



NATIONAL CENTER for
INTERPROFESSIONAL PRACTICE
and EDUCATION

Association for the Behavioral Sciences and Medical Education
October 15, 2015

The State of the Science of Interprofessional Practice and Education

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Professor, Pharmaceutical Care and Health Systems

The National Center for Interprofessional Practice and Education

nexusipe.org

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NATIONAL CENTER for
INTERPROFESSIONAL PRACTICE
and EDUCATION

INFORMING

CONNECTING

ENGAGING

ADVANCING

We're shaping the future of our evolving health care landscape by creating a true partnership and shared responsibility between practice and education – what we call the “Nexus” – to enhance the patient experience, improve population health and lower costs.



1,426

IPE
RESOURCES

INFORMING

Browse resources and stories and learn about us and the Nexus.

2,091

COMMUNITY
MEMBERS

CONNECTING

View the member directory, scan resource collections and join a group discussion.

37

EDUCATIONAL
OFFERINGS

ENGAGING

Find an educational opportunity and the latest IPE events.

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RESEARCH
PROJECTS

ADVANCING

Learn about work occurring at sites across the U.S. and read our latest research.

JOIN THE CONVERSATION

OUR LATEST STORIES

UPCOMING EVENTS

Objectives

- To familiarize learners with the current state of interprofessional practice, research and education.
 - describe the current state of IPE, CP research as an intersected activity taking place within a nexus
- To demonstrate how the National Center on Interprofessional Practice and Education is filling a decades-long gap linking interprofessional education, collaborative practice and big picture outcomes.
 - describe the National Center's three-pronged strategical approach to research, intervention testing and informatics
- To share the current informed thinking of the Institute of Medicine on interprofessional education and collaborative practice research.
 - describe the recent Institute of Medicine report of IPE and CP research and evaluation



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

Interprofessional, collaborative practice “occurs when multiple health workers **and students** from different professional backgrounds provide comprehensive health services by working with patients, their families, carers (caregivers), and communities to deliver the highest quality of care across settings.”

Adapted from:

The Centre for the Advancement of Interprofessional Education, UK, 1987

World Health Organization, Framework for Action on Interprofessional Education and Collaborative Practice, 2010.



A bit about our language...

The “New” IPE

Interprofessional Practice and Education

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We believe high-functioning teams can improve the experience, outcomes and costs of health care.

National Center for Interprofessional Practice and Education is studying and advancing the way stakeholders in health work and learn together.

National Center Funders

- Health Resources and Services Administration Cooperative Agreement Award No. UE5HP25067
 - Robert Wood Johnson Foundation
 - Gordon and Betty Moore Foundation
 - Josiah Macy Jr. Foundation

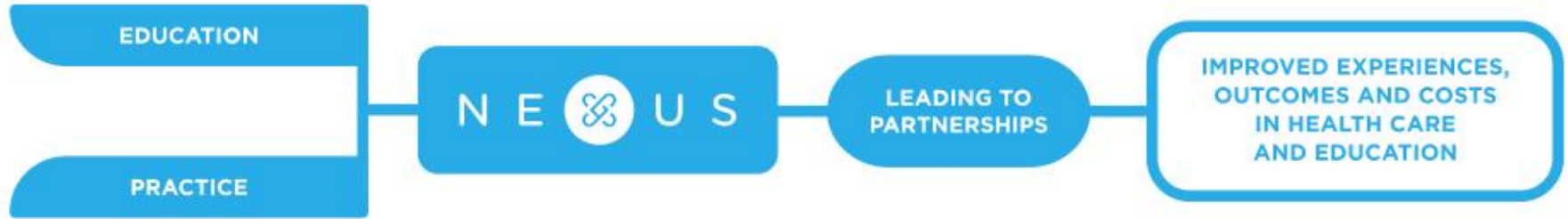


To provide the **leadership, evidence** and **resources** needed to guide the nation on the use of interprofessional practice and education as a way to enhance the experience of health care, improve population health, and reduce the overall cost of care.



