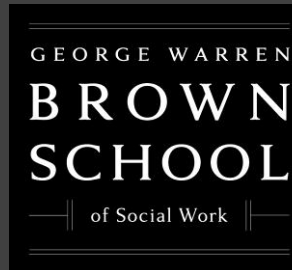


Training needs and supports for evidence-based decision making among the public health workforce

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Outline

- Objectives
- Background | EBDM and competencies
- Current Study | Aims, Samples, Measures, Analyses, Results
- Implications | EBDM Supports and Needs
- Next Steps

Objectives

- Describe evidence-based decision making (EBDM) and the need for the public health workforce to be competent in EBDM
- Identify EBDM competency gaps in the public health workforce in state and local health departments
- Formulate possible approaches to enhance capacity in EBDM competencies

Evidence-based Decision Making

EBDM is a **PROCESS**

Includes:

- Making decisions from the best available scientific evidence
- Systematic use of data and information sources
- Engaging the community in assessment and decision making
- Evaluating programs and policies

Why EBDM?

- Need competent workforce versed in evidence-based processes
- Processes to apply evidence in decision making are encouraged in funding streams
- Competencies in EBDM overlap with national efforts to build workforce capacity
 - QI and performance improvement initiatives
 - Public Health Accreditation Board standards Domain 10-
“Contribute to and apply the evidence base of public health”

EBDM competencies

Action planning: Understand the importance of developing an action plan for how to achieve goals and objectives.

Evaluation designs: Understand the different designs that are useful in program or policy evaluation.

Adapting Interventions: Understand how to modify programs and policies for different communities and settings.

Qualitative evaluation: Understand the value of qualitative evaluation approaches including the steps involved in conducting qualitative evaluations.

Communicating research to policymakers: Understand the importance of effectively communicating with policymakers about public health issues.

Quantitative evaluation: Understand the uses of quantitative evaluation approaches (e.g. surveillance and/or surveys).

Economic evaluation: Understand how to use economic data in the decision making process.

Prioritization: Understand how to prioritize program and policy options.

Study aims

- Identify largest competency gaps in EBDM and compare gaps among state and local health department employees
- Determine any changes in mean gaps reported in 2008 and 2013 by state health department chronic disease prevention staff
- Describe possible modalities for further capacity building in EBDM competencies and processes as reported among state health department staff in 2013

