

Towards New Forms of Evidence in Health Promotion:

The Shifting Context for Methodologic Issues in Health & Society Research

**Mini-Symposium & Inauguration
of Prof.dr. Maria Koelen**

Wageningen University, March 2010

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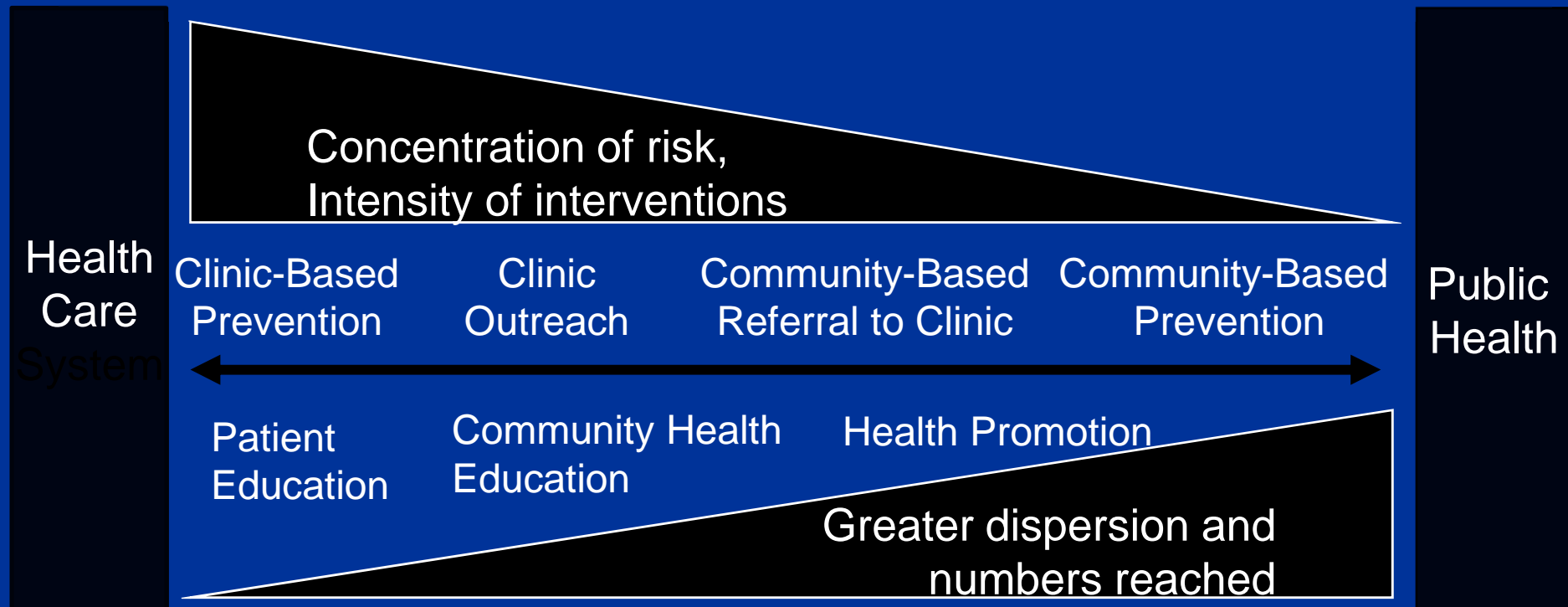
The Wageningen University Health & Society Program

- “...to develop scholarly activity in the field of health promotion incorporating the following three perspectives:
 - individual factors and social environment,
 - food production and consumption, and
 - the natural and built environment”
- All of these involve two targets of change or intervention and several types of evidence:
 - Behavior (individual, family, social, organizational)
 - Environment (through technology or policy)

