

# 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



UNC CHARLOTTE  
College of Health and Human Services

21 March 2014  
L. Michele Issel, PhD, RN

PHSSR PBRN Monthly Teleconference

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# GENERAL INFORMATION

## Funders



Robert Wood Johnson  
Foundation

Grant # 71575,  
PHSSR Portfolio

## Researchers:

Issel, Handler,  
Holbrook, Snebold,  
Leep



College of Health and Human Services  
UNC CHARLOTTE

**NACCHO**

National Association of County & City Health Officials

*The National Connection for Local Public Health*

**UIC** SCHOOL OF  
UNIVERSITY OF ILLINOIS  
AT CHICAGO PUBLIC HEALTH

Acknowledgements: Deb  
Rosenburg, Christine Bhutta,  
Nathalie Robin, Hale Thompson,  
Comfort Olorusaiye.

## Partners



**AMCHP**  
ASSOCIATION OF MATERNAL & CHILD HEALTH PROGRAMS



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# 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%)

## SMALL LHDs

n=137(51%)

serving populations  
of fewer than  
50,000

## MEDIUM LHDs

n=105 (39%)

serving populations  
from 50,000 to  
499,000

## LARGE LHDs

n=27 (10%)

serving populations  
greater than 500,000





# 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

Small	Medium	Large
Child Immunizations	Child Immunizations	WIC
WIC	WIC	HIV testing
Breastfeeding	Breastfeeding	STI testing
Lead poison prevention	Lead poison prevention	Lead poison prevention
Pregnancy testing	HIV testing	Child immunization; Breastfeeding



# MCAH SERVICES/PROGRAMS PROVIDED

## BY LHD JURISDICTION SIZE

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%)



