



Assessment and Evaluation in IPE: Lessons Learned from a Multi-Methods Study

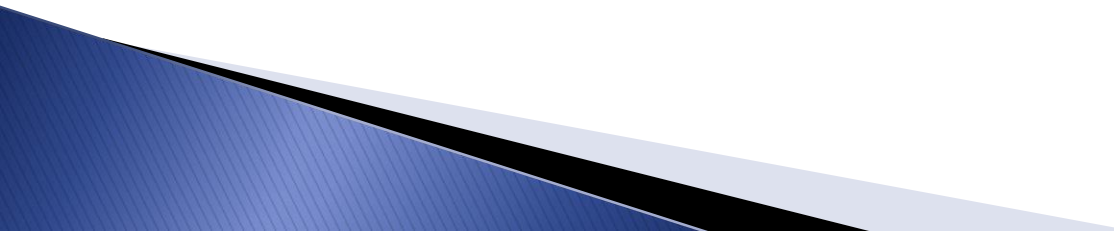
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Session Objectives

- Describe multi-methods study which:
 - Examined methods and tools to assess learner and team interprofessional competencies
 - IPEC Competencies
 - Examined IPE program evaluation approaches
- Discuss learner assessment and program evaluation needs in IPE

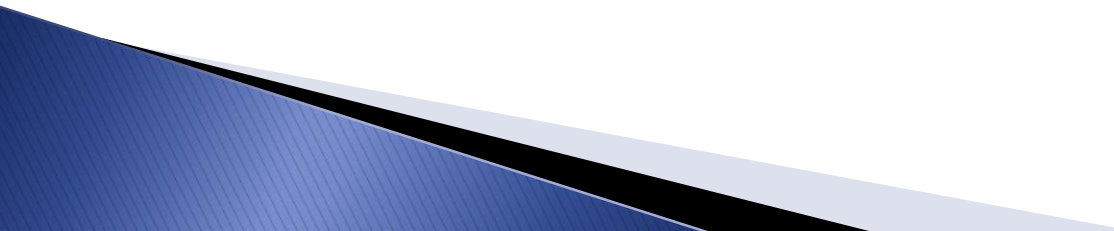
Project Goal

- Promote sustainable IPE programs through delineation of best practices
 - Focus on learner assessment and program evaluation processes
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Clarification of Terms

- Assessment: measurement of performance (skill/knowledge attainment)
 - Measures “people”
- Evaluation: examines the process
 - Measures “things,” e.g., on the program level
 - Did the intervention do what it is supposed to do?

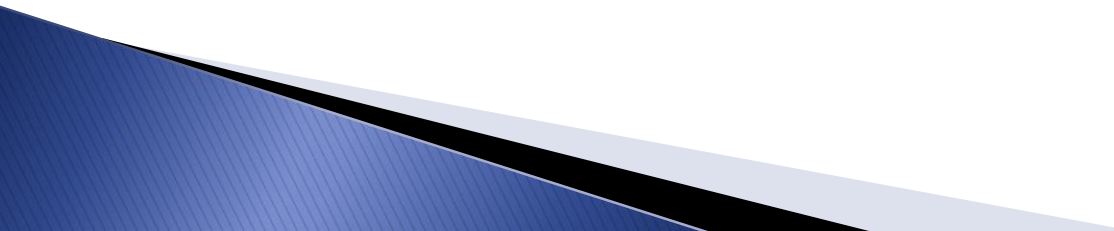
Mixed Methods Study

- Interviews with IPE program leaders
 - Literature review → “review of reviews”
 - Mapping tools to IPEC competencies
 - Expert research meeting
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Interviews

- Semi-structured interviews with
 - 20 IPE program leaders in the U.S. & Canada
 - Focus on assessment/evaluation approaches at learner, team, and program levels
 - What approaches and tools used
 - Challenges
 - Lessons learned and associated recommendations
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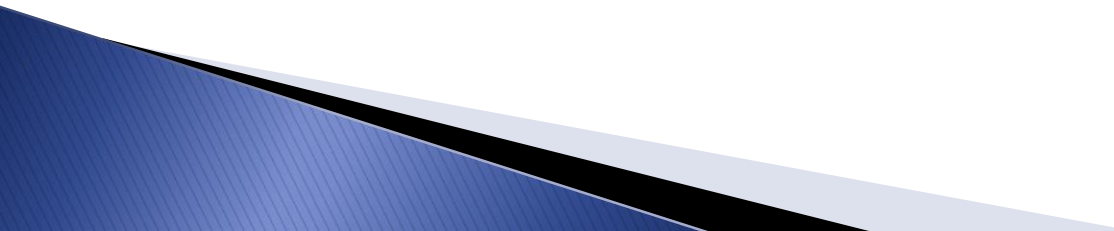
Interviews, continued

