Bridging Health and Health Care

Hospital Investment and Interaction in Public Health Systems

Research In Progress Webinar

Wednesday, May 4, 2016

12:00-1:00pm ET/ 10:00-11:00am MT

www.systemsforaction.org

Agenda

Welcome: **Anna Hoover, PhD,** RWJF *Systems for Action* National Coordinating Center & Assistant Professor, U. of Kentucky College of Public Health

Hospital Investment and Interaction in Public Health Systems

Presenters: **Danielle Varda, PhD**, School of Public Affairs, University of Colorado Denver *danielle.varda@ucdenver.edu* and **Lisa Van Raemdonck, MPH, MSW**, Colorado Association of Local Public Health Officials *lisa@calpho.org*

Commentary: **Erik L. Carlton, DrPH,** U. of Memphis School of Public Health *lcrlton1@memphis.edu;* **Christopher Maylahn, MPH,** Office of Public Health Practice, NY State Dep't. of Health *cmm05@health.ny.gov*

Questions and Discussion

Presenters

Danielle Varda, PhD
Associate Professor, School of Public Affairs,
 University of Colorado Denver
Director, CU Center on Network Science

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Lisa Van Raemdonck, MPH, MSW
Executive Director, Colorado Association of Local
 Public Health Officials
Co-Director, Colorado Public Health Practice
 Based Research Network   *lisa@calpho.org*

Hospital Investment and Interaction in Public Health Systems

– Research in Progress Webinar–
May 4, 2016

Colorado Association of Local Public Health Officials

Lisa VanRaemdonck; Shannon Kolman

University of Colorado Denver - School of Public Affairs

Danielle Varda; Kayleigh Newman

Colorado School of Public health

Greg Tung; Adam Atherly

University of Kentucky, College of Health Sciences

Rachel Hogg

Colorado School of
PUBLIC HEALTH

CALPHO
Colorado Association of Local Public Health Officials

University of Colorado
Denver

UK
UNIVERSITY OF
KENTUCKY
College of Health Sciences

Project Background

Health Reform Changes: Affordable Care Act (ACA) and IRS requirements that nonprofit hospitals conduct community health needs assessments and develop implementation plans.

❖ We expect that these changes have resulted in:

✓ Increased <u>Investment</u> by Hospitals in PH Systems (e.g. Community Benefits Spending)

✓ Increased <u>Involvement/Interaction</u> by Hospitals in PH Systems (e.g. Community Health Needs Assessments)

Research Questions

RQ1: What indicators specify higher hospital interaction and investment in the public health system?

◦ RQ1a: What indicators inform successful Hospital-PH partnerships (interactions)?

◦ RQ1b: What indicators inform increased Hospital contributions to "Community Benefit" (investments)?

RQ2: How can data inform strategies for increasing levels of Hospital interaction and investment in public health systems?

Specific Aims

1. Develop a conceptual framework that identifies hypothesized indicators of increased hospital interaction and investment in public health systems based on the literature and a modified Delphi methodology.

2. Create a database of available indicator data for hospitals represented in the data.

3. Analyze relationships between the indicators and data on 2 outcomes: hospital interaction with PH systems (PARTNER data, AHA data) and hospital investment in PH systems (990 Schedule H data, AHA data). Determine which indicators explain increased hospital interaction and investment in public health systems.

