Participatory Research:
If We Want More Evidence-Based Practice, We Need More Practice-Based Evidence*

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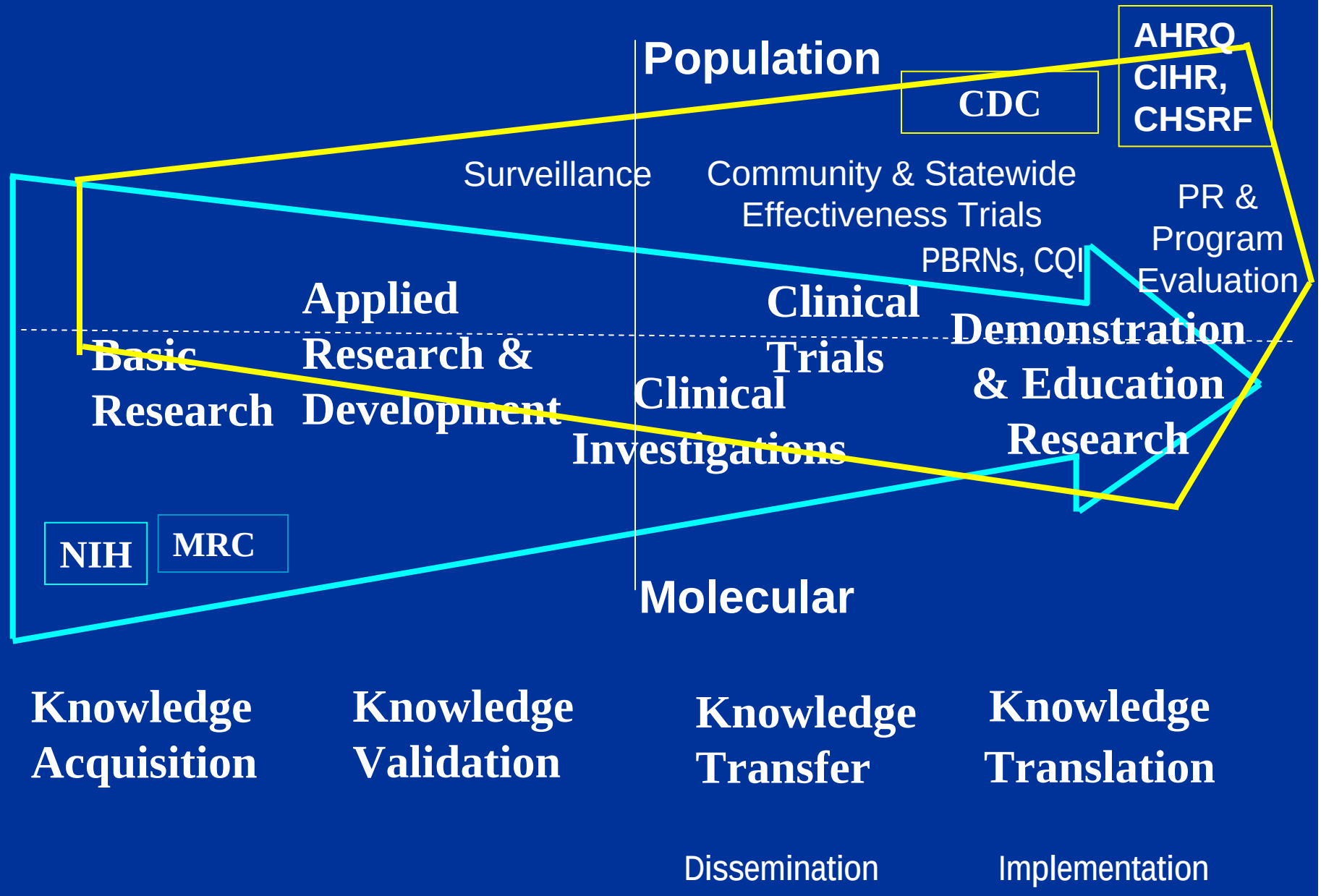
***www.lgreen.net**

Issues for Evidence-Based Practice and Translating Research to Practice

- Setting research & evaluation priorities
- Making research findings actionable, usable, relevant (to whom?)
- Translating research to local circumstances, cultures, and personnel
- Making practice more evidence-based
- Making evidence more practice-based

Two Dimensions of Health Research



Issues for Evidence-Based Practice and Translating Research to Practice

- Setting research priorities
- Making research findings actionable, usable, relevant within settings
- Translating research from outside to local circumstances, cultures, personnel
- Making practice more evidence-based
- Making evidence more practice-based

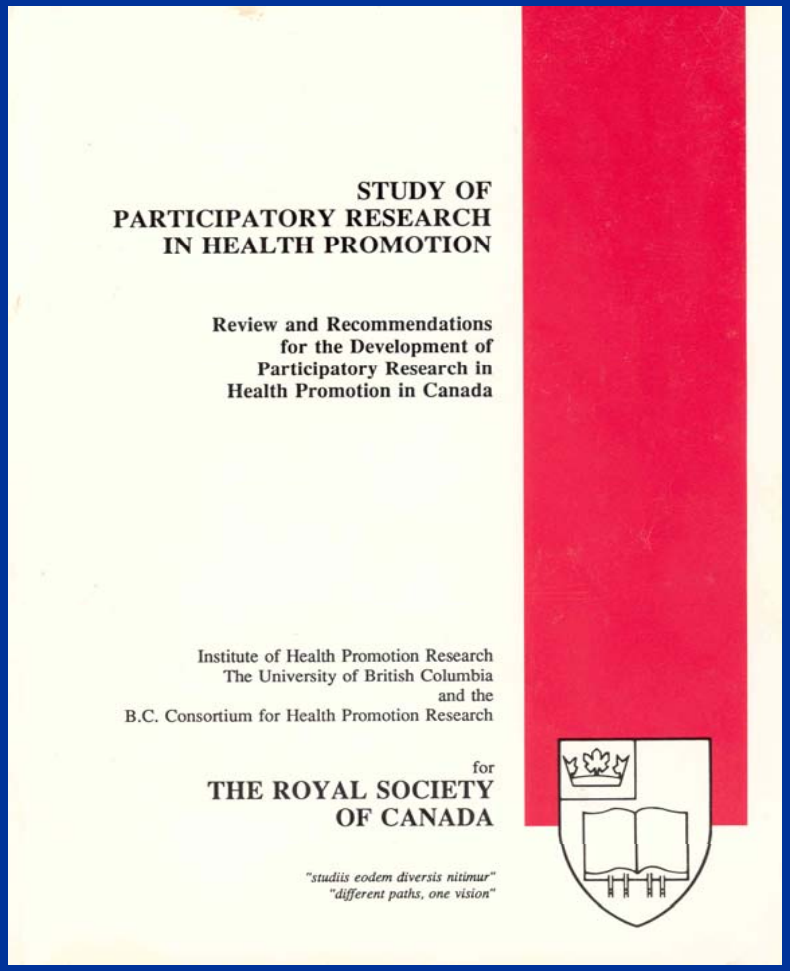
Training "Experimenting Practitioners"

- Can't turn the MPH degree into a PhD
- Can turn an MPH into a questioning practitioner:
  - Skeptical about the external validity of most research and research syntheses
  - Willing to adapt and engage
- Can turn a curious, questioning, adapting practitioner into an experimenting practitioner, with the DrPH

Some Benefits of Participatory Research in Practice-Based Evidence

- Results are relevant to interests, circumstances, and needs of those who would apply them
- Results are more immediately actionable in local situations for people and/or practitioners
- Generalizable findings more credible to people, practitioners and policy makers elsewhere because they were generated in partnership with people like themselves
- Helps to reframe issues from health behavior of individuals to encompass system and structural issues.

