# Evaluating Interprofessional Education Outcomes in Clinical Settings Testimony for the HRSA Advisory Committee on Interdisciplinary, Community-Based Linkages

#### Christine Arenson, MD

Professor, Department of Family Medicine and Community Health Co-Director, National Center for Interprofessional Practice and Education University of Minnesota January 2021





### Disclosures/Acknowledgements

- I have no disclosures relevant to this presentation, other than my role at the National Center for Interprofessional Practice and Education.
- I would like to acknowledge the work of Dr. Barbara Brandt and the National Center team, who have developed these concepts and tools.
- I would also like to acknowledge our many partners across the United States (70 partners and over 100 IPE programs). We have learned together with them.



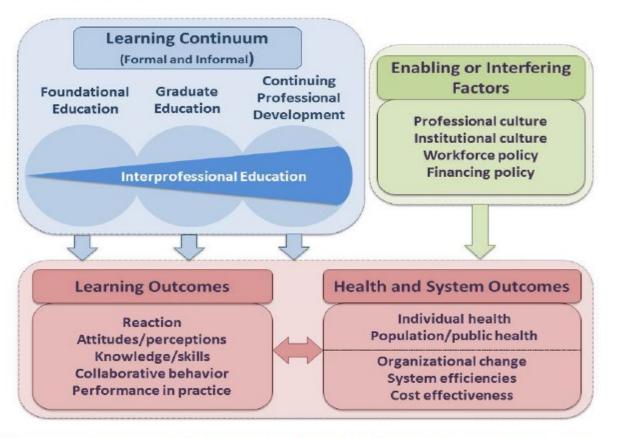
### Building on a Strong Foundation

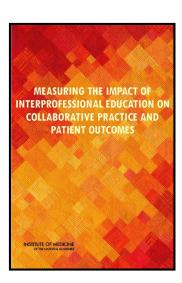
- Our work builds on the IOM model, which built on decades of IPE work.
- We have worked with clinicians, educators, health services researchers, educational psychologists and measurement experts to:
  - Understand what is practical and possible in the interprofessional clinical learning and practice environment.
  - Map variables to track key Quadruple Aim outcomes.



#### Theoretical Framework: IOM Model

FIGURE: The interprofessional learning continuum (IPLC) model



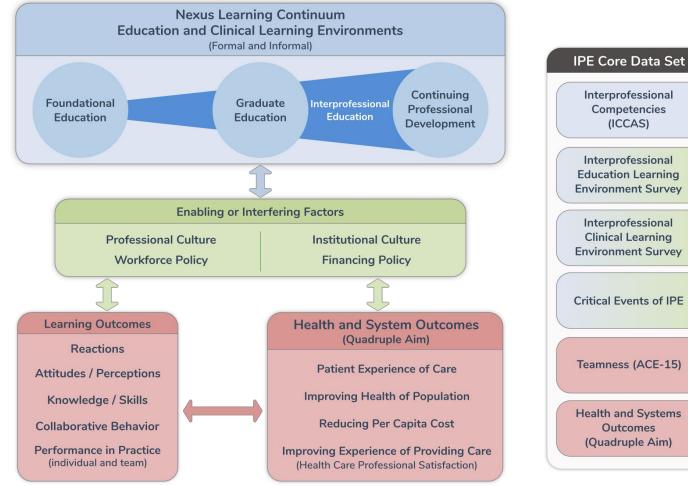


NOTE: For this model, "graduate education" encompasses any advanced formal or supervised health professions training taking place between completion of foundational education and entry into unsupervised practice.





## National Center Expanded Model









### Key Principles

- **The Nexus** Education informed by and within practice, including Academic-Practice and Academic-Community partnerships.
- **Knowledge Generation** Interprofessional informatics, action research, developmental evaluation; real time evidence to inform practice.
- Place-Based IPE Think globally, act locally; design and measure impact on local community, address inequity and improve health.
- Starting with the Patient— Design interventions with deep patient/family/community/population engagement and work back from there.
- Expanded Definition of Who Is on the Team A broad spectrum of health professionals and paraprofessionals, patients and communities but also social scientists, data scientists, educators — to maximize patient/ community engagement, design, and knowledge generation.
- Quadruple Aim Improve experience of care, improve health, increase value, support the healthcare team.