4. Revise the conceptual framework to highlight those indicators that are identified as significant in Aim 3 analysis.

5. Develop a data codebook that includes the indicators for use by states to assess the status of their indicators, compared to other states.
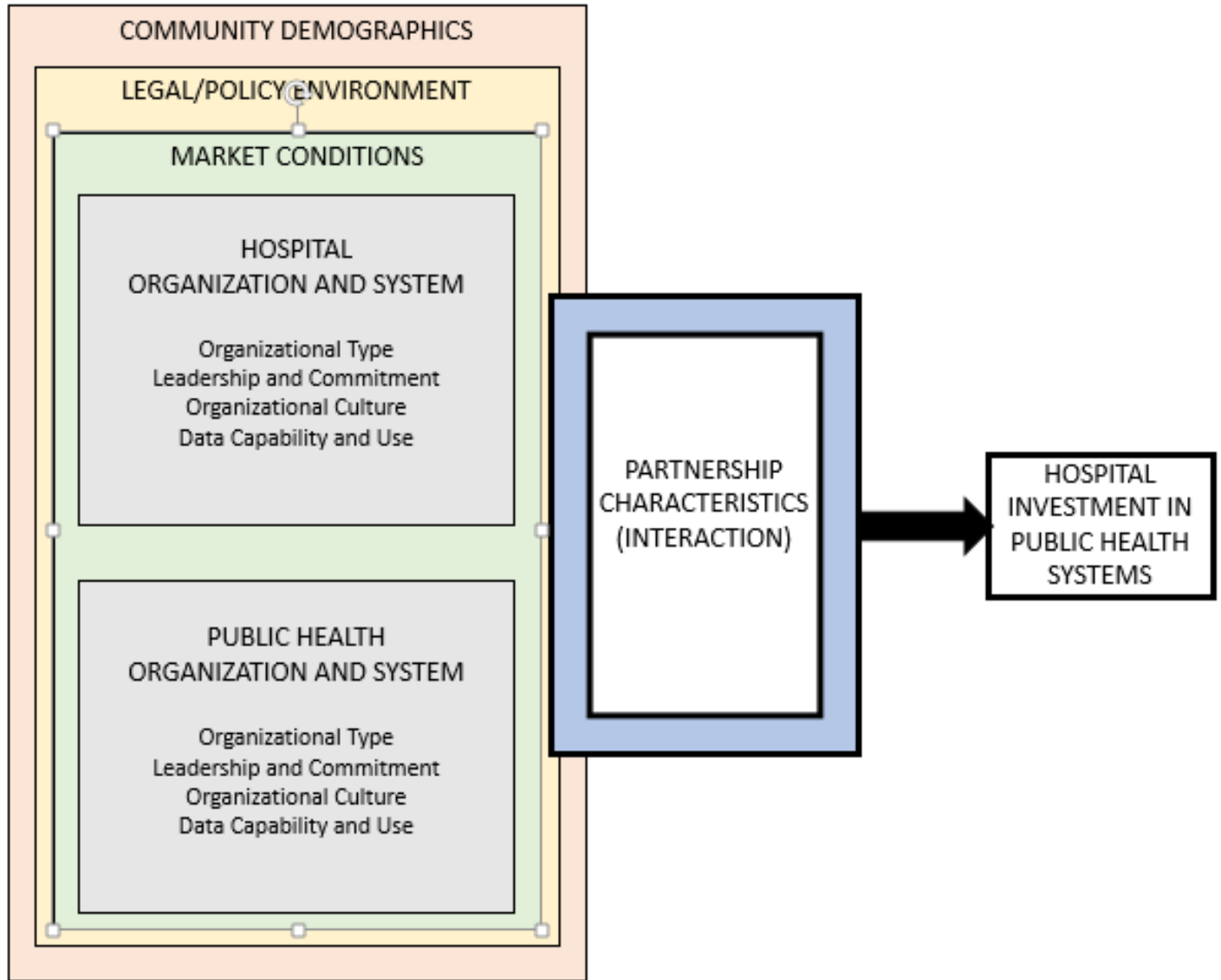
To Accomplish Aim 1 (Conceptual Framework):

❖Review of the peer reviewed and grey literature to narrow the framework scope

❖Drafted conceptual model

❖Convened expert panel to review, further narrow, and refine the conceptual model.
  - ❖The expert panel consisted of 9 people representing hospitals (N=4), public health (N=2), and other national expertise (N=3)
  - ❖Contributed diverse voices to the conversation
  - ❖Provided feedback on the questions we are asking
  - ❖Drew on experiences related to PH-Hospital interactions (what factors were most important in success and challenges?)
  - ❖Reflected on discussion and process
  - ❖Provided new resources and ideas

Conceptual Framework

COMMUNITY DEMOGRAPHICS

LEGAL/POLICY ENVIRONMENT

MARKET CONDITIONS

HOSPITAL
ORGANIZATION AND SYSTEM

Organizational Type
Leadership and Commitment
Organizational Culture
Data Capability and Use

PUBLIC HEALTH
ORGANIZATION AND SYSTEM

Organizational Type
Leadership and Commitment
Organizational Culture
Data Capability and Use

PARTNERSHIP
CHARACTERISTICS
(INTERACTION)

HOSPITAL
INVESTMENT IN
PUBLIC HEALTH
SYSTEMS

To Accomplish Aim 2 & 3

Create Database

❖ Three Secondary Data Sets
- 990 and Schedule H Community Benefit Data
- PARTNER PH-Hospital Partnership Data
- American Hospital Association Data

❖ Merged All Three Datasets by Medicare ID

❖ Analysis Lens: Two Perspectives
- Hospital – Public Health <u>System</u>: Cross-Sector Interorganizational Partnerships
- Hospital – Public Health <u>Agencies</u>: Partnerships with <u>only</u> PH Agencies
  - NACCHO Profile Data

Descriptive Analysis

Nonprofit Hospitals in Dataset

- 134 unique nonprofit hospitals (Medicare IDs); 200 observations (some repeated within and across years)
- Size = 16-2083 beds, average = 284 beds