Samples

- **2008 State**
health
department staff
in chronic
disease

n=441



- **2013 State**
health
department staff
in chronic
disease

n=904



- **2012 Local**
health
department
directors

n=517



- **2013 Local**
health
department
managers

n=332

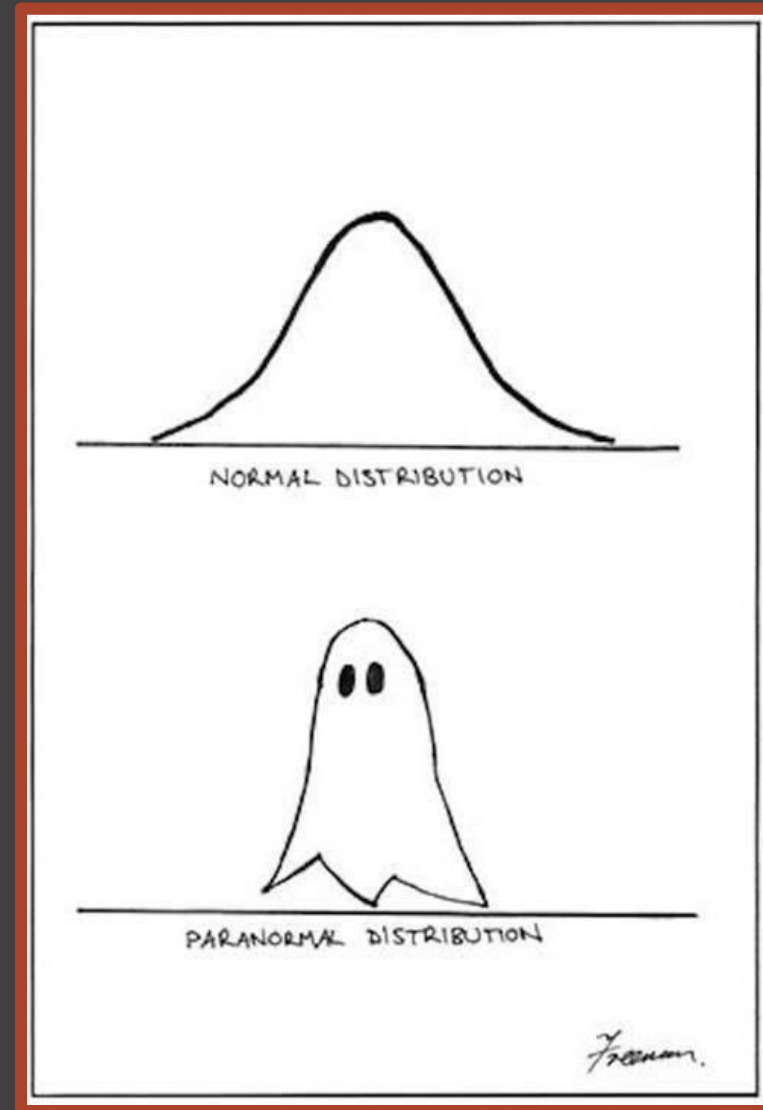


Measures

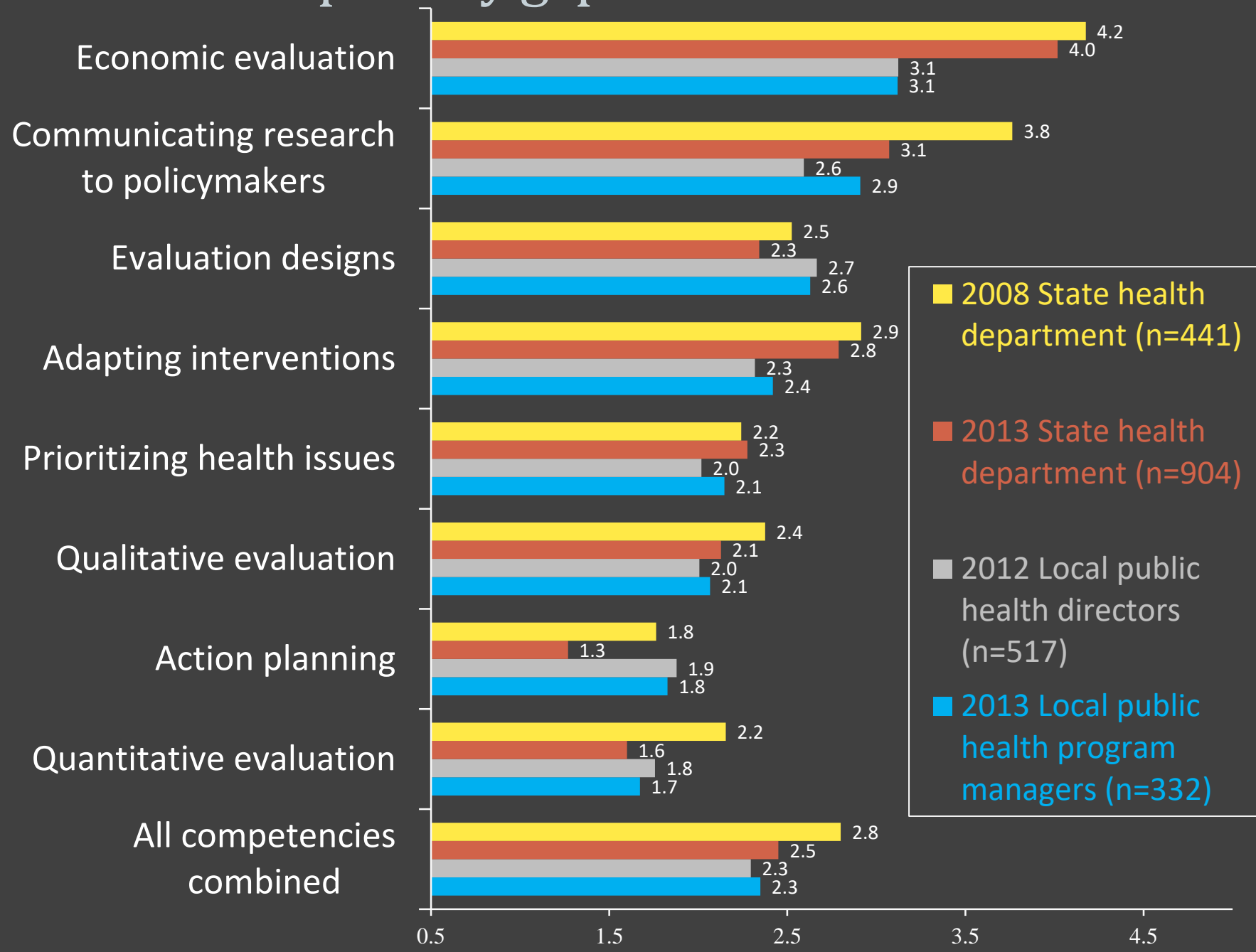
- EBDM competencies (all samples)
 - Self reported importance and availability of each EBDM competency on 11 point Likert scale
- Possible items for capacity building (2013 state health department sample)
 - Ranked top three items that would most encourage them to use EBDM
 - Ranked top three items that would be most helpful for applying EBDM in their work

