

Public Health and Policy Settings

Ross C. Brownson
Washington University in
St. Louis



INSTITUTE FOR PUBLIC HEALTH

GEORGE WARREN
BROWN
SCHOOL
— of Social Work —



Objectives

1. To describe opportunities for D&I research in the public health system.
2. To frame a series of D&I challenges.
3. To explore the basis for evidence-based policy.
4. To understand the challenges and opportunities in translating evidence to policy.

Public Health Orientation

- In contrast to medical model, which focuses on treatment of illness (with prevention and control) in individuals
- Public health is focused on community-based approaches to **prevent** disease and disability in **populations**
 - ecologic view of health, such that individuals are placed within larger social and environmental context which defines the conditions that determine health
- BUT -- variation in resources, priorities and level of intervention AND growing overlap (e.g., implementation of the ACA)

Major trends and patterns in public health (a.k.a., D&I research opportunities!)

- Accreditation of public health agencies
- Quality improvement
- Minimum set of functions (recent IOM report)
- ACA – increased integration of prevention/population health with healthcare

The challenge of D&I for PH settings

Survey of state and local public health practitioners

- Only 30% of local public health practitioners had heard of the Community Guide
- In state-level agencies, 90% had heard of guide
 - Much fewer reported making changes to existing (20%) or new programs (35%) on the basis of recommendations

EBP or PBE

“If we want more evidence-based practice, we need more practice-based evidence”

- L. Green

Green and Glasgow *Eval Hlth Prof* 2006;29:126-153.

- D&I Science – primarily concerned with how to get more evidence-based interventions to appropriate audiences and practice settings
- Flip side– what are the characteristics of practice settings that influence the ability to disseminate and implement?

Evidence-based Public Health

“The development, implementation, and evaluation of effective programs and policies in public health through application of principles of scientific reasoning.”

Kohatsu et al. Am J Prev Med 2004;27(5)

And, the process of EBPH...

Agency (health department)-level structures and activities that are positively associated with performance measures (e.g., achieving core public health functions, carrying out evidence-based interventions).

Brownson et al. AJPM 2012; 2012;43(3):309-319

Results, 5 A-EBP domains

- Workforce development
 - QI (82%), EBDM (59%)
- Leadership
 - Staff participation (84%) hire w/ PH degree (36%)
- Organizational climate and culture
 - Life long learning (71%), culture supports EBDM (42%)
- Relationships and partnerships
 - Importance (92%), share resources (68%)
- Financial processes
 - Multi funding sources (96%), QI resources (55%)

Thinking beyond the journal article

| How LHDs learn about research findings? | How researchers perceive they most effectively reach practitioners? |
|--|--|
| 1. Professional associations | 1. Journal articles |
| 2. Seminars/workshops | 2. Face-to-face meetings |
| 3. Email alerts | 3. Media interviews |
| 4. Journal articles | 4. Press releases |

Example of a D&I Trial in Public Health

A randomized controlled trial evaluating the impact of knowledge translation and exchange strategies

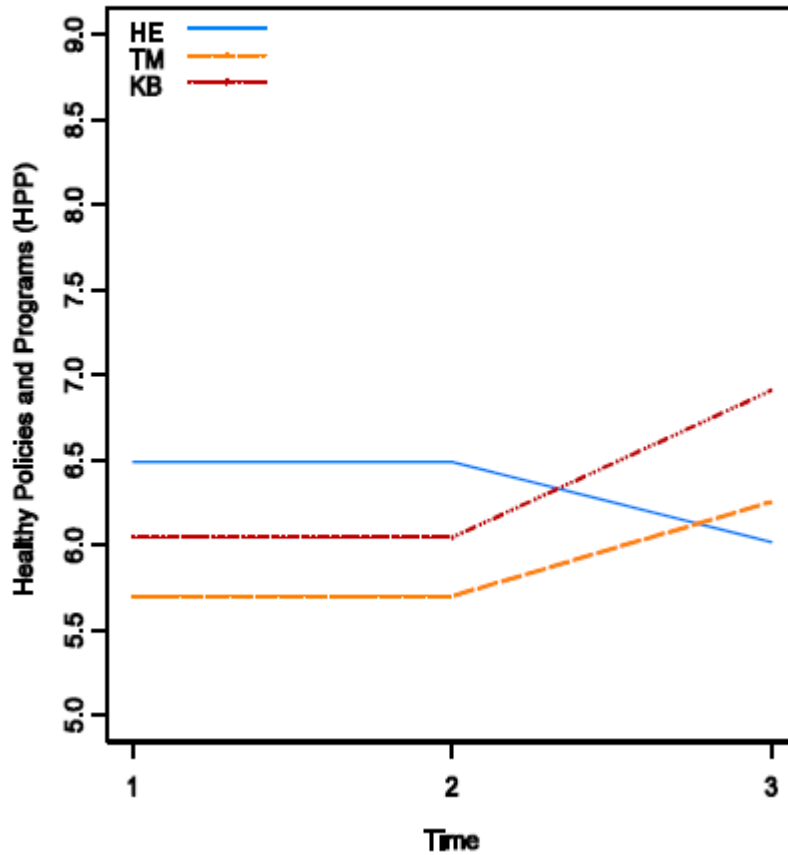
Dobbins et al. *Implement Sci* 2009;4:61.