The Nexus: Our Vision for Health

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- Improving quality of experience for patients, families, communities and learners
- Sharing responsibility for achieving health outcomes and improving education
- Reducing cost and adding value in health care delivery and education

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The National Center began with a successful response to a 2012 funding opportunity based on the following HRSA Principles:

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A coordinating center for interprofessional education and collaborative practice will provide **leadership, scholarship, evidence, coordination and national visibility** to advance interprofessional education and practice as a viable and efficient health care delivery model.



Looking Ahead: Today's Trends and Game-Changers

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New Models of Care

Disruptive innovations

Value-based payment

The emergence of “boundary spanning roles”

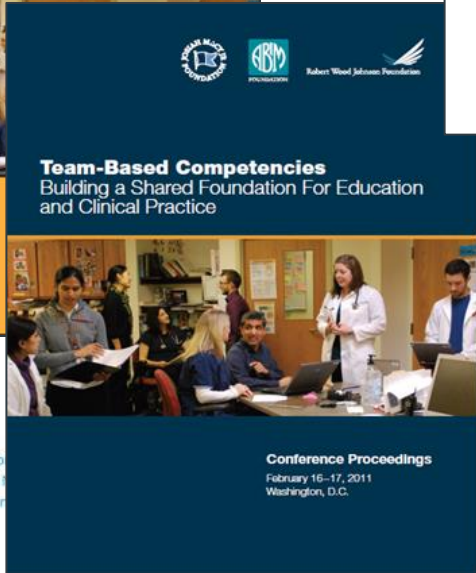
Disconnect between higher education and health transformation

Urgent need for new models of real-time data collection, research and evaluation to drive workforce planning and decisions



Educational Game Changers

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ABOUT THE IOM | REPORTS | ACTIVITIES | MEETINGS

Explore by Topic | Q, Keyword Search

Activity

Global Forum on Innovation in Health Professional Education

Type: Forum
Topics: Education, Global Health, Health Care Workforce
Board: Board on Global Health

Activity Description

The Global Forum is an ongoing, convening activity of the IOM that brings together stakeholders from multiple nations and professions to network, discuss and illuminate issues within health professional education. Currently, there are over 60 appointed members to the Forum who are academic experts and health professionals representing 18 different disciplines from 9 countries. Of these members, 46 are sponsors.

Report Releases

Empowering Women and Strengthening Health Systems and Services Through Investing in Nursing and Midwifery Enterprise: Lessons from Lower-Income Countries: Workshop Summary
Released: February 9, 2015

Building Health Workforce Capacity Through Community-based Health

Competency Domains

1. Values/Ethics
2. Roles/Responsibilities
3. Interprofessional Communication
4. Teams and Teamwork

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What will be the impact on workforce of Secretary Burwell's announcement on value-based payment goals?

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Principles:

Incentives to motivate higher value care

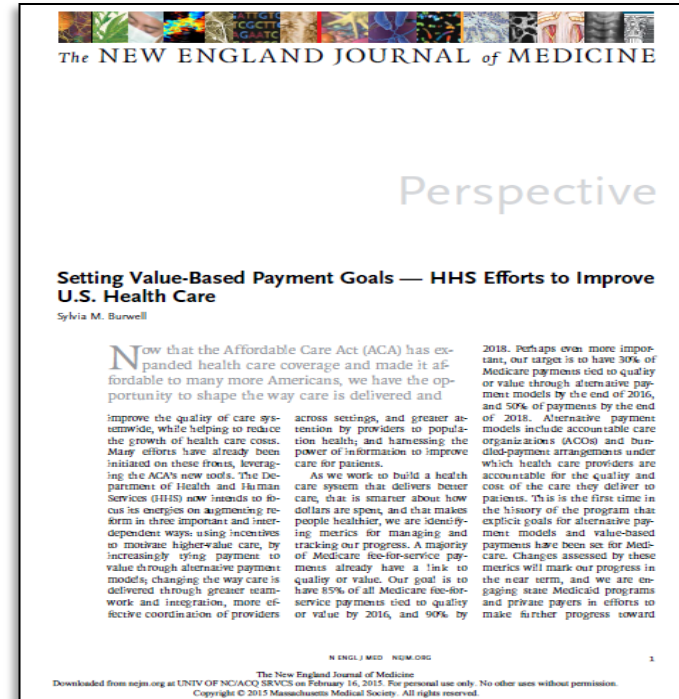
Alternative payment models

Greater teamwork and integration

More effective coordination of providers across settings

Greater attention to population health

Harness the power of information to improve care for patients



The State of Interprofessional Practice and Education Research



Issues in the field: Difference or not?