Analyses

- Importance – availability= gap
- Aggregated across samples for comparison
- T-tests 2008 and 2013 state health department (SHD) samples



EBDM competency gaps



Largest EBDM competency gaps

	2008 SHD (n=441)	2013 SHD (n=904)	2012 LHD Directors (n=517)	2013 LHD Program Managers (n=332)
Economic evaluation	1	1	1	1
Communicating research to policymakers	2	2	3	2
Adapting interventions	3	3	4	4
Evaluation designs	4	4	2	3

5 year comparison

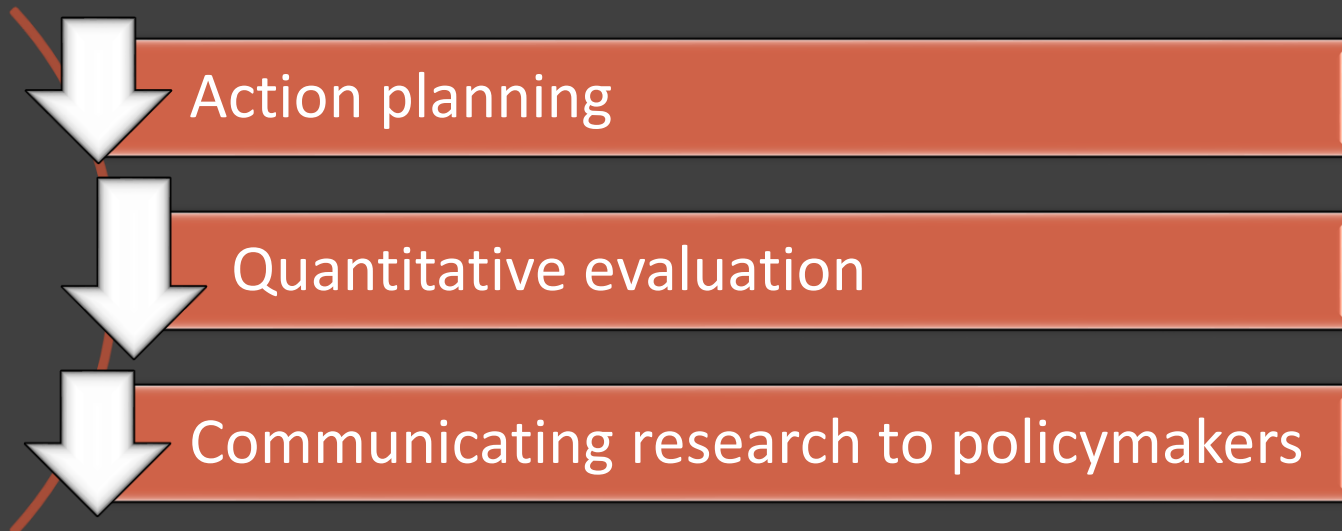
	2008 State Health Department Staff (n=441)	2013 State Health Department Staff (n=904)	
	Mean (95% CI)	Mean (95% CI)	
<u>Economic evaluation</u>	8.8 (8.7-9.0)	9.7 (9.6-9.8)***	Importance
Understand how to use economic data in the decision making process.	4.7 (4.5-4.9)	5.6 (5.5-5.8)***	Availability
	4.2 (3.9-4.4)	4.0 (3.8-4.2)	Gap
<u>Communicating research to policymakers</u>	9.2 (9.1-9.3)	10.1 (10.0-10.2)***	Importance
Understand the importance of effectively communicating with policymakers about public health issues.	5.4 (5.2-5.6)	7.0 (6.8-7.2)***	Availability
	3.8 (3.5-4.0)	3.1 (2.9-3.3)***	Gap
<u>Adapting Interventions</u>	9.2 (9.1-9.3)	9.9 (9.8-10.0)***	Importance
Understand how to modify programs and policies for different communities and settings.	6.3 (6.0-6.5)	7.2 (7.0-7.3)***	Availability
	2.9 (2.7-3.1)	2.8 (2.6-3.0)	Gap
<u>Evaluation designs</u>	8.2 (8.0-8.3)	9.7 (9.6-9.8)***	Importance
Understand the different designs that are useful in program or policy evaluation.	5.6 (5.4-5.8)	7.4 (7.2-7.5)***	Availability
	2.5 (2.3-2.7)	2.3 (2.2-2.5)	Gap

