Developing Dissemination and Implementation Competencies for Training Programs

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Why Competencies?

- Growth of D&I training programs
 - Institutes: TIDIRH, IRI, MT-DIRC, KT Canada
 - Conferences: This one, SIRC, GIC
 - Degree/Certificate Programs: UCSF, Rochester, KT Canada
- Emphasis on Competency-Based Education in research & practiceoriented training programs

Why Competencies?

- Helps guide the field
 - D&I science still being defined
 - Measuring Progress

- Competencies:
 - Offer Structure
 - Target Points
 - Fluid Constructs

(Thacker & Brownson, 2008; Leung, 2003)



A specific range of skill, knowledge ability to do something successful being adequately or well qualified the condition of being capable of the meet demands, requirements

Phase 1: Competency List Development

- Initial Grant List
 - IOM Recommendations
 - Dissemination and Implementation Research in Health: Translating Science to Practice Textbook
 - Previous D&I trainings
- Expert Panel Review
 - Colleagues in USA, Canada, UK, Australia
- Final list for sorting
 - 100 Statement suggestions
 - Final list 43 statements

Phase 2: Card-Sort

In order to develop a Dissemination and Implementation Training (D&I) or Knowledge Translation (KT) curriculum that is most applicable to those it benefits, we are requesting that you help us categorize D&I (KT) competencies by experience levels.

Please group the competency statements on the left by clicking and dragging them into beginner, intermediate and advanced boxes on the right. There are no right or wrong answers and no constraints to the number of statements required for each box.

We would like you to think about how you would organize the competencies into learning levels (beginner, intermediate, advanced) as it should be addressed in a training curriculum.

Note: The term "Dissemination and Implementation" (D&I) can be used interchangeably with "Knowledge Translation" (KT).

- Define and communicate D&I research terminology
- Define what is and what is not D&I research.
- Identify existing gaps in D&I research.
- Assess, describe, and quantify (where possible) the context for effective D&I (setting characteristics, culture, capacity & readiness).
- Formulate methods to address barriers of D&I research.
- Differentiate between D&I research and other related areas, such as efficacy research and effectiveness research.
- Identify the potential impact of disseminating, implementing and sustaining effective interventions.
- Identify the potential impact of scaling down (aka deimplementing) an ineffective but often used intervention.
- Determine which evidencebased interventions are worth disseminating and implementing.
- Identify appropriate conceptual models, frameworks, or program logic for D&I change.
- Describe a range of D&I

Beginner
Intermediate
Advanced

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- Identify appropriate conceptual models, frameworks, or program logic for D&I change.
- Describe a range of D&I strategies, models and frameworks.
- Describe gaps in D&I



Participants

- Sent out link to 300 identified participants
- 124 total participants- 40% response rate

Country Breakdown

- 86% USA
- 7% Canada
- 5% Australia
- 1% United Kingdom
- <1% Other

Expertise Levels

29% Beginners

47% Intermediate

24% Advanced

How would you sort these competencies?

 Take a moment to think how you would categorize the following competency statements.... Would you classify this as a beginner, intermediate, or advanced competency as it should be addressed in a training curriculum?

 "Differentiate between D&I research and other related areas, such as efficacy research and effectiveness research."

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- Determine which evidencebased interventions are worth disseminating and implementing.
- Evaluate and refine innovative scale-up and spread methods (e.g., technical assistance, interactive systems, novel incentives and 'pull' strategies).
- Identify appropriate conceptual models, frameworks, or program logic for D&I change.
- Describe a range of D&I

Beginner Differentiate between D&I research and other related areas, such as efficacy research and effectiveness research.			
Intermediate			
Advanced			

Would you classify this as a beginner, intermediate, or advanced competency as it should be addressed in a training curriculum?

 "Evaluate and refine innovative scale-up and spread methods (e.g. technical assistance, interactive systems, novel incentives and 'pull' strategies)"

"Evaluate and refine innovative scale-up and spread methods (e.g., technical assistance, interactive systems, novel incentives and 'pull' strategies)" ADVANCED

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Items

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- Determine which evidencebased interventions are worth disseminating and implementing.
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- Describe a range of D&I strategies, models and

Beginner Intermediate Advanced Evaluate and refine innovative scale-up and spread methods (e.g., technical assistance, interactive systems, novel incentives and 'pull' strategies).

 Would you classify this as a beginner, intermediate, or advanced competency as it should be addressed in a training curriculum?