- **A randomized trial to evaluate the effectiveness of three different implementation strategies for improving knowledge translation and exchange in health departments**
 1. Access to online registry
 2. Tailored messaging
 3. Knowledge broker

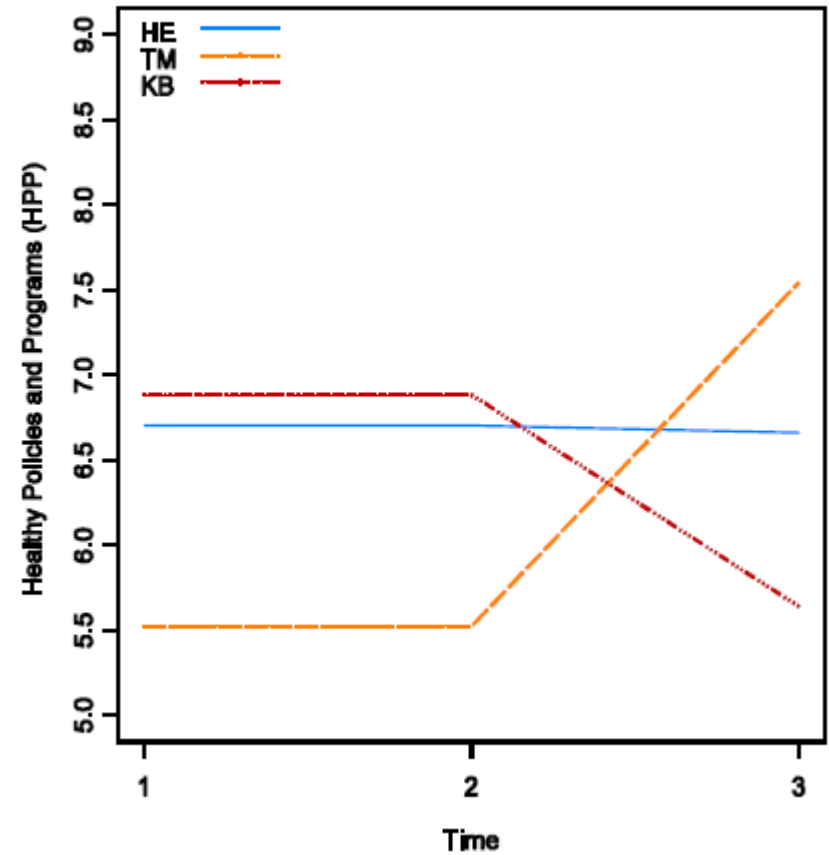
- 108 health departments (Canada)
- Primary outcome: extent to which research evidence was used in a recent program decision
- Secondary outcome: change in sum of evidence-informed healthy body weight promotion policies or programs

Dobbins et al. *Implement Sci* 2009;4:61., cont.

Low Research Culture (4/7)



High Research Culture (6/7)



THE POTENTIAL:

How has health [or other] policy, today, already affected your life [positively or negatively]?

Top 10 public health achievements

- *Examples*
 - Vaccination
 - Motor-vehicle safety
 - Safer workplaces
 - Fluoridation of drinking water
 - Recognition of tobacco use as a health hazard
- Each of these advances involved policy

Centers for Disease Control and Prevention. Ten great public health achievements-- United States, 1900-1999. MMWR 1999 Apr 2;48(12):241-3

What is policy?

- “those laws, regulations, formal and informal rules and understandings that are adopted on a collective basis to guide individual and collective behavior”
 - Policies tend to influence the environment (legal, social, economic, and physical)
 - Affects on social norms
 - Importance noted in the definitions of core functions of PH

For policy...

“Laws are like sausages.
You should never watch them being
made.”

- Honoré Mirabeau, 1918



The challenge...