AHA Data on Nonprofit Hospitals
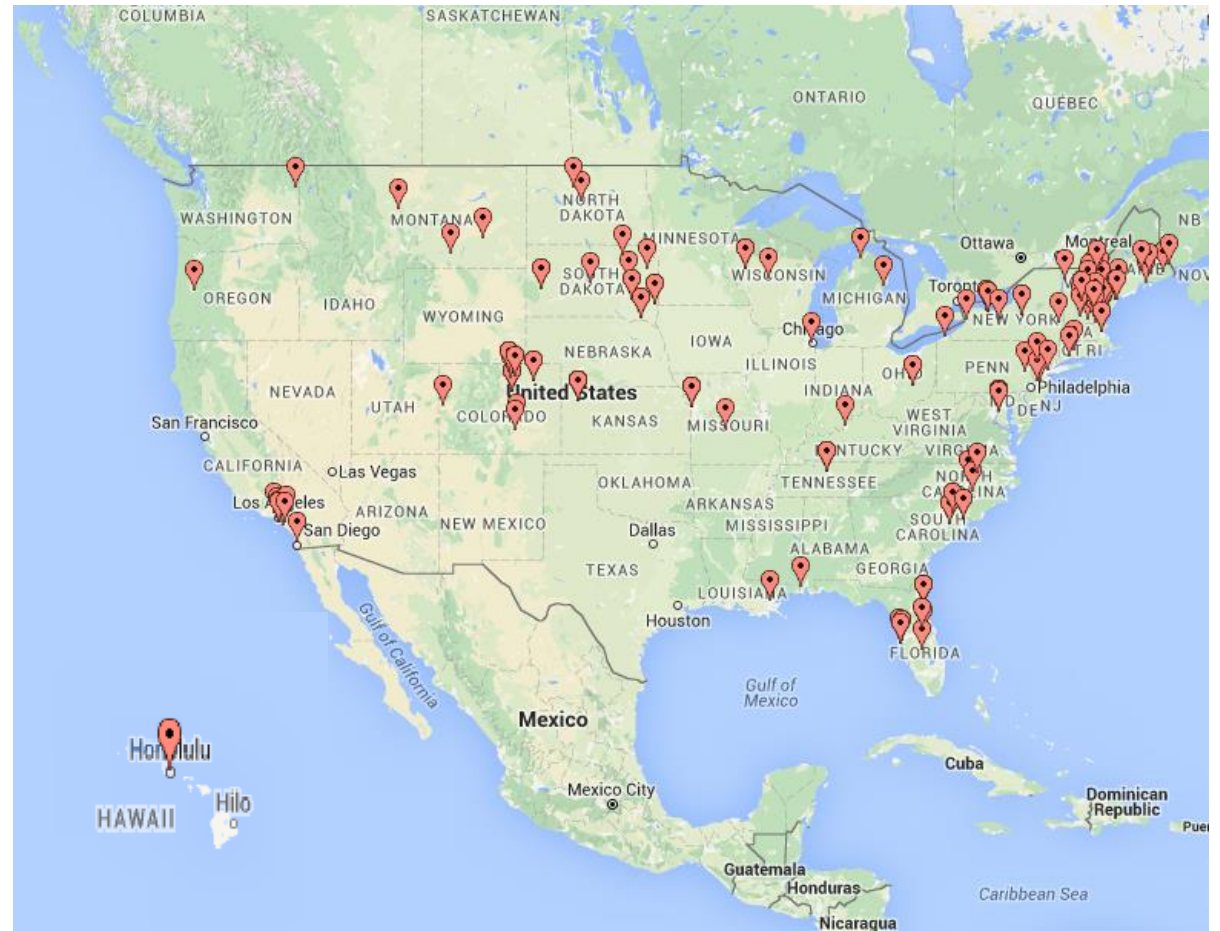
Hospital "Investment" Data

990 and Schedule H Data

All at Facility Level	Mean	SD
Total Community Benefit	$52.7 million	$105.3 million
Total Community Benefit (% operating expenses)	11.47%	
Community Health Improvement Services and Community Benefit Operations	$6.9 million	$67.6 million
Community Building Total	$0.45 million	$2 million

Two Lenses to Describe "Hospital Interaction"

PARTNER Data

Data available from existing community level networks of cross-sector, interorganizational networks from across the US