Spectrum of Health & Society Evidence and Strategies*

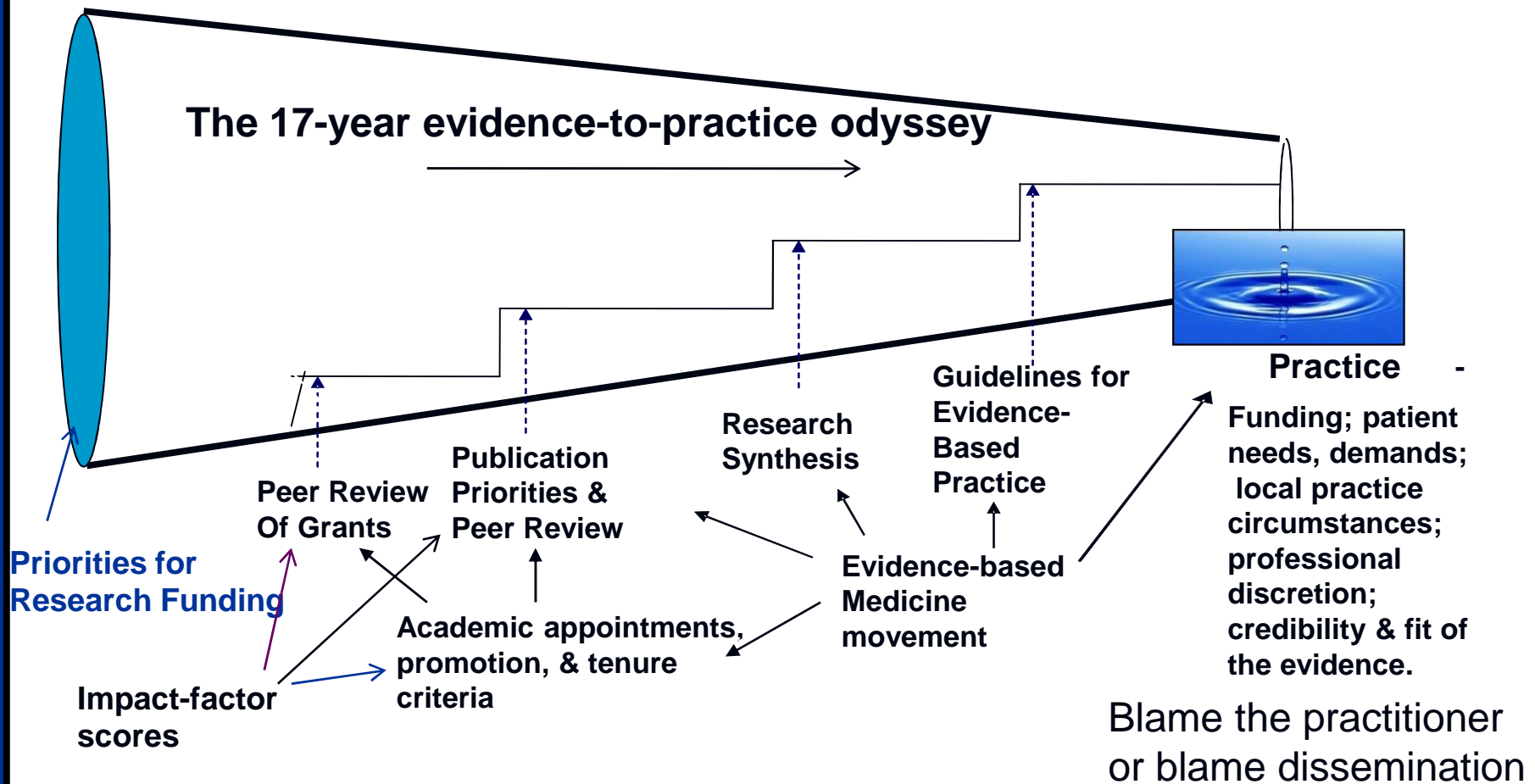
Individual Health
Factors

Society: Environmental and
Socioeconomic Factors and
Policies in Health **& Other**
Sectors



*Green LW, presented at Heelsum VI, for *Family Practice*, 2012.

The Pipeline Fallacy of Producing & Vetting Research to Get Evidence-Based Practice*



*From Green LW, Making research relevant: If it's an evidence-based practice, where's the practice-based evidence? *Family Practice*, 2008; 25(suppl1):20-24. From Heelsum V.

Problems Identified by IOM Report

Narrow focus

Lack of attention to larger systems context

Lacking details of implementation process or
evaluation process

Lack of relevance to real world

Many studies focus on one type of intervention,
but obesity may require a combination of
interventions; in fact, some things appear not
to work when tested alone



Institute of Medicine. *Bridging the Evidence Gap in Obesity Prevention: A Framework to Inform Decision Making*. Washington, DC: The National Academies Press, 2010.

Conclusions about Status of Evidence

The current research literature lacks the power to set a clear direction for obesity prevention across a range of target populations

This lack of evidence for effectiveness may be taken as a lack of effectiveness

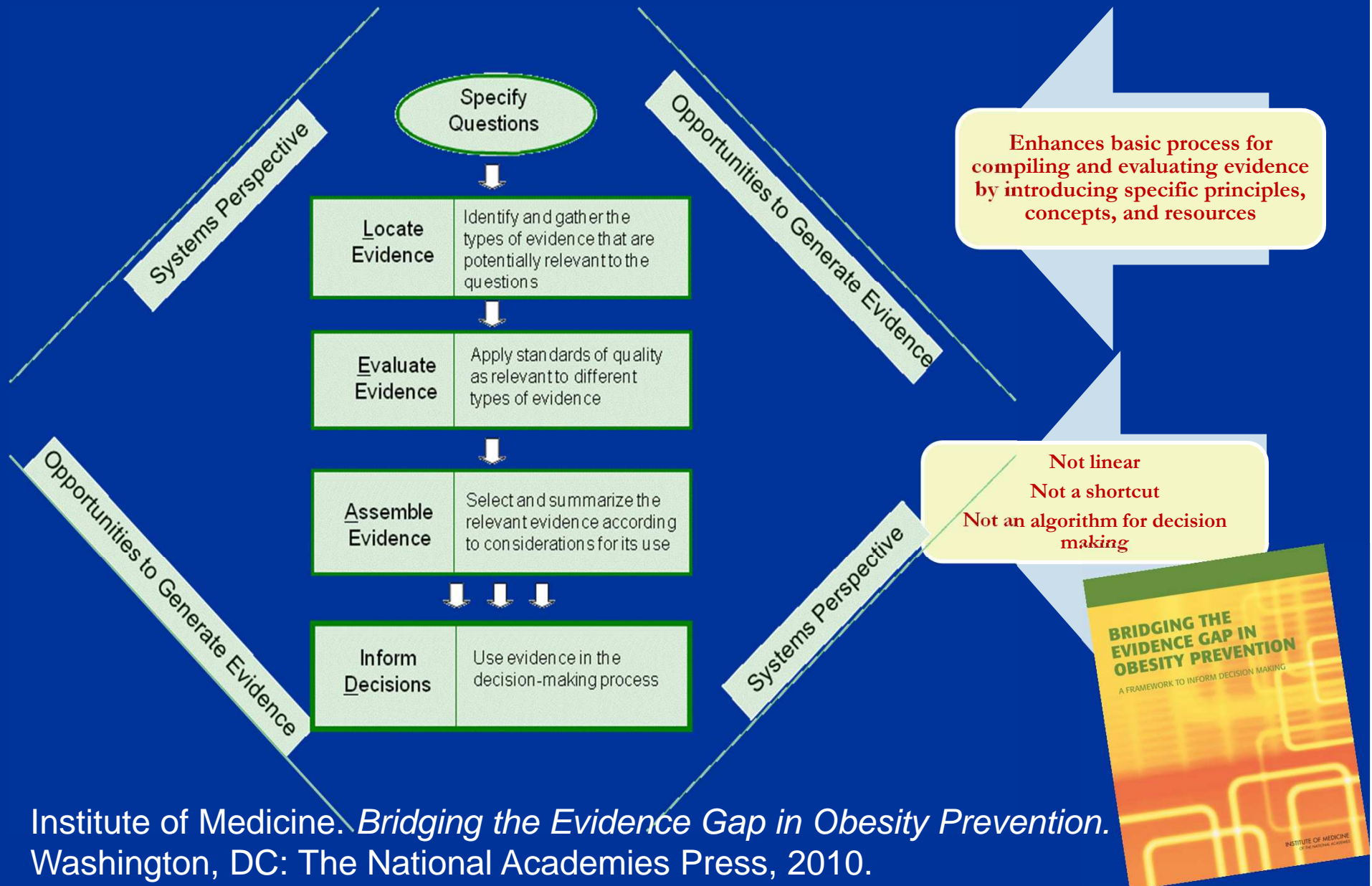
Lack of a conceptual framework for evidence selection