Guidelines for PR - 1995



- University of British Columbia team
- For: The Royal Society of Canada
- © 1995
- Current Guidelines available at: www.lgreen.net

Definition and Standards of Participatory Research for Health*

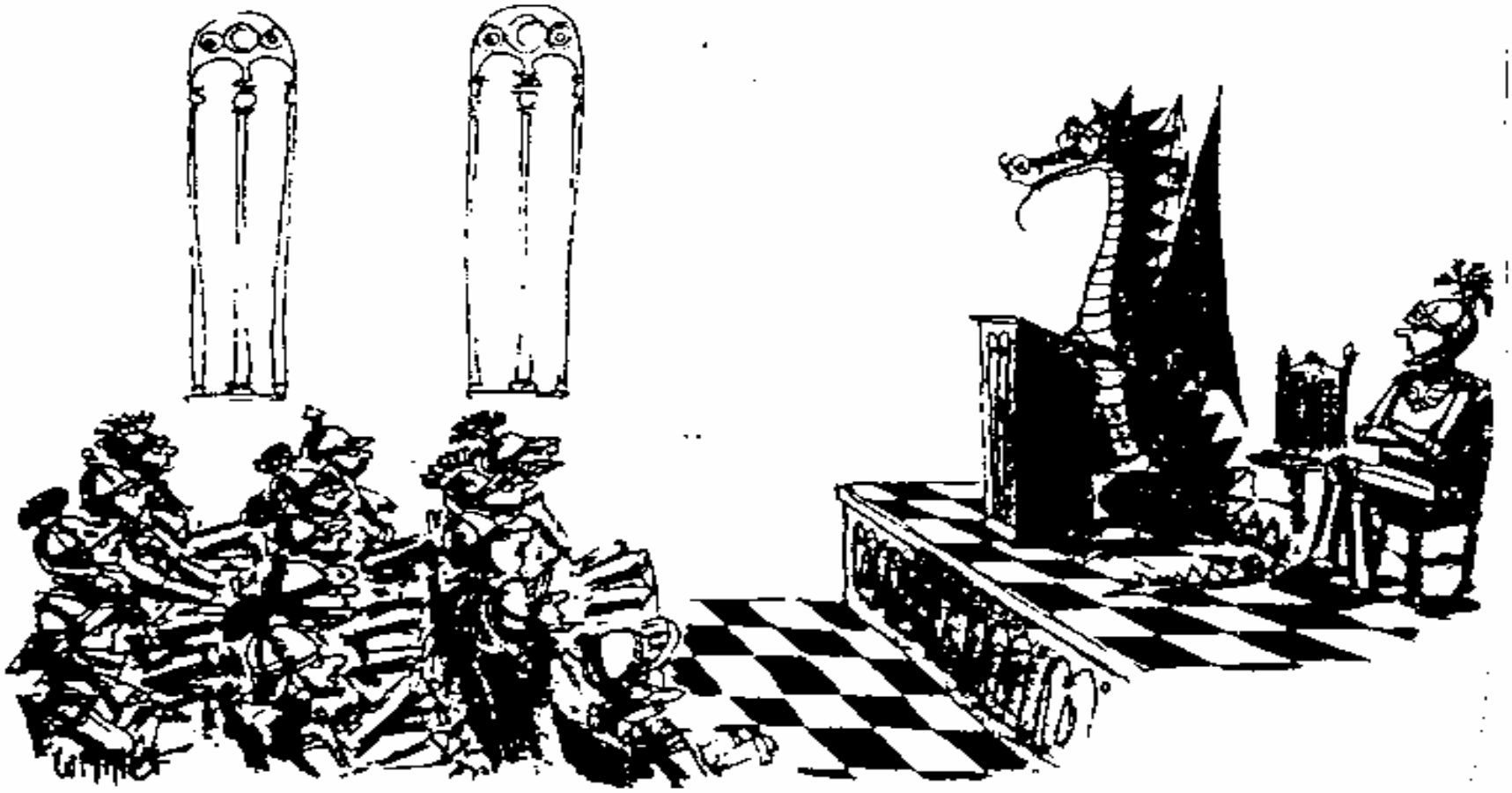
Systematic investigation…

Actively involving people in a co-learning process…

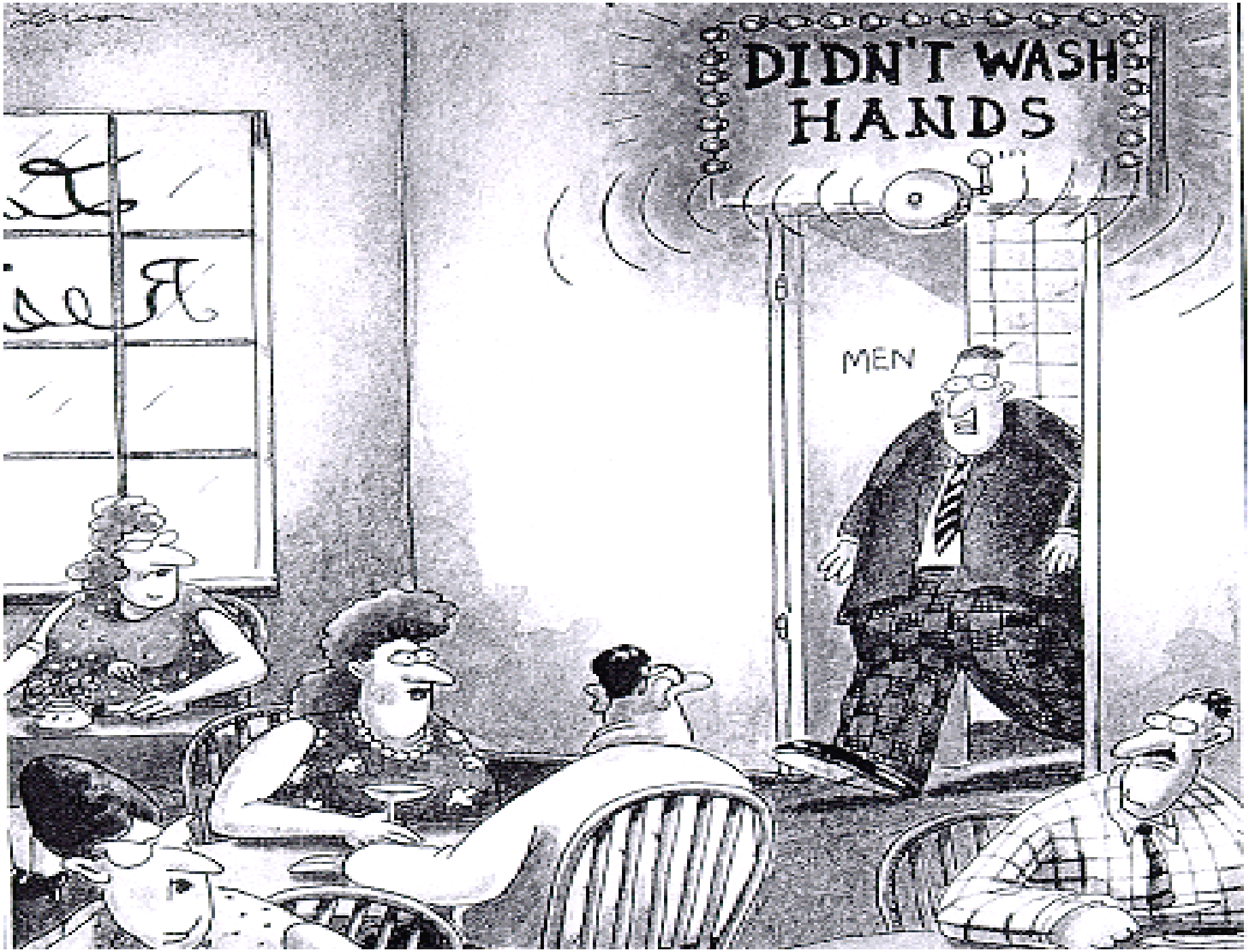
For the purpose of action conducive to health**