5 year comparison

	2008 State Health Department Staff (n=441)	2013 State Health Department Staff (n=904)	
	Mean (95% CI)	Mean (95% CI)	
<u>Prioritization</u>			
Understand how to prioritize program and policy options.	8.9 (8.7-9.0)	9.9 (9.8-10.0)***	Importance
	6.7 (6.5-6.8)	7.6 (7.5-7.8)***	Availability
	2.2 (2.1-2.4)	2.3 (2.1-2.4)	Gap
<u>Qualitative evaluation</u>			
Understand the value of qualitative evaluation approaches including the steps involved in conducting qualitative evaluations.	8.5 (8.3-8.6)	9.5 (9.4-9.6)***	Importance
	6.1 (5.9-6.3)	7.4 (7.2-7.6)***	Availability
	2.4 (2.1-2.6)	2.1 (2.0-2.3)	Gap
<u>Quantitative evaluation</u>			
Understand the uses of quantitative evaluation approaches (e.g. surveillance and/or surveys).	8.6 (8.5-8.8)	9.9 (9.8-10.0)***	Importance
	6.5 (6.3-6.7)	8.3 (8.1-8.4)***	Availability
	2.2 (1.9-2.4)	1.6 (1.4-1.8)***	Gap
<u>Action planning</u>			
Understand the importance of developing an action plan for how to achieve goals and objectives.	9.2 (9.0-9.3)	10.2 (10.1-10.2)***	Importance
	7.4 (7.2-7.6)	8.9 (8.8-9.0)***	Availability
	1.8 (1.6-2.0)	1.3 (1.1-1.4)***	Gap
<u>Overall average</u>			
All EBDM competencies.	8.8 (8.7-8.9)	9.8 (9.8-9.9)***	Importance
	6.1 (5.9-6.2)	7.4 (7.3-7.5)***	Availability
	2.8 (2.6-3.0)	2.5 (2.3-2.6)**	Gap

5 year comparison

- All competencies had **higher** importance and availability ratings in 2013 than in 2008.
- On average, gaps were **smaller** in 2013 than in 2008.



2013 State Health Departments

What would most encourage you to use EBDM?

67.9%

- Agency leaders prioritizing EBDM

63.0%

- Easy access to data resources for EBDM

46.8%

- Direct supervisors prioritizing EBDM

What is most useful for applying EBDM in your work?

64.3%

- EBDM training for specific program areas

48.6%

- Summaries of research evidence (e.g. issue briefs)

40.4%

- Help with EBDM processes (e.g. community assessment, evaluation)

Summary of findings

- Top four largest gaps were similar across the four samples:
 - Economic evaluation
 - Communicating research to policy makers
 - Adapting interventions
 - Evaluation designs
- On average, importance and availability of EBDM competencies were **larger** and gaps were **smaller** in 2013 than in 2008 for state health department staff
 - Suggests growing importance and availability of EBDM competencies

Implications

Growing support for EBDM

- Spread of training in evidence-based public health
- Growing numbers of accredited public health programs
- Growing numbers of public health departments applying for accreditation
- Many online resources and tools for EB processes

Implications

Training needs for EBDM capacity

- Using economic evaluation data-
“informed consumer”
- Effective strategies for
communicating research to policy
makers
- Strategies for adapting EB
interventions- fidelity issues



Next steps

- Organizational supports for EBDM
 - Trainings specific to topic areas
 - Help with EBDM processes
 - Easy access to data on EBDM processes
- Increase capacity for training in health economics
- Training, technical assistance and/or other support for adapting interventions
- Scale up training for evidence-based public health

Thank You!

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