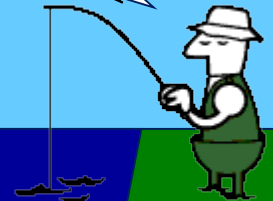


Because what you told
me is absolutely
Yes, how did I completely
you know?

The problem

Because you don't know
where you are, you don't
know where you're going,
and now you're blaming
me

You must
policy n



A scenario for you

- Research aim: To understand the diffusion of local (governmental and business) clean indoor air in southern states in the US
 - A study of late adopters in 25 counties/cities
- Some particular challenges for this research?
- Stage of policy research spectrum (assessment of need, public awareness, policy implementation, tracking outcomes)?
- What design makes sense?

Domains of Evidence-Based Public Health Policy

| Domain | Objective | Data Sources |
|---------------|---|--|
| Process | To understand approaches to enhance the likelihood of policy adoption | <ul style="list-style-type: none">• Key informant interviews• Case studies |
| Content | To identify specific policy elements that are likely to be effective | <ul style="list-style-type: none">• Systematic reviews• Content analyses |
| Outcome | To document the potential impact of policy | <ul style="list-style-type: none">• Surveillance systems• Natural experiments tracking policy-related endpoints |

Examples of Policy Translation Challenges (most research has been on barriers)

For the policy maker:

1. Poor timing
2. Ambiguous findings & lack of relevant data

For the researcher:

1. Mismatch of randomized thinking with nonrandom problems
2. Lack of control over the independent variable

Examples from ongoing
policy dissemination research
(policy content & process)

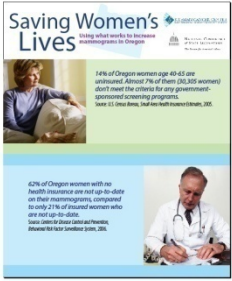

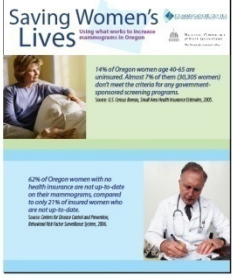

*(Overall goal: Understand and
enhance dissemination of EB
policy among state level policy
makers)*