- Data pooled into common file for analysis
 - Analysis of cross-cutting themes, commonalities, and major outliers
 - Iterative process involving research team
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Literature Review

- Initial article identification in electronic databases on assessment and evaluation in IPE and associated terms (1960–2012)
 - 2,173 articles identified; further examination yielded 807
- Hand search of *Journal of Interprofessional Care* and other open sources
- Key review articles identified^{1–9}
- “Review of reviews”

Expert Meeting

- 10 key leaders and 2 trainees from U.S. & Canada, diverse perspectives represented
 - Provided project initial findings to group
 - Asked about perceived gaps, needs, recommendations and ideal IP learner assessment
 - Meeting notes content analyzed for common themes
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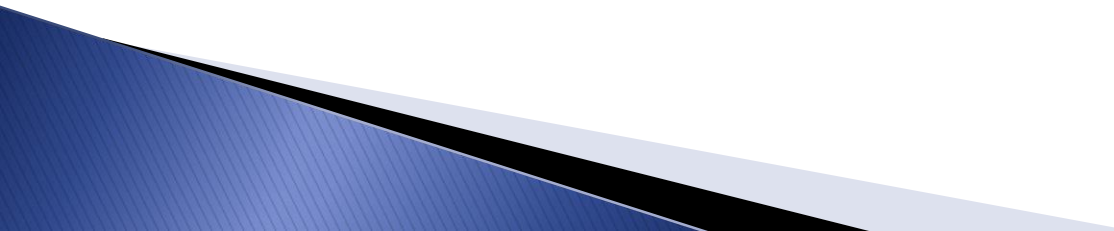
Findings – Interviews

- Diverse methods and tools used – qualitative and quantitative
- Most assessment at individual level; very little at level of team
 - Most around attitudes/perceptions
- Locally developed instruments; some use of validated instruments
 - RIPLS¹⁰, IEPS¹¹ most common

Findings – Interviews

- Program evaluation tied to learner outcomes
 - Counts of attendance
 - Attitudinal changes
 - Satisfaction
 - Focus groups/interviews
 - Faculty perspectives
- Little use of evaluation frameworks in U.S, such as Kirkpatrick Barr model¹², logic models

Findings – Interviews

- Need for robust measures
 - Integrate assessment and evaluation at beginning of activity/program implementation
 - Evaluation is challenging
 - More data collected than can be easily analyzed
 - Analysis takes time and expertise
 - Dedicated resources needed
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Findings – Literature Review

- Two excellent sources for quantitative instruments
 - “An Inventory of Quantitative Tools to Measure IPE and Collaborative Practice” from CIHC¹
 - “Measuring Teamwork in Health Care Settings: A Review of Survey Instruments” by Valentine et al²

Findings – Literature Review

- Some evidence for positive impact on delivery of care and patient outcomes^{3,4}
 - Improved organizational practices (use of guidelines, protocols, shared records)
 - Improved patient satisfaction
 - Possibly, improved clinical outcomes (e.g., infection rates, length of stay)

Findings – Literature Review

- IPE appears to positively impact learners' attitudes and knowledge / skills^{4,5}
 - Value IP experience; change in perceptions of other professions; change in views of IP collaboration
 - Enhanced understanding of other professions; knowledge of IP collaboration and development of associated skills

Findings – Literature Review of IPE Evaluation

- Small and growing evidence that IPE and IPC are “effective”...however
 - Need for longitudinal study
 - Need for consistency and quality in research – local context predominates reports
 - Theory often absent to guide interventions and research

IPEC Competencies¹³ Mapping

- Mapping challenging due to competency language (framed holistically)
 - Considerable overlap between evaluation approaches and competency domains
 - Mapped approaches to assessment of Knowledge, Attitudes, Skills and Behaviors to IPEC competency domains

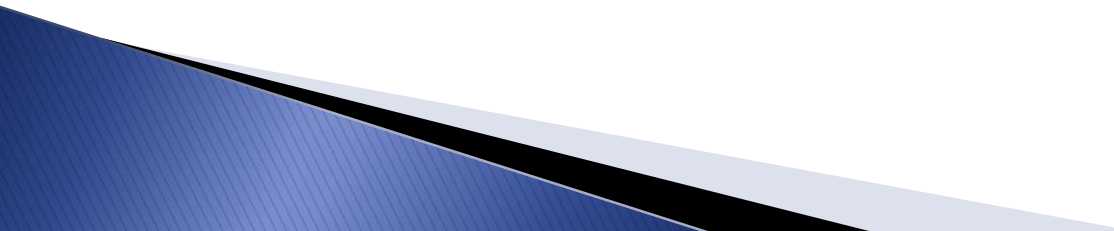
Attitudes (Values/Ethics)