It is difficult to fund, conduct, and publish research on community, environmental, and policy-based obesity prevention initiatives

Assessing or reporting on the generalizability of research results to other populations or settings has not been given priority



The L.E.A.D. Framework



Institute of Medicine. *Bridging the Evidence Gap in Obesity Prevention*. Washington, DC: The National Academies Press, 2010.

The “New” Forms of Evidence for Health Promotion

- Participatory research evidence
 - Community-Based Participatory Research (CBPR)
 - Practice-based or action research
- Surveillance evidence
- Population diagnostic evidence
- Program evaluation evidence
 - Multi-component
 - Continuous quality improvement
 - How context effects (moderates) outcomes

Six Questions Most Commonly Asked About CBPR

- 1 What is it?
- 2 What is the added value for health promotion research?
- 3 What predicts outcomes in CBPR? What are successful methods to establish CBPR, measure CBPR related outcomes?
- 4 What does it take to sustain effective partnerships?
- 5 What does CBPR contribute to translating health promotion research to policy or practice?
- 6. Challenges and opportunities in CBPR for health promotion research?

1. What constitutes CBPR?

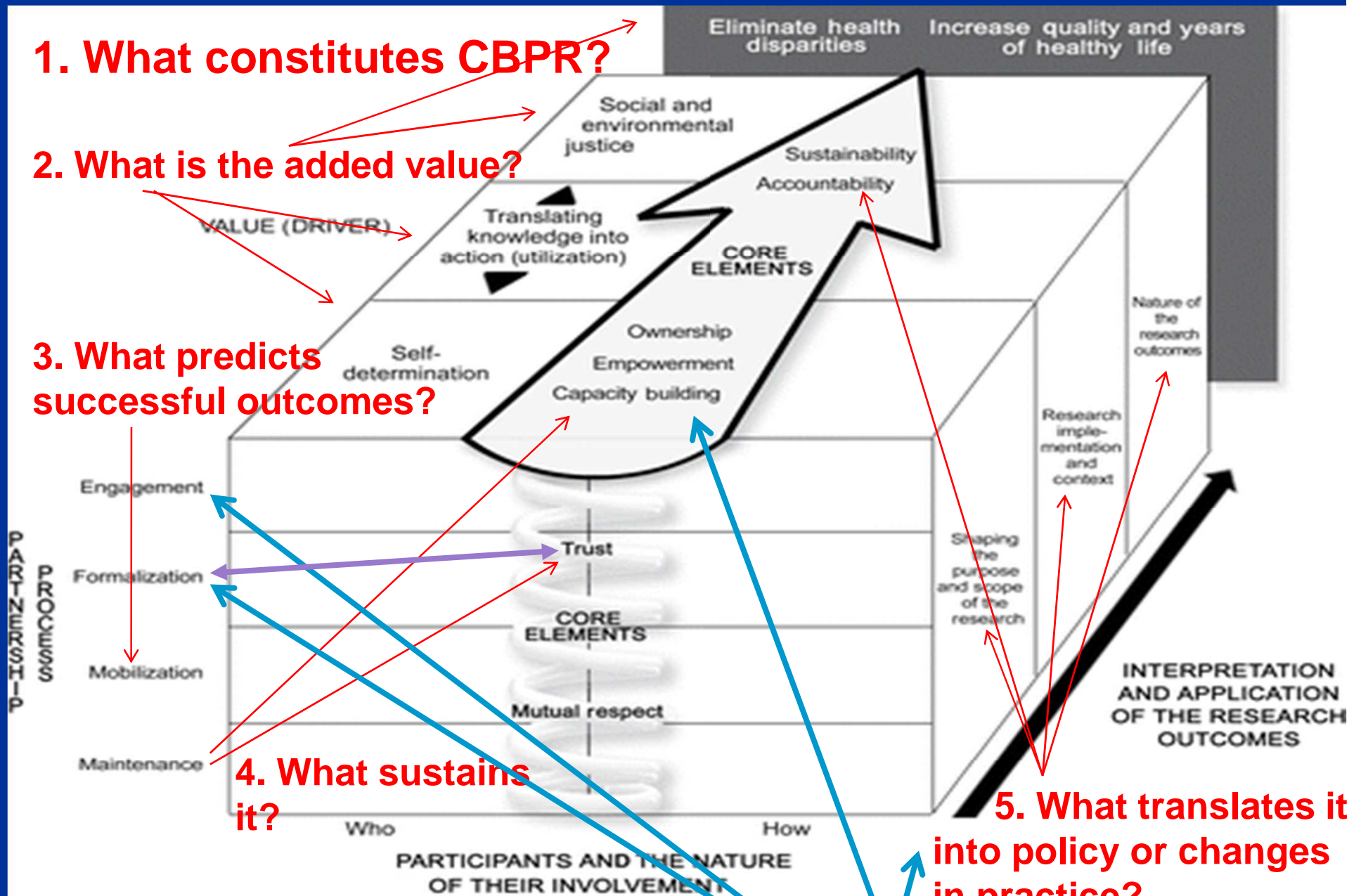
2. What is the added value?