- Health Focused Networks

- Each One Includes Hospitals

- Not All Involve Public Health

Phase 1: Public Health System

- 134 Whole Networks
- ~41,000 partnerships
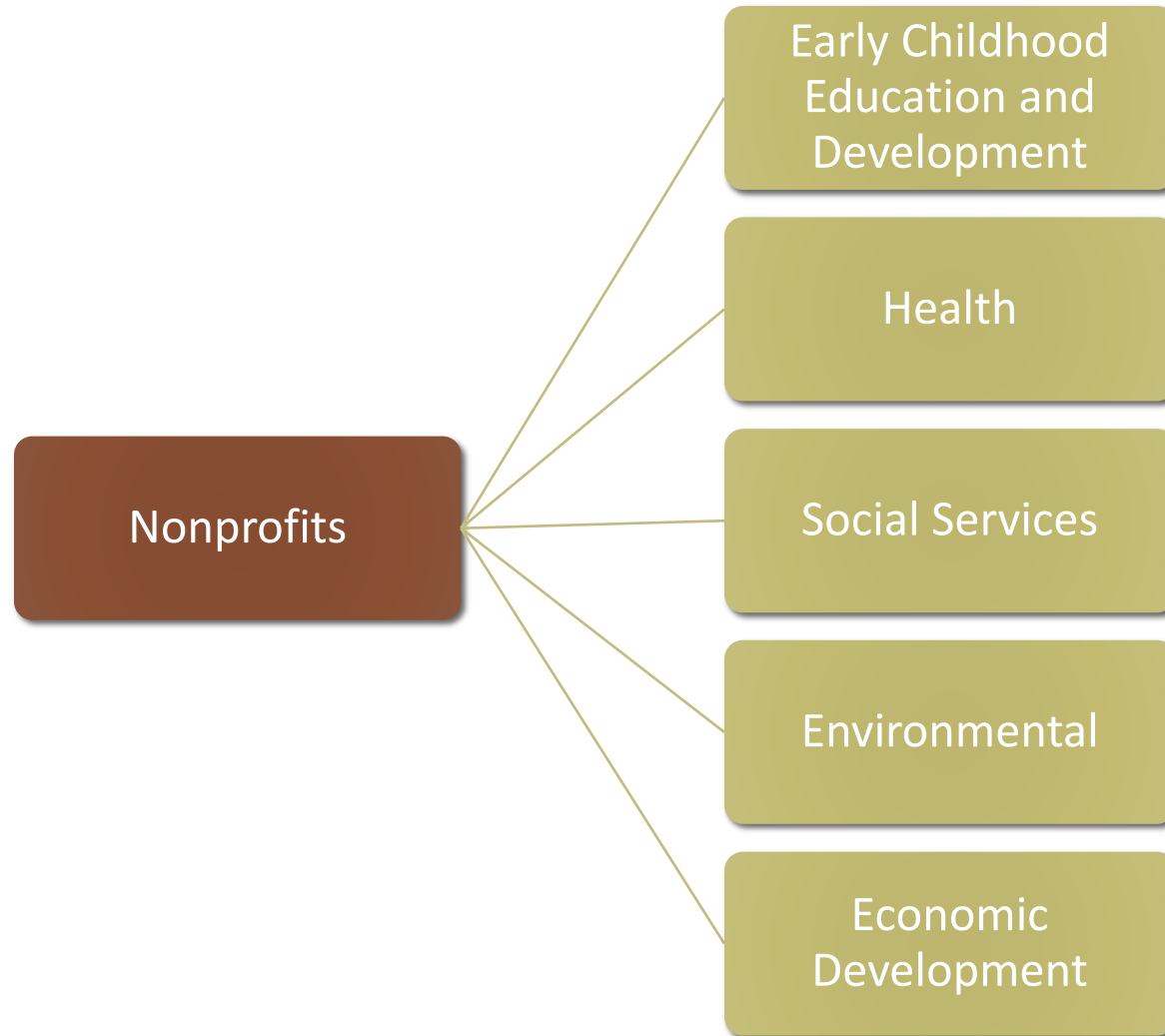- ~6,000 hospital-cross-sector partnerships
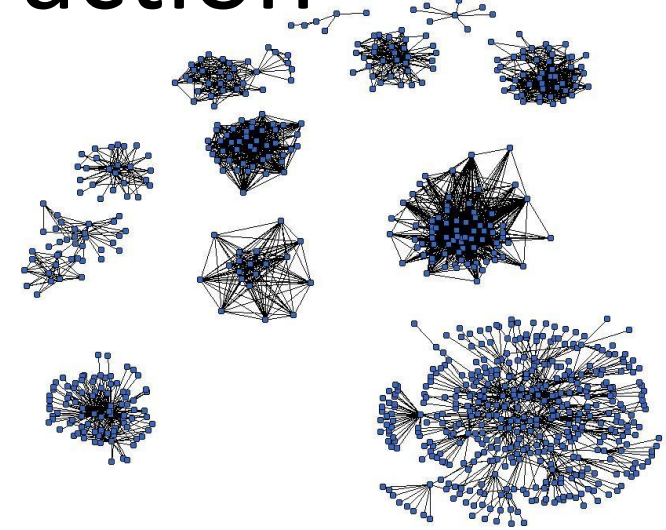
Phase 2: Public Health Agencies