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

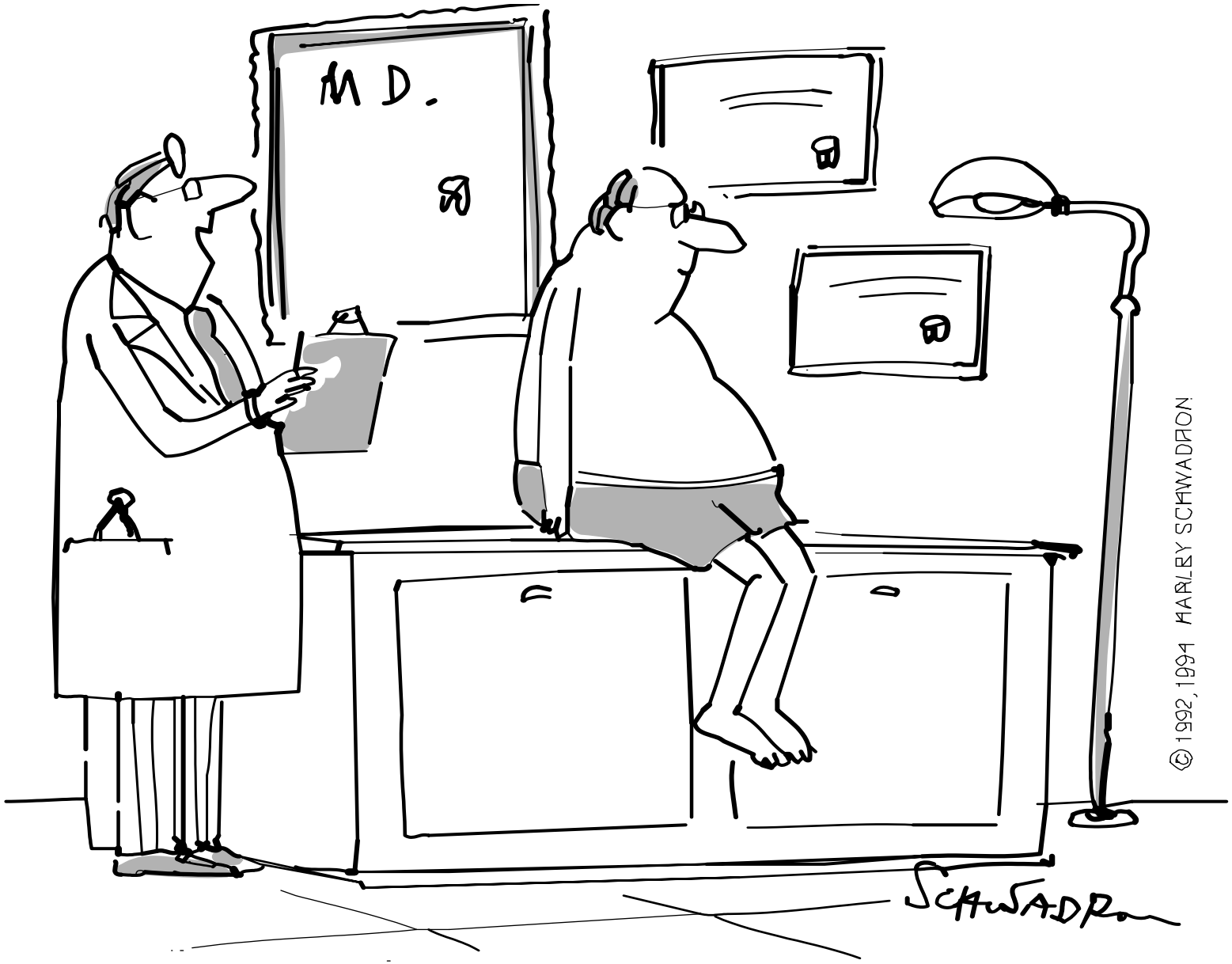
*Green, George, Daniel, et al., *Participatory Research…* Ottawa: Royal Society of Canada, 1997. www.lgreen.net/guidelines.html



“To begin with, I would like to express my sincere thanks and deep appreciation for the opportunity to meet with you. While there are still profound differences between us, the very fact of my presence here tonight is a major breakthrough.”



Garv Larson



"I want you to quit smoking and lose 35 pounds. Then I want you to come back and tell me how the hell you did it."

Participatory Research in its Various Incarnations

-Action Research

-Participatory Action Research (PAR)

-Participative Research

-Policy-oriented Action Research

-Collaborative Inquiry

-Participatory Rural Appraisal (PRA)