Quantitative measures

- Use of existing instruments
 - Teams and teamwork (ATHCT¹⁴)
 - Toward IPE/collaboration (RIPLS¹⁰, IEPS¹¹)
- Use of institutionally developed questionnaires to address local objectives

Attitudes (Values/Ethics)

Qualitative approaches

- Interviews
 - Reflective essays/reports
 - Focus groups/debriefings
 - Group reports/projects/products
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Knowledge (Roles / Responsibilities)

- Institutionally developed surveys/tools
 - Issues of reliability and validity
- Self report related to skills/knowledge
- Knowledge tests

Behaviors (IP Communication)

- Individuals
 - Simulations¹⁵, OSCE type formats
 - Chart audits (reference to other professions)
 - Preceptor/Observer ratings
 - ICAR¹⁶
 - IPP¹⁷
 - Multi-source feedback
 - ABIM TEAM¹⁸ tool for inpatient physicians

Behaviors (Teams and Teamwork)

- Team
 - Simulation events
 - Disaster 101¹⁹
 - SIRE²⁰
 - Self-assessment/team climate scales
 - Relational Coordination²¹
 - Direct observation (team performance scales)

Program Evaluation

- Learner outcomes
- Learner and teacher satisfaction
- Count of participants
- Interviews/focus groups
- “Institutional Culture”
 - APTR instrument,²² IP-COMPASS,²³
institutionally focused items

Findings – Expert Meeting

- Most programs primarily focused on curricular implementation
- Need to catalogue existing resources
 - Help programs avoid re-inventing the wheel
 - e.g. CIHC¹, MedEdPORTAL²⁴, and the National Center²⁵
- Robust measures of learners needed, including direct observation
- Use of developmental models, such as Milestones²⁶

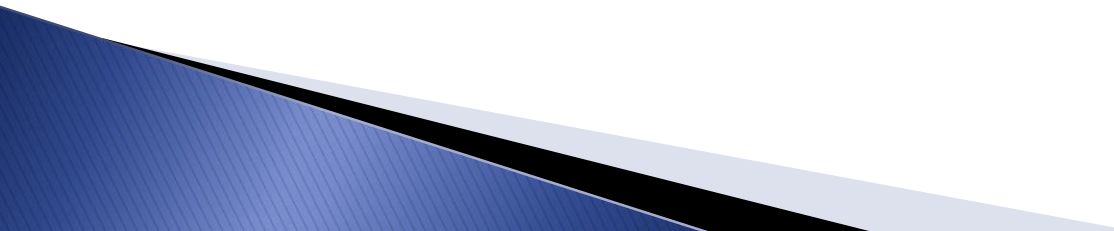
Conclusions

- Growing evidence for effectiveness of IPE and IPC
 - IPE linked to attitudes
- Few studies reporting assessment of behaviors

Conclusions

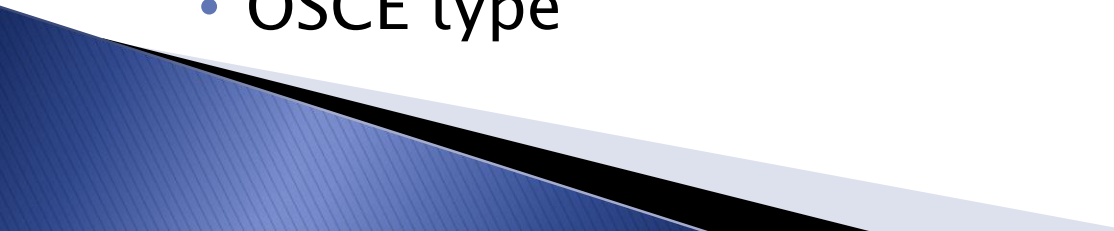
- Multiple tools exist
 - Many focus on attitudinal dimensions
 - Some focus on team self-assessment or multi-source feedback
- Few behaviorally-based assessment tools exist
 - For individuals and teams

Conclusions

- The IPE field primarily focused currently on developing and implementing curricula
 - Less emphasis on learner assessment and program evaluation
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Thoughts for the Future

Based on our research, we see the following opportunities:

- Longitudinal assessment; developmental continuum
 - Multiple types of assessment, including behavioral observations
 - Portfolios
 - Preceptor
 - OSCE type
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