- 413 Hospital-Public Health Agency Partnerships
  - 159 reported by hospitals
  - 254 reported by Public Health

of Organizations from 10 sectors

Pie chart legend:
- Nonprofit Organizations — 33%
- Local Government Agencies — 11%
- Schools (Pre-12) — 10%
- Local Health Department/Agencies — 8%
- Physician Practice — 6%
- College/Universities — 6%
- Hospitals — 6%
- Other State Agencies — 5%
- State Health Agencies — 4%
- Employer/Business — 4%
- Other State Agencies — 2%, 1%, 1%
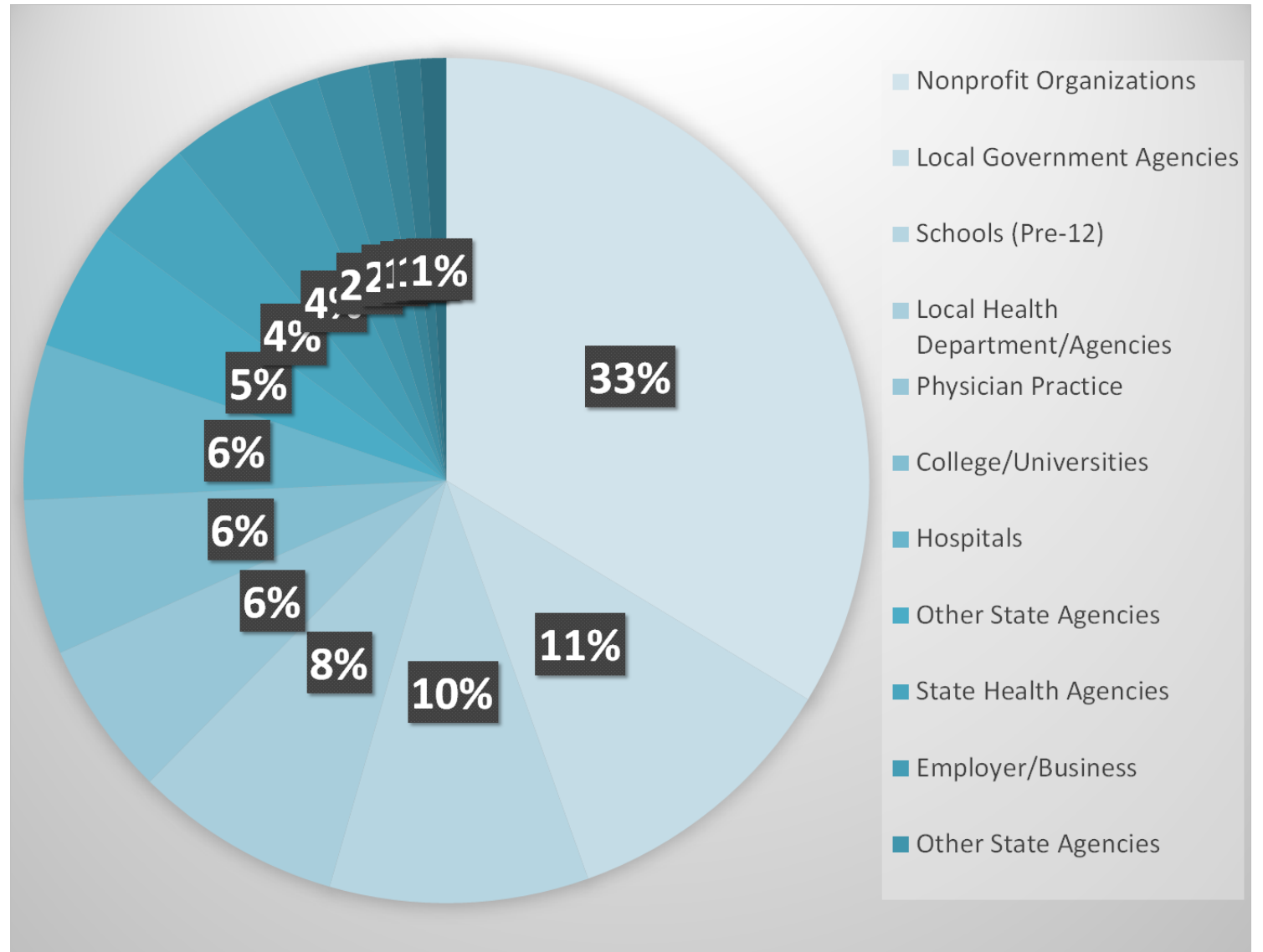
Next Step: Breaking Out Sectors in More Detail

Nonprofits

- Early Childhood Education and Development
- Health
- Social Services
- Environmental
- Economic Development

