Public Health PBRN
Monthly Virtual Meeting
March 20, 2014
Research-in-Progress Presentation by
North Carolina Public Health Practice-Based Research Network

MCH Performance in Local Health Departments: Services, EPHS,
and Economic Strategies
Presented by Michele Issel, PhD, RN

Please remember to mute your telephone/computer speakers during the presentation
Conference Phone: 877-394-0659
Conference Code: 7754838037#

at the University of Kentucky College of Public Health
Staying Resilient in Hard Times: Maternal, Child, and Adolescent Health Programs and Services

21 March 2014
L. Michele Issel, PhD, RN

PHSSR PBRN Monthly Teleconference
GENERAL INFORMATION

Funders

Grant # 71575, PHSSR Portfolio

Researchers:
Issel, Handler, Holbrook, Snebold, Leep

Partners

Acknowledgements: Deb Rosenberg, Christine Bhutta, Nathalie Robin, Hale Thompson, Comfort Olorusaiye.
LOCAL PUBLIC HEALTH: THE CURRENT CLIMATE

• Decreased fiscal and political resources

• Reductions in MCAH budgets

• Shift towards systems, life course, and population public health

• Implementation of the Affordable Care Act
HOW THE STUDY WAS DONE

Conducted to identify MCAH best practices in “hard times.”

Best Practices:
- Services/Programs Delivery
- Economic Strategies
- EPHS Delivery

Other Topics in Survey:
- Collaboration
- ACA
HOW WE DEVELOPED THE SURVEY

- Partners provided guidance and input
- NACCHO’s members pilot tested the survey
- Feedback used to:
  - Refine list of 35 MCAH services/programs
  - Refine list of 21 potential collaborators
  - Refine wording and sequence of questions
HOW WE CONDUCTED THE SURVEY

• Online survey using Qualtrics
• Sent to participants in April–May 2012
• Random sample of NACCHO members
  • LHDs were selected within size strata
  • Respondents were responsible for MCAH outcomes
• Used STATA for data analyses
THE SAMPLE: WHO RESPONDED

546 invited to participate; 269 returned usable surveys (49%)
STRENGTHS OF THE MCAH SURVEY

Strengths:

+ Administered to a large, nationally representative sample of LHDs

+ Reviewed and tested by MCAH practitioners to strengthen its face validity
LIMITATIONS OF THE MCAH SURVEY

Limitations:
- Cross-sectional survey
- Data were self-reported by LHDs
- Survey response rate of 49% (typical of NACCHO surveys of this type)
- Differential response rate by jurisdiction size
- Data collected in April-May 2012
WHAT THE DATA SHOW
Objective 1: Services/Programs

Objective 1: To understand and document:

a) The MCAH services/programs that **LHDs provide directly or by contract**

b) The MCAH services that are **not available** in a jurisdiction
THE SURVEY: SERVICES/PROGRAMS QUESTIONS

For each of the 35 services/programs, respondents were asked whether:

a) Their LHD provides or contracts out
b) Other agency/organization provides
c) Not available in community/jurisdiction
d) Don’t know
## MCAH Services/Programs: Most Frequently Provided by LHD Jurisdiction Size

<table>
<thead>
<tr>
<th></th>
<th>Small</th>
<th>Medium</th>
<th>Large</th>
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</thead>
<tbody>
<tr>
<td>Child Immunizations</td>
<td>Child Immunizations</td>
<td>WIC</td>
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</tr>
<tr>
<td>WIC</td>
<td>WIC</td>
<td>HIV testing</td>
<td></td>
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<tr>
<td>Breastfeeding</td>
<td>Breastfeeding</td>
<td>STI testing</td>
<td></td>
</tr>
<tr>
<td>Lead poison prevention</td>
<td>Lead poison prevention</td>
<td>Lead poison prevention</td>
<td></td>
</tr>
<tr>
<td>Pregnancy testing</td>
<td>HIV testing</td>
<td>Child immunization; Breastfeeding</td>
<td></td>
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</tbody>
</table>
Small but significant difference in the number of services/programs provided/subcontracted by LHD jurisdiction size.

