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Intervention Mapping:
Designing Theory and Evidence Based
Health Promotion Programs

Planning for
Implementation and
Sustainability



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Why think about program diffusion?

- Because program usefulness or success depends both on
 - ✓ Effectiveness
 - ✓ Exposure

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Use of an Innovation Requires

- Adoption
Depends upon knowledge of an innovation awareness of unmet need, and the decision that an innovation may meet the need and be given a trial (Adoption may depend on active dissemination of a program)

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Use of an Innovation Requires

- **Implementation**
Use of the innovation to a fair trial point
- **Sustainability**
Maintenance and institutionalization of a program or its outcomes

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Adoption Terms

Steckler, Goodman et al., 1992; Goodman, Steckler, Kegler, 1997	Awareness Adoption
Parcel, 1995; Parcel, Eriksen, et al., 1989; Parcel, Taylor, et al., 1989	Dissemination Adoption
Rogers (1983, 1995) Individual Adoption	Adoption: Knowledge, Persuasion, Decision
Rogers (1983, 1995) Organizational Adoption	Initiation: Agenda-Setting and Matching

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Implementation Terms

Steckler, Goodman et al., 1992; Goodman, Steckler, Kegler, 1997	Implementation Maintenance
Parcel, 1995; Parcel, Eriksen, et al., 1989; Parcel, Taylor, et al., 1989	Implementation
Rogers (1983, 1995) Individual Adoption	Implementation Confirmation
Rogers (1983, 1995) Organizational Adoption	Implementation: Redefining and Clarifying

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Sustainability Terms

Steckler, Goodman et al., 1992; Goodman, Steckler, Kegler, 1997	Institutionalization Renewal
Parcel, 1995; Parcel, Eriksen, et al., 1989; Parcel, Taylor, et al., 1989	Maintenance
Rogers (1983, 1995) Organizational Adoption	Routinizing

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Focus on Adoption

Program adopters moving through stages of:

- Knowledge of the innovation
 - Persuasion or attitude development
 - Decision
 - Adoption
 - Implementation
 - Confirmation
- (Everett Rogers (1983, 1995))

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Characteristics of Individual Adopters

- **Innovators** – venturesome; shortest time between awareness and adoption; reached by medial channel
- **Early adopters** – opinion leaders
- **Early majority** – deliberators; reached by interpersonal channel
- **Late majority** – skeptical; reached by interpersonal channel and increased outreach
- **Laggards** – traditional; need more potent outreach and incentives

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Program (Innovation) Characteristics

- Relative advantage
- Compatibility
- Complexity
- Observability of the results
- Impact on social relations
- Reversibility
- Communicability
- Required time and commitment
- Risk and uncertainty
- Ability to be modified

Oldenburg, et al., 1997; Rogers, 1995

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Factors Related to Adoption and Implementation

- Awareness and perception of program characteristics

Adoption

- Behavioral Capability, skills, self-efficacy and outcome expectations

Implementation

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Steps to planning an intervention to get a health innovation or program used

- Define and differentiate the potential users
- Develop a linkage system
- Define the required behaviors
- Hypothesize factors related to performing the behaviors
- Develop methods and strategies to influence the factors and behaviors

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Develop a Linkage System

- Identify individuals or groups who will decide to adopt
- Identify who will implement
- Incorporate representatives into a linkage system between the development group and users

*Ask them to participate in Development and advisory committees
Go into the field often*

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What are the goals of the linkage system?

- Improve fit between program content and user practice
- Promote feelings of ownership toward innovation
- Ensure logistic fit
- Deal with problems before negative impact
- Build and enhance capacity

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Specify Adoption Behavior

- What do the decision-makers (who) who are considering the program need to do (what) in order to assure program adoption?
 - How will you know that they have done it?
- For example: The curriculum committee of the Star Independent School District will decide to use the Smart Choices Tobacco Prevention Program as indicated by the director of curriculum ordering it.

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Specify Implementation Performance Objectives

- What are the subcomponents of the Implementation behavior?

For example: The teachers will

- Schedule Smart Choices Lessons
- Teach lessons as described in the guide (fidelity)
- Teach at least 80% of lessons (completeness)
- Send parent materials home

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Specify Institutionalization Performance Objectives

- What are the subcomponents of the Institutionalization behavior?
- For example: The administrators will
 - Include Smart Choices Program in teacher evaluations
 - Will refer to Smart Choices in district public relations
 - Will budget for Smart Choices curriculum materials
 - Will reward teaching of Smart Choices with fidelity and completeness

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CF Family Education Program Diffusion Intervention Plan
ADOPTION AMONG CF CENTERS – AWARENESS