-Dialectical Research

-Conscientizing Research

-Emancipatory Research

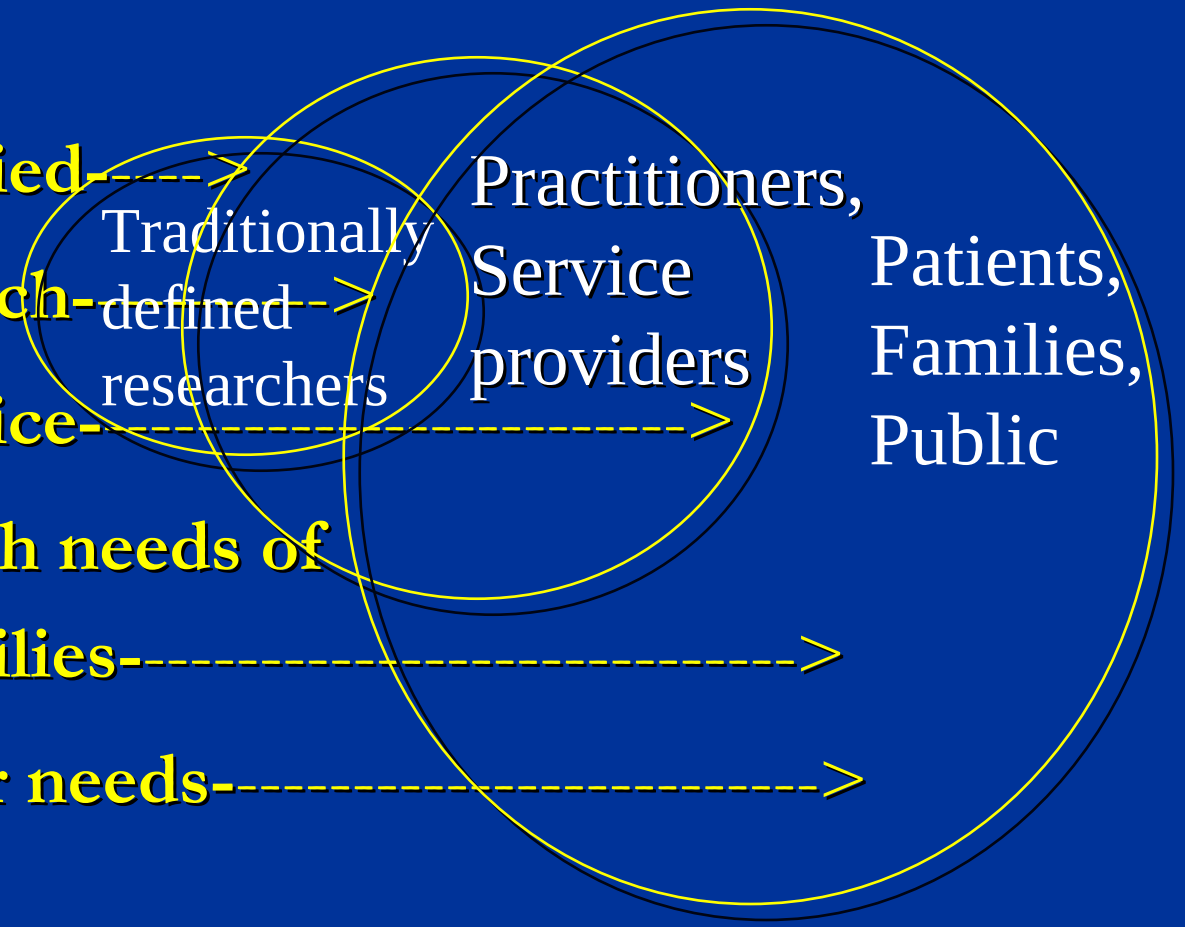
-Social Reconnaissance

-Participatory Learning Research

- Empowerment Evaluation
- Participatory Research

Layers of Collaboration in Participatory Research

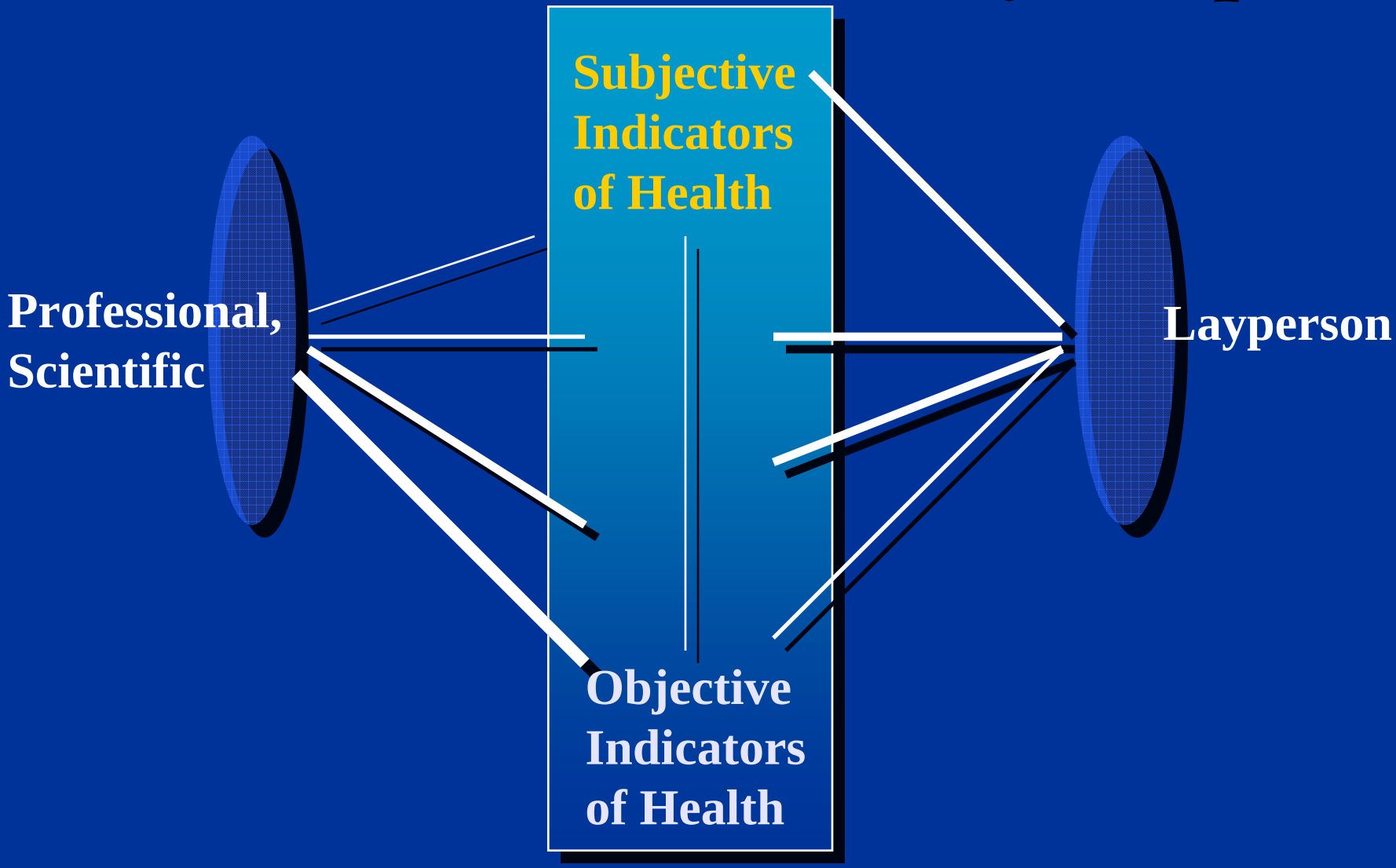
- **Basic & applied----->**
- **Action research-->**
- **PAR in practice----------->**
- **PAR on health needs of patients, families----------->**
- **PAR on other needs----------->**



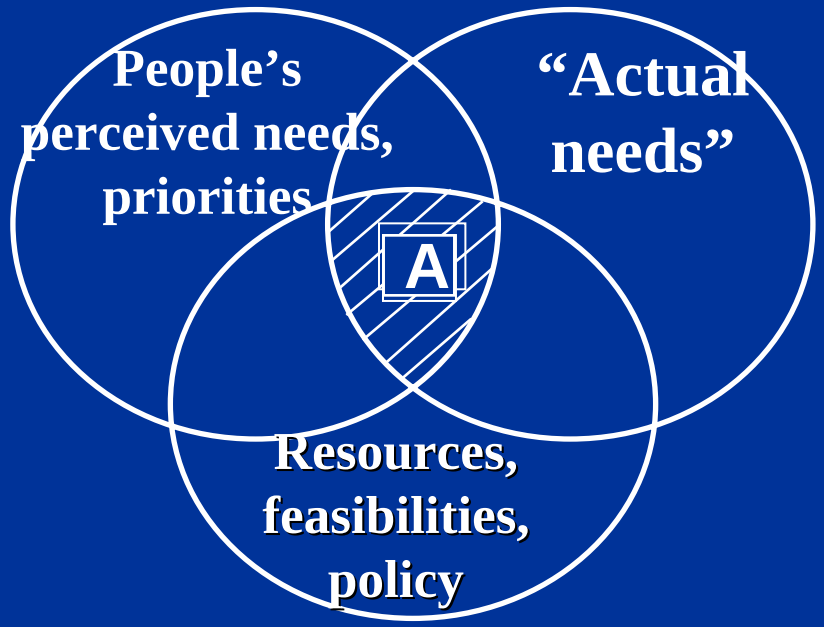
Empowerment Evaluation Definition: Fetterman & Wandersman, 2005, p. 28.

- An evaluation approach that aims to increase the probability of achieving program success by (1) providing program stakeholders with tools for assessing the planning, implementation, and self-evaluation of their program, and (2) mainstreaming evaluation as part of the planning and management of the program/organization.