Overview: Conveying information via policy briefs

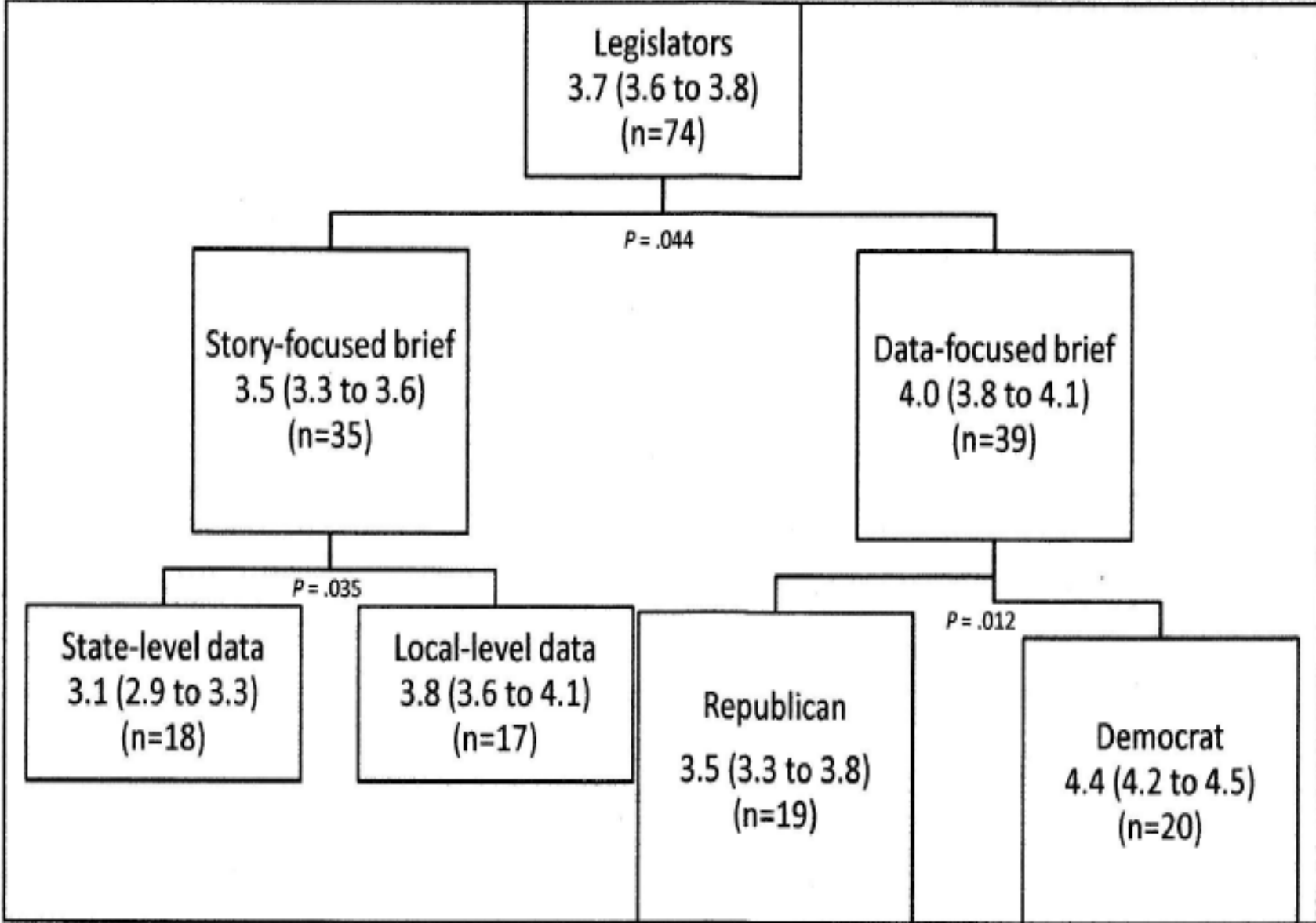
Phase 1: Audience Research

- Most policy briefs are text heavy and not “brief”
- Randomized experiment
 - Compare data vs. narrative
 - Three key groups of policy makers in six states:
 - **legislators**
 - **legislative staff members**
 - **executive branch administrative leaders**
 - Read a brief then responded to a short questionnaire

Phase 1: Policy Brief Design

| | Data | Narrative |
|-------|---|--|
| Local |  <p>Saving Women's Lives Using what works to increase mammograms in Oregon</p> <p>14% of Oregon women age 40-65 are uninsured. Almost 7% of them (26,335 women) don't meet the criteria for any government-approved screening program. See it, Use It, Not See It, Not Use It. www.oregon.gov/health</p> <p>62% of Oregon women with no health insurance are not up-to-date on their mammograms, compared to only 37% of insured women who are not up-to-date. See it, Use It, Not See It, Not Use It. www.oregon.gov/health</p> |  <p>Saving Women's Lives Using what works to increase mammograms in Oregon</p> <p>"I got a small lump on my left breast and hoped it would go away. But it didn't. It was easy to get off having a mammogram. I worked for a small, family-owned business that didn't provide health insurance. I made too much money to qualify for government programs, but not enough to pay for a mammogram."</p> <p>"By the time Andrea came to see me, her cancer had spread and was very aggressive. She needed a mastectomy to remove her breast and several courses of chemotherapy plus chemo. She remained cancer-free for eight months. She was one of the lucky ones. When cancer is found at a late stage it's more difficult to treat. It's also more expensive."</p> |
| State |  <p>Saving Women's Lives Using what works to increase mammograms in Oregon</p> <p>14% of Oregon women age 40-65 are uninsured. Almost 7% of them (26,335 women) don't meet the criteria for any government-approved screening program. See it, Use It, Not See It, Not Use It. www.oregon.gov/health</p> <p>62% of Oregon women with no health insurance are not up-to-date on their mammograms, compared to only 37% of insured women who are not up-to-date. See it, Use It, Not See It, Not Use It. www.oregon.gov/health</p> |  <p>Saving Women's Lives Using what works to increase mammograms in Oregon</p> <p>"I got a small lump on my left breast and hoped it would go away. But it didn't. It was easy to get off having a mammogram. I worked for a small, family-owned business that didn't provide health insurance. I made too much money to qualify for government programs, but not enough to pay for a mammogram."</p> <p>"By the time Andrea came to see me, her cancer had spread and was very aggressive. She needed a mastectomy to remove her breast and several courses of chemotherapy plus chemo. She remained cancer-free for eight months. She was one of the lucky ones. When cancer is found at a late stage it's more difficult to treat. It's also more expensive."</p> |

Data trees on brief *usefulness*



Overall Likelihood of Use

- One size does not fit all!!
- Higher among
 - Women
 - Those who identify themselves as socially liberal
 - Respondents older than 52 years
 - Those without graduate education

Take home points

1. There are emerging changes in the PH system that make ideal D&I research opportunities.
2. Policy has an enormous impact on health and is in need of quality dissemination research.
3. More than many other areas, the issues are ideal for opportunistic, natural experiments.