Evidence-based decision making in LHDs increases from 2010 to 2013

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Disclosure

• Neither we, nor our spouses, have had a financial, professional or personal relationship that might potentially bias and/or impact the content of the educational activity/session.

• Kay Lovelace, Gulzar Shah, Carolyn Leep, and Robert Aronson
Gap

• LHDs are expected to use an evidence-based approach to effectively address the gap between population health goals in the United States and current morbidity and mortality rates.

• Critical to know the extent to which LHDs use evidence-based approaches and how their use of these approaches has changed over time.
Presentation objectives

• To identify indicators of evidence-based decision making (EBDM) practices in the NACCHO Profile surveys

• To identify changes in EBDM practices in US local health departments from 2010 to 2013

• To assess the implications for research and practice
Background

• National movement and training programs to increase evidence-based decision making and evidence-based public health practices in LHDs

• Focus on QI

• Practice-based research networks that include LHDs and academic institutions

• Mandatory local public health accreditation in some states and national voluntary accreditation
Evidence from research on LHD’s use of EBDM practices in 2010

- Governance matters – LHDs with local, compared to state governance, use more EBDM practices

- Size matters – LHDs in larger jurisdictions use more EBDM practices

- Resources matter – LHDs with expenditures in the middle and top tertile use more EBDM practices

Evidence from 2010 Profile suggests that:

• Workforce matters – LHDs with
  – a LHD director with a public health degree,
  – an epidemiologist,
  – a health educator, and/or
  – preparedness staff use more EBDM practices

• Lovelace, Aronson, Rulison, Labban, Shah, Smith (2014)
Our research questions

• How has the extent to which LHDs use evidence-based decision making practices changed from 2010 to 2013?

• What do we know about evidence-based decision making practices in local public health in 2013?
Methods:

Compared weighted samples of all LHDs in country from 2010 to 2013

- NACCHO 2010 Profile of LHDs Study
- NACCHO 2013 Profile of LHDs Study
Methods: Samples

2010

• 516 LHDs that completed both Core Module and Module 2
  – 83% response rate for LHDs that received Module 2
  – Almost ¼ of all the LHDs in the country
  – Representing 47 states

2013

• 490 LHDs that completed both Core Module and Module 1
  – 79% response rate for LHDs that received Module 1
  – Almost ¼ of all LHDs in the country
  – Representing 45 states
Methods: Procedure

For the outcome measure:

• Consulted with expert panel (n=14)

• Selected questions to measure evidence-based decision making and its potential predictors

• Assessed content validity through survey of subsample of expert panel (n = 10)
Outcome measure: Evidence-based decision making

• **Performed directly surveillance and epidemiology** (1-2 points)
  • No surveillance/epidemiology= 0 points;
  • 1-3 types=1 point;
  • 4-7 types=2 points

• **Conducted a community health assessment within the last 5 years** (1 point)

• **Developed a community health improvement plan** (1 point)

• **Applied research findings to practices within the LHD** (1 point)

• **Used County Health Rankings to increase awareness of the multiple determinants of health with public, policymakers, or media** (1 point)

• **Used The Guide to Community Preventive Services in a few, many, or all relevant program areas** (1 point)
RESULTS
Percent of LHDs performing 5-7 EBDM practices increased
What drives changes in the numbers of LHDs using more EBDM practices?
Bottom line

More LHDs used:
• Epidemiology and Surveillance
• Community Health Assessments
• Community Health Improvement Plans
• Research findings
• County Health Rankings
• The Community Guide
More LHDs use each EBDM practice over time.
Increases in components EBDM Index from 2010-2013

6%  Community Health Assessments
4%  Community Health Improvement Plans
4%  Research findings
31% County Health Rankings
19% The Community Guide
DISCUSSION
Uptake of the County Health Rankings:
Maricopa County’s Journey Toward Public Health Accreditation

The Maricopa County Department of Public Health (MCDPH) serves over 3.8 million people, making it responsible for one of the largest territories of any local health department in the country. The county covers residents from the sprawling Phoenix metropolitan area to isolated rural communities, giving MCDPH the responsibility for meeting the needs of a diverse population. To ensure it is effectively meeting those needs and improving health across the community, MCDPH’s Office of Performance Improvement draws from the National Prevention Strategy and Arizona’s Chronic Disease Strategic Plan to guide its work. MCDPH continuously promotes the use of evidence-based approaches throughout the health department. In one of the largest improvement efforts yet, MCDPH used The Guide to Community Preventive Services (The Community Guide) to identify evidence-based programs, services, and policies in preparation for national public health department accreditation.
Increase in Percent of LHDs conducting Community Health Assessments
The context LHDs face in 2013

• Budget cuts make efficiency and effectiveness even more important
  – 57% of LHDs had cuts in at least one program area in 2011; 47% had cuts in 2012
  – 10,600 job losses in 2011; 4,300 losses in 2012
  – 41% of LHDs had lower budgets than the previous year in 2012; 27% in 2011
The context of LHDs in 2013

• Call for:
  – Resource sharing
  – Economies of scale
  – Partnering
  – Use of Information Technology
  – Collaboration with non-profit hospitals under the community benefit provisions of the Affordable Care Act
Limitations

• Outcome measure is limited to available items in the datasets.

• LHDs that report using similar EBDM may actually vary widely in the quantity and quality of the use of these practices.

• Cross-sectional analysis, not comparing the same LHDs.

• The surveys are self-report and the data are not independently verified.

• Some survey respondents may not have knowledge of the entire LHD.
Future directions

• Determine if different combinations of EBDM strategies are more important than others

• Determine if same factors predict EBDM in LHDs that completed 2013 NACCHO Profile Survey

• Complete more work on contextual factors associated with LHDs’ use of EBDM
  – Does resource sharing among LHDs increase EBDM?
  – What is the impact of LHD-non profit hospital partnerships on EBDM?

• Does EBDM lead to better LHD and community health outcomes?
Thank you!

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