Performance objectives	Determinants addressed	Theoretical methods	Intervention strategies
Staff will:	Personal	Persuasion	Pharmaceutical-style product detailing of program to CF centers
Evaluate patient education needs in their center	Knowledge Awareness	Modeling	Contact person recruitment of workshop registrants
Know CF FEP exists as a response to need	Outcome expectations	Cues to participate in training	Distribution of color program guide charts
Review program characteristics favorably	External Identification of contact person for workshop planning		Workshop invitation and confirmation
Learn how to implement the CF FEP	Identification of potential program champion		Scientific presentations and exhibit at CF medical meeting

CF centers will	Personal	Persuasion	Workshops
Decide to adopt	Outcome expectations	Persuasion	Discussion
Identify program champion	Self-efficacy	Active learning	Problem analysis
Program champion will	Attitudes	Social support	Role playing
Facilitate adoption in CF centers	Skills to get center personnel buy-in	Dissonance reduction	Team meeting
Meet with CF center director and team to facilitate decision	External Existence of team	Modeling	Problem solving
	Team meetings	Skill building	Enactment with guided practice
	Space/Time		Newsletters
	Patient/staff ratio		Model stories
	Decision-making		Resources
	Program champion		Information

ADOPTION – CENTER DIRECTORS AND STAFF

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Team members will	Personal	Modeling	Workshops
Use CF FEP completeness and fidelity	Behavioral capability and self-efficacy for working with families and team	Skill training	Role playing
Design plan	Outcome expectations	Reinforcement	Lecture
Create team	External Space	Persuasion	Role-modeling
Schedule team meetings	Time—workflow		Practice
Orient new members to CF FEP	Documentation		Coordinators
Talk about patient care using the CF FEP	Program champion		Technical and social support
Document program use	Team roles		Reinforcement
	Medical staff buy-in		Role modeling
			Newsletters
			Model stories
			Resource

IMPLEMENTATION WITH CF FAMILIES

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Team members will	Personal	Problem-solving	Regional coordinators
Integrate the CF FEP into center routines	Behavioral capability and self-efficacy for program integration into routines	Reinforcement	Technical and social support
Use CF FEP in orientation of new staff	Outcome expectations	Social support	Social reinforcement
Write CF FEP into job descriptions	Social reinforcement		Role modeling
Write CF FEP into care paths or continuous quality improvement plans	External CF FEP meetings or CFFEP discussions in other meetings		Newsletters
	Documentation forms		Role model stories
			Resources
			Information

INSTITUTIONALIZATION

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CF Family Education Program Diffusion Intervention Plan				
Diffusion stage target group	Performance objectives	Determinants addressed	Theoretical methods	Intervention strategies
Adoption – Awareness of CF Center Health Care Providers	Staff will: Evaluate patient education needs in their center Know CF FEP exists as a response to need Review program characteristics favorably Learn how to implement the CF FEP	Personal Knowledge Awareness Outcome expectations External Identification of contact person for workshop planning Identification of potential program champion	Persuasion Modeling Cues to participate in training	Pharmaceutical-style product detailing of program to CF centers Contact person recruitment of workshop registrants Distribution of color program guide charts Workshop invitation and confirmation Scientific presentations and exhibit at CF medical meeting

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Adoption – Decision by CF Centers (top down and team buy-in)	CF centers will	Personal	Persuasion	Regional Workshops
	Decide to adopt	Outcome expectations	Persuasion	Discussion
	Identify program champion	Self-efficacy	Active learning	Problem analysis
	Program champion will	Attitudes	Social support	Role playing
	Facilitate adoption in CF centers	Skills to get center personnel buy-in	Dissonance reduction	Social support
	Meet with CF center director and team to facilitate decision	External Existence of team	Modeling	Presentation
		Team meetings	Skill building	Team meeting to plan implementation
		Space		Problem solving
		Time—workflow		Enactment with guided practice
		Patient/staff ratio		Newsletters
		Decision-making		Role model stories
		Program champion		Resources
				Information

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Implementation with Families in CF Centers	Team members will	Personal	Modeling	Regional workshops
	Work with families using the CF FEP w/ completeness and fidelity	Behavioral capability and self-efficacy for working with families and team	Skill training	Role playing
	Design plan	Outcome expectations	Reinforcement	Lecture and written guides
	Create team	External Space	Persuasion	Videotape role-modeling
	Schedule team meetings	Time—workflow		Guided practice and feedback
	Orient new members to CF FEP	Documentation		Regional coordinators
	Talk about patient care using the CF FEP	Program champion		Technical and social support
	Document program use	Team team roles		Social reinforcement
		Medical staff buy-in		Role modeling
				Newsletters
				Role model stories
				Resources
				Information

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Institutionalization	Team members will Integrate the CF FEP into center routines Use CF FEP in orientation of new staff Write CF FEP into job descriptions Write CF FEP into care paths or continuous quality improvement plans	Personal Behavioral capability and self-efficacy for program integration into routines Outcome expectations Social reinforcement External CF FEP meetings or routine CF-FEP discussions in other meetings Documentation forms	Problem-solving Reinforcement Social support	Regional coordinators Technical and social support Social reinforcement Role modeling Newsletters Role model stories Resources Information
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