Perceptions of Hospitals by Their Cross Sector Partners

Phase 1:
Early Descriptive Analysis
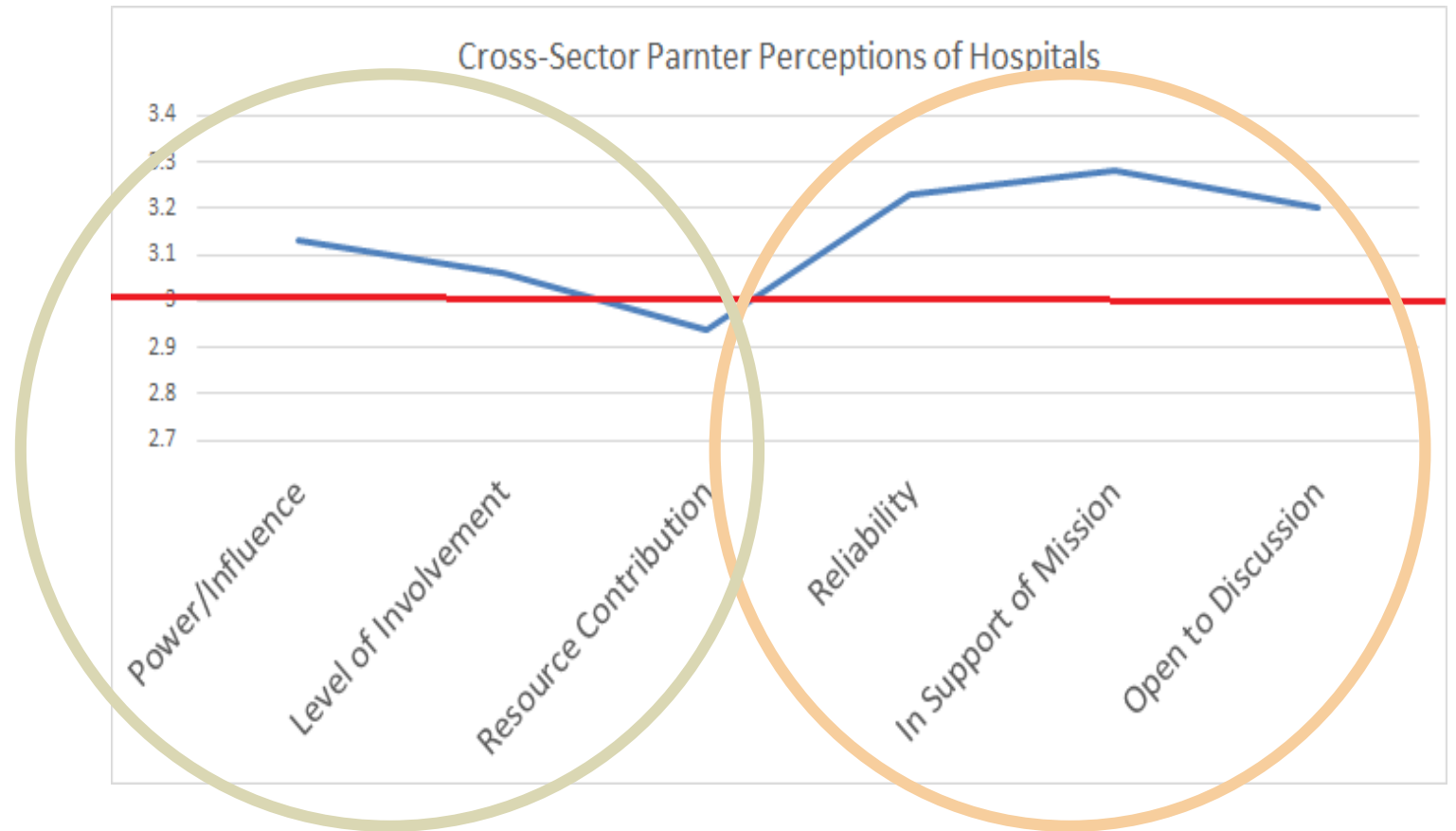
Perceptions of Value Among Cross-Sector Partners

