



December 2014

## Exploring the Process, Models, and Outcomes of Hospital-Public Health Partnerships

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### Recommended Citation

Varda DM, Retrum JH, Chapman C. Exploring the Process, Models, and Outcomes of Hospital-Public Health Partnerships. *Front Public Health Serv Syst Res* 2014; 3(5).

DOI: 10.13023/FPHSSR.0305.05

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## Exploring the Process, Models, and Outcomes of Hospital-Public Health Partnerships

### Abstract

Health care reform has resulted in changes throughout the health system, including the Affordable Care Act (ACA) requirement that hospitals conduct community health needs assessments, taking into greater consideration the public health of their respective communities. This has led to growing strategies to develop partnerships between hospitals and public health (PH) as a way to meet these needs<sup>1</sup>. Meantime, there is a need for data on Hospital-PH partnerships, due to the growing emphasis that these types of partnerships get implemented in practice. In this paper we analyze a secondary data set to explore how hospitals and public health have engaged in partnerships prior to the ACA. We asked “How amenable have hospitals and public health agencies been to forming partnerships?” We found that while Hospitals traditionally have fewer partners, contribute fewer resources, and report fewer outcomes, they tend to report high perceptions of value and more frequent, complex partnerships. The impact of these results are important to efforts to build an evidenced-based foundation by which hospital and public health personnel can develop skills to manage these complex relationships.

### Keywords

public health, hospitals, partnerships

### Cover Page Footnote

We would like to acknowledge the Robert Wood Johnson Foundation, the National Coordinating Center for PHSSR, and the AcademyHealth for their ongoing support for this research.

Health care reform has resulted in changes throughout the health system, including the Affordable Care Act (ACA) requirement that hospitals conduct community health needs assessments, taking into greater consideration the public health of their respective communities. This has led to growing strategies to develop partnerships between hospitals and public health (PH) as a way to meet these needs<sup>1</sup>. Meantime, there is a need for data on Hospital-PH partnerships, due to the growing emphasis that these types of partnerships get implemented in practice. The process by which this is occurring, the models of partnerships evolving, and the eventual outcomes of these new arrangements are not yet clear. There are many perceptions of the way that these partnerships have, and are, developing – most of these assumptions are anecdotal or based on perceptions<sup>2</sup>. There is also a lack of understanding of whether these types of relationships already exist in communities, and if so, what do we know about them? There is very little data available to explore these interactions, and almost all available data is from the perspective of the PH partner.

In this paper we analyze a secondary data set to explore how hospitals and public health have engaged in partnerships prior to the ACA. We asked “How do hospitals report their experiences working with partners, in comparison to how public health organizations report their partnerships?”

## METHODS

To address these questions, we analyzed over three years of data of existing Hospital-PH partnerships in communities around the US. This research is a secondary analysis, from the PARTNER ([www.partnertool.net](http://www.partnertool.net)) dataset<sup>3</sup>. The data, collected between October 2009 and June 2013, includes survey responses from 519 public health organizations and 194 hospitals<sub>2</sub>. Approximately 3,847 dyadic relationships between hospitals and other organizations in these data are available<sub>3</sub>. The data were gathered in over 200 communities, using the same survey and analysis methodologies. Each dyad represents a relationship between a Hospital, PH, or Other organization, related to work they do together within a public health collaborative. One unique aspect of these data are the responses by hospitals, representing the hospital perspective. The availability of these data allows us to report on the types and context of hospital partnerships in a large N sample.

Based on previous analysis of the PARTNER dataset<sup>4,5</sup>, primarily on the role that PH plays in community coalitions, a set of working propositions were developed. These include:

- ▶ PH orgs are more likely (than hospitals) to:
  - Have more partnerships
  - Have more frequent interactions with partners
  - Have more coordinated interactions with their partners
  - Value their partners more

<sup>1</sup> IRB Approval to use as secondary data - Protocol 11-0098.