**SMALL LHDs**
- Provided 12.4 services
- or 38.5% of 35 (95%CI 34.7 - 42.5%)

**MEDIUM LHDs**
- Provided 14.2 services
- or 41.5% of 35 (95%CI 36.6 - 45.4%)

**LARGE LHDs**
- Provided 13.0 services
- or 37.7% of 35 (95%CI 25.7 - 50.7%)
MCAH SERVICES/PROGRAMS PROVIDED

• LHDs provided/subcontracted an average of 13.1 services, or 39.4% (95%CI 36.5–42.2%) of the 35 possible services.

• 10-15% of the LHDs, either their agencies or other agencies in their jurisdictions, do NOT deliver prenatal care, prenatal home visits, pediatric dental care, nutrition services, and school-based clinics.

• <10% of LHDs offer mental health or foster care services. School clinics and pediatric dental care are the least likely to be available.
WHAT WE LEARNED: PROGRAMS/SERVICES

- Portfolio of MCAH services/programs varies by LHD size.
  - Medium size jurisdictions provide slightly more services/programs than either small or large LHDs.
- Childhood immunizations, WIC, breastfeeding support, and lead poisoning prevention are provided regardless of size.
- Large portion of the 35 possible MCAH services/programs are not provided by the LHD itself, but by other agencies in the jurisdiction.
Objective 2: To understand and document:

a) The degree to which the 10 EPHS are carried out, specific to MCAH population
EPHS Findings

Alpha reliabilities = .85 to .95

EPHS domain scores:
  2.6 (highest) workforce, access, and inform
  1.9 (lowest) enforce

LHD Jurisdiction Size and EPHS Scores:
  Small-significant for most EPHS domains
  Medium-mixed
  Large-NS and many reversed
## EPHS Scores and LHD Size

<table>
<thead>
<tr>
<th>EPHS Scale</th>
<th>Correlation &lt;50,000</th>
<th>p-value</th>
<th>Correlation 50,000-499,999</th>
<th>p-value</th>
<th>Correlation 500,000+</th>
<th>p-value</th>
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<td>NS</td>
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<tr>
<td>Evidence/Research</td>
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<td>NS</td>
<td>-0.21</td>
<td>NS</td>
</tr>
</tbody>
</table>
EPHS and Services

Number of services significantly related to overall EPHS score (p<.01)

Within population size, the services-EPHS relationship was not significant.

For LHDs in large jurisdictions, the relationship (non-significant) was reversed with low service LHDs demonstrating, on average, the highest EPHS scores.
Objective 3: To understand and document:

a) Which types of economic/financial strategies were used by LHDs, specifically relative to MCAH services/programs
Items in Economic Strategies Scale

7 Strategies:

Number of Steps taken using that strategy
   1=none, 2=few, 3=moderate, 4=numerous

Degree that MCAH preservation was motivation

Affected MCAH (yes/no)
Objective 4: Characterize Best Practices

Objective 4: Develop a Profile that captures:
   a) Most effective economic strategies
   b) The highest level of EPHS delivery
   c) Profile of MCAH services/programs delivery

Analysis is pending!

Cluster analyses-
   Service clusters & Strategies clusters
General Research Implications

Organizational level response rates

Data management

Data linkage via FIPS

Partnerships
PHSSR Implications

A) Characterization challenges

B) Complexity of connecting organizational processes with outcomes

C) Atheoretical explorations and dependent variable choice
Dissemination to Date

Webinars and Media Presentations


Special Report


Scientific Presentations

**MCH Service Delivery Profile of LHDs: Relationship with the Performance of the Essential Public Health Services.** Handler, A., Snebold, L., Thompson, H., Leep, C., Olorunsaiye, C., **Issel, L. M.**. CityMatCH Annual Meeting (under review).

**MCH Service Delivery Profile of LHDs: Relationship with the Performance of the Essential Public Health Services.** Handler, A., Snebold, L., Thompson, H., Leep, C., Olorunsaiye, C., **Issel, L. M.**. APHA Annual Meeting, New Orleans. (under review).