3. What predicts successful outcomes?

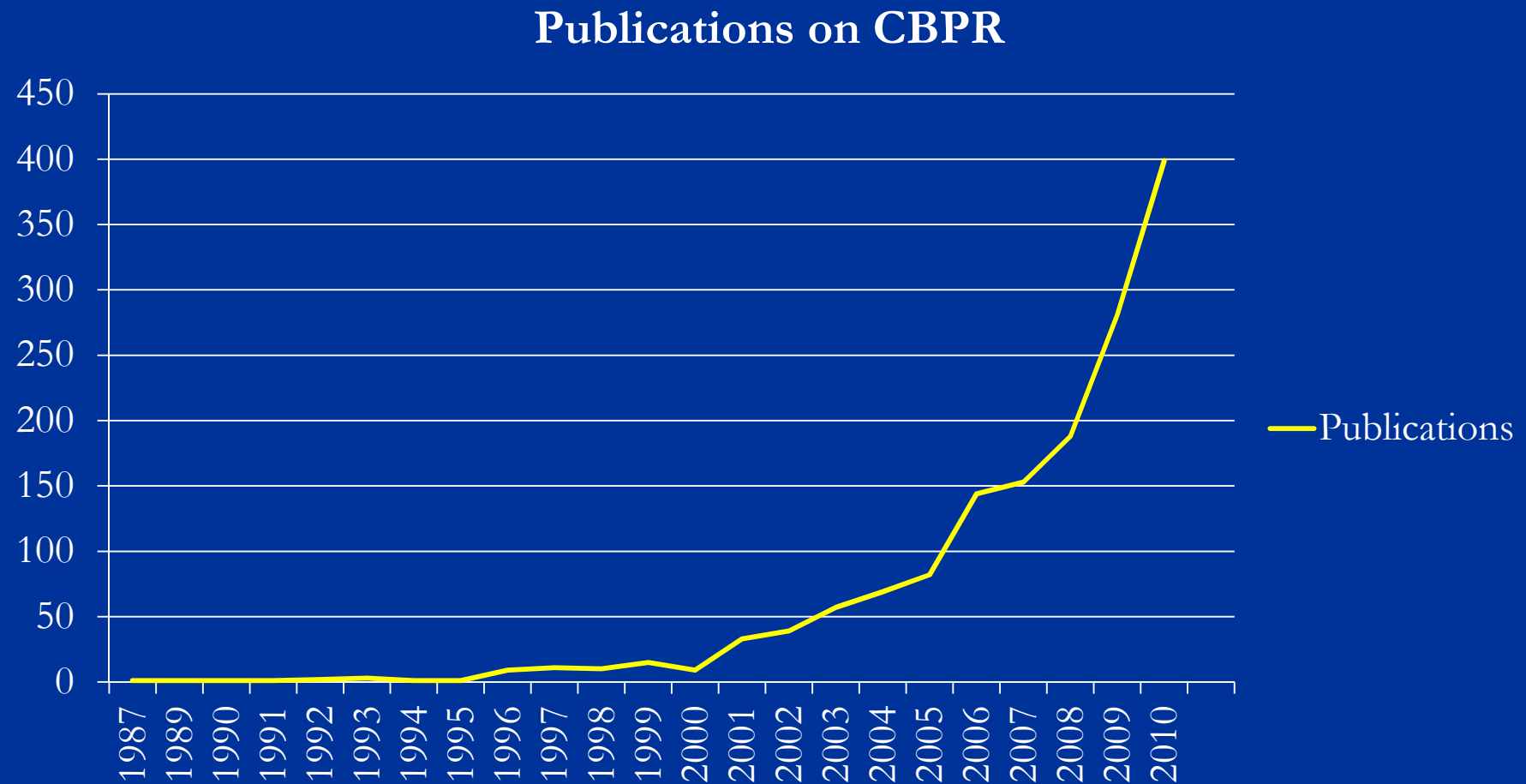
4. What sustains it?

5. What translates it into policy or changes in practice?

6. Challenges and Opportunities for Health & Society Research



Number of Publications on CBPR Based on Scopus Search*



*Based on unpublished Scopus review by Doug Brugge, Tufts U., 2011.

Definition and Standards of Participatory Research for Health*

Systematic investigation...

