

2012 SUMMIT ON THE
**SCIENCE OF ELIMINATING
HEALTH DISPARITIES**
BUILDING A HEALTHIER SOCIETY
INTEGRATING SCIENCE, POLICY AND PRACTICE

DECEMBER 17-19, 2012

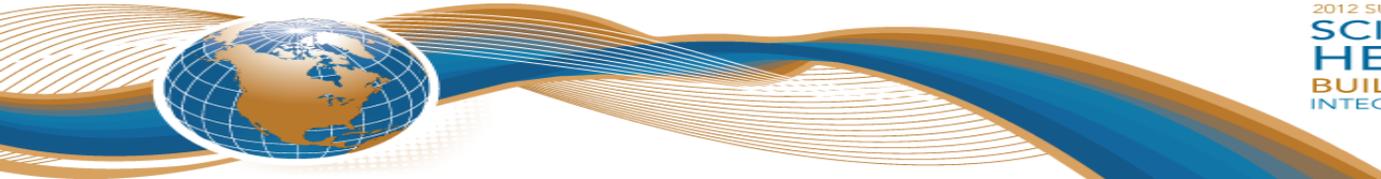
GAYLORD NATIONAL RESORT AND CONVENTION CENTER
NATIONAL HARBOR, MARYLAND

IMPLEMENTATION SCIENCE MODELS (AND RELATED METRICS) TO HELP REDUCE HEALTH DISPARITIES

Russell E. Glasgow, Ph.D.
Deputy Director,
Implementation Science
Division of Cancer Control and
Population Sciences
National Cancer Institute

OUTLINE

- **Implementation Science (IS) Models-overview**
- **RE-AIM Model—and metrics**
- **Evidence Integration Triangle (EIT)**
- **Commonalities and Conclusions**



Implementation Science Frameworks: Converging Recommendations

- Recent review of Implementation Science Models (Tabak RG, et al. *Am J Prev Med* 2012;43:337-50)
- RE-AIM: Reach, Effectiveness, Adoption, Implementation and Maintenance—the “What”
www.re-aim.org
- Evidence Integration Triangle (EIT)—the “How”
<http://cancercontrol.cancer.gov/IS/presentations.html>



Implementation and Dissemination Research Characteristics (Russ' view)

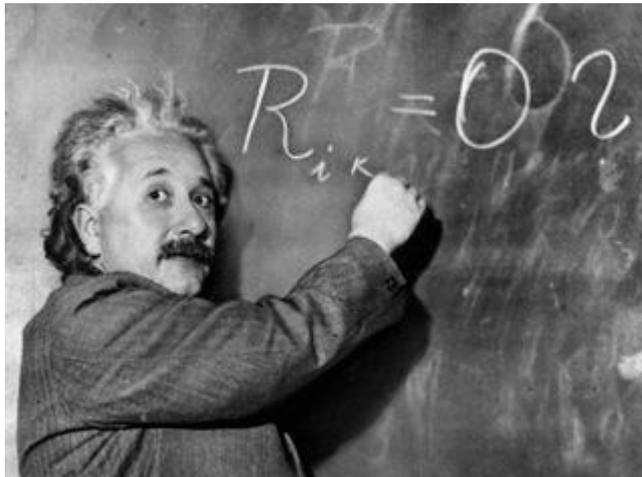
- Contextual
- Complex
- Multi-component programs and policies
- Non-linear
- Transdisciplinary
- Multi-level
- Addresses “wicked”, messy, important problems

Glasgow RE, Steiner JF In: Brownson RC, Colditz G, Proctor E, eds. Dissemination and implementation research in health: Translating science and practice. New York: Oxford University Press, 2012:72-93.



