves et al., 2016). However, many IPECP studies and curricula, remain under-theorised. The common theoretical frameworks and models (implicitly or explicitly) referred to within IPECP studies that were identified within the BEME reviews are presented in Table 2.

*Table2: Commonly used theoretical frameworks and models*

- *Actor-network theory (Latour, 2005)*
- *Adult learning theories (Knowles, 1975; Kolb, 1984; Schön, 1983)*
- *Communities of practice theory (Lave & Wenger, 1991)*
- *Constructivist learning principles and reflection (Kolb, 1984; Vygotsky, 1978)*
- *Contact theory (Allport, 1954)*
- *Intergroup contact theory (Pettigrew, 1998)*
- *Interprofessional socialisation framework (Khalili, Orchard, Spence Laschinger, & Farah, 2013)*
- *Kirkpatrick's 4-level educational outcomes model (Barr, Koppel, Reeves, Hammick, & Freeth, 2005; Kirkpatrick, 1996)*
- *Practice theory (Bourdieu, 1977, 1990)*
- *Presage-process-product (3P) model of learning and teaching (Biggs, 1993)*
- *Quality improvement principles (Sainfort, Karsh, Booske, & Smith, 2001)*
- *Social cognitive perspectives (Bandura, 2004; Bandura & Walters, 1977)*
- *Social identity theory (Tajfel & Turner, 2004)*
- *System theory (Von Bertalanffy, 1968)*

# Objectives and key results for interprofessional education and collaborative practice research

InterprofessionalResearch.Global and Interprofessional.Global are committed to building and supporting a culture of global IPECP research, which is essential to generating evidence-based, theoretically informed, and methodological sound strategies for IPECP research.

In Table 3 we list our objectives and key results for IPECP research to achieve by ATBH XI (2022).

*Table 3. Objectives and key results for interprofessional education and collaborative practice research to obtain by ATBH XI (2022)*

| Objectives | Key results |
|---|---|
| 1. Strengthen a consensus-based partnership with diverse regional and international stakeholders to ensure the inclusivity of interprofessional research | a) A joint partnership exploration team between Interprofessional.Global and IPR.Global |
| | b) A successful 4-day partnership development meeting |
| | c) Working groups of Interprofessional.Global and IPR.Global function effectively and in an integrated way |

| | |
|---|---|
| 2. Determine the status of IPECP research globally | a) Report on a global scan to identify (1) IPECP research and projects and (2) potential sources of research funding (globally, governmental, non-profit, profit |
| | b) Best practice guideline in IPECP research |
| | c) Report on the models, theories and frameworks applied to IPECP research |
| 3. Develop global consensus on a set of definitions and descriptions that capture interprofessional education, learning, practice and care | a) Report on Delphi study at ATBH X (2020) |
| | b) Release of consensus lexicon at ATBH XI (2022) |
| 4. Encouraging IPECP research | a) Global IPECP research excellence awards at ATBH X and ATHB XI |
| | b) IPECP researchers web-based portal |

# Call for collaborative partners

To accomplish these strategic actions, IPR.Global and Interprofessional. Global continue to seek collaborative partnership and sponsorship from around the globe. For more information about these organisations and to join, visit:

- *www.research.interprofessional.global*
- *www.interprofessional.global*

# Appendix A

## Proposed Lexicon for the Interprofessional Field

### Proposed citation for stand-alone appendix:

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Global Confederation *for* Interprofessional Education & Collaborative Practice

# Preface

As Interprofessional education (IPE) has developed over the past 30 years, there has been continuous and continuing work to ensure that the three parts of the definition of IPE are clearly understood and agreed on. That teaching, learning, research, and evaluation recognise the need to show how the parts are interwoven.

The multivariate complexity of this task can be seen in the matrix (Proposed lexicon in the following pages), and in the attempts to locate comparable studies in the various BEME analyses. The matrix also illustrates why it is too often impossible to compare research studies that purport to be investigations of IPE.