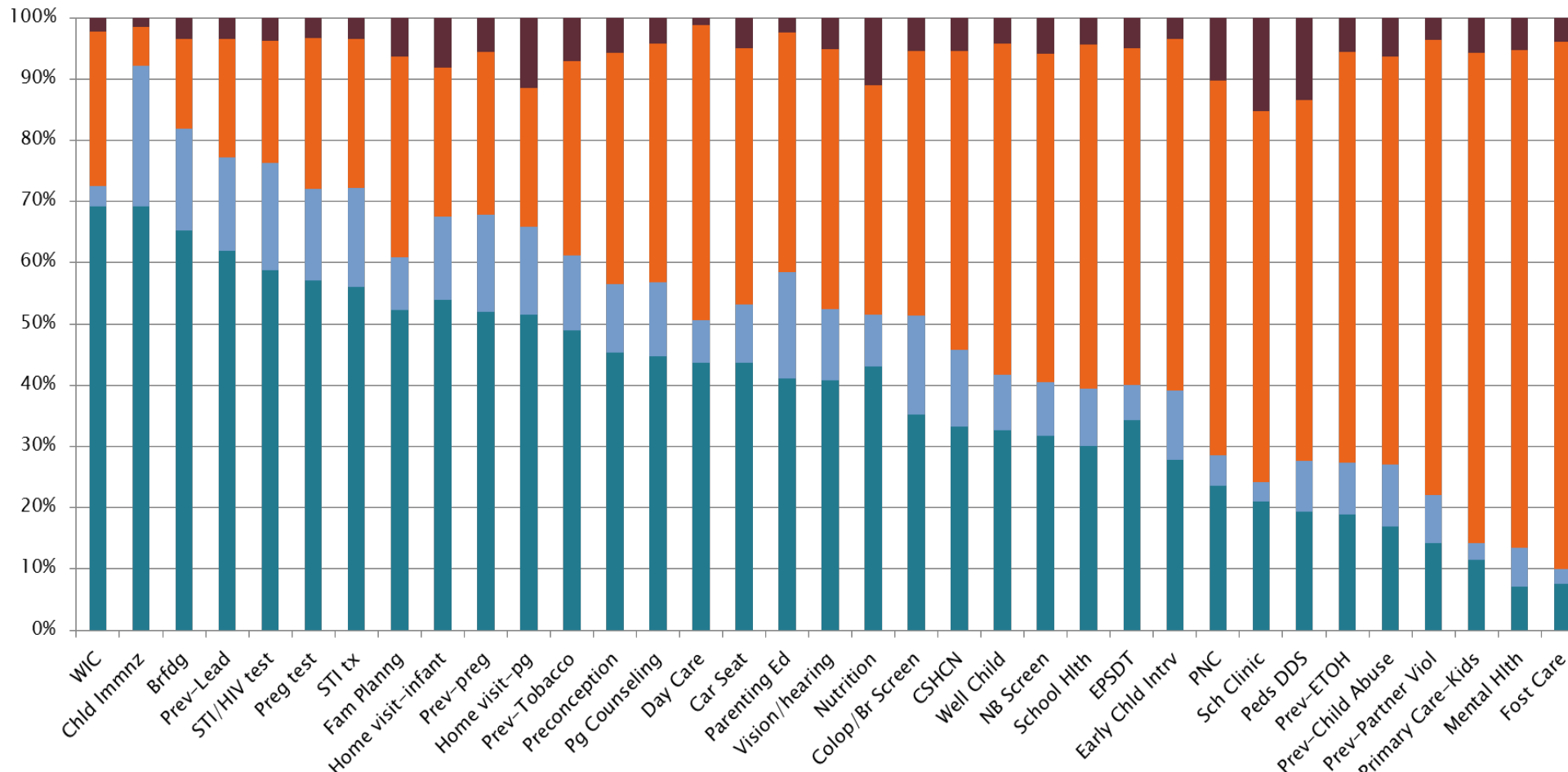
# MCAH SERVICES/PROGRAMS PROVIDED

- 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.





# MCAH SERVICES/PROGRAMS PROVIDED



- Not Available**
- Other Agency Provides**
- LHD + Other Provides**
- LHD Provides/Contracts out**

# WHAT WE LEARNED: PROGRAMS/SERVICES



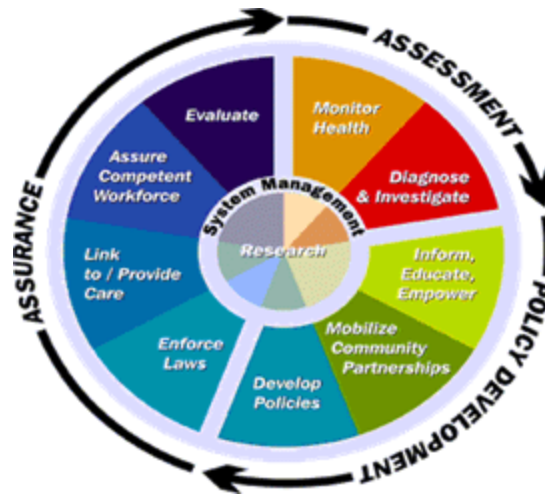
- Portfolio of MCAH services/programs **varies by LHD size.**
  - Medium size jurisdictions provide slightly more services/programs than either small or large LHDs.
- Childhood immunizations, WIC, breastfeeding support, and lead poisoning prevention are **provided regardless of size.**
- Large portion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



# Objective 2: Level of EPHS Performance

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

EPHS Scale	Correlation	p-value	Correlation	p-value	Correlation	p-value
	<50,000		50,000-499,999		500,000+	
Monitor	<b>0.36</b>	0.000	0.20	0.07	-0.11	NS
Diagnose	<b>0.33</b>	0.000	<b>0.23</b>	0.02	-0.28	NS
Inform	<b>0.32</b>	0.001	<b>0.28</b>	0.007	0.03	NS
Mobilize	<b>0.26</b>	0.007	0.18	0.08	-0.10	NS
Make Policy	<b>0.20</b>	0.04	0.15	NS	-0.09	NS
Enforcement	0.11	NS	0.01	NS	0.12	NS
Assure Access	<b>0.31</b>	0.001	<b>0.27</b>	0.009	0.08	NS
Workforce	<b>0.49</b>	0.000	<b>0.28</b>	0.006	0.16	NS
Evaluate	<b>0.38</b>	0.000	<b>0.40</b>	0.000	-0.05	NS
Evidence/Research	<b>0.29</b>	0.003	0.16	NS	-0.21	NS