**THE SAME POLICIES, RESEARCH METHODS, PARADIGMS
AND APPROACHES THAT PRODUCED TODAY'S INEQUITIES
ARE NOT LIKELY TO REDUCE THEM**

***“The significant problems we face cannot be
solved by the same level of thinking that
created them.”***



A. Einstein

2012 SUMMIT ON THE
**SCIENCE OF ELIMINATING
HEALTH DISPARITIES**
BUILDING A HEALTHIER SOCIETY
INTEGRATING SCIENCE, POLICY AND PRACTICE

DECEMBER 17-19, 2012

GAYLORD NATIONAL RESORT AND CONVENTION CENTER
NATIONAL HARBOR, MARYLAND

Recommended Purpose of Research (*ala* RE-AIM—www.re-aim.org)

Collect evidence to document interventions that can:

- **Reach large numbers of people, especially those who can most benefit**
- **Be widely adopted by different settings**
- **Be consistently implemented by staff members with moderate levels of training and expertise**
- **Produce replicable and maintained effects (and minimal negative impacts) at reasonable cost**

Gaglio B, Glasgow RE. In: Brownson R, Colditz G, Proctor E, eds. Dissemination and implementation research in health: Translating science to practice. New York: Oxford University Press, 2012:327-56



RE-AIM—Disparities Implications

RE-AIM Element	
Reach	<ul style="list-style-type: none">• Characteristics of those who participate vs. decline• Expand categories used for classification of potential disparities- e.g. literacy, numeracy, address, geospatial
Effectiveness	<ul style="list-style-type: none">• “Representative narrative”• Impact of context• Unanticipated consequences
Adoption	<ul style="list-style-type: none">• Engage stakeholders from low resource settings from outset• Document and address reasons for non-participation
Implementation	<ul style="list-style-type: none">• Monitor Delivery• Track costs of implementation• Be transparent
Maintenance	<ul style="list-style-type: none">• Assess long-term results of different subgroups...If inequities, find out why• Prepare delivery settings with tools to guide, monitor and adapt intervention• Support and study sustainability



RE-AIM—Disparities Implications Continued

<u>RE-AIM Issue</u>	<u>Disparity</u>	<u>Overall Impact</u>
Reach	30%	70% of benefit
Effectiveness	0 (equal)	70% of benefit
Adoption	30%	49% of benefit
Implementation	30%	34% of benefit
Maintenance	30%	24% of benefit



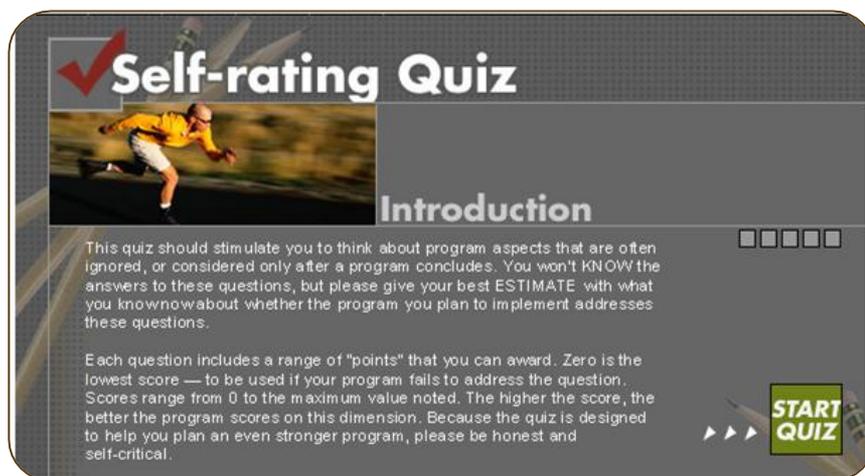
RE-AIM Implications— What Outcomes and Metrics are Valuable?

- **Beyond Mean Effect Size?**
- **Ask- at multiple levels WHO is reached, WHAT type settings are implementing; WHICH staff can implement, etc.**
- **All 5 RE-AIM dimensions are important—need to broaden usual focus**