<sup>2</sup> Total Data N =31,696 total dyadic ties; from N=4,829 total organizations

<sup>3</sup> Breakdown of Dyads: Hospital-PH, N=470; Hospital-Hospital, N=517; PH-Hospitals, N=677; Hospitals-Other, N=999; PH-PH, N=1972; Other-PH, N=2824; Other-Other, N=19571

- Trust their partners more
- Share more resources with communities
- Report higher perceptions of success
- Report more outcomes achieved

These were used as a “roadmap” for analysis, given that the opportunity for analysis is so complex.

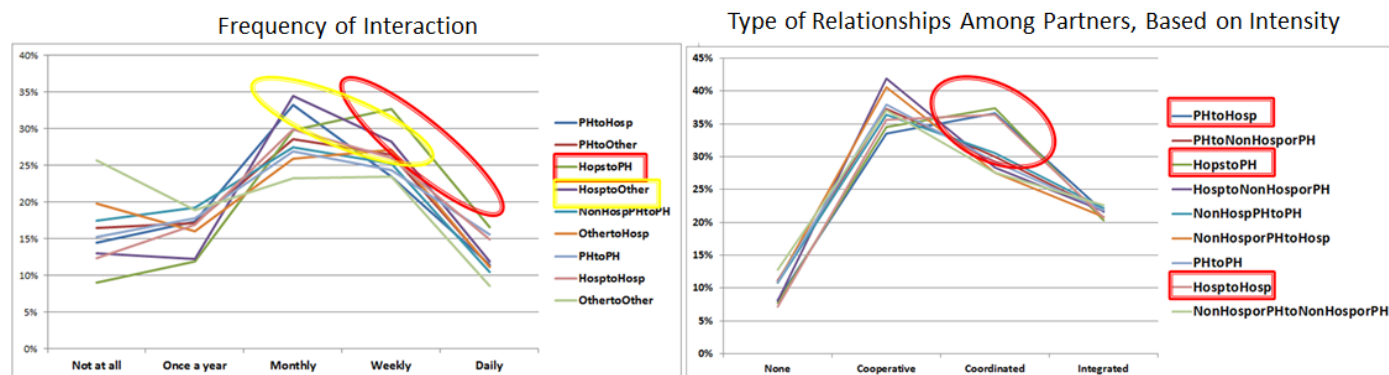
## RESULTS

*Number and Types of Partnerships.* Together, PH and Hospitals make up roughly 25 percent (n=713) of all organizations in the data set. PH makes up 17 percent (n=519), Hospitals are 8 percent (n=194), and Other organizations are the other 75 percent (the category “other” represents: Education, Funders, Dental, Providers, Government (Non PH), Nonprofits/volunteer orgs, health insurance, professional organizations, faith-based, business, law enforcement/legal, military, regional networks/alliances, citizen representatives/experts, and community health centers). Similarly, PH and Hospitals make up about 28 percent (n=8875) of all partnerships (17 percent PH (n=5388), 11 percent (n=3486) Hospital, and 72 percent Other).

### *Type and Frequency of Interactions*

Overall, hospitals report more frequent interactions with their partners (measured as amount of contact between partners) than other organizations report with their partners (including those reported by PH). Hospitals also report more coordinated interactions (measured on a scale of cooperative, coordinated, integrated) with their partners than other organizations. Likewise, PH organizations report more coordinated activities with Hospitals than with other organizations. All of these observations reflect a deviation from the typical pattern among the other types of dyads in the data (see Figure 1).

**Figure 1: Frequency and Type of Relationships Among Partners (Hospital-PH, Hospital-Other, PH-Hospital, Hospital-Hospital Trends Highlighted)**



### *Variations in Perceptions of Trust and Value*

One of the most surprising findings was an analysis of the perceptions that the various organizations have of their partners. The data represents responses to questions regarding the degree to which each organizations trusts (measured as reliability, mission congruence, and communication) and values (measured as levels of power/influence, resource contribution, and time commitment) their partners. Overall, PH organizations reported the greatest level of trust toward hospitals. In terms

of value, hospitals reported greater levels towards PH and Other organizations, than did PH towards those same groups.

#### *Resources Contributed/ Outcomes Achieved*

There was little variation in the types of resources contributed and reports of types of outcomes achieved. However, based on an ANOVA of the data, PH contributes significantly more resources and reports more outcomes than hospitals and other orgs (See Table 1).