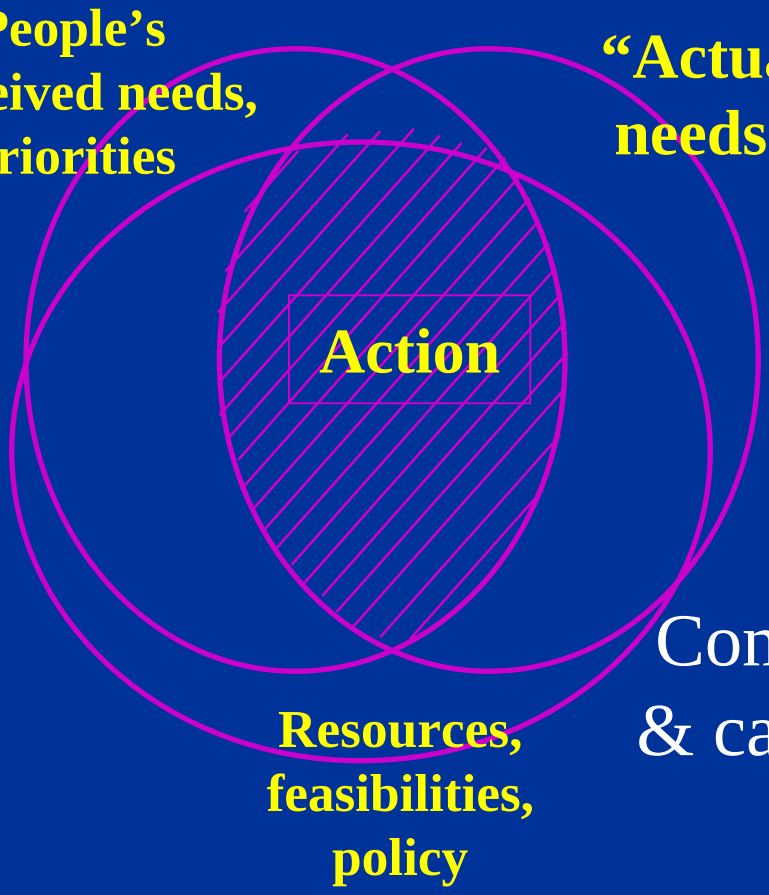
The Lenses of Scientists, Health Professionals and Lay People



Closing the Gaps Between Population & Scientists' Perception of Needs, and Policy Makers' Assessments



Reconciling Perceived Needs, "Actual Needs," & Resources



Health Education →

Participatory Research ←

Community organization & capacity development ↑

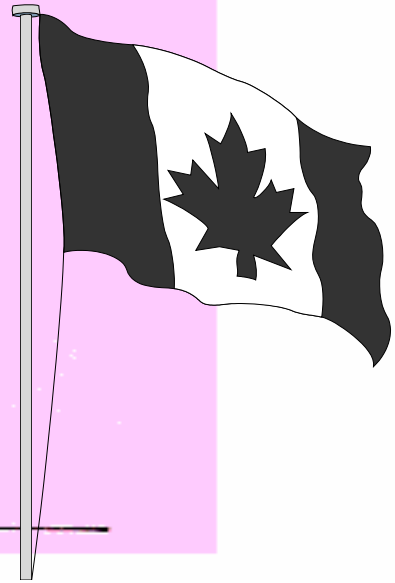
TEAMWORK

When geese fly in formation, they travel 70% faster than when they fly alone.

Geese share leadership. When the lead goose tires, he (or she) rotates back into the "V," and another flies forward to become the leader.

Geese keep company with the fallen.

When a sick or weak goose drops out of the flight formation, at least one other goose joins to help and protect.



Issues for Evidence-Based Practice and Translating Research to Practice

- Setting research priorities
- Making research findings actionable, usable, relevant: participatory research
- Translating research to local circumstances: External validity & “fidelity” vs adaptation
- Making practice more evidence-based
- Making evidence more practice-based

Building Policy and Practice from Evidence + Theory

- Not starting with theory and looking for problems on which to test them, but starting with problems and looking for theories to help us solve them*
- Evidence generalizes to other circumstances, settings, & populations in the form of either replication or theory
- Replication is limited by the infinite number of context-population combinations
- "In theory, theory and practice are the same thing. In practice they're not.." -Jan L.A. van de Snepscheut
- "All models are wrong. Some are useful" --Box

***Green LW. Public health asks of systems science… *Amer J Public Health 96,* March 2006. See also: Gielen & Sleet, *Epid Reviews 25,* 2003; Gielen, Sleet & DiClemente (Eds.). *Injury & Violence Prevention.* San Francisco: Jossey-Bass, 2006.**

Problems Perceived by Practitioners in Translating Research from RCTs*

- An accessibility gap
  - "Do I have the same resources as the experimenters?"
- A credibility gap
  - "How different is their situation of practice from mine?"
- An expectation gap
  - "Is it really necessary and realistic for me to strive for such lofty goals in my practice?"

*Lancaster B. Closing the gap between research and practice. *Health Educ Q.* 1992; 19:408-411.

"Fidelity" vs Adaptation

- Researchers test an intervention for its efficacy
- Rigorous test qualifies the study for official lists of "evidence-based practices" and guidelines
- Practitioners try to incorporate it into their programs
- Poor fit produces failure of program
- Practitioners are blamed for not implementing with "fidelity"
- Now buy the producers' training program