The bottom line:

“Does interprofessional education and interprofessional collaborative practice make a difference to health care and patient/health outcomes?” (John Gilbert, 2013)

Best response as told by Gilbert:

“Interprofessional education [and collaborative practice] is a great truth awaiting scientific confirmation”. (Dewitt “Bud” Baldwin, MD, 2013)

Gilbert, J.H.V. (2013). Interprofessional – education, learning, practice and care. *Journal of Interprofessional Care*, 27: 283–285.



Issues in the Field: Growth in Research

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1970 to 2010: Prolific area of inquiry

IP Research	1970	2010	% Change
# of IP-related publications	356	8,519	+ 2293%
# of journals publishing IP research	209	2867	+ 1272%

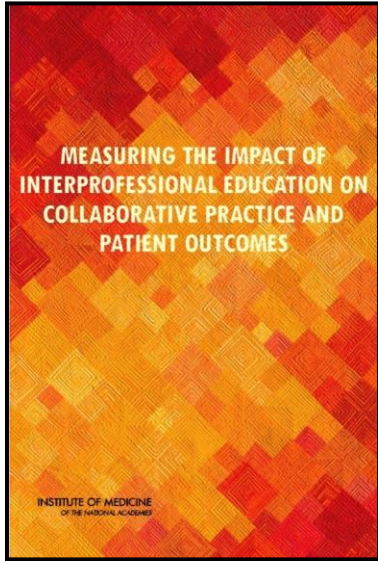
Paradis, E. Reeves, S. (2013) Key trends in interprofessional research: A macrosociological analysis from 1970 to 2010. *Journal of Interprofessional Care*, 27: 113 – 122.



2014 National Center Scoping Review Yielded:

- **very little IPECP research has dealt with big picture health-related outcomes,**
- **the literature on the effectiveness of healthcare teams has yielded mixed results,**
- **IPECP competencies have been defined and partially adopted in health professions education but there is increasing recognition that additional competencies might be needed,**
- **there remains a gap between the identification and subsequent application of educational (pre- and post-licensure) best practices, and**
- **despite the availability of a number of IPECP measurement instruments, sound, reliable and validated tools are in short supply.**





IPE can improve learners' perceptions of interprofessional practice (IPP) and enhance collaborative knowledge and skills.

Establishing a direct cause-and-effect relationship between IPE and patient, population, and system outcomes has proven more difficult.

Lack of a well-established causal relationship between education and health and systems outcomes is not unique to IPE.



- Plagued by terminology problems and concerns
- Research questions mostly concentrated on local, unique program/project implementation and assessment
- Little “mainstream” publication

As a result, despite this long history, the actual sphere of influence emanating from IPECP research has been limited.



Problems with Measurement and Assessment

Few appropriate IPECP measurement and assessment instruments have undergone a rigorous validation process (Thannhauser et al., 2010).

Majority of work attitudinal: A lot of “happy” people

The Canadian Interprofessional Health Collaborative in 2012 published An Inventory of Quantitative Tools to Measure Interprofessional Education and Collaborative Practice

To RIPLS or Not To RIPLS: That is only part of the question



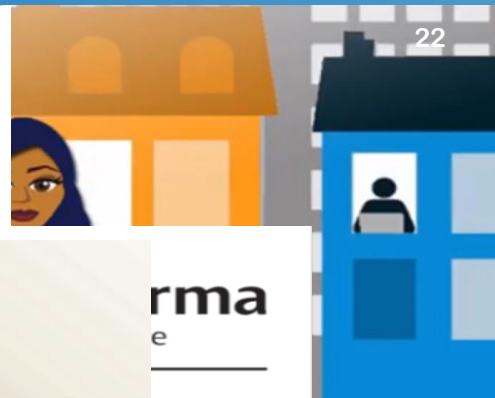
- A number of researchers have taken up the challenge of developing a research agenda for this area of inquiry (Thistlethwaite et al., 2012; Gilbert, 2013; Thistlethwaite, 2012; IOM, 2015).
- The NCIPE research agenda, 2014 - 2015



How the National Center on Interprofessional Practice and Education is filling a decades-long gap linking interprofessional education, collaborative practice and big picture outcomes.