Perceptions of Trust Among Cross-Sector Partners
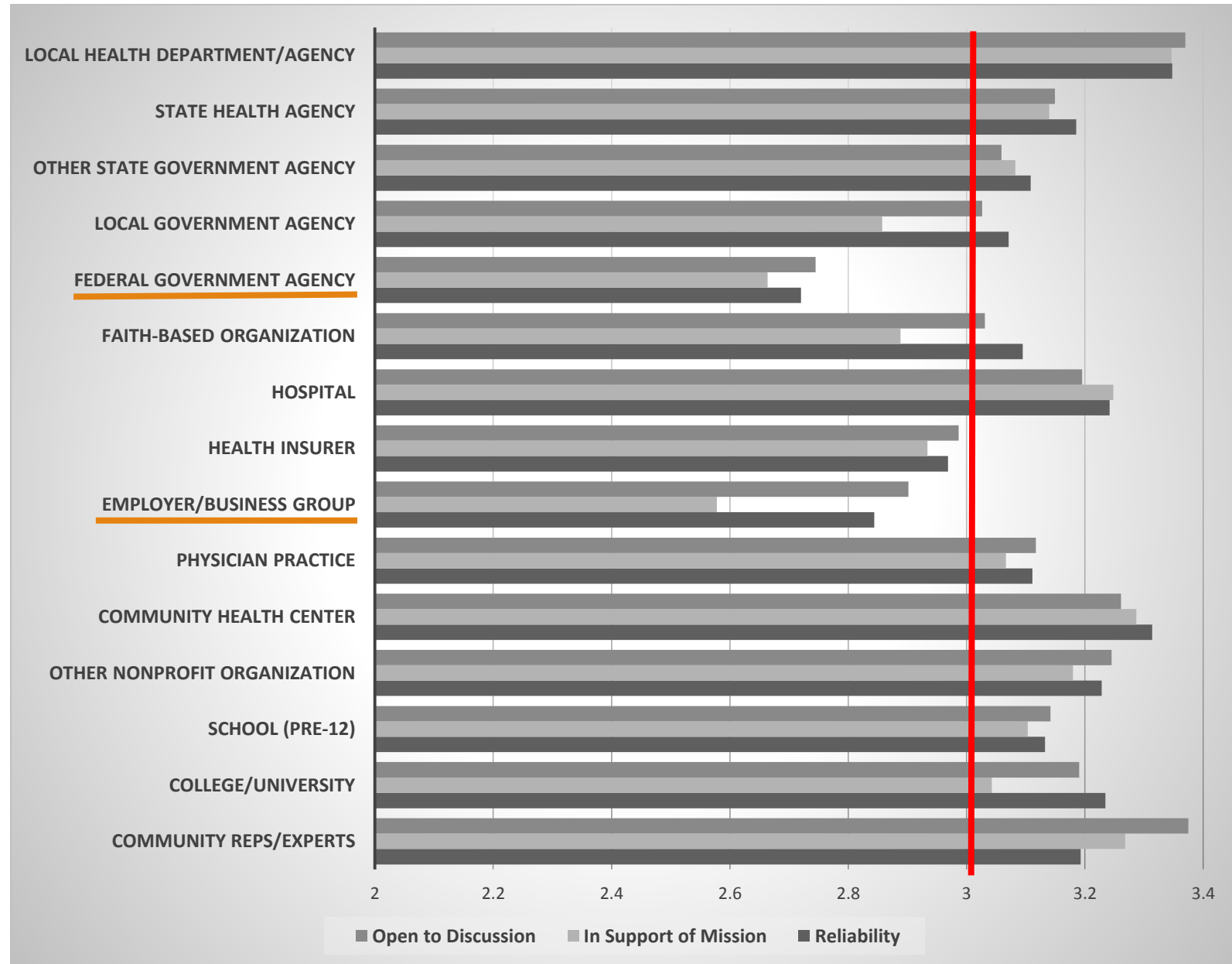
Other Dimensions to Look At Across Sectors

Resource Exchange

❖ What do hospitals contribute?

❖ What does public health contribute?

Activities Engaged In?

❖ Types of activities?

❖ Level of interaction: Cooperative, Coordinated, Integrated

Perceptions of Outcomes/Success

❖ What do hospitals contribute?

❖ What does public health contribute?

Others

Implications for Research & Practice

❖ **Research**
  ❖ Quality and Types of Data Available – Need for research to build the databases
  ❖ Many areas of the conceptual framework we will not be able to analyze in this study

❖ **Practice**
  ❖ Can we leverage specific factors that may promote increased investments and interactions in public health systems?
  ❖ Can we target programs and interventions that will emphasize those factors in practice?
  ❖ What leverage points can policymakers look towards to balance the cost-benefits across the Hospital, Public Health, and broader Cross-Sector landscape?