Issues for Evidence-Based Practice and Translating Research to Practice

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- Translating outside research to local circumstances
- Making practice more evidence-based
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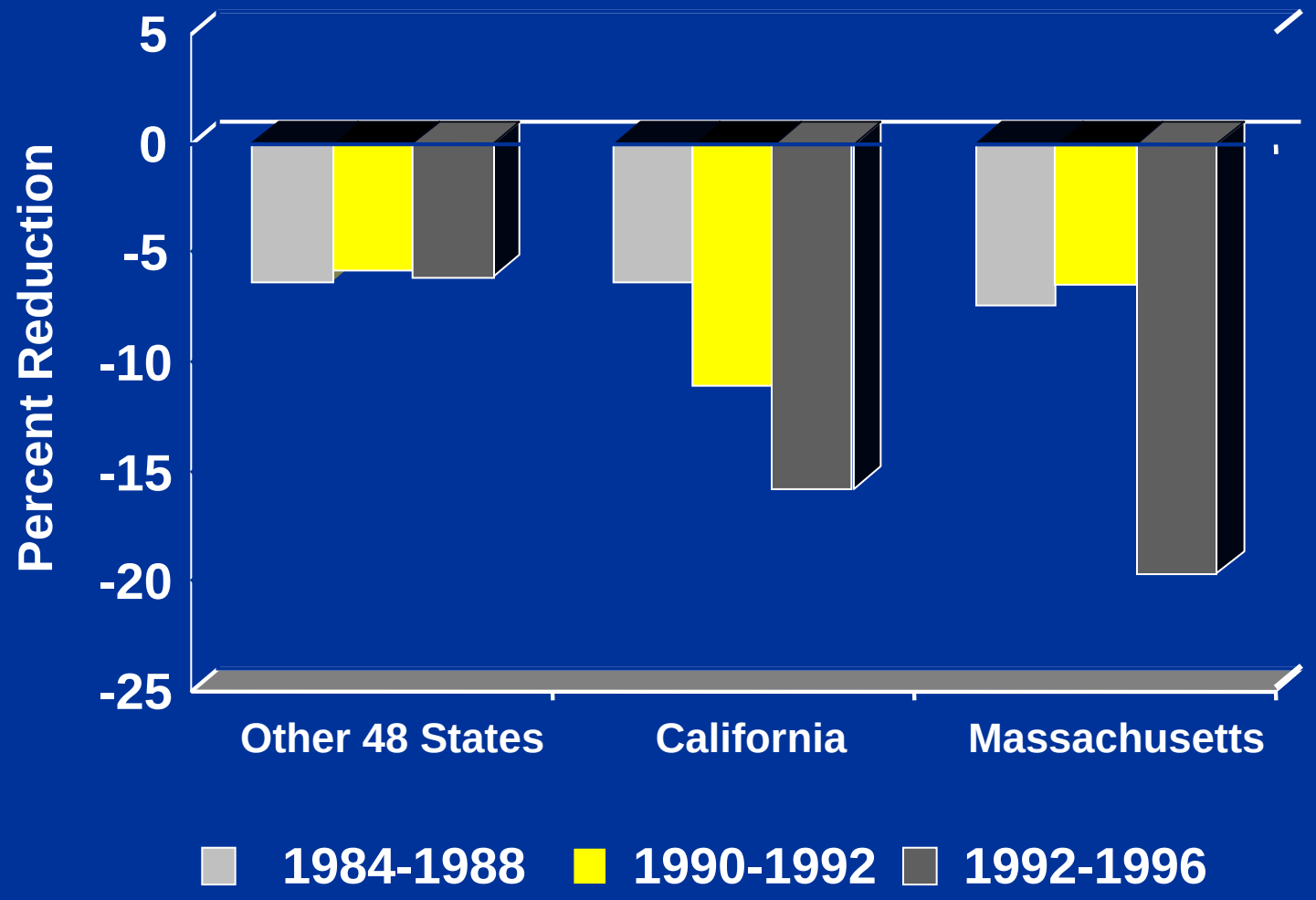
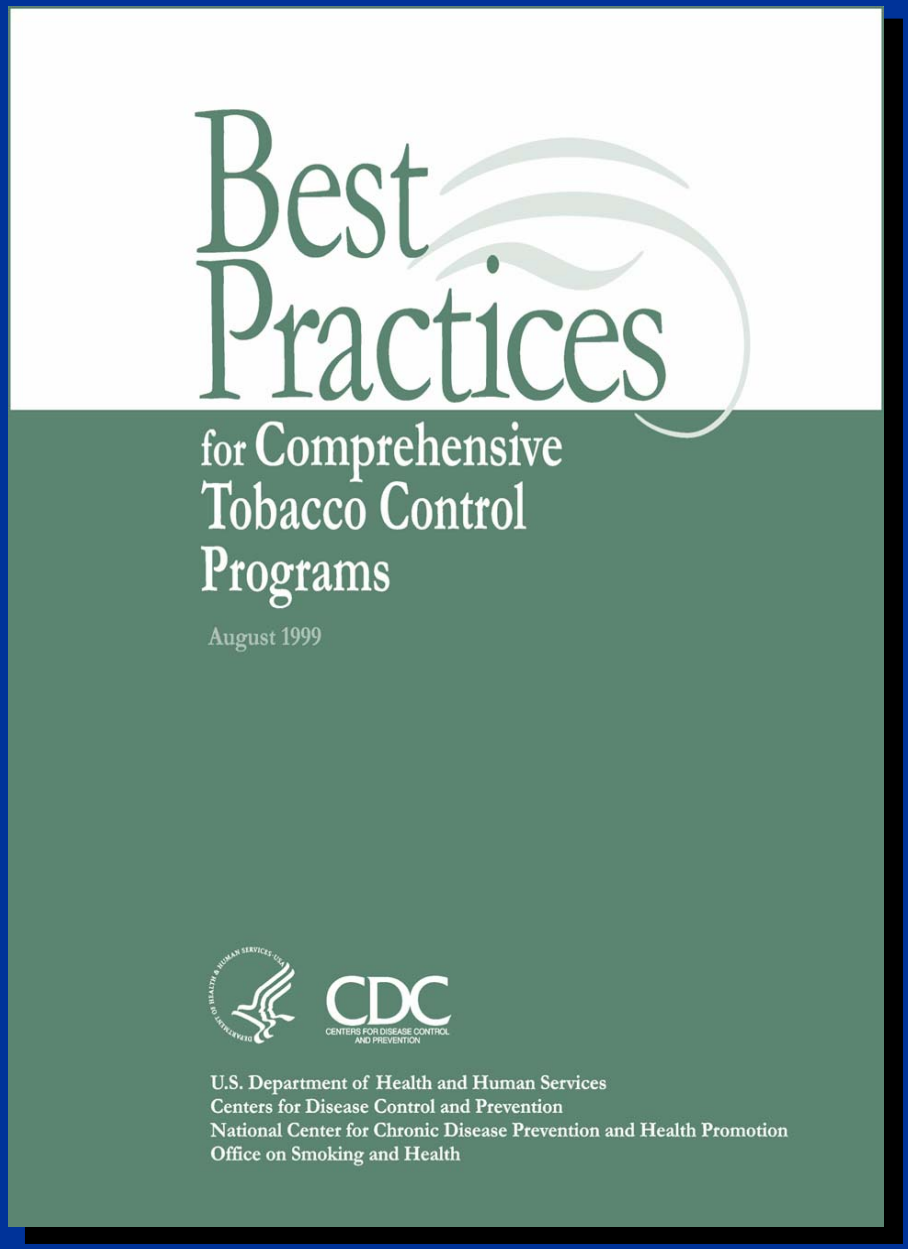
The Reductionist, Internal Validity Drift of Health Sciences Evidence

- Evidence-based medicine movement taken to scale in public health
- The peer review preferences for experimental control and certainty of causation
- The publishing preferences for RCTs and positive results
- The limitations of print space driving out richer description of interventions, protocols, procedural lessons, subgroup variations
- But there is a more natural type of public health evidence that has greater influence on program planning, practice & policy

Change in Per Capita Cigarette Consumption

California & Massachusetts vs Other 48 States, 1984-1996




Best Practices
for Comprehensive Tobacco Control Programs
August 1999
CDC
CENTERS FOR DISEASE CONTROL AND PREVENTION
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

Efficacy vs. Effectiveness:

- ***Efficacy*. The tested impact of an intervention under highly controlled circumstances.**
- ***Effectiveness*. The tested impact of an intervention under more normal circumstances (relatively less controlled, real-time, "typical" setting, population, and conditions).**
- ***Broad Program Evaluation.* The tested impact of a blended set of interventions on larger systems and populations. "Natural Experiments" with minimal control, maximum variability.**

