


Health Promotion Strategies: Week 12 IMA Step 5

Diffusion: adoption/adaptation, implementation, sustainability

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Class topics

1. Processes of adoption and adaptation
2. Pivotal role of implementation
3. Sustainability: what happens when health promoter “go home”
4. This stage provides an excellent mini-example of the IMA


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Class preparation

- Develop a plan for optimizing the adoption, implementation and sustainability of your “ideal” response to your chosen issue
- What did you learn about issues related to program **diffusion**
 - Adoption/adaptation
 - Implementation
 - Sustainability


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Six sub-stages of Step 5

1. Identify potential users and re-evaluate the planning group and linkage system to assure representation of potential program users
2. Specify performance objectives for program adoption, implementation & sustainability
3. Specify determinants of adoption, implementation and sustainability
4. Create implementation program matrices regarding change outcomes that will affect the determinants
5. Select methods & strategies to address/influence the determinants
6. Design interventions and organize programs to effect change objectives related to program use


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Six steps of the Intervention Mapping Approach

1. Conduct a needs assessment
2. Create matrices of change objectives based on the determinants of behavior and environmental conditions
3. Select theory-based intervention methods and practical strategies
4. Translate methods and strategies into an organized program
5. **Plan for adoption, implementation and sustainability of the program**
6. Generate an evaluation plan

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Why should we care about “diffusion”?

1. From the beginning: **indirect** planning to enhance potential that will be adopted, implemented and sustained
2. For the implementation stage: **direct** planning of interventions to influence adoption, implementation & continuation
3. The diffusion stage links everything in the IMA together: backward & forward
4. Provides a wonderful mini-example of the IMA

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Diffusion processes

- The “diffusion” process:
 1. awareness of need or of an innovation
 2. decisions to adopt the innovation
 3. initial use
 4. program continuation
- Three **stages**
 1. Adoption
 2. Implementation
 3. Sustainability

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Diffusion processes: the importance of “linkage system”

- “Linkage system”:
 1. Developers
 2. Implementers
 3. End users
- Importance of linkage system involvement in diffusion
 1. **Indirect**: involvement throughout all IMA stages
 2. **Direct**: involvement re. specific diffusion planning

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Adoption

By individuals
By organizations (& individuals within organizations)

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Implementation

Three dimensions

1. Fidelity
2. Completeness
3. Dose

Adaptation: Rogers: “reinvention”—enhanced “ownership”

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Sustainability

A growing literature re:

1. Definitions: commonalities but not consensus
2. Influencing factors

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Is sustainability possible? (Scheirer, 2005)

Figure 1
Program Life Cycle

Extent of Implementation within each organization

Time in Months

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Sustainability definitions

Common typology (Shediac-Rizkallah & Bone, 1998):

1. **Maintenance of intervention effect/benefits**
2. **Institutionalization** of intervention (Rogers: "routinization"):
3. **Capacity building** in recipient community

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Dimensions of institutionalization (Yin, 1979)

1. **Extensiveness** of integration in organization subsystems
2. **Intensiveness**: depths of integration:
 1. Passages
 2. Routines
 3. Niche saturation

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Sustainability: typology (Scheirer, 2005)

1. Continued health benefits for new or intended recipients
2. Continuation of program activities: routinization, institutionalization
3. Continued capacity of a community to develop & deliver HP programs
4. Sustaining ideas, beliefs, principles, values underlying initiative
5. Organizational sustainability

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Sustainability: Four components (THCU, 2001)

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Routinization framework (Yin, 1979)

1. Budget
2. Personnel
3. Supply & maintenance
4. Training
5. Organizational governance

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Factors influencing sustainability (Scheirer, 2005)

1. A program can be modified over time
2. A "champion" is present
3. A program "fits" with its organization's mission and procedures
4. Benefits to staff members and/or clients are readily perceived
5. Stakeholders in other organizations provide support

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"When funding stops": Factors that increase sustainability (Stevens & Peikes 2006)

1. Project-related factors
 1. Organizational sponsorship
 2. Host organization's expertise
 3. In-kind contributions
 4. Charismatic leadership
 5. Survival tactics
 6. Strategic planning capacity
 7. Diverse funding streams
 8. Public recognition
2. Environmental factors
 1. Public awareness of problem
 2. Public recognition of project as a solution
 3. Provider (professionals') support
 4. External championship
 5. Involvement of local funders

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Elements of capacity affecting dissemination: Individual level (Flaspohler et al., 2008)

<p>Innovation-specific capacities</p> <ol style="list-style-type: none"> 1. Understanding/knowledge of innovation & problem 2. Perceived capacity to implement innovation 3. Buy-in/attitude toward innovation 	<p>General capacities</p> <ol style="list-style-type: none"> 1. Staff capability 2. Staff background 3. Staff openness
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Elements of capacity affecting dissemination: organizational level (Flaspohler et al., 2008)

<p>Innovation-specific capacities</p> <ol style="list-style-type: none"> 1. Fit with organization 2. Organizational support for innovation 3. Technical assistance & training 4. Capacity to evaluate innovation implementation & use 	<p>General capacities</p> <ol style="list-style-type: none"> 1. Effective leadership 2. Clear vision/mission 3. Organizational structure 4. Effective management style 5. Organizational climate 6. Resource availability 7. Collective staff capability 8. Community linkages
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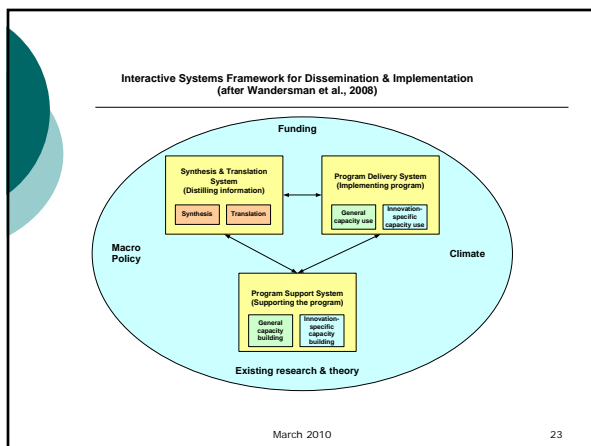
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Elements of capacity affecting dissemination: Community level (Flaspohler et al., 2008)