**Table 1: ANOVA Results for Reports of Outcomes and Resource Contributions Among PH, Hospitals, Other Organizations**

Resources	N	Mean	SD	Range	Different Mean between PH-HOS?	Different mean than Other avg?
Public Health	461	.477	.310	0-1	Yes, public health contributes more (p<0.001)	Yes, PH contributes more (p<0.001)
Hospitals	228	.296	.278	0-1		Yes, Other contributes more (p<0.01)
Other	1738	.322	.253	0-1		
Outcomes	N	Mean	SD	Range	Different Mean between PH-HOS?	Different mean than Other avg?
Public Health	399	.577	.308	0-1	Yes, public health reports more outcomes achieved (p<0.001)	Yes, public health reports more outcomes achieved (p<0.001)
Hospitals	215	.472	.362	0-1		Yes, other orgs report more outcomes achieved (p<0.05)
Other	1556	.5336	.364	0-1		

In summary, while Hospitals traditionally have fewer partners, contribute fewer resources, and report fewer outcomes, they tend to report high perceptions of value and more frequent, coordinated partnerships. In terms of our working propositions, we found the following:

- ▶ PH orgs are more likely (than hospitals) to:
  - Have more partnerships (True)
  - Have more frequent interactions with partners (False)
  - Have more coordinated interactions with their partners (False)
  - Value their partners more (False)
  - Trust their partners more (True)
  - Share more resources with communities (True)
  - Report higher perceptions of success (False)
  - Report more outcomes achieved (True)

## IMPLICATIONS

In this brief analysis, we learned that hospitals are already very engaged at the community level and report high levels of perceptions of the value of these relationships. The impact of these results are important to efforts to build an evidenced-based foundation by which hospital and public health personnel can develop skills to manage these complex relationships. Managing intersectoral partnerships is challenging and currently, both hospital and PH personnel lack sufficient skills to be successful at implementing them. More information on the way hospitals already work in these networks can help develop Quality Improvement strategies for improving partner processes, nurture relationships, and leverage existing ties. Curriculum for trainings to develop up the core competencies of public health professionals in the area of systems building and leadership requires data analysis like this, to inform what the expectations, perceptions, and experiences are of diverse partners.

### SUMMARY BOX:

**What is Already Known about This Topic?** Health care reform has resulted in changes throughout the health system, including the Affordable Care Act (ACA) requirement that hospitals conduct community health needs assessments, taking into greater consideration the public health of their respective communities. This has led to growing strategies to develop partnerships between hospitals and public health (PH) as a way to meet these needs.

**What is Added by this Report?** As expectation for Hospital-PH partnerships evolve, a greater need for research and empirical evidence is required to inform practice and policy development. In this paper we analyze a secondary data set to explore how hospitals and PH have engaged in partnerships prior to the ACA. We ask, *“How do hospitals report their experiences working with partners, in comparison to how public health organizations report their partnerships?”*

**What are the Implications for Public Health Practice, Policy, and Research?** The impact of these results are important to efforts to build an evidenced-based foundation by which hospital and public health personnel can develop skills to manage these complex relationships.

## REFERENCES

1. Mays, G. P., & Scutchfield, F. D. (2010). Improving public health system performance through multiorganizational partnerships. *Preventing Chronic Disease, 7*(6).
2. Pinto, R. M. (2009). Community perspectives on factors that influence collaboration in public health research. *Health Education & Behavior, 36*(5), 930-947.

3. Varda, D. M., Chandra, A., Stern, S., & Lurie, N. (2008). Core dimensions of connectivity in public health collaboratives. *Journal of Public Health Management and Practice*, 14(5), E1-E7.
4. Retrum, J., Chapman C. and Varda, D. (forthcoming) "Implications of Network Structure on Public Health Collaborative" *Journal of Health Education and Behavior*.
5. Varda, Danielle M. and Jessica H. Retrum. (2012). "An Exploratory Analysis of Network Characteristics and Quality of Interactions Among Public Health Collaboratives". *Journal of Public Health Research*. 1(2), 170-176.