# 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: Economic Strategies

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

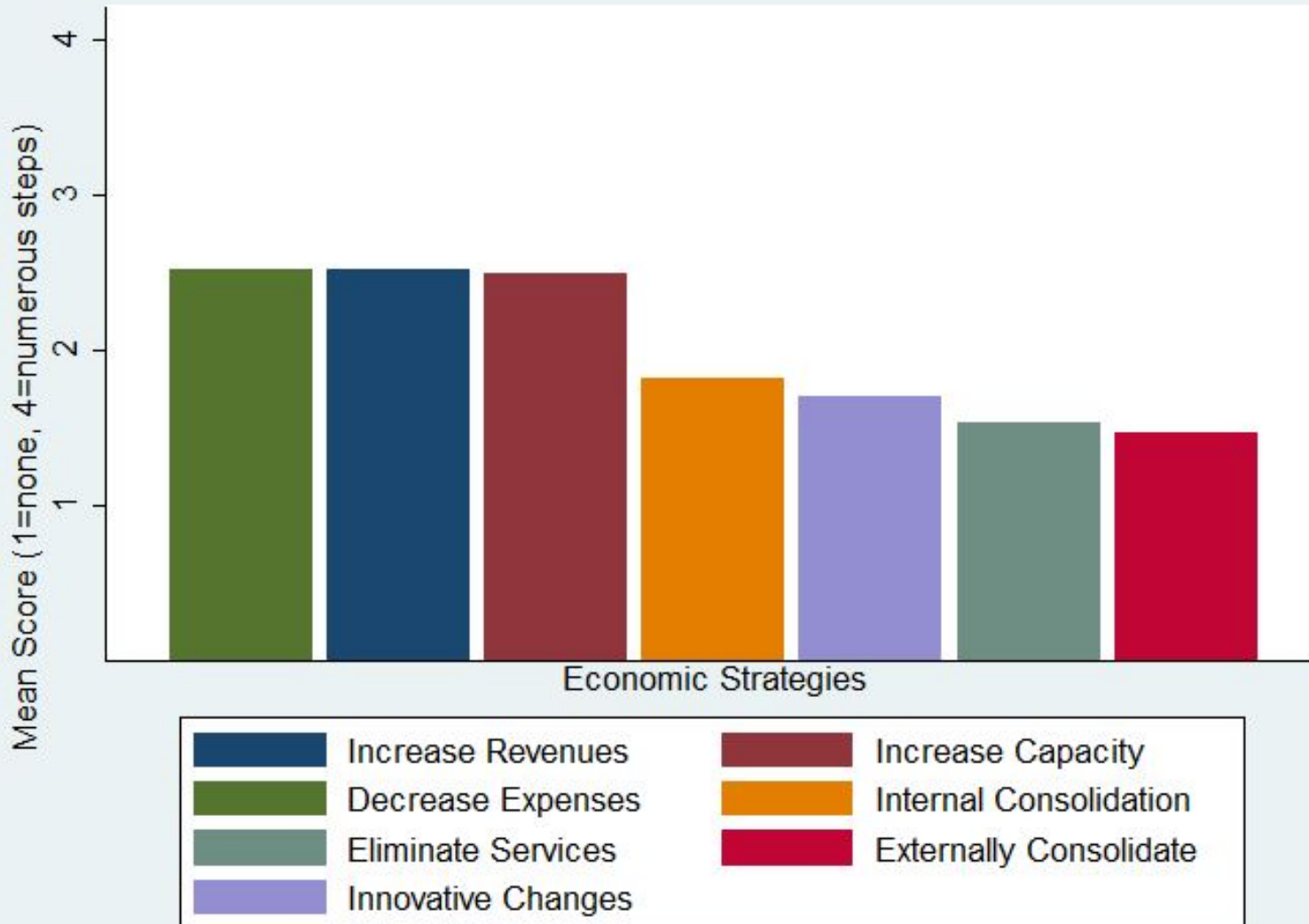
Degree that MCAH preservation was motivation

Affected MCAH (yes/no)





# 7 Economic Strategies



# 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



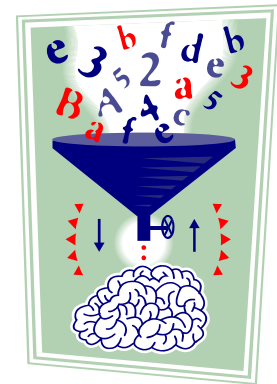
# General Research Implications

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

**Issel, L. M.**, Handler, A., Snebold, L (2013). *Staying resilient in hard times: Maternal, Child, and Adolescent Health Programs, Services and Collaborations*. NACCHO webinar, October 29, 2013.

**Issel, L. M.**, Handler, A., Snebold, L (2013). *Staying resilient in hard times: Local Maternal, Child and Adolescent Health and the ACA*. NACCHO webinar, November 26, 2013.

## Special Report

Handler, A., Snebold, L., Leep, C., Pecha, D. & **Issel, L. M.**, (2013). *Staying resilient in hard times: Local collaboration for women, children, youth and families*. *NACCHO Research Brief*, October 2013.

## 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]

*Using Cluster Analysis to Characterize LHD Responses to the Economic Downturn*. **Issel, L. M.**, Holbrook, A. & Handler, A. Keeneland Annual Conference, Lexington, KY. April, 2014.

*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**



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# 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**  
Yawn, et. al. *J Am Board Fam Med*, January-February 2014 Vol. 27, no. 1, pp 123-135.
  - **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  
<http://iom.edu/Global/Perspectives/2014/EconomicsOfAdaptation.aspx>
  - **A Sustainable Financial Model for Community Health Systems**  
Hester and Stange, IOM Discussion Paper  
<http://iom.edu/Global/Perspectives/2014/SustainableFinancialModel.aspx>
  - **Practical Playbook: Collaboration between primary care and public health**  
<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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