RE-AIM Self-Rating Quiz

http://re-aim.org/resources_and_tools/index.html



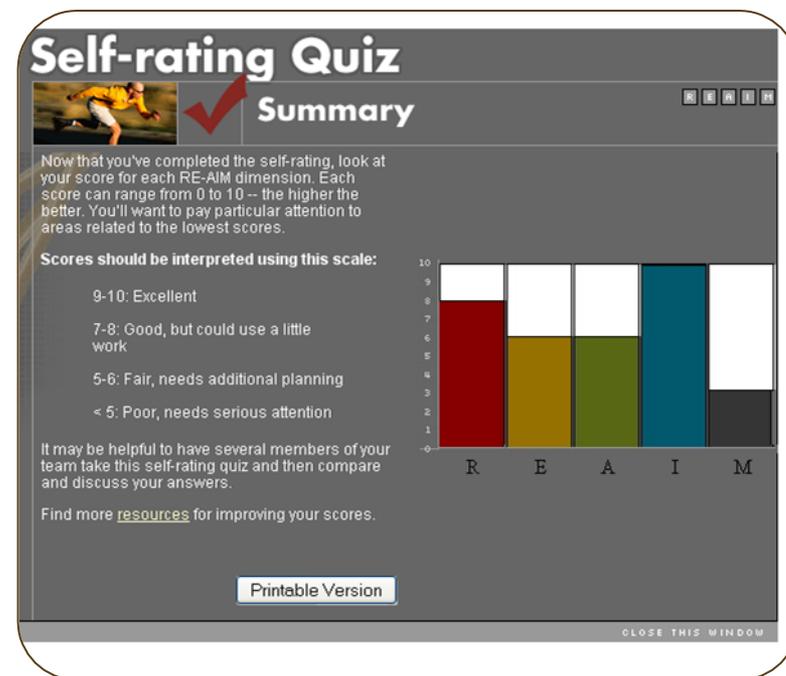
Self-rating Quiz

Introduction

This quiz should stimulate you to think about program aspects that are often ignored, or considered only after a program concludes. You won't KNOW the answers to these questions, but please give your best ESTIMATE with what you know about whether the program you plan to implement addresses these questions.

Each question includes a range of "points" that you can award. Zero is the lowest score — to be used if your program fails to address the question. Scores range from 0 to the maximum value noted. The higher the score, the better the program scores on this dimension. Because the quiz is designed to help you plan an even stronger program, please be honest and self-critical.

START QUIZ



Self-rating Quiz

Summary

Now that you've completed the self-rating, look at your score for each RE-AIM dimension. Each score can range from 0 to 10 — the higher the better. You'll want to pay particular attention to areas related to the lowest scores.

Scores should be interpreted using this scale:

9-10: Excellent
7-8: Good, but could use a little work
5-6: Fair, needs additional planning
< 5: Poor, needs serious attention

It may be helpful to have several members of your team take this self-rating quiz and then compare and discuss your answers.

Find more [resources](#) for improving your scores.

Printable Version

Bar Chart Data:

Dimension	Score
R	8
E	6
A	6
I	10
M	3



Evidence Integration Triangle (EIT)

**Intervention Program/Policy
(Prevention or Treatment)**
(e.g., key components; principles;
guidebook; internal & external validity)



**Participatory Implementation
Process**
(e.g., stakeholder engagement;
CBPR; team-based science; patient
centered)

Practical Progress Measures
(e.g., actionable & longitudinal
measures)



Multi-Level Context

- Intrapersonal/Biological
- Interpersonal/Family
- Organizational
- Policy
- Community/Economic
- Social/Environment/History

IMPLICATIONS OF EIT FOR REDUCING DISPARITIES

- Evidence alone is a start, but not enough
- Need relevant, practical Measures and Metrics of progress
- Both of above need to be selected with partnership of stakeholders
- Expect iteration and adaptation—rather than immediate success



QUESTIONS TO ASK....

- In this world of “the 4 P’s” of personalized medicine.... **ALSO** ask the 4 “W’s”:
 - ✓ Who Benefits
 - ✓ Who Suffers
 - ✓ Who Pays
 - ✓ Who Profits

Glasgow RE, Fisher EB, Haire-Joshu D, Goldstein MG. *Am J Public Health* 97(11):1936-1938 (Editorial)



2012 SUMMIT ON THE
**SCIENCE OF ELIMINATING
HEALTH DISPARITIES**
BUILDING A HEALTHIER SOCIETY
INTEGRATING SCIENCE, POLICY AND PRACTICE

DECEMBER 17-19, 2012

GAYLORD NATIONAL RESORT AND CONVENTION CENTER
NATIONAL HARBOR, MARYLAND

TAKE-HOME POINTS

- **Start with the End (Dissemination? Scale-Up: Sustainability? Reducing Disparities?) in Mind**
- **Start with and Partner with Stakeholders Throughout All Phases..... including Design and Analyses**
- **Implementation Science is Complex, Dynamic, Contextual, Learning, Systems Based.... and our models, designs and metrics need to be also**
- **All Models (including these) are WRONG....but may be useful**

