

# **Planning & Evaluating Evidence for Dissemination of Prevention Interventions**

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# RE-AIM Working Group

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**What evidence is needed to  
support dissemination of an  
intervention?**

# Translation to Practice: Magic Diet Intervention

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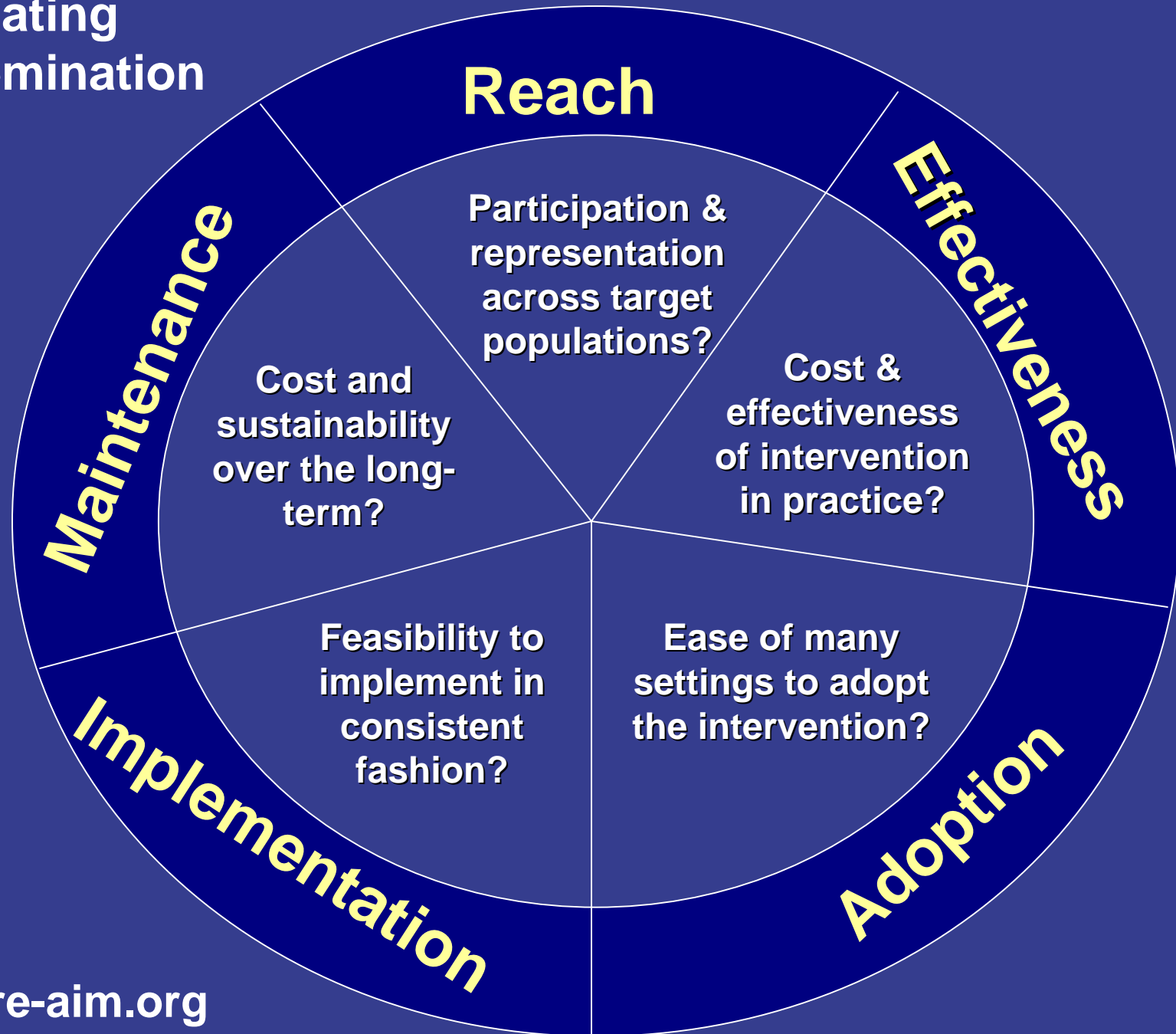
<u>Dissemination Step</u>	<u>Concept</u>	<u>% Population Impact</u>
50% of Health Clinics Use	Adoption	50%
50% of Clinicians Counseled	Adoption	25%
50% of Patients Accepted	Reach	12.5%
50% Follow Regimen Correctly	Implementation	6.25%
50% of Those Taking Correctly Show Effect	Effectiveness	3.1%
50% Continue to Benefit After 6 months	Maintenance	1.6%