General capacities

1. Leadership
2. Participation & opportunities to participate
3. Resources
4. Connections among people & organizations
5. Connections with outside communities & institutions
6. Sense of community
7. Norms & values
8. Commitment
9. Community power
10. Community knowledge & skills

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STEP 5: Diffusion: 6 sub-steps

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Sub-step 1: re. "linkage system"

- Identify potential users & re-evaluate the planning group & linkage system to assure representation of potential program users
- Linkage system
 1. Developers
 2. Implementers
 3. End-users

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Sub-step 2: Specify performance objectives for program adoption, implementation & sustainability

1. **Re. Adoption**
 1. "Who will make the adoption decision and how?"
 2. "What will the potential adopters need to do to constitute adoption of the program?"
 3. By individuals and/or organizations
2. **Re. Implementation:** more likely to be multiple tasks: "Who... what... with fidelity & completeness as indicated by...?"
3. **Re. one or more of the sustainability goals:** re.
 1. continuation of effects
 2. Institutionalization
 3. capacity building

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Sub-step 3: Specify determinants of adoption, implementation & sustainability

- "Factors that are likely to influence the achievement of the performance objectives"
 - **within** individuals responsible for adoption and implementation
 - **external** (social or structural factors that might be barriers or facilitators)

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Determinants of program use (cont.)

Use 6 **core processes**

1. Brainstorming
2. Literature review: specific..... general: keeps breaking down the theoretical processes involved in or influencing adoption etc.
 - Re. personal/individual determinants
 - Rogers's Diffusion Theory: SCT: TPB
 - Potential adopters' perceptions re. program characteristics
 - Social interactions among stakeholders
 - Behavioural capability, skills, self-efficacy, reinforcement (intrinsic, extrinsic) —key at implementation stage
 - Re. external determinants
 - Organizational change models
 - Community development models

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Selecting determinants: criteria

Criteria for selecting determinants for use in developing change objectives related to diffusion objectives:

1. **Importance** (strength of association with program adoption and implementation)
2. **Changeability** (how likely a diffusion intervention will bring about change in the determinant)
3. **Cost, feasibility etc.**

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Sub-step 4: Create implementation program matrices re. change outcomes that will affect the identified determinants

- Same as original Step 2, but now focusing on outcomes for adoption, implementation and sustainability of the program (rather than on the original behavioural and environmental outcomes)

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Sub-step 5: Select methods & strategies to address/influence the determinants

- Take account of how decisions re. adoption etc. are made in organizations: **this takes us back to our earlier discussions re. decision-making by individuals and in organizations**
- Importance of champions: **this takes us back to discussions of leadership**
- Use the same **6 core processes to identify methods and strategies**

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Sub-step 6: Design/develop "diffusion" interventions & organize programs...

- Design/develop interventions & organize programs to effect change objectives related to program use (i.e., re. adoption, implementation, sustainability)

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Implications for evaluation

1. Leads directly to PROCESS evaluation
2. Outcome of earlier STEP 2 leads directly to IMPACT evaluation

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RE-AIM to help plan, evaluate & report research

R	→ Increase	<u>R</u> each
E	→ Increase	<u>E</u> ffectiveness
A	→ Increase	<u>A</u> doption
I	→ Increase	<u>I</u> mplementation
M	→ Increase	<u>M</u> aintenance

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Glasgow, Klesges, Dziewaltowski, et al., *Ann Behav Med*, 2004

RE-AIM Dimensions

Dimension	Definitions
<u>R</u> EACH	<ol style="list-style-type: none"> 1. Participation rate among potential target group(s) 2. Representativeness of participants in terms of social, demographic, and health characteristics
<u>E</u> FFICACY/ <u>E</u> FFECTIVENESS	<ol style="list-style-type: none"> 1. Effects of intervention on primary outcome of interest 2. Impact on quality of life and negative outcomes 3. Robust outcomes (similar effects among targeted groups)

Individual Level

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RE-AIM Dimensions (cont.)

Dimension	Definitions
<u>A</u> DOPTION	<ol style="list-style-type: none"> 1. Participation rate among possible settings and contexts 2. Representativeness of participating settings, intervention staff
<u>I</u> MPLEMENTATION	<ol style="list-style-type: none"> 1. Extent intervention was delivered as intended in protocol 2. Time & cost of intervention
<u>M</u> AINTENANCE	<ol style="list-style-type: none"> 1. Longer-term effects ≥ 6 months (Individual) 2. Impact of attrition on outcomes (Individual) 3. Sustained delivery or modifications of intervention (Setting)

Setting Level

Both

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Preparing for next week

- Compare/contrast the role of evaluation in your **proposed "ideal" response** to your chosen issue with the way evaluation was **actually employed** (or not) in your chosen community-based response/intervention
- Explore:
 - W.K. Kellogg Foundation Evaluation Toolkit
 - University of Kansas Community Tool Box: Evaluation Model