



Evaluating the effects of partnerships on public health outcomes: the review of evidence



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Research Objectives



- Partnerships are promoted in public health as a way to improve public health outcomes through better coordination and sharing of resources between multiple public health partners
- The goal of the study was to collect existing evidence of effectiveness of partnerships; identify gaps in the literature, and suggest directions of future research

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Why study partnership effectiveness?



- Partnerships are organizational innovations that can improve public health outcomes through better coordination of service delivery and sharing of limited resources (IOM report, “The Future of the Public’s Health in the 21st Century”)
- Government agencies and foundations require the formation of partnerships as part of grant processes

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Effectiveness of partnerships

- Partnerships are effective if they contribute to improvement of public health outcomes
- Partnerships are cost effective if benefits of partnering outweigh the costs of partnering
- Ideally, effectiveness measures should be quantitative and based on sound science

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Challenges in partnership effectiveness evaluation



- Difficult to attribute public health outcomes to partnerships effects
- The costs and benefits of partnering are usually unobservable
- Partnering is a matter of choice; thus randomized control methods may not be feasible for partnership effectiveness evaluation

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Study design



- A literature search was used as a primary approach for identification and description of partnership effects in public health
- We identified 110+ papers that directly or indirectly investigate effects of partnerships on public health outcomes

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Gaps in the literature



- Gap #1. Most of the studies of partnership effectiveness are descriptive in nature which limits generalisability of results
- Gap #2. Well-designed studies of effectiveness of partnerships that provide evidence of quantitative effects of partnerships on health outcomes are rare
- Gap #3. No consensus on what constructs of partnership characteristics are important for assessment of partnerships

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Typical statements from the literature



Gaps in the literature	Typical statement	Source
1. Most studies of partnership effectiveness are descriptive	Case studies [findings] (with various threats to internal and external validity) are insufficient to make strong conclusions about the effects of partnerships on population-level outcomes	Rousoss and Fawcet, page 375
2. Very few methodologically rigorous partnership effectiveness studies	..93% of.. {partnership effectiveness} studies does not employ experimental... design, making it difficult to infer any causal relationship among factors and outcomes	Zakos and Edwards, pages 353, 358
3. Lack of consensus on which of 146+ constructs (measurement scales) should to be included in a scientifically sound partnership evaluation tool	Published measures often lacked information regarding validity and reliability, with internal consistency reliability being the most commonly reported statistic.	Granner and Sharpe, page 514
	Almost no attention has been paid to validating measures of partnership functioning. This is critical, because a measure that is reliable (obtains consistent results), but not valid (does not measure what it purports to measure) is of little value.	Ansari and Weiss, page 176



Partnership research priority areas



1. Social Networks methods to measure partnerships
2. Quantitative methods of evaluation of partnership effects on public health outcomes
3. Process assessment to improve partnership performance

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1. Social Networks methods to measure partnerships

Types of questions that can be answered by using relevant social network measures

Research questions

Network measure

How well developed/connected is the partnership network?

Density

What is the overall configuration of the network (decentralized vs. centralized)?

Centralization

Which organization is the most powerful in the network (most connected)?

Degree centrality

Which organization everybody want to work with? (has most ward connections to)

Indegree centrality

Which organization is the most eager to work with other organizations? (has most outward connections)

Outdegree centrality

Which organization is in a position of being a gatekeeper/broker/intermediary?