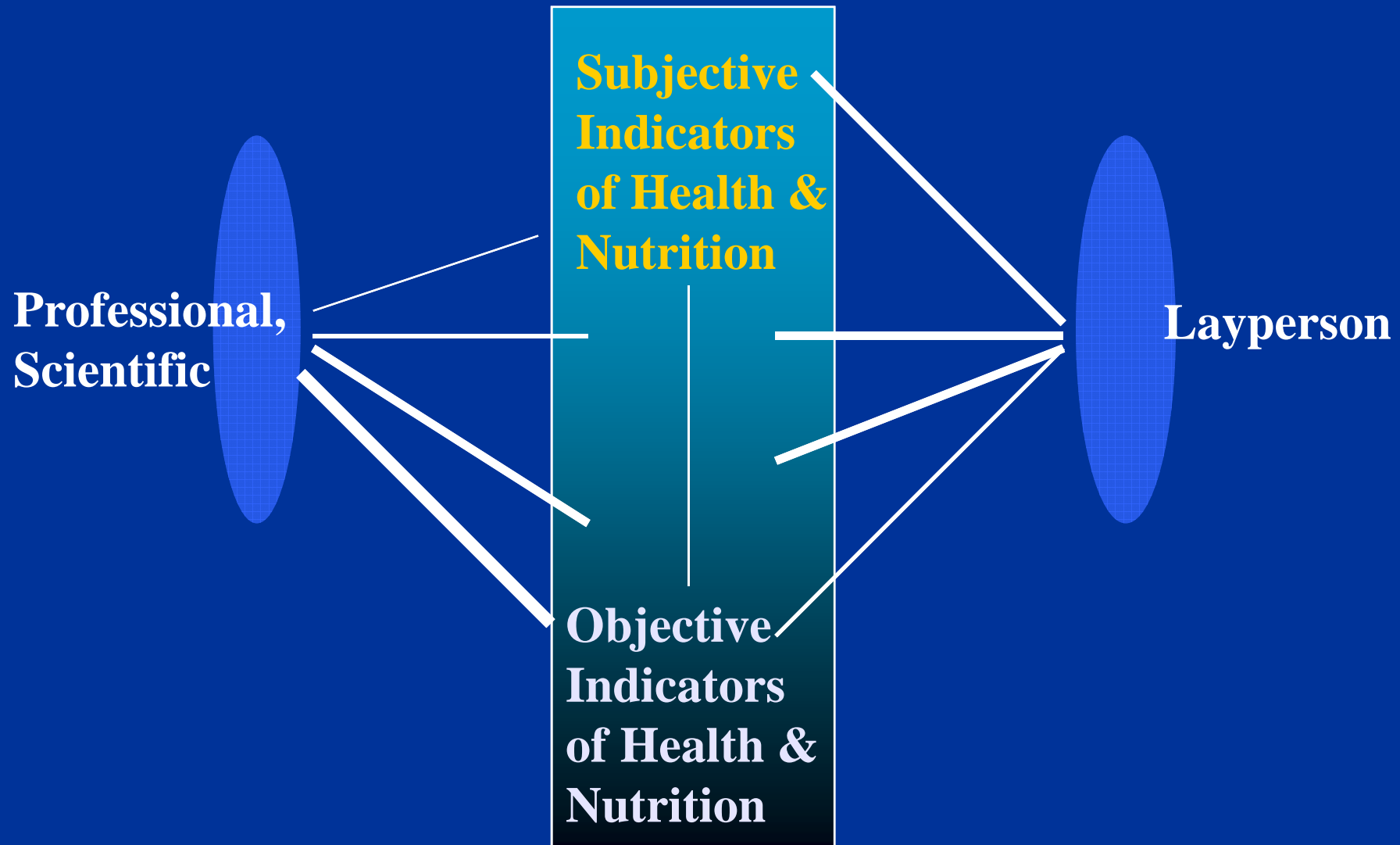
Actively involving people in a co-learning process...

For the purpose of action conducive to health

--not just involving people more intensively as *subjects* of research or evaluation

*Green, George, Daniel, et al., *Participatory Research...* Ottawa: Royal Society of Canada, 1997. www.lgreen.net/guidelines.html