■ Interprofessional Education and Collaborative Practice: Welcome to the “New” Forty-Year Old Field



EVALUATING INTERPROFESSIONAL EDUCATION AND COLLABORATIVE PRACTICE:

*What Should I Consider
When Selecting a
Measurement Tool?*

assessment. The actual sphere of influence of this research has been limited. Often discussed separately, this paper places IPE and CP in the same conceptual space. The interface of these form a nexus where new knowledge creation may be facilitated. Rigorous research on IPE in relation to CP that is relevant to and framed by health system reform in the United States (US) is the ultimate research goal of the National Center for Interprofessional Practice and Education at the University of Minnesota. This paper describes the direction and scope for a focused and purposive IPECP research agenda linked to improvement in health outcomes, contextualized by

History

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Delaney

Does intentional and concerted interprofessional education and interprofessional practice:

- improve the triple aim outcomes on an individual and population level?
- result in sustainable and adaptive infrastructure that supports the triple aim outcomes of both education and practice?
- identify ecological factors essential for achieving triple aim outcomes?
- identify factors essential for systematic and adaptive infrastructure in the transformation of the process of care and education?
- identify changes needed in policy, accreditation, credentialing and licensing for health care provision and education?



Strategic Undertakings of the National Center

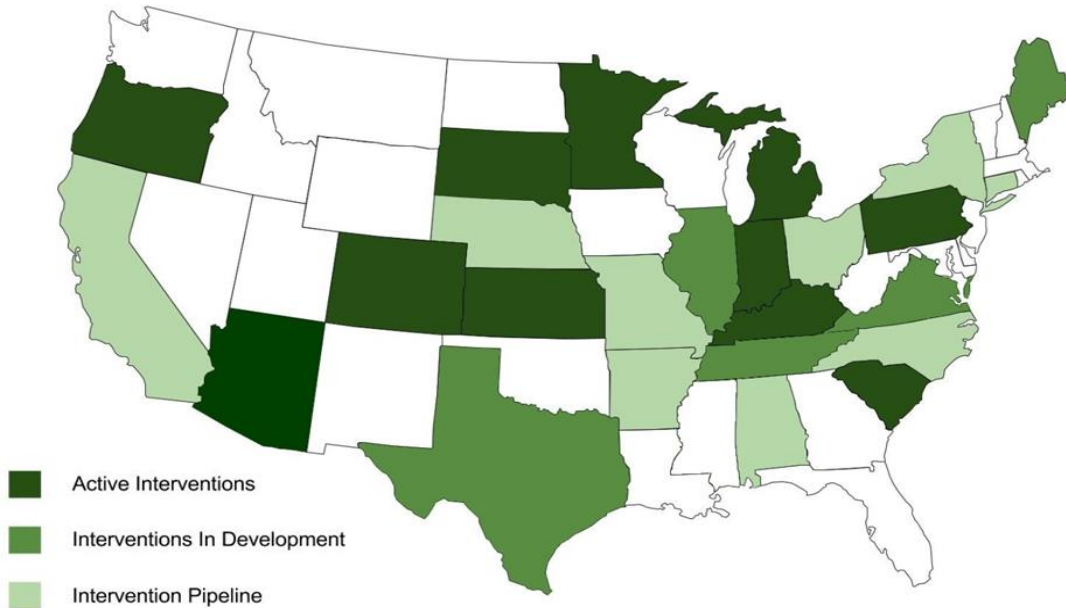
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- Investment in Comparative Effectiveness Research (CER) to answer the questions posed by the National Center's Research agenda
- Nexus Incubator Network to nurture intervention research for data generation and IPECP model testing
- Creation of a sound informatics platform---National Center Data Repository (NCDR) to house generated data for analysis
- Expand and reload the current NCDR Advisory Council
- Establish a subgroup of the NCDR Advisory Council as advisors for data analytics and reporting