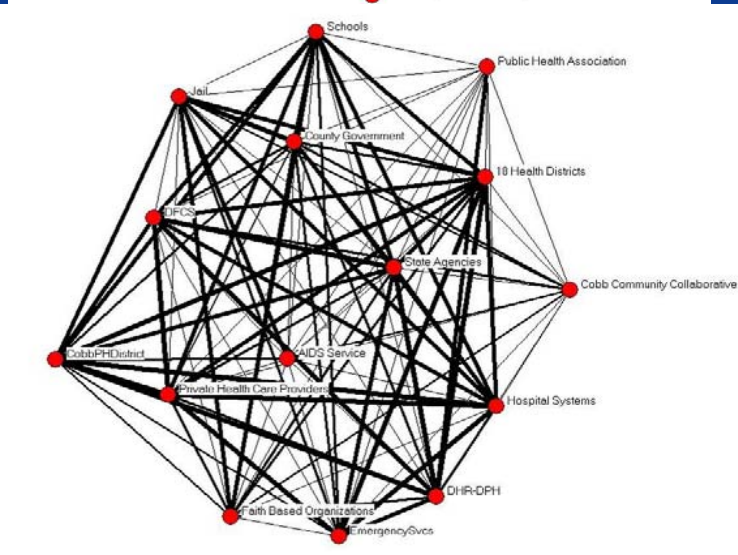
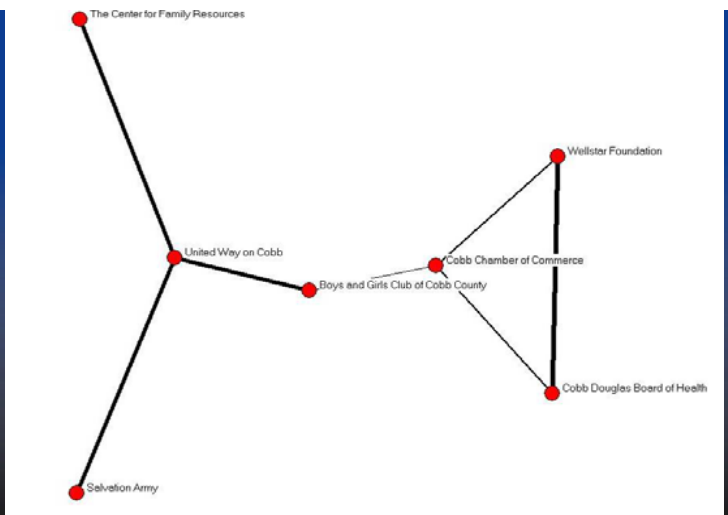
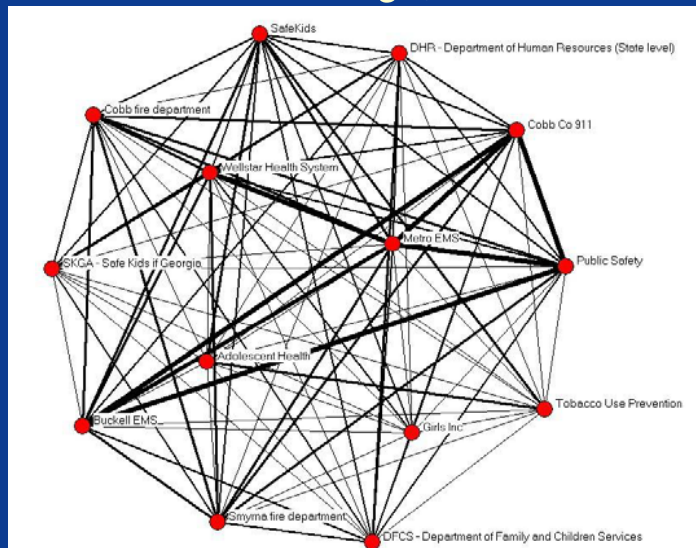
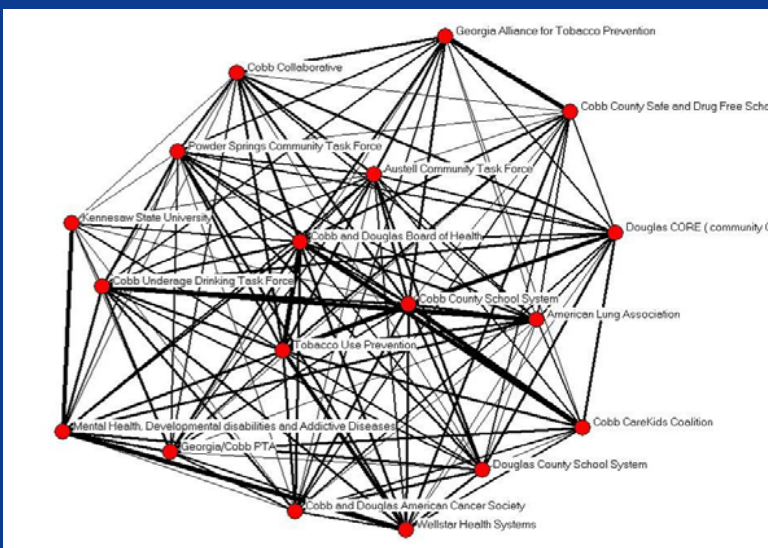
Betweenness

Which organization provides the shortest path for reaching all network members?