# Moral of the Story?

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- **Focus on the denominator and impact on populations, not just individuals**
- **Consider multiple steps to evaluate dissemination decisions (RE-AIM)**

# Evaluating Dissemination



# “RE-AIM” Evaluation to Aid Dissemination Decisions

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- To broaden criteria used to evaluate interventions to include *external validity*
- To evaluate issues relevant to intervention *adoption, implementation, and maintenance*
- To improve evidence base for intervention dissemination by:
  - Informing *design of interventions*
  - Providing *framework for decision makers*

# RE-AIM Framework

	Dimension	Definitions
Individual Level	<u>REACH</u>	<ol style="list-style-type: none"><li>1. Participation rate among potential target population(s)</li><li>2. Representativeness of participants in terms of social, demographic, and health characteristics</li></ol>
	<u>EFFICACY/ EFFECTIVENESS</u>	<ol style="list-style-type: none"><li>1. Impact on quality of life and negative outcomes</li><li>2. Effects of intervention on primary outcome of interest</li><li>3. Robust outcomes (extent of effect modification among targeted groups)</li></ol>

# RE-AIM Dimensions (cont.)

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

# RE-AIM Evaluation for Decision-Makers

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- Encourage standard and comprehensive reporting of RE-AIM type dimensions
- Provide criteria for decisions on translation and dissemination
- Tools to contrast programs on potential impact of interventions

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# Dissemination Potential: RE-AIM

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- **Saturation in target population (Reach)**
  - Few exclusion criteria; high participation
  - Inclusive of underserved, high-risk groups
- **Diverse study samples (Representativeness)**
  - Generalizable to future recipients
  - Inclusive of race/ethnicity, age, gender, comorbidities, and social factors

Tunis, Stryer, Clancy, *JAMA*, 2003.

Klesges, Estabrooks, Dzewaltowski, Bull, Glasgow, *Ann Beh Med*, in press.

# Dissemination Potential: RE-AIM

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- Effects demonstrated across multiple target groups (Effective)
- Few negative outcomes and high quality of life (Effective)
- Effect modification is minimal (Robust)

Tunis, Stryer, Clancy, *JAMA*, 2003.  
Klesges, et al., *Ann Beh Med*, in press.

# Dissemination Potential: RE-AIM

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- Includes various and representative settings (Adoption)
  - Multiple settings included
  - Settings typical of community

Tunis, Stryer, Clancy, *JAMA*, 2003.

Klesges, et al., *Ann Beh Med*, in press.

# Dissemination Potential: RE-AIM

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- **Intervention is Feasible (Implementation)**
  - **Low cost in time and money**
  - **Deliverable by non-research staff**
  - **Process of intervention delivery well-documented for replication**

Tunis, Stryer, Clancy, *JAMA*, 2003.  
Klesges, et al., *Ann Beh Med*, in press.

# Dissemination Potential: RE-AIM

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- Individual change is long-term and low attrition (Maintenance)
- Intervention is sustainable long-term and “absorbs” adaptation (Sustainability)

Tunis, Stryer, Clancy, JAMA, 2003.  
Klesges, et al., Ann Beh Med, in press.