Next Steps

❖ Running Models to Look at Relationships Between
- ❖ Hospital Characteristics (Control Variables)
- ❖ Hospital Investment in Public Health Systems

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❖ Revise Conceptual Model

❖ Identify Data Needs

❖ Translate Data to Recommendations for Practice

Project Information & Updates

go to: **http://www.publichealthsystems.org/hospital-investment-and-interaction-public-health-systems**

Commentary

Erik L. Carlton, DrPH, MS
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Questions and Discussion

Webinar Archives & Upcoming Events

go to: http://www.publichealthsystems.org/phssr-research-progress-webinars

Upcoming Webinars

May 19, 2016 (1-2p ET/ 10-11a PT)

ARE WE MEASURING UP? EXPLORING PUBLIC HEALTH PERFORMANCE AND HEALTH EQUITY IN THE UNITED STATES AND CANADA

Phuc Dang, MA, University of Victoria, British Columbia and University of Kentucky College of Public Health

June 1, 2016 (12-1p ET/ 9-10a PT)

EFFECTS OF CROSS-JURISDICTIONAL RESOURCE SHARING ON THE IMPLEMENTATION, SCOPE AND QUALITY OF PUBLIC HEALTH SERVICES

Justeen Hyde, PhD, Institute for Community Health & Harvard Medical School, and Debbie Humphries, PhD, MPH, Yale School of Public Health

June 23, 2016 (12-1p ET/ 11-12a CT)

IMPROVING THE EFFICIENCY OF NEWBORN SCREENING FROM COLLECTION TO TEST RESULTS

Beth Tarini, MD, MS, University of Iowa College of Medicine, formerly at University of Michigan Medical School

Thank you for participating in today's webinar!
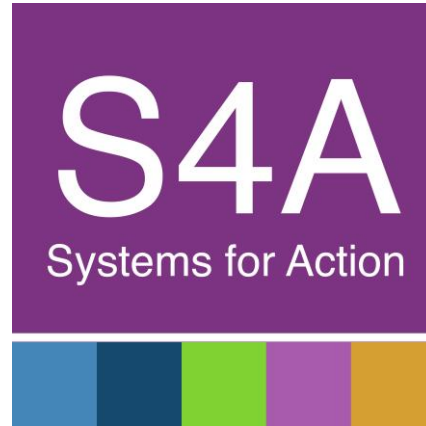
For more information about the webinars, contact:

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Speaker Bios

Danielle M. Varda, PhD is an Associate Professor at the School of Public Affairs (SPA) at the University of Colorado Denver, and the Director of the CU Center on Network Science. Dr. Varda joined SPA from the RAND Corporation, where she worked as an Associate Policy Scientist from 2005-2008. She specializes in collaborative governance and network leadership, focusing specifically in Public Health Systems and Services Research. Her research focus is on evaluating the network structure of interorganizational collaborations between the public, private, and nonprofit sectors and the subsequent network effects of these recorded interactions. She has developed models and methods of network measurement, and with funding from the Robert Wood Johnson Foundation, is the developer of a software tool (PARTNER, www.partnertool.net) that uses Social Network Analysis to administer a survey and link to an analysis tool, to measure and monitor collaborative activity over time. Dr. Varda's PARTNER tool is used by over 600 communities in 30 countries and all over the U.S. The PARTNER suite of tools, technical assistance, and training is a well-known resource for communities working to build their community networks and systems. Her research portfolio includes projects in the areas of maternal/child health, public health preparedness, nonprofit community networks, and systems evaluation. *danielle.varda@ucdenver.edu*

Lisa VanRaemdonck, MPH, MSW is Executive Director of the Colorado Association of Local Public Health Officials as well as Co-Director for the Colorado Public Health Practice-Based Research Network. Her work is dedicated to encouraging public health system-level improvements through strategic partnerships, workforce development, peer networking, capacity building, practice-based research and dissemination, and policy development. Prior to her public health career, Lisa worked in public relations and marketing, and has experience with non-profit and business-to-business communications. *lisa@calpho.org*

Erik L. Carlton, DrPH, MS is Assistant Professor of Health Systems Management and Policy at The University of Memphis School of Public Health, with an adjunct appointment in Preventive Medicine, and is an affiliate faculty member with the Center for Health Systems Improvement at the University of Tennessee Health Sciences Center. His current research focuses on the integration of public health and primary care systems, integrating behavioral health systems, increasing interdisciplinary education in healthcare, and public health leadership and workforce development. In addition to his teaching and research, Dr. Carlton has published and presented nationally on a variety of topics, and is the founder of a consulting firm which facilitates collaborations and provides technical assistance and marketing solutions to small business, non-profit, and public sector organizations. *lcrlton1@memphis.edu*

Christopher Maylahn, MPH is an epidemiologist in the Office of Public Health Practice of the New York State Department of Health. His principal focus is the Department's Prevention Agenda toward the Healthiest State, the state's health improvement plan, and he is actively involved with the New York Public Health Practice Based Research Network. He has served in numerous administrative and leadership roles and been responsible for many program initiatives addressing cardiovascular diseases, diabetes, asthma, obesity, age-related eye diseases and epilepsy. In particular, he worked for the Vermont Heart Association to develop a state hypertension control program, and has been an active member of the National Association of Chronic Disease Directors and the Council of State and Territorial Epidemiologists. *cmm05@health.ny.gov*