The term “interprofessional education” (occasions when members or students of two or more professions learn with, from and about each other, to improve collaboration, and the quality of care and services (Centre for the Advancement of Interprofessional Education (CAIPE), 2019)) can be used to describe IPE as the beginning of a continuum of collaboration that spans interprofessional learning (IPL), and which needs research to show IPE and IPL as continuously interwoven into interprofessional practice (IPP) and interprofessional care (IPC).

Article 4 of the Sydney Declaration (All Together Better Health V, 2010) states: “Between ATBH V and ATBH VI the global interprofessional community will undertake to develop a globally agreed-upon set of definitions and descriptions that capture interprofessional education, learning, practice, and care”. As the tenth anniversary of the signing occurs at ATBH X in 2020, it is clear that the collaborative effort to produce this proposed lexicon is apposite, timely and urgent.

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# Introduction

With the advancement of interprofessional education and collaborative practice, the need for common terminology in the interprofessional field is growing. According to Mitzkat, Berger, Reeves and Mahler (2016), the clarification around the definition of commonly-used interprofessional terminology plays a significant role in the progression of IPECP knowledge and science.

In Article 4 of the Sydney Interprofessional Declaration, a consensus communiqué from the ATBH V conference in Australia (2010), it is stressed that *"… the global interprofessional community will undertake to develop a globally agreed-upon set of definitions and descriptions that capture interprofessional education, learning, practice, and care".*

Hence IPR.Global and Interprofessional.Global established a Terminology Taskforce. As the first step, the taskforce created this proposed lexicon for the interprofessional field based on the current interprofessional literature. This lexicon serves as the starting point in developing global consensus on a set of definitions and descriptions related to interprofessional education, learning, practice, and care.

As next step, IPR.Global and Interprofessional.Global are planning to conduct a web-based global Delphi panel in early 2020.

# Proposed Interprofessional Lexicon

## CORE TERMS

**Competencies for Interprofessional Collaborative Practice (CIPCP)**: The integrated enactment of knowledge, skills, values, and attitudes that enable working together successfully across the professions and with patients, along with families and communities, to improve health outcomes in specific care contexts (Interprofessional Educational Collaborative, 2016).

**Interprofessional Collaborative Person-Centred Practice (IPCPCP)**: IPCPCP refers to a model of collaborative practice that involves a partnership between a team of health/social care professionals and patients/clients/families/communities in a participatory, collaborative and coordinated approach to shared decision-making to deliver the highest quality of care (D'Amour & Oandasan, 2005; Gilbert, 2005; Khalili et al., 2013; Orchard, Curran, & Kabene, 2005).

**Interprofessional Collaborative Practice (IPCP):** IPCP in health-care occurs when multiple health workers from different professional backgrounds provide comprehensive services by working with patients, their families, carers and communities to deliver the highest quality of care across settings (World Health Organization, 2010).

**Interprofessional Education (IPE)**: Occasions when members or students of two or more professions learn about, with and from each other, to improve collaboration, and the quality of care and services (Centre for the Advancement of Interprofessional Education (CAIPE), 2019).

**Interprofessional education and collaborative practice (IPECP):** A term used to describe the total scientific field of study encompassing interprofessional education (IPE) and Interprofessional Collaborative Practice (IPCP); as defined separately in this document (InterprofessionalResearch.Global, 2019).

**Interprofessional Socialisation (IPS)**: IPS refers to the process in which individuals develop a dual professional and interprofessional identity (dual identity) through acquisition of both professional and interprofessional beliefs, values, behaviours and commitments to become 'collaborative practice-ready' to practice collaboratively with others to improve quality of care and services (Khalili, 2019; Khalili et al., 2013)

**IPECP Research**: The systematic investigation into and study of IPECP science, materials and sources for the purposes of advancing the scholarly field in order to establish facts and knowledge and reach new conclusions in IPECP (Gilbert, 2013; Lutfiyya et al., 2016).