# Dissemination Potential

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- **Compelling and relevant outcomes**
  - **Addresses “high impact” problem**
- **Acceptable to community**
- **Available channels for delivery**

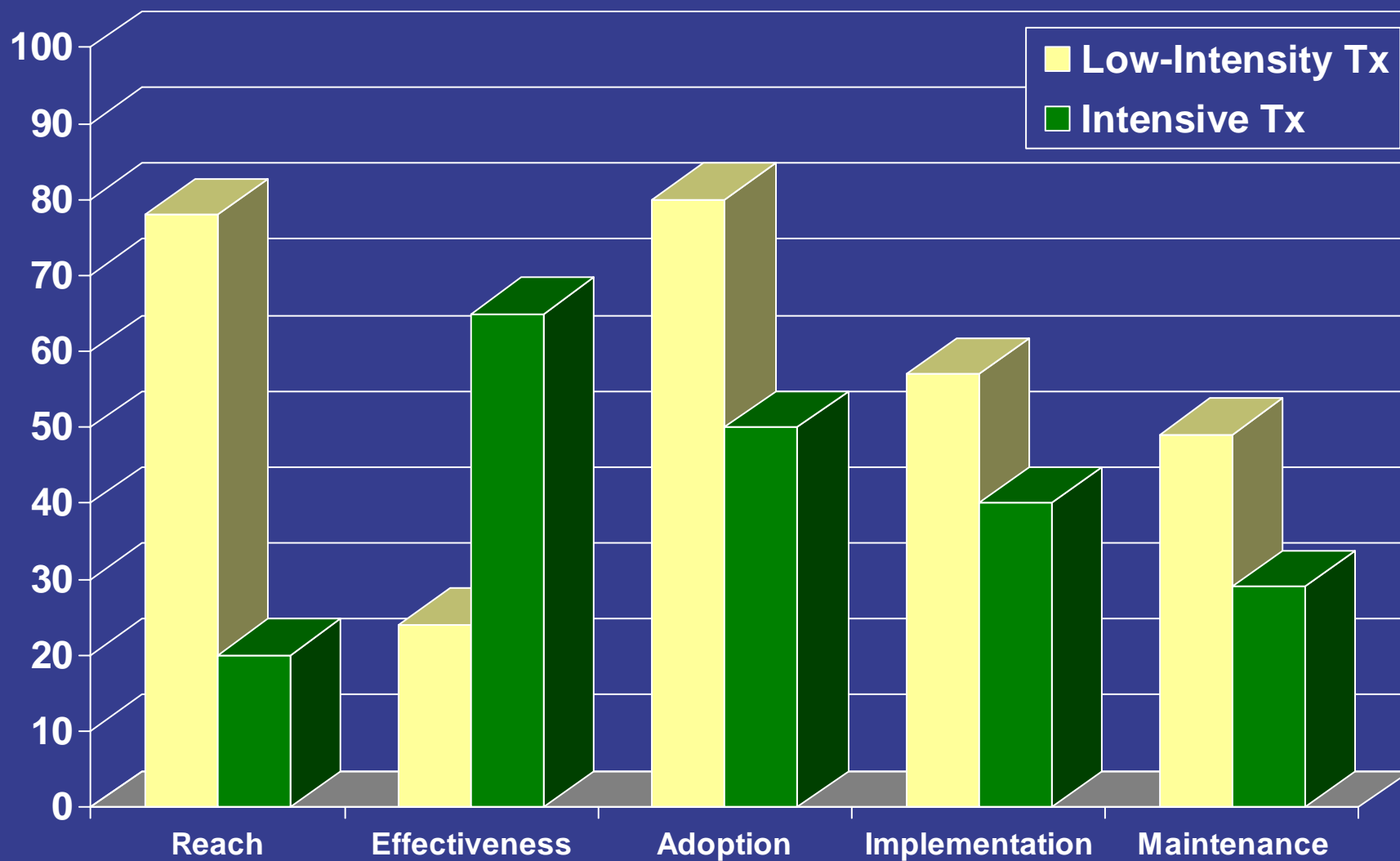
CDC, *Guide to Community Preventive Services*.  
Brownson RC, Simoes EJ, *AJPM*, 1999.