"Identify and articulate the trade-offs between a variety of different study designs for D&I research"

"Identify and articulate the trade-offs between a variety of different study designs for D&I research" INTERMEDIATE

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Beginner
Intermediate Identify and articulate the trade-offs between a variety of different study designs for D&I research.
Advanced

D&I Competency Distribution by Domains

Section A: Definitions, Backgrounds and Rationale	Total 10 StatementsBeginner: 50%Intermediate: 50%Advanced: 0%
Section B: Theory and Approaches	Total 7 Statements Beginner: 14% • Intermediate: 87% • Advanced: 0%
Section C: Design and Analysis	Total 14 StatementsBeginner: 14%Intermediate: 57%Advanced: 29%
Section D: Practice- Based Considerations	Total 12 StatementsBeginner: 25%Intermediate: 67%Advanced: 33%

Statements sorted as "Beginner"

- 11 Total Competency Statements
 - Example:
 - Define and Communicate D&I research terminology
 - Describe the concept of measurement of fidelity

Statements sorted as "Intermediate"

- 27 Total Competency Statements
- Tertile Cut-off: Mean score- 1.6
 - Example:
 - Identify and measure outcomes that matter to stakeholders, adopters and implementers
 - Describe a process for designing for dissemination (planning for adoption, implementation and sustainability during the intervention development stage)

Statements sorted as "Advanced"

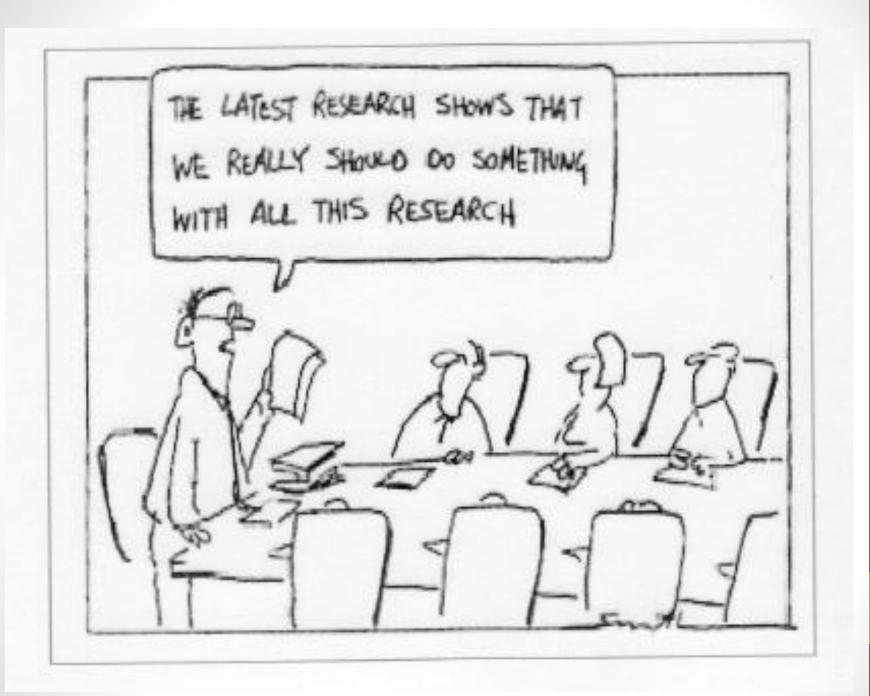
- 5 Total Competency Statements
- Tertile Cut-Off: Mean Score- 2.27
 - Example:
 - Effectively explain and incorporate concepts of de-adoption and de-implementation into D&I study design
 - Incorporate methods of economic evaluation (e.g., implementation costs, cost-effectiveness) in D&I study design

Implications for Training Programs

- Shaped the agenda at 2014 MT-DIRC Summer Institute
- More formalized curriculum
- Ability to replicate programs, credentialing
- Tool for assessment

Limitations

- Tertile use
 - Not an exact science
- Limited international presence
 - 14% of total respondents outside U.S.A
- Limited expert presence
 - Only 24% self-identified as "Advanced" expert
 - Expertise terms were not defined



Further Work

- Testing competencies with current MT-DIRC fellows
 - Pre & Post Assessments

- Building on: Concept Mapping D&I Training needs
 - Practitioner & Researcher perspectives

MT-DIRC Program

Come join us!



Currently recruiting second cohort

Applications due Friday, January 16th 2015

2015 Institute: June 1-5th 2015 in St. Louis

Acknowledgments

Funding Source:

National Cancer Institute

Grant # R25CA171994-02

Veterans Administration

Additional Collaboration with The Cancer Research Network

For more information or an application, please email me:

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