## PERIPHERAL TERMS

**Collaborative person-centred care (CPCC)**: A type of arrangement designed to promote the involvement of patients/clients and their families within a context of health or social care (Barr et al., 2005; Reeves, Lewin, Espin, & Zwarenstein, 2010).

**Collaborative Practice-Ready**: Refers to individuals/students who feel and demonstrate competence and confidence in working collaboratively within an interprofessional team, to improve quality of care and/or to address the quadruple aim (Khalili, 2019; World Health Organization, 2010).

**Interprofessional collaboration**: A type of interprofessional work that involves different health or social care professions regularly coming together to provide services. It is characterized by shared accountability and interdependence between individuals, as well as clarity of roles and goals (Barr et al., 2005; Reeves et al., 2010).

**Interprofessional coordination**: Interprofessional coordination is a type of work similar to interprofessional collaboration (see above) as it involves different health and social care professions regularly coming together to provide services with clear roles and goals. It differs from collaboration as it is a 'looser' form of working arrangement, whereby shared accountability and interdependence are less important (Barr et al., 2005; Reeves et al., 2010).

**Interprofessional learners**: Learners (students, educators, professionals) from two or more distinct roles/professions who learn about, with and from each

to improve collaboration and the quality of care (Barnsteiner, Disch, Hall, Mayer, & Moore, 2007).

**Interprofessional networking**: Interprofessional networking is a type of work similar to interprofessional collaboration (see above) but involving loosely organised groups of individuals from different health and social care professions who meet and work together on a periodic basis. Shared team identity, clarity of roles/goals, interdependence, integration and shared responsibility are less essential than in coordination (Barr et al., 2005; Reeves et al., 2010).

**Team-based health care**: Team-based health care is the provision of health services to individuals, families, and/or their communities by at least two health providers who work collaboratively with patients and their caregivers—to the extent preferred by each patient—to accomplish shared goals within and across settings to achieve coordinated, high-quality care (Mitchell et al., 2012).

## SUPPLEMENTAL TERMS

**Dual Professional & Interprofessional Identity (Dual Identity)**: Refers to the development of robust sense of belonging to both own profession (In-Profession Favouritism) and to the interprofessional community (Interprofessional Favouritism) in which individuals view themselves simultaneously as a member of own profession and the interprofessional team/community (Khalili, 2019; Khalili et al., 2014, 2013).

**Evidence-based**: Refers to situations where individuals conscientiously, explicitly, and judiciously use the current best evidence in making decisions about the work they are doing (Woodbury & Kuhnke, 2014).

**Evidence-informed**: Refers to situations where individuals not only consider the current best evidence in making decisions about the work they are doing, but also, they utilize individual expertise, the resources, and the needs of the service users to draw sound judgment (Woodbury & Kuhnke, 2014).

**Interdisciplinary** relates to collaborative efforts undertaken by individuals from different disciplines (such as psychology, anthropology, economics, geography, political science and computer science) who work together on the same project/issue to analyse, synthesise and harmonise links between them into a coordinated and coherent whole (Barr, 2009; Collin, 2009; Dyer, 2003; Khalili et

al., 2013; Lawrence, 2010; Mitchell, 2005).

**Interprofessional programme evaluation**: Is the systematic assessment of the design, implementation or results of IPECP initiatives for the purposes of learning or decision-making. Interprofessional impact evaluation should explore the 'how and why' in addition to the 'what', should include patient/client/family/community experiences, include purposeful alignment between the education and health delivery systems, evaluate collective outcomes by a mixed-methods approach and include an economic analysis (ROI) (Cox, Cuff, Brandt, Reeves, & Zierler, 2016).

**Intraprofessional** is a term which describes any activity which is undertaken by individuals within the same profession (Barr, 2009; Collin, 2009; Dyer, 2003; Lawrence, 2010; Mitchell, 2005).