The Lenses of Scientists, Health Professionals and Lay People

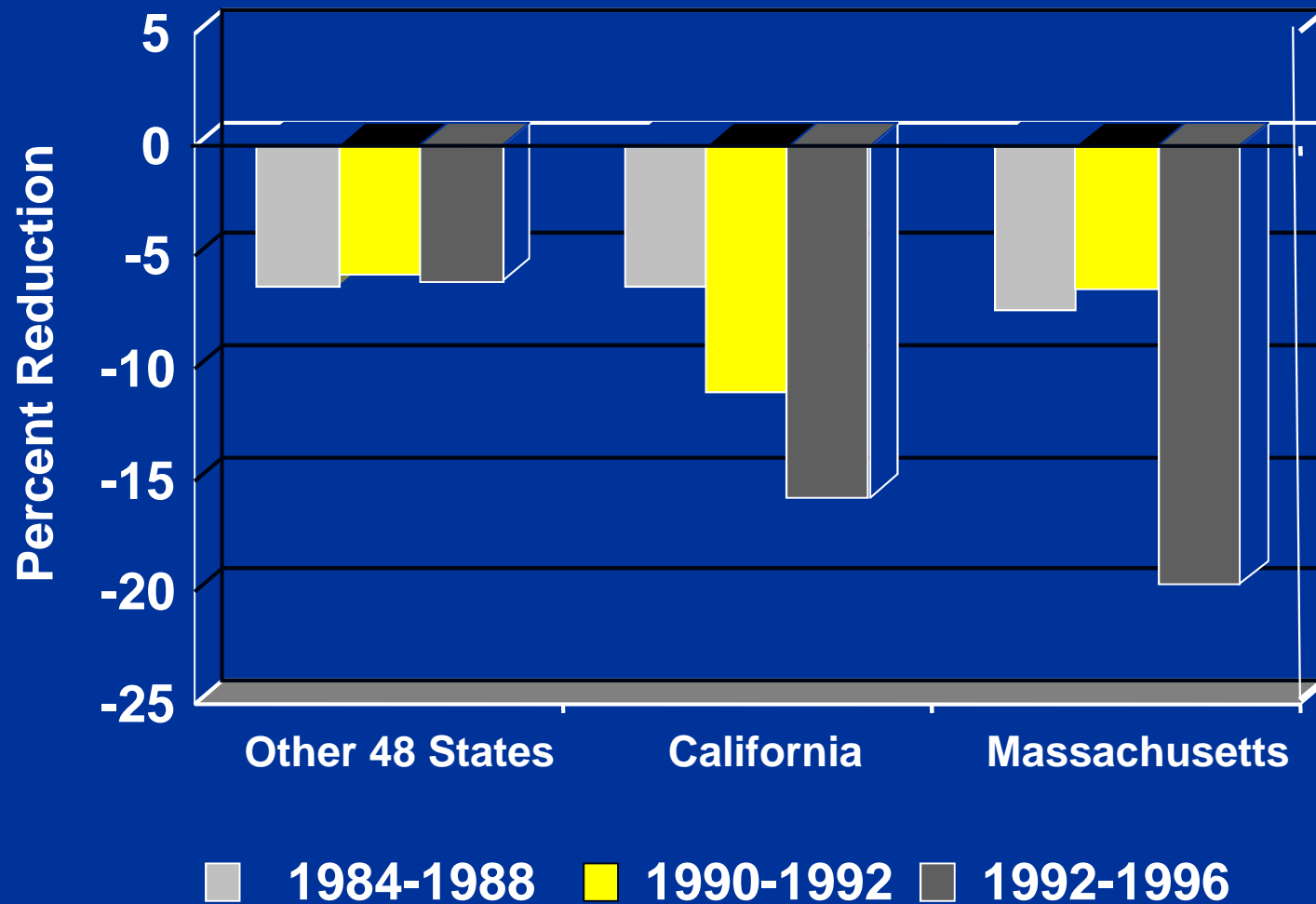


New (neglected) Evidence Forms

- Participatory research evidence
 - Community-Based Participatory Research
 - Practice-based or action research
- Surveillance evidence
- Population diagnostic evidence
- Program evaluation evidence
 - Multi-component evaluations
 - Continuous quality improvement
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Change in Per Capita Cigarette Consumption