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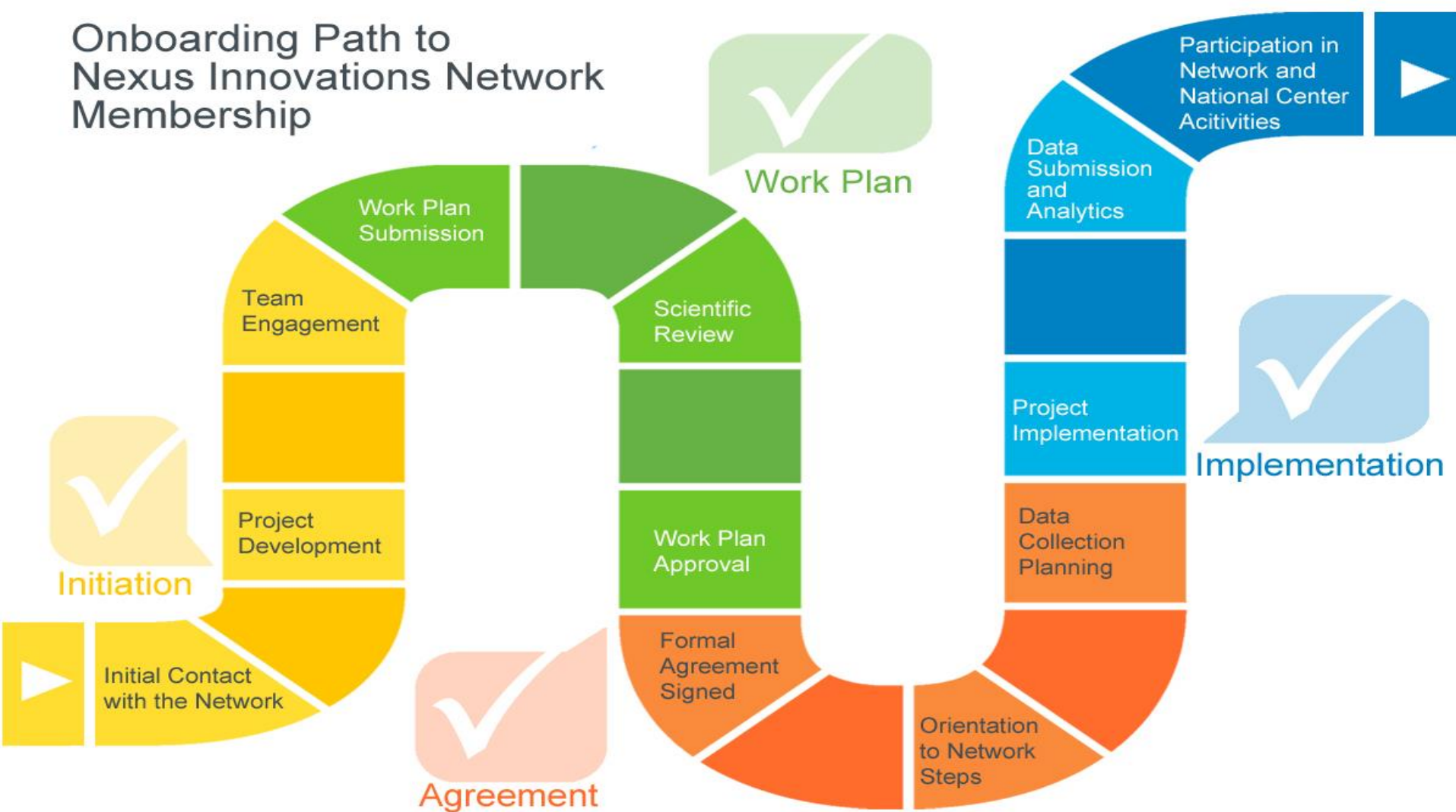


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Onboarding Path to Nexus Innovations Network Membership



The Faculty Preceptor as Nexus: Interprofessional practice and education at the point of primary care

Current situation needing change: In order to scale up current interprofessional efforts, we need faculty preceptors and clinical sites developed where students experience both interprofessional practice and education.

Intervention: Part A: To discern the effects of a faculty development program on preceptor and learner attitudes, knowledge, skills, and behavior regarding IPECP. This package will include interprofessional faculty development materials, interprofessional practice tools, and interprofessional education curricula.