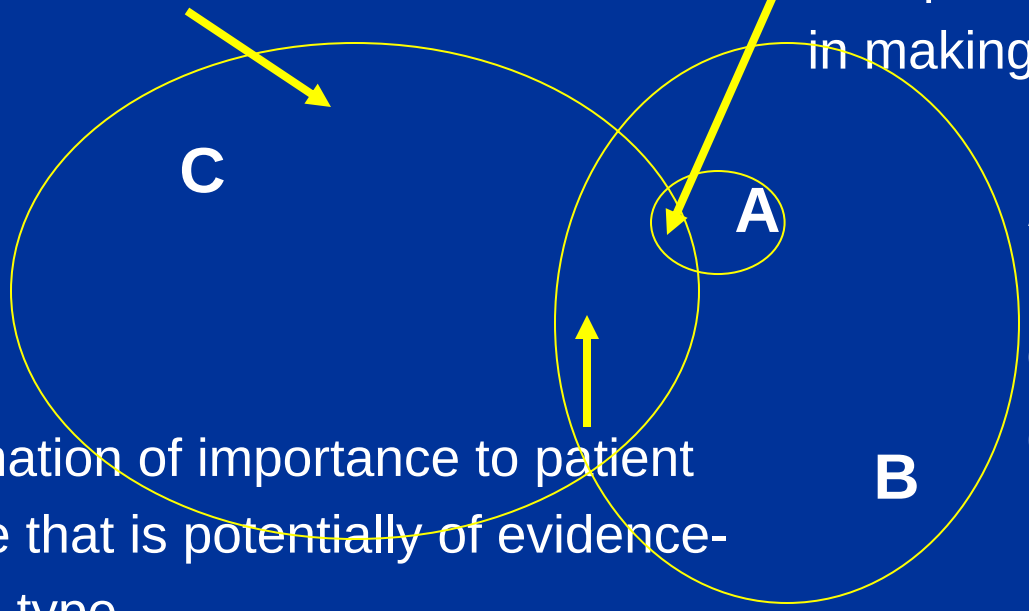
The Trade-offs

- ***Efficacy.*** **Maximizes *internal validity*, i.e., the degree to which one can conclude with confidence that the intervention caused the result.**
- ***Effectiveness.*** **Maximizes *external validity*,* i.e., the degree to which one can generalize from the test to other times, places, or populations.**
- ***Program Evaluation.*** **Maximizes reality testing in particular settings, & with the combination of interventions required for public health effect.**

Evidence-Based Medicine and Patient-Centered Medicine*

Information of importance to patient choice that is not even potentially of "evidence-based type."

Area where there is currently good evidence-based information of importance to patients in making choices.



A "Good evidence"

B Potential for "good evidence"

C Information of potential importance to patients in making health care choices

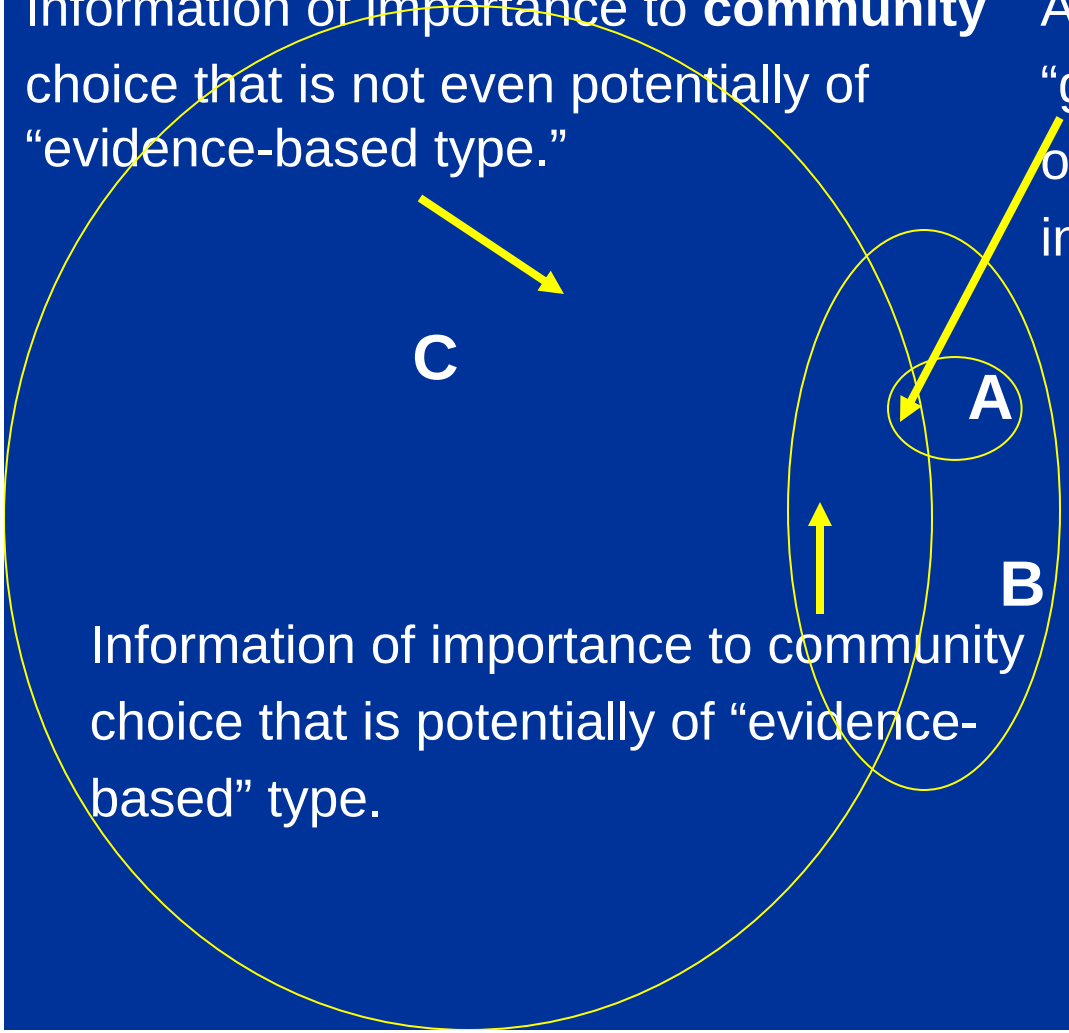
Information of importance to patient choice that is potentially of evidence-based type.

*In A.L. Cochrane, from T. Hope. Evidence-based patient choice and the doctor-patient relationship. In *But Will It Work, Doctor?* Kings Fund, London, 1997, 20-24.

Evidence-Based Public Health

Information of importance to **community** choice that is not even potentially of "evidence-based type."

Area where there is currently "good evidence-based" information of importance to **communities** in making choices.



A "Good evidence"