# RE-AIM Evaluation for Decision-Makers

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- Encourage standard and comprehensive reporting of RE-AIM type dimensions
- Provide criteria for decisions on translation and dissemination
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## Relative Standing of Two Interventions on RE-AIM Dimensions



# Resources

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- [www.re-aim.org](http://www.re-aim.org) info on framework, calculations, resources
- Klesges LM, Estabrooks P, Dzewaltowski D, Bull S, Glasgow, RE. Beginning with the application in mind: designing and planning health behavior change interventions to enhance dissemination. *Annals of Behavioral Med*, in press.
- Glasgow RE, Lichtenstein E, Marcus A. Why don't we see more translation of health promotion research to practice? Rethinking the efficacy to effectiveness transition. *Am J Public Health*, 2003;93(8):1261-1267.
- Glasgow RE, Klesges, LM, Dzewaltowski D, Bull S, Estabrooks P. The future of health behavior change research: What is needed to improve translation of research into health promotion practice? *Annals of Behavioral Medicine*, 2004;27:3-12.

## WHAT'S NEW

**Publication Uses RE-AIM  
to Summarize Directions  
for Future Research**

The February 2004 issue of *Annals of Behavioral Medicine* includes an article by members of the RE-AIM work group entitled "The Future of Health Behavior Change Research: What is Needed to Improve Translation of Research into Health Promotion Practice?".

>> [More of What's New...](#)



Try the **REACH  
CALCULATOR**

► [MORE RESOURCES](#)

Take a  
**TOUR** OF **re-aim**  
.org

Use the **Quick  
Quiz**  
Is your program strong or lacking?



## Welcome to re-aim.org!

RE-AIM is a systematic way for researchers, practitioners, and policy decision makers to evaluate health behavior interventions. Ultimately, it can be used to estimate the potential impact of interventions on public health.

### > For People Conducting Research

If you're a researcher who wonders how to translate theory to practice, discover what we've learned about applying research findings to everyday situations. Share your thoughts with peers. [More...](#)

### > For People in Community & Health Care Settings

If you deliver health behavior interventions, you'll find valuable resources to have a greater impact on the lives of people you want to help. Share successes and challenges with others. [More...](#)

## WELCOME

**RE-AIM Welcomes  
Active for Life Grantees**

RE-AIM has entered into a partnership with another RWJF supported project, "Active for Life," the goal of which is to enhance regular physical activity among adults age 50 and older.



We are delighted to make our services available to Active for Life sites...AND we need to hear from you about ways to make this site most helpful to you.

- [Welcome Community Leaders](#)
- [FAQs](#)
- [Resources](#)

THE  
ROBERT WOOD  
JOHNSON  
FOUNDATION

**K-STATE**  **CHI**  
KANSAS STATE UNIVERSITY  
COMMUNITY HEALTH INSTITUTE



## Calculating Reach

Target population [y]



>>> [Ideas about finding numbers for estimates](#)

As you tackle **REACH** issues, there are two important questions to ask:

- 1) What percent of the target population are you reaching? (Use the calculator to get some answers.)
- 2) Are your participants the people you need to reach? In other words, are the participants *representative* of your target population?

>>> **New calculators to be added soon!**

There are ways to calculate representativeness and we will post calculators when they are available. Please check back!

Enter your numbers without commas:

Email Address:

Estimated target population [y]

Estimated number exposed to recruitment [a]

Actual number who respond to recruitment [b]

Actual number who are eligible [c]

Actual number who participate [d]

% of target who respond to recruitment

% of eligible who participate

% of REACH into target population

% excluded from study

% participation among eligible


[RE-AIM.org](#) > Resources

## Resources

Note: This section contains links to tools and resources. We will continue to add items as they become available.

### RESOURCES ▾

[Calculations](#)
[Checklists](#)
[Figures and Tables](#)
[Frequently Asked Questions \(FAQs\)](#)
[Links](#)
[Measures](#)
[Publications](#)
[Presentations](#)

### RELATED ▾

#### Resources Grouped by Element

If you'd rather see the resources grouped by the RE-AIM dimensions, click on the elements listed below.

- [Reach](#)
- [Efficacy/Effectiveness](#)
- [Adoption](#)
- [Implementation](#)
- [Maintenance](#)

#### Calculations

Access a standard sequence for calculating and reporting on Reach, and use the calculators for Reach and Adoption. Other items will be added as they become available.

#### Checklists

Use the RE-AIM framework to identify issues that people should consider when designing interventions and studies.