#### True North

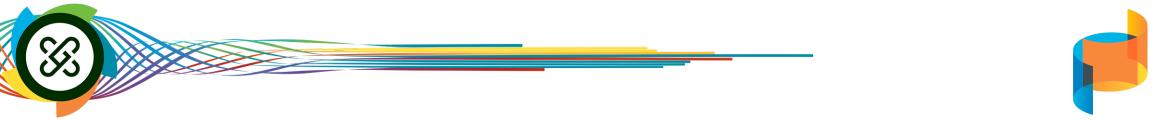
If we are not having a positive impact on health – including addressing upstream factors (SDOH) and creating health equity – we have failed.





# Critical Success Factors for Community-Engaged, Practice-Based Assessment of IPE

- Patients, families, and communities be fully engaged in the design, implementation and assessment of **CARE**.
- Interprofessional community-engaged EVALUATION teams to effectively study best strategies for supporting evolving interprofessional practice teams to achieve Quadruple Aim outcomes and health equity.
- Interprofessional work-based **LEARNING** for emerging/transforming practice teams to realize the potential of true collaborative interprofessional, patient-engaged practice.



### National Center IPE Knowledge Generation

- Blends what is currently known about interprofessional research and evaluation approaches to leverage the burgeoning science of big data used in health systems worldwide.
- Creates the opportunity to collect consistent data across sites, to develop knowledge of common elements of effective interprofessional practice and education.
- Supports collaboration by linking locally generated data on individual programs to additional data across programs, enabling a virtuous cycle of improvement.



# Mapping the IPE Core Data Set

Components	Interprofessional Learning Continuum	Quadruple Aim Outcome(s)
Interprofessional Collaborative Competencies (ICCAS)	Learning Outcomes	
Interprofessional Education Learning Environment Survey (IELES)	Learning, Health and System Outcomes	Provider/student wellbeing, Cost
Interprofessional Clinical Learning Environment Survey (ICLES)	Learning, Health and System Outcomes	Provider wellbeing, Cost
Critical Events of IPE	Enabling and Interfering Factors	Provider/ student wellbeing, Cost
Collaborative Environment (ACE-15)	Provider/Staff wellbeing	Provider/Staff wellbeing
Quadruple Aim Outcomes	Health and System Outcomes	Patient Experience, Population Health, Cost

# Collecting and Sharing Health and System Outcomes Data

IPE innovators are working with a wide variety of community partners and practice settings. The following are exemplar sources of health and system outcomes data.

Health & Systems Data Type:	Data Sources and/or Instruments:
Patient/client/people/families use of services, targeted outcomes	Electronic Health Records (EHR), other patient/client records
Patient health-related quality of life, self-report	Short Form Health Survey (SF-12 or SF-36)
Patient/client/people/families experience, satisfaction	CAHPS or other measures of experience with care
Health professionals and practice setting staff job satisfaction, retention, perceptions of working environment	Staff, Professionals Satisfaction Surveys, Human Resources records, etc.

#### Critical Events of IPE: Qualitative Evidence

- Identifying "forks in the road" that impact program outcomes
  - Need to change program strategy/ plan significantly
  - Key staff member departure or addition
  - Change in key educational organization partner
  - Change in key practice organization partner
  - Unforeseen external forces
  - Money and resources
  - Difficulty collecting data for evaluation purposes



#### Value of Tracking Critical Events

- Critical events may be enabling or interfering factors to program effectiveness and sustainability
- Opportunity for the IPE team to reflect, assess, and redirect efforts as needed
- Provide critical understanding and timeline of factors impacting the local program
- Examining Critical Events summaries across programs has facilitated important learnings around common success factors and strategies for addressing interfering factors and leveraging enabling factors



#### Summary

- IPE in in the Nexus of practice and education enables learning for students and practicing health care teams while improving meaningful Quadruple Aim outcomes for individuals and populations
- Real-time developmental evaluation of IPE allows for continuous quality improvement at the local level
- A Core Data Set of common, cross cutting IPE metrics allows real-time learning and quality improvement of individual programs and crossprogram learning to inform IPE broadly
- Tracking Critical Events of IPE provides local teams a structured opportunity to assess, reflect and address enabling and interfering factors, and informs future program design



#### References

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