**IPECP Quality Improvement**: Is a systematic approach to making changes in IPE and/or IPCP that lead to better patient/population outcomes (health), stronger system performance (care) and enhanced professional development. It draws on the combined and continuous efforts of all stakeholders — health care professionals, patients and their families, researchers, planners and educators — to make better and sustained improvements (adapted from Batalden and Davidoff (2007).

**Multidisciplinary** refers to activities performed by members from different academic disciplines (psychology, sociology, mathematics) who work independently, in parallel or sequentially on different aspects of a project within their disciplinary boundaries. In healthcare settings, this term has historically been used erroneously in place of interprofessional. In medicine, it can refer to collaborative work among professionals from different specialties (e.g. neurologists, cardiologists, surgeons) (Barr, 2009; Collin, 2009; Dyer, 2003; Khalili et al., 2013; Lawrence, 2010; Mitchell, 2005).

**Patient Safety**: Refers to the application of safety science methods into, and an attribute of health care systems that minimizes the incidence and impact of adverse events and maximizes recovery from such events (Emanuel et al., 2008).

**Professional Identity**: Refers to the development of sense of belonging to own profession through acquisition of professional beliefs, values, behaviours and commitments, while individuals may develop neither bias nor favouritism

towards other related professions (Clark, 1997; Khalili, 2013; Öhlén & Segesten, 1998).

**Professions** are occupational groups who in general provide services to others, such as nurses or social workers. It can be used as a term of self-ascription to avoid the need to apply regulatory criteria which differ between groups (Barr, 2009; Collin, 2009; Dyer, 2003; Lawrence, 2010; Mitchell, 2005).

**Quadruple Aim**: Refers to an approach to optimizing health system performance through improving the health of populations (better health), enhancing the experience of care for individuals (better care), and reducing the per capita cost of health care (better value), improving the work life of health care providers (better work experience) (Bodenheimer & Sinsky, 2014; Feeley, 2017).

**Service providers (Health Care Providers, practitioners, Clinicians, health workers)**: Refers to a trained individual who provides health/social services to patients/client/families/communities to address their health/wellbeing needs (World Health Organization, 2010).

**Service-users (patient/client/family/community)**: Service user refers to individual(s) who use health or social care services (Scammell, Heaslip, & Crowley, 2015).

**Transdisciplinary** is a term which describes an evolution in the team approach where team members share knowledge, skills, and responsibilities across disciplinary boundaries with a certain amount of boundary blurring between disciplines and implies cross-training and flexibility in accomplishing tasks (Barr, 2009; Collin, 2009; Dyer, 2003; Lawrence, 2010; Mitchell, 2005).

**Transprofessional** is an activity designed to promote generic working: a process whereby the activities of one professional group are undertaken by members of another (Barr, 2009; Collin, 2009; Dyer, 2003; Lawrence, 2010; Mitchell, 2005)

**Unidisciplinary** is an activity undertaken by one scientific discipline alone (Barr, 2009; Collin, 2009; Dyer, 2003; Lawrence, 2010; Mitchell, 2005).

**Uniprofessional Education**: Refers to a model of higher education wherein learners from each discipline/program learn and socialize in isolation from those in related disciplines/programs which leads learners to develop uniprofessional Identity (Clark, 1997; Khalili et al., 2014).

**Uniprofessional Identity**: Refers to the development of strong favouritism

towards own profession (In-Profession Favouritism) while developing bias and prejudice against those in other related profession (Out-Profession Discrimination) to improve own self-concept (Khalili et al., 2014, 2013).

**Uniprofessional** is an activity undertaken by one profession alone (Barr, 2009; Collin, 2009; Dyer, 2003; Khalili et al., 2013; Mitchell, 2005).

We would like to emphasize that this *proposed lexicon for the interprofessional field* is a working document of a set of interprofessional definitions and descriptions for further input, discussion, and adjustment. We will

continue developing a global consensus on a set of definitions and descriptions that capture interprofessional education, learning, practice and care. As next steps, we are planning a web-based global Delphi panel early in 2020.

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