#### Figures and Tables

The figures illustrate RE-AIM concepts. The tables provide ways to anticipate and avoid obstacles to designing and delivering health behavior programs. Maximize the positive impact on public health.

#### Links

Access websites that provide useful data and information. The links are categorized as 1) behavior change programs and implementation guidelines, 2) data sources, 3) reporting guidelines, or 4) general interest.

#### Literature Review Coding Resources

- [Coding Sheet for Publications Reporting on RE-AIM Elements](#)
- [Coding Definitions for Literature Review of Reporting on RE-AIM Elements](#)

#### Measures

Find examples of tools to evaluate health behavior programs and policies based on the RE-AIM elements.

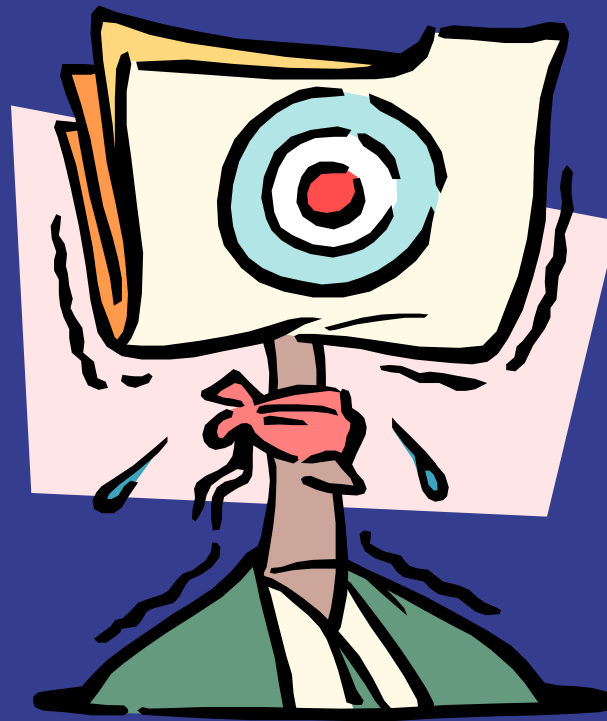
#### Publications

This list of citations contains links to abstracts of journal articles about health behavior interventions and issues related to the RE-AIM framework.

## RE-AIM Questions to Ask and Ways to Enhance Overall Impact

RE-AIM Dimension	Questions to Ask of Potential Programs	Possible Ways to Enhance Dissemination
<b>REACH</b> (Individual Level)	What % of the target population comes into contact? Does program reach those most in need? Will participants be representative of the targeted population?	Formative evaluation with potential users with those declining Small scale recruitment studies to test methods Identify and reduce barriers Use multiple channels of recruitment
<b>EFFECTIVENESS</b> (Individual Level)	Does program achieve key targeted outcomes? Does it produce unintended adverse consequences? How will impact on quality of life (QOL) be assessed?	Incorporate more tailoring to individual Reinforce via repetition, multiple modalities, social support and systems change Use stepped care approach Evaluate adverse outcomes and QOL for program revision and cost-to-benefit analyses
<b>ADOPTION</b> (Setting/Organizational Level)	What % of target settings and organizations will use? Will these organizations having underserved or high-risk populations use it? Does program help the organization address its primary mission?	Conduct formative evaluation of adoptees and settings that decline Recruit settings that have most contact with target audience Provide different cost options and customization of intervention Develop recruitment materials outlining program benefits and required resources
<b>IMPLEMENTATION</b> (Setting/Organizational Level)	How many staff within a setting will try this? Can different levels of staff implement the program successfully? Are different components delivered as intended?	Provide delivery staff with training and technical assistance Provide clear intervention protocols Consider automating all or part of the program Monitor and provide staff feedback and recognition for implementation
<b>MAINTENANCE</b> (Individual and Setting Levels)	Does the program produce lasting effects at individual level? Can organizations sustain the program over time? Are those persons and settings that show maintenance those most in need?	Reduce level of resources required Incorporate "natural environmental" and community supports Conduct follow-up assessments and interviews to characterize success at both levels Incorporate incentives and policy supports

# Questions & Comments??



RE-AIM