Closeness



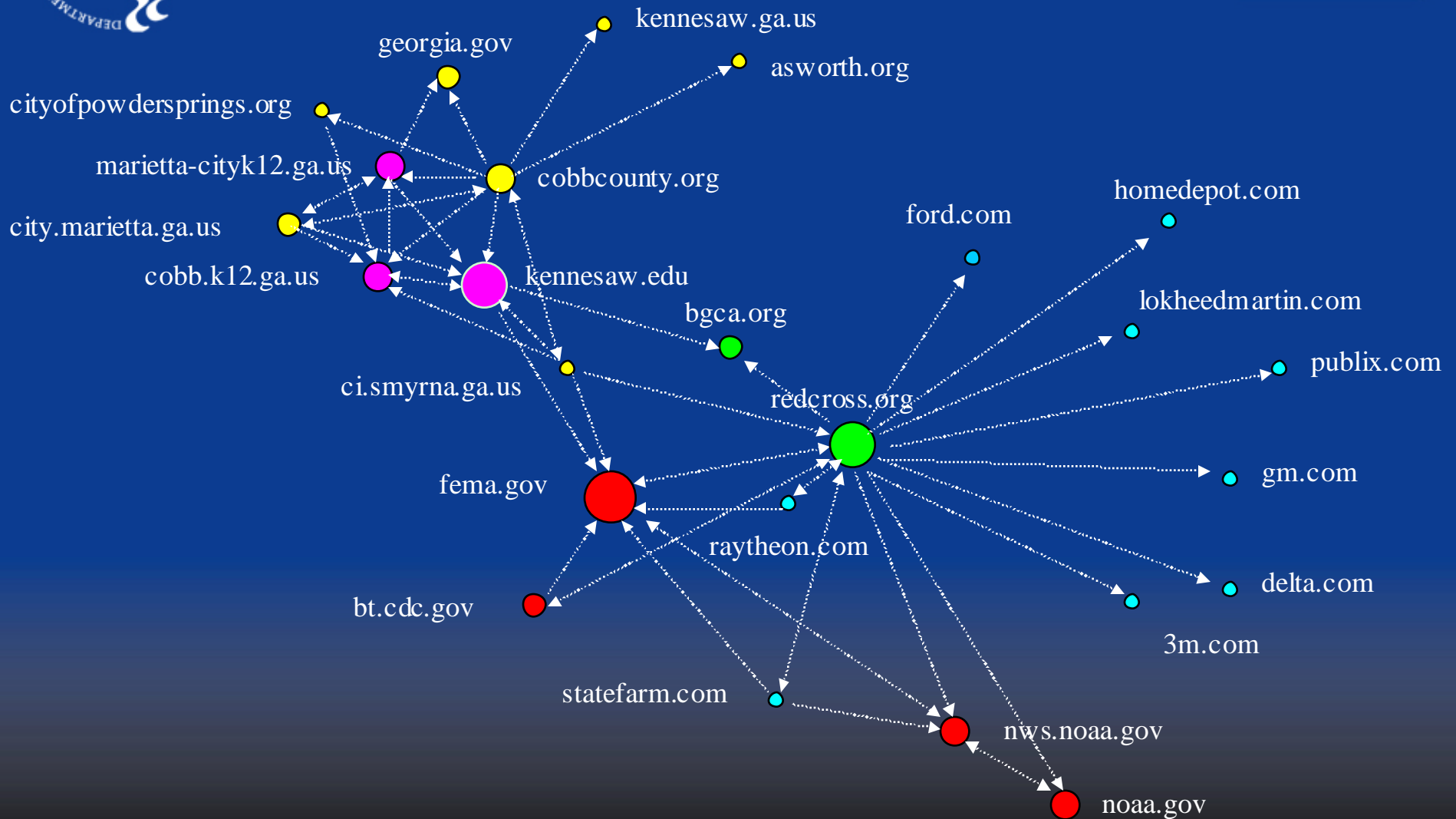
Examples of existing networks in Cobb county, GA



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Example of web network of Cobb county health department during Hurricane Katrina