California & Massachusetts vs Other 48 States, 1984-1996



Best Practices

for Comprehensive
Tobacco Control
Programs

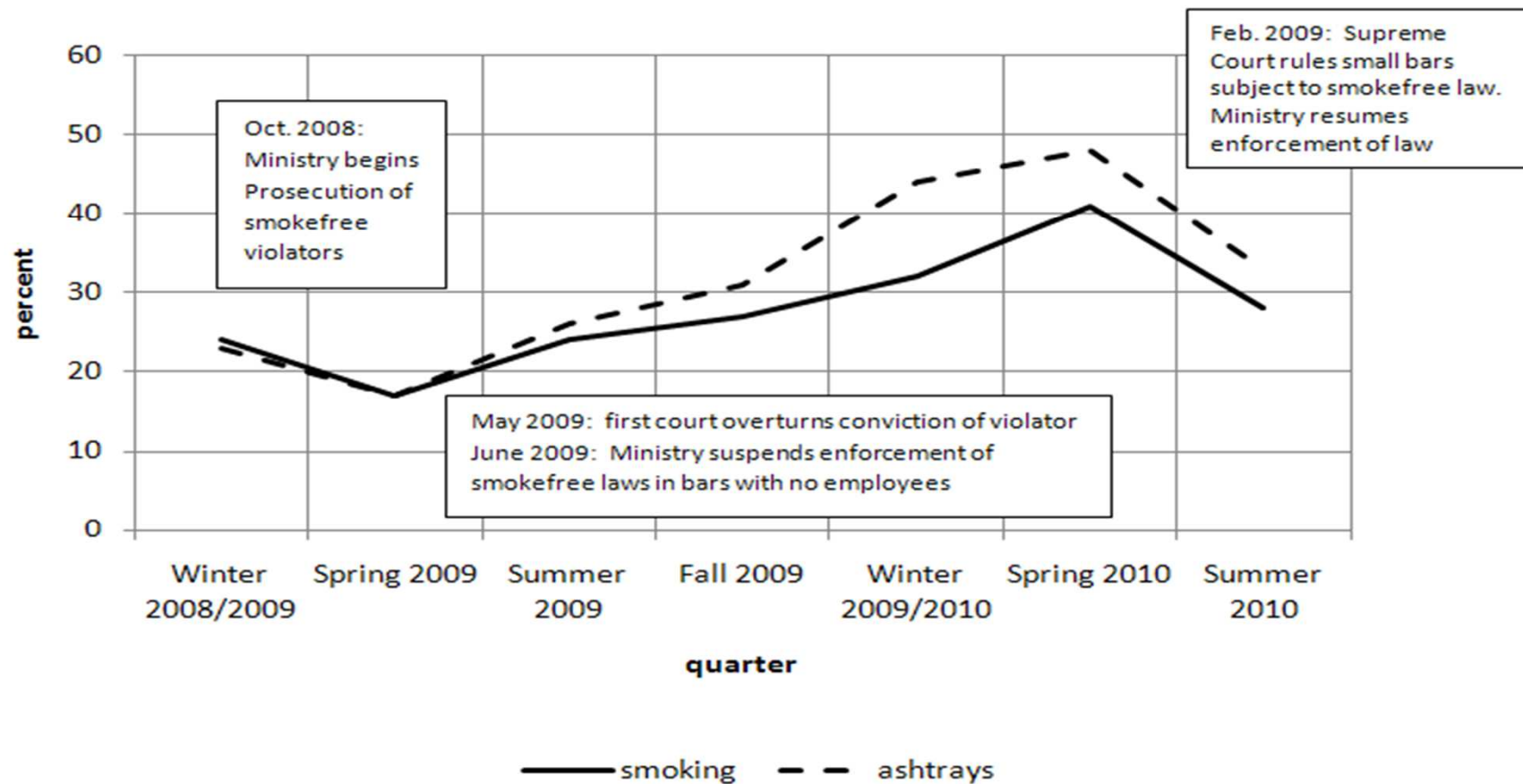
August 1999



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention
National Center for Chronic Disease Prevention and Health Promotion
Office on Smoking and Health

<http://www.cdc.gov/tobacco>

Netherlands Implementation of Smoke-free Law in Bars

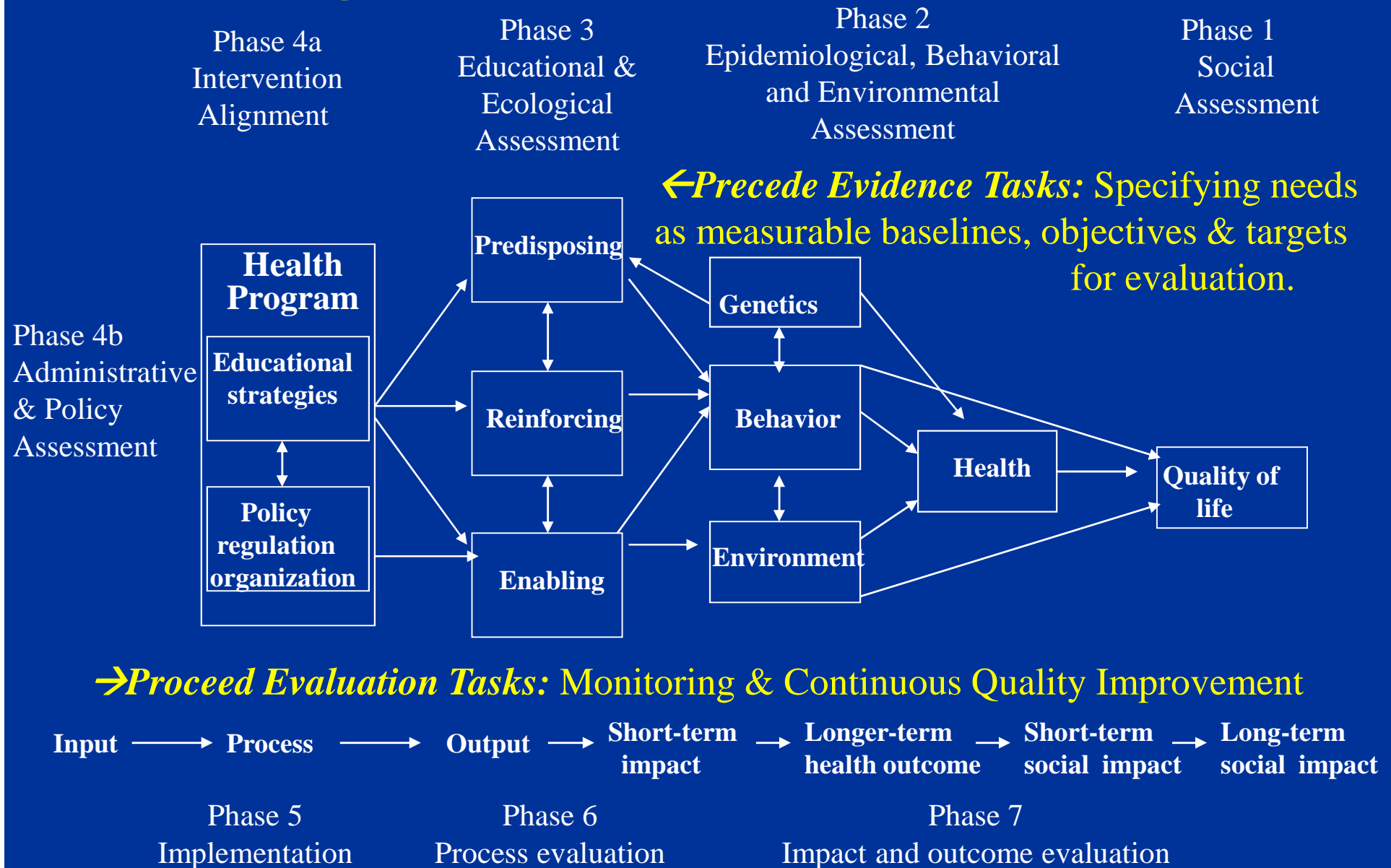


Gonzalez M, Glantz S. Ending the smoke-free exemption for the hospitality industry in the Netherlands: Public misperceptions and the failure of policy regarding smoke-free bars. In review, 2011.