Part B: To discern effects of transforming a traditional primary care clinic into an interprofessional teaching clinic on: a. utilization of interprofessional resources/team members; b. patient outcomes of top three chronic disease diagnoses; c. patient outcomes after utilization of medical-legal partnership clinic; d. patient satisfaction with interprofessional care

Research Question(s): Part A: In clinical preceptors and learners providing care in a traditional primary care setting, what is the effect of an interprofessional and collaborative practice faculty development program on preceptor and learner attitudes, knowledge, skills and behavior compared pre and post intervention?

Part B: What is the impact of the interprofessional experiential model (IPTC and IP education curriculum) on patient outcomes at baseline and every six months and also compared to a matched control group receiving the traditional model of primary care?

Clinical Outcomes:

1) Identifying professions on the interprofessional team and what referrals for team-based care are being made; 2) Identifying who the key cohort of patients that have highly utilized team services are; 3) Identifying the effects of the creation and utilization of a flow sheet to help capture data; 4) Change in key performance measures for each of the 3 disease states; 5) Tracking MLP referrals, 6) Identifying outcomes of the legal cases; 7) Tracking patient satisfaction surveys and patient focus groups

Triple Aim Outcomes Addressed:

The project outcomes are connected to the Triple Aim Outcomes of improving care quality of patients and increase in patient satisfaction for care received.

Ecological Data/Variables:

Focus on chronic disease, lower SES- urban and rural clinics

Study Design with Comparison Groups:

Part A: Longitudinal study to determine the effects of the faculty preceptor at the primary point of care.

Part B: Longitudinal study to determine the effects of the interprofessional experiential model on patient outcomes compared to a matched cohort of patients seen in a traditional primary care model.

The National Incubator Network and the National Center Data Repository

National Center Data Repository (NCDR) has 6 milestones :

1. Conceptual framework and architecture ***completed***
2. Survey development and validation ***completed***
3. Intervention Network development and data input ***completed***
4. Proof of Concept and Preliminary Data Analytics ***readied for publication***
5. Intervention Network expansion ***underway***
6. Analytics and results dissemination

NCDR Preliminary Analytics

- Sufficient data is available from early adopter sites in user and education surveys to permit demonstration of descriptive, univariate, bivariate, and multivariate analysis
- This preliminary information is being prepared for publication as proof of concept



Demonstrate that a big engaged informatics approach can work

Early strong emerging themes:

- ✓ **The redesign of the process of care is about changing culture.**
- ✓ **Moving education and delivery systems requires a compelling vision and case statement.**
- ✓ **The IPECP effort needs to be appropriately resourced.**
- ✓ **Leadership is essential.**



National Center serves as data repository, analytical, and reporting center for HRSA nursing grant awardees NEPQR-ICPC.

- Data storage and analysis are separate from Nexus Innovations Network (NIN)
- A total of 41 awardees will participate – each has defined health outcomes and uses standardized collection methods where possible such as HEDIS and CPAT
- National Center requiring data dictionaries with fields comparable to NIN files so that data is additive to the total analytical framework in NCDR



- Convene key stakeholders to get to know each other as a pre-requisite for successful IPE
- Intentionally teach teamwork knowledge, skills and attitudes/values
- Purposefully use IPE to teach / learn about and address patient safety and quality issues
- Strategically implement IPE as a means to improve access to health care
- Incorporate IPE into health workforce redesign efforts for new models of care
- Intentionally link IPE efforts to improve individual, population, and/or community health outcomes
- Develop and implement IPE models so that they lower costs in: $\sqrt{\text{health care}}$ $\sqrt{\text{education}}$



Current Informed Thinking of the Institute of Medicine on Interprofessional Education and Collaborative Practice Research