**Predictors of Strategic Approaches Used by LHDs During the Economic Downturn.** **Issel, L. M.**, Holbrook, A. & Handler, A. AcademyHealth Annual Research Meeting, San Diego, CA. June, 2014. [poster]


**Local Health Departments Delivery of MCAH Services/Programs and Performance of Essential Services for MCAH Population.** **Issel, L. M.**, Thompson, H. & Handler, A. Keeneland Annual Conference, Lexington, KY. April, 2013. [Poster].

**Sharing data between local health departments & state health agencies: needs, challenges, and workarounds.** **Vest, J. & Issel, L. M.**. Keeneland Annual Conference, Lexington, KY. April, 2013.

**Local MCAH service/program Delivery in Tough Economic Times.** **Issel, L. M.**, Thompson, H., Carda-Auten, J., Snebold, L., & Handler, A. CityMatCH. San Antonio, TX December 2012. [poster]

**Local Health Department Collaborations in Maternal, Child, and Adolescent Health.** Snebold, L., Carda-Auten, J., **Issel, L. M.**, Thompson, H., & Handler, A. CityMatCH. San Antonio, TX December 2012. [poster]
Thank You!

See you at 2014 Keeneland Conference
Other Meeting Agenda Items

Welcome to our newest Public Health PBRN from Hawaii

PBRN Research Updates
• MPROVE Projects: Reports in progress
• DACS Projects: virtual meeting, Monday, March 18

Dissemination Opportunities
• Frontiers
• AJPH Special Issue- Call for Papers: Advances in Public Health Services and Systems Research-manuscripts accepted through May 15

Funding Opportunities
• DIRECTIVE
Other Meeting Agenda Items

Annual PBRN Grantee Meeting: April 7-8, 2014

Agenda

Monday, April 7, 9:00AM-4:00PM
• State of the PHSSR/PBRN National Coordinating Center
• Introducing the Robert Wood Johnson Foundation Culture of Health Initiative
• Panel discussion on DACS
• Breakout sessions
  • PHAST 2.0
  • Suggestions/Ideas?

Tuesday, April 8, 9:30-11:30AM
• 8:30-11:45am PHSSR/PBRN and NNPHI Grantee Poster presentation (please send title and author by 3/24)
• 9:30-11:30am PHSSR/PBRN and NNPHI Grantee Workshop: Interactive session on research dissemination
• 11:30-11:45am Post-meeting Networking and Poster Presentations

Thank you for making your travel arrangements in a timely manner. Unfortunately, due to the high cost of airfares this year, we will not be able to provide an additional hotel night for those presenting at the Keeneland Conference.
Other Meeting Agenda Items

• 2014 PBRN Social Network Analysis Survey- thank you to those who have submitted your network rosters. (Requirement for DIRECTIVE applicants)

• Recent Articles of Interest/Resources
  – Preventing Voltage Drop: Keeping Practice-Based Research Network (PBRN) Practices Engaged in Studies
  – A Mixed-Methods Study of Research Dissemination Across Practice-Based Research Networks
    Lipman et. al. *J Ambulatory Care Manage* 2014 Vol. 37, No.2 pp. 179-188
  – Governmental Public Health and the Economics of Adaptation to Population Health
    Mays, IOM Discussion Paper
  – A Sustainable Financial Model for Community Health Systems
    Hester and Stange, IOM Discussion Paper
  – Practical Playbook: Collaboration between primary care and public health
    [https://practicalplaybook.org/](https://practicalplaybook.org/)
Presentation schedule

Presentation Schedule for 2014

January 16 Tennessee PBRN
February 20 Nebraska PBRN
March 20 North Carolina PRBN
May 15 New York PBRN
June 19 California PBRN
July 17 Connecticut PBRN
August 21 Ohio PBRN
September 18 Colorado PBRN
October 16 New Jersey PBRN
November 20 Washington PBRN
December 18 New Hampshire PBRN
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