New (neglected) Evidence Forms

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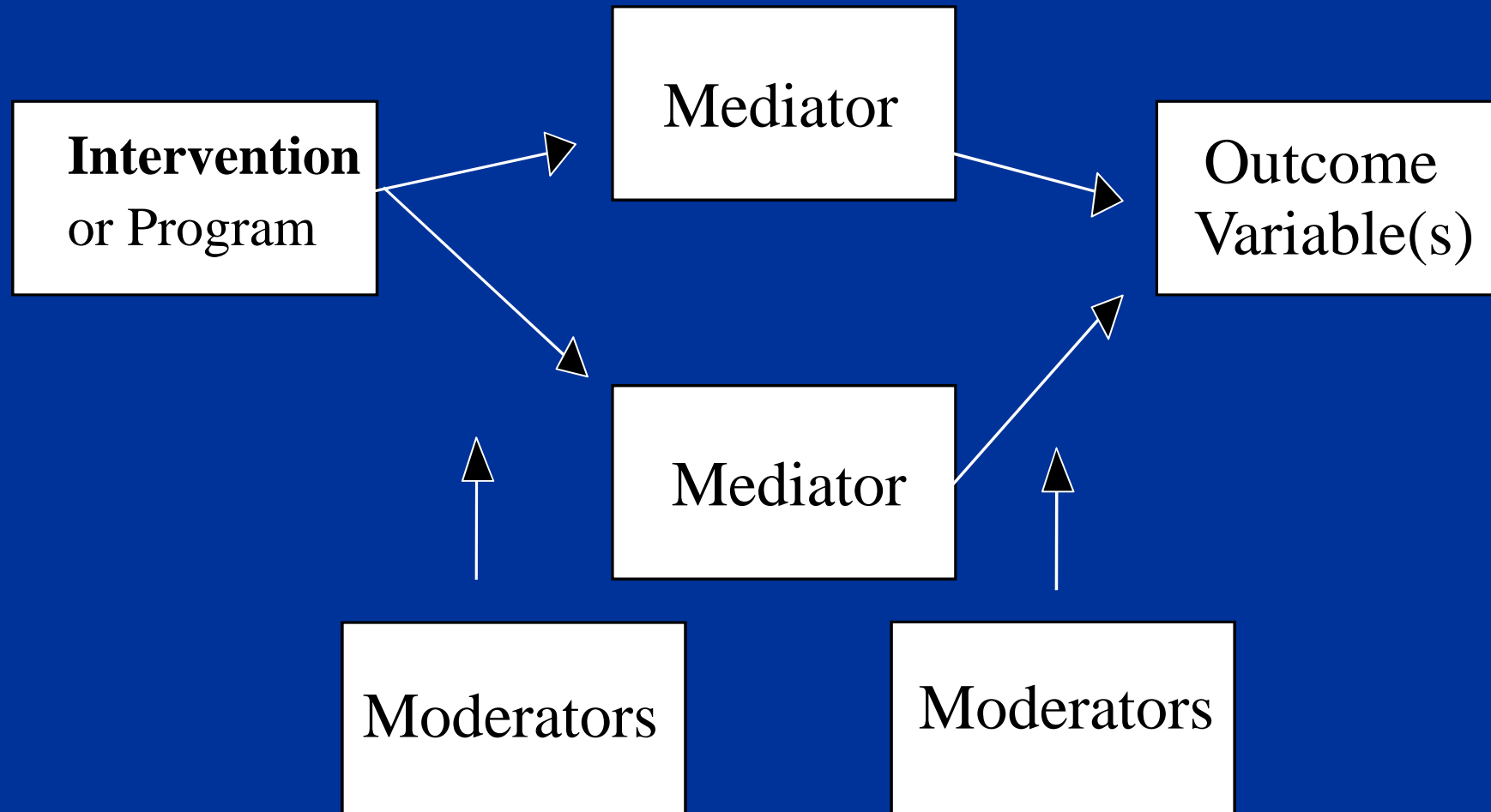
PRECEDE-PROCEED as both Logic Model and Procedural Model



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 - **How context effects (moderates) outcomes**

Mediating and Moderating Variables



Green & Kreuter, *Health Program Planning: An Educational and Ecological Approach*. 4th ed. New York: McGraw-Hill, 2005. Green & Glasgow, *E&HP*, 2006.

Aligning Evidence* with (and deriving it from) Practice: Matching, Mapping, Pooling and Patching

- *Matching* ecological levels of a system or community with RCT evidence of *efficacy* for interventions at those levels
- *Mapping* theory to the causal chain to fill gaps in the evidence for *effectiveness* of interventions
- *Pooling* experience to blend interventions to fill gaps in evidence for the effectiveness of programs in similar situations
- *Patching* pooled interventions with indigenous wisdom and professional judgment about plausible interventions to fill gaps in the *program* for the specific population

*Green & Kreuter, *Health Program Planning: An Educational and Ecological Approach*. 4th ed. NY: McGraw-Hill, 2005, Chapter 5. Green & Glasgow, 2006.

6 Conclusions (Remedies)

- Reform the research funding priorities
- Reform publication criteria
- Reform the criteria for inclusion and weighting of studies into systematic reviews and research syntheses;
- Reform the derivation and qualification of practice guidelines from the systematic reviews;
- Reform the academic promotion and tenure criteria and weights given to community- & practice-based research;
- Reform the research training of students and fellows in methods of practice-based and participatory research

A Vision for “Health & Society”

- A future in which we would not need to ask how to get more evidence-based practice, rather
- How to engage students, practitioners, patients and communities in a participatory process of practice-based research and program evaluation?
- How to adapt the “best practices” guidelines through *best processes* of collecting data to diagnose the biopsychosocial needs of their patients and communities...

The Vision (expanded)

- How to match the proposed evidence-based interventions to those needs, filling gaps in the evidence-based interventions with the use of theory and mutual consultation, and prospective testing of complementary interventions
- The cumulative, building-block tradition of evidence-based medicine from RCTs would be complemented by a parallel strengthening and support of a tradition of participatory research and evaluation conducted in practice settings.