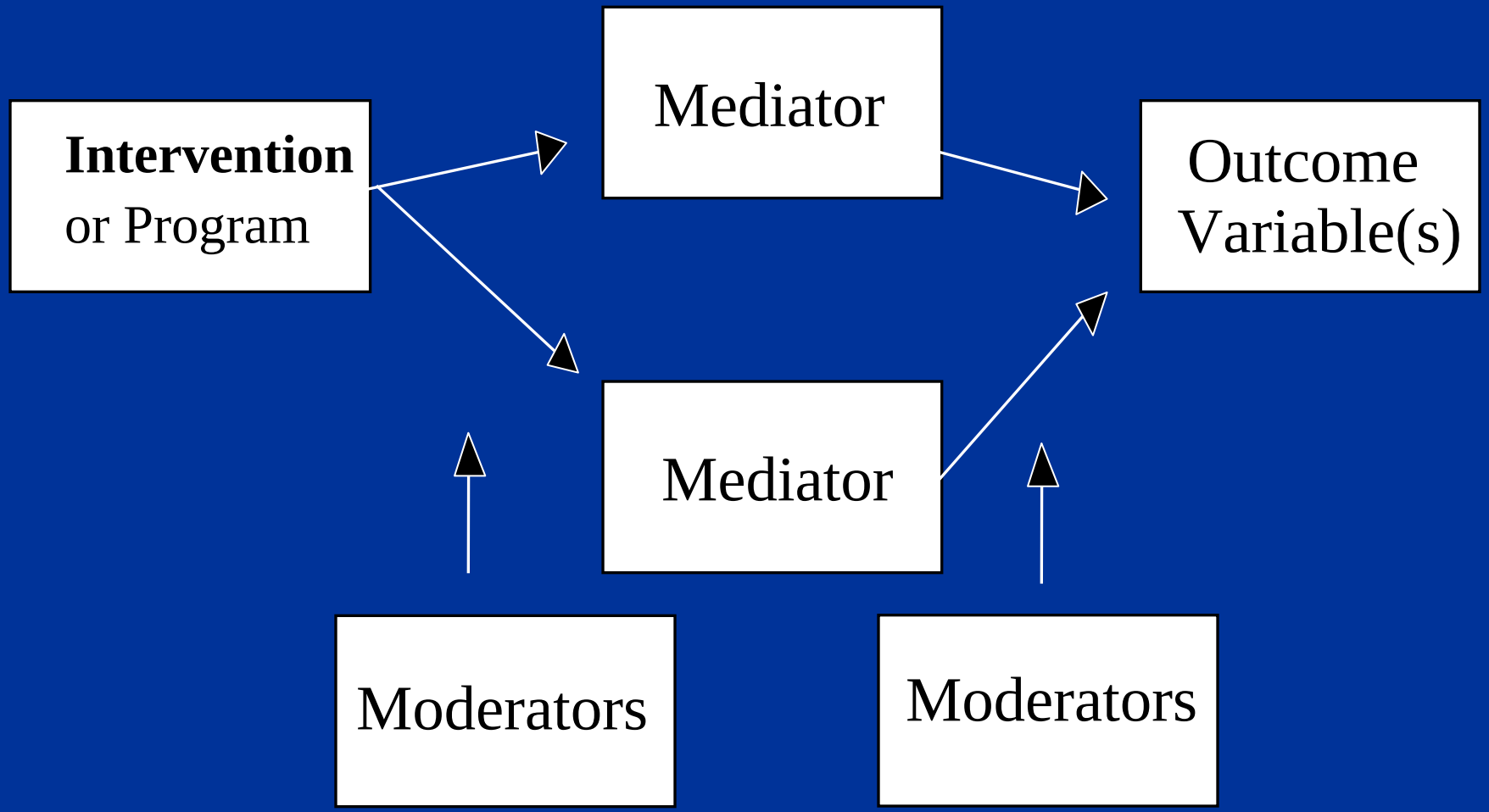
B Potential for "good evidence"

C Information of potential importance to communities in making health choices

Issues for Evidence-Based Practice and Translating Research to Practice

- Setting research priorities
- Making research findings actionable, usable, relevant in Canada: Participatory Research
- Translating research to local circumstances in Atlantic provinces
- Making practice more evidence-based
- Making evidence more practice-based

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.

Caveats on Participatory Research

- Problems of trust and time for planning
- Problems of multiple levels of mobilization and intervention
- Problems of academic reward systems
- Problems of taking research results to scale and sustaining effects
  - Internal vs. external validity
  - Best practices vs. locally-appropriate and affordable practices
  - Partnerships vs coalitions

Green LW, Mercer SL. *Amer J Public Health* Dec. 2001.

The Bridge (not the Pipeline) from Research to Practice

- If we want more evidence-based practice, we need more practice-based evidence.
- The importance of practitioners and other end-users in shaping the research questions.
- Practitioners and their organizations represent the structural links (and barriers) to addressing the important health issues. Engage them.

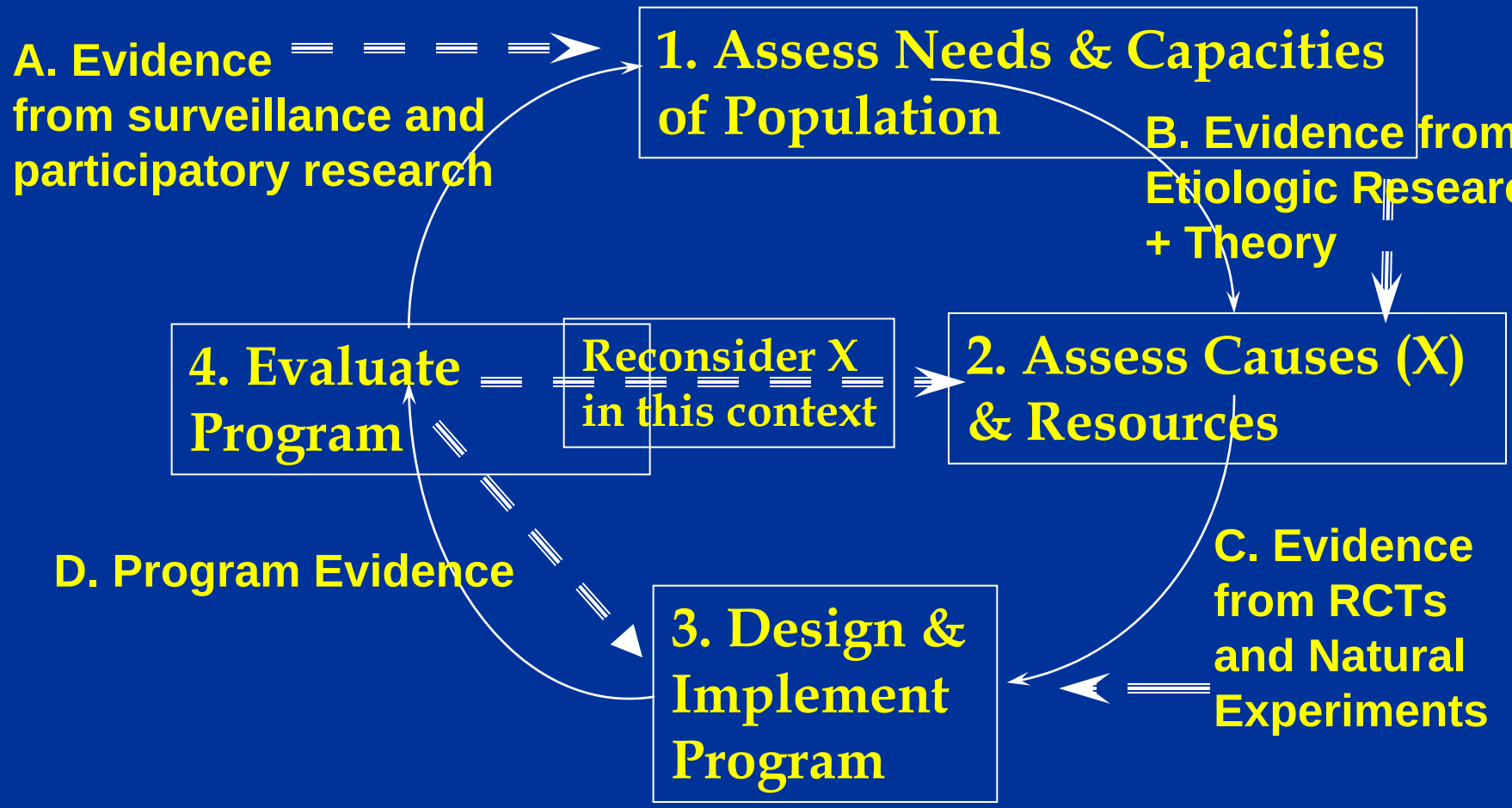
*Green, L.W. From research to "best practices" in other settings and populations. *Am J Health Behavior* 25:165-178, April-May 2001. Full text: www.ajhb.org/25-3.htm.

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

- *Matching* ecological levels of a system or community with 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.

Uses of Evidence in Population-Based Planning-Research Models



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