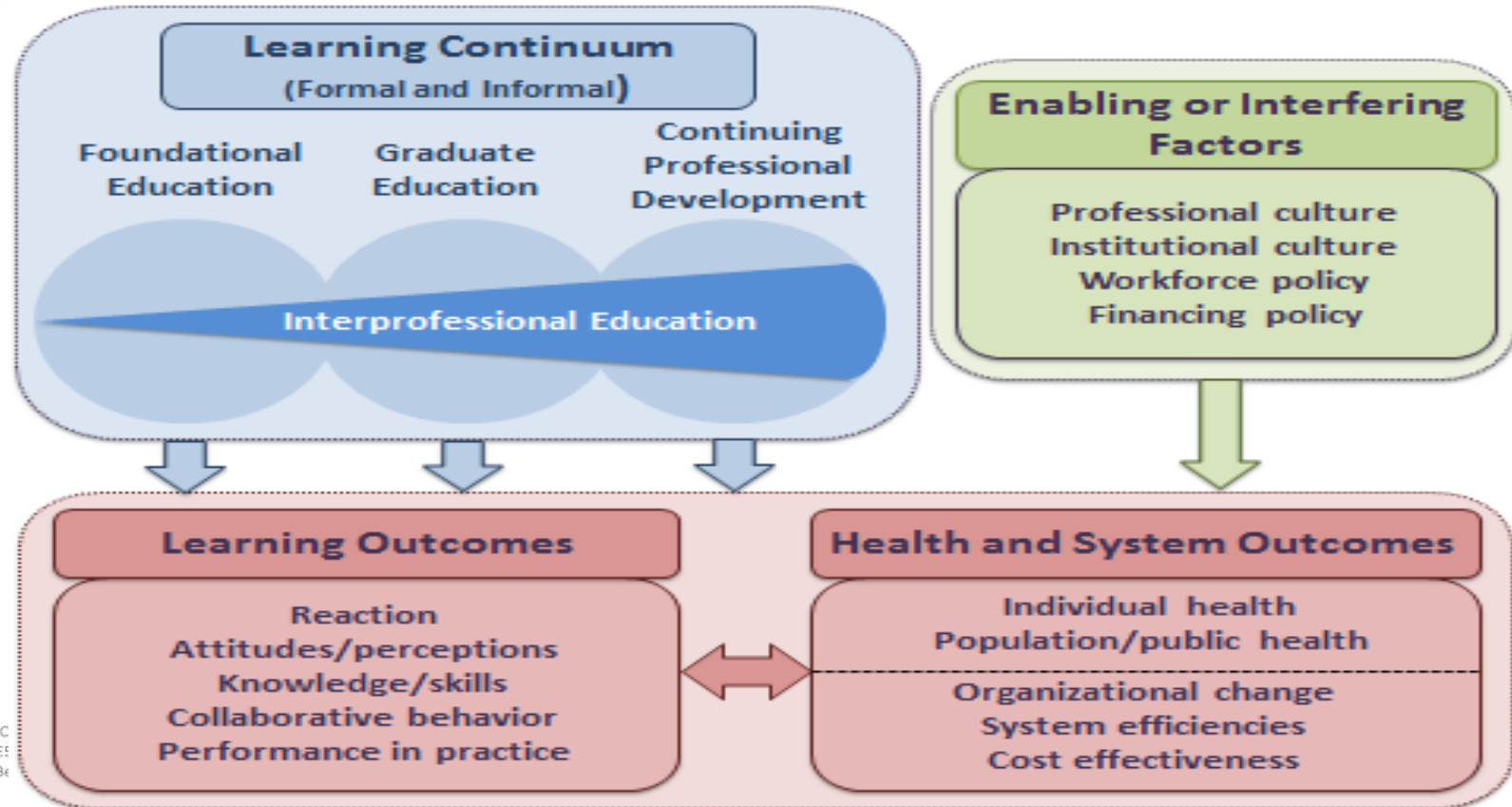
1. More purposeful, well-designed, and thoughtfully reported studies are needed to answer key questions about the effectiveness of IPE in improving performance in practice and health and system outcomes (*better studies*)
2. Without purposeful and more comprehensive system of engagement between education and health care delivery systems, evaluating impact of IPE interventions on health and systems outcomes will be difficult (*alignment*)
3. Having a comprehensive conceptual model would greatly enhance the description and purpose of IPE interventions and their potential impact. Such a model would provide a consistent taxonomy and framework for strengthening the evidence base linking IPE with health and system outcomes (*conceptual model*)



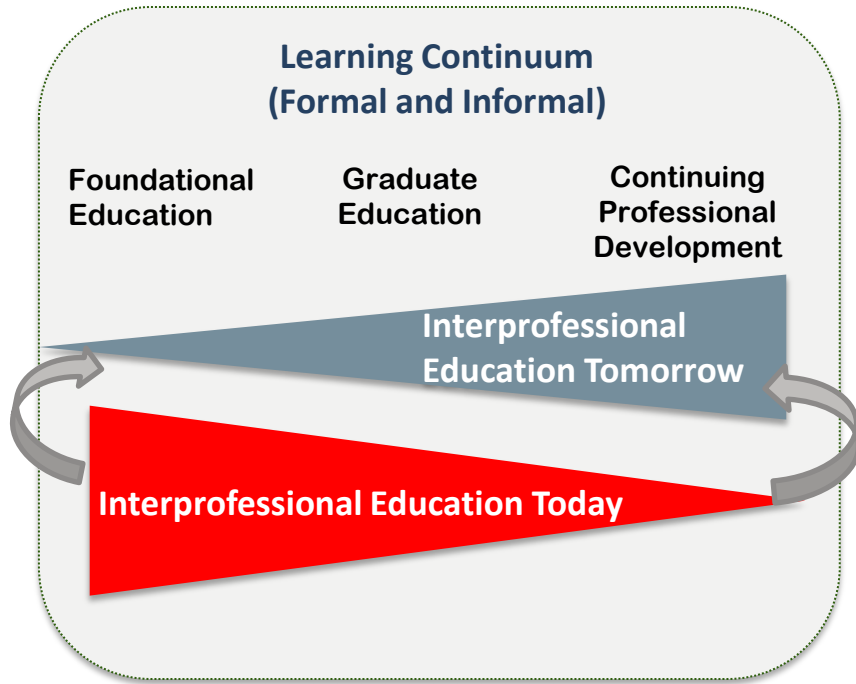
An Interprofessional Learning Continuum Model

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Institute of Medicine, 2015



The 'Reverse Megaphone' Effect



The majority of IPE efforts today occur **early** in the learning continuum (Foundational Education) resulting in lower level learning outcomes (reaction, attitudes/perceptions and knowledge/skills).

The greatest opportunity for collaborative practice is when students/trainees are working together in clinical practice, where relationships are formed and interdependence is readily evident.

If the ultimate goal of IPE is to improve health and system outcomes, education & training should increase across the learning continuum.

At best, there is only a weak connection between formal classroom-based IPE and improved health or systems outcomes.

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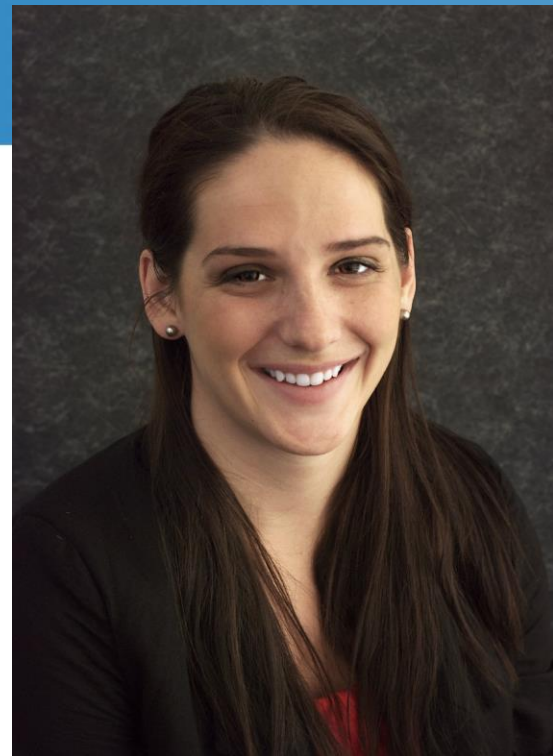


Engage with the Resource Center

Join the IPE movement at nexusipe.org

asknexus@umn.edu for inquiries

Many tools and resources available – webinars, online modules, publications, tools, presentations and more...



Meet Meghan

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Questions and Take Aways. . . .



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Help the National Center learn. . . .

What worked well?

What could we improve?

Any other feedback is welcomed.





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