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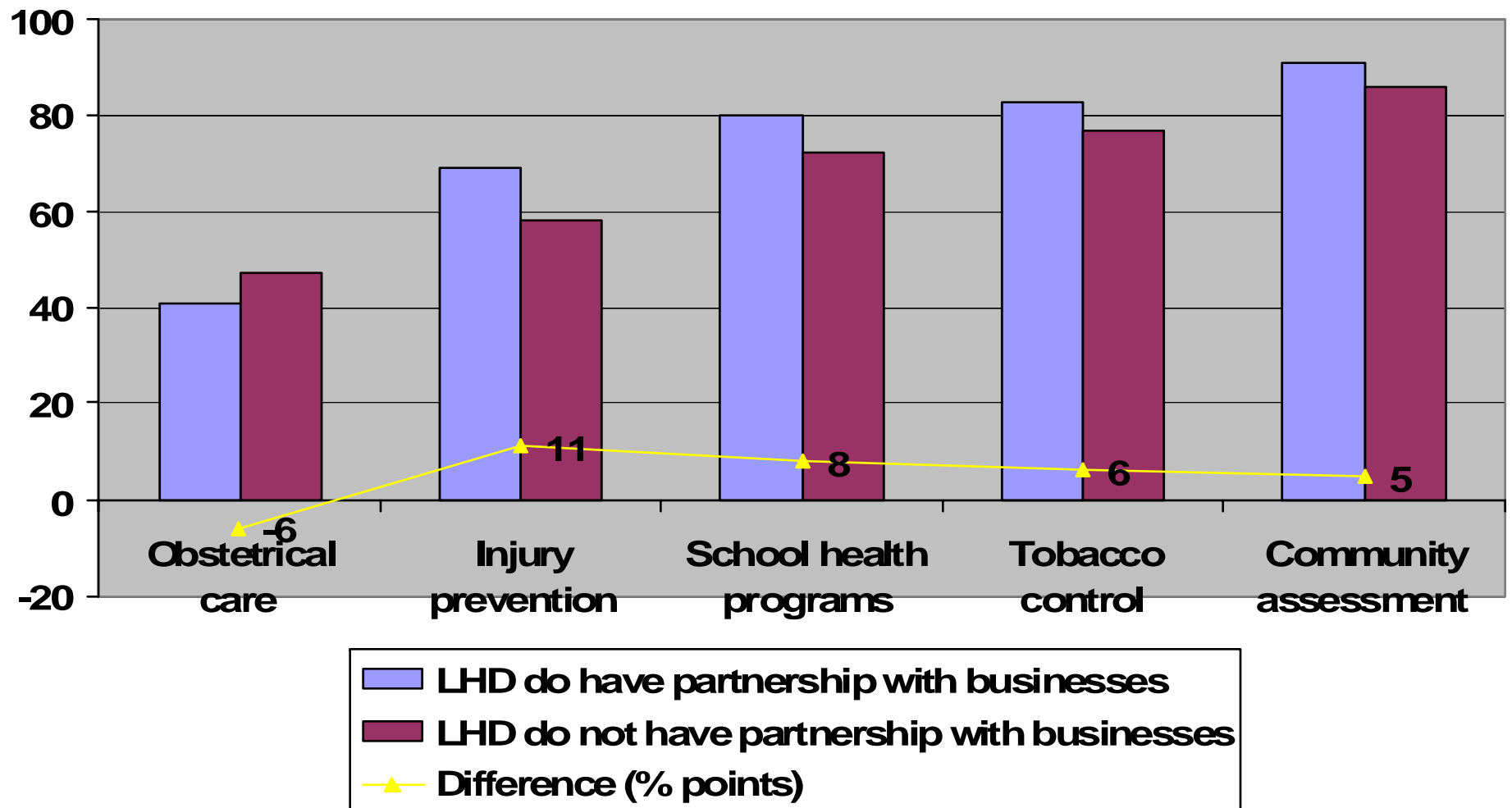
2. Quantitative methods of evaluation of partnership effects on public health outcomes



- Propensity scores matching - allows for quasi-experimental assignment of study units into comparable pairs of cases and controls based on probability of participation in partnership.
- Instrumental variable methods – deal with endogeneity of partnership choice by using “instruments”, i.e, variables that correlate with the explanatory variable, but are not correlated with error term

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Example of estimation of the effects of partnerships with businesses on provision of public health services by health departments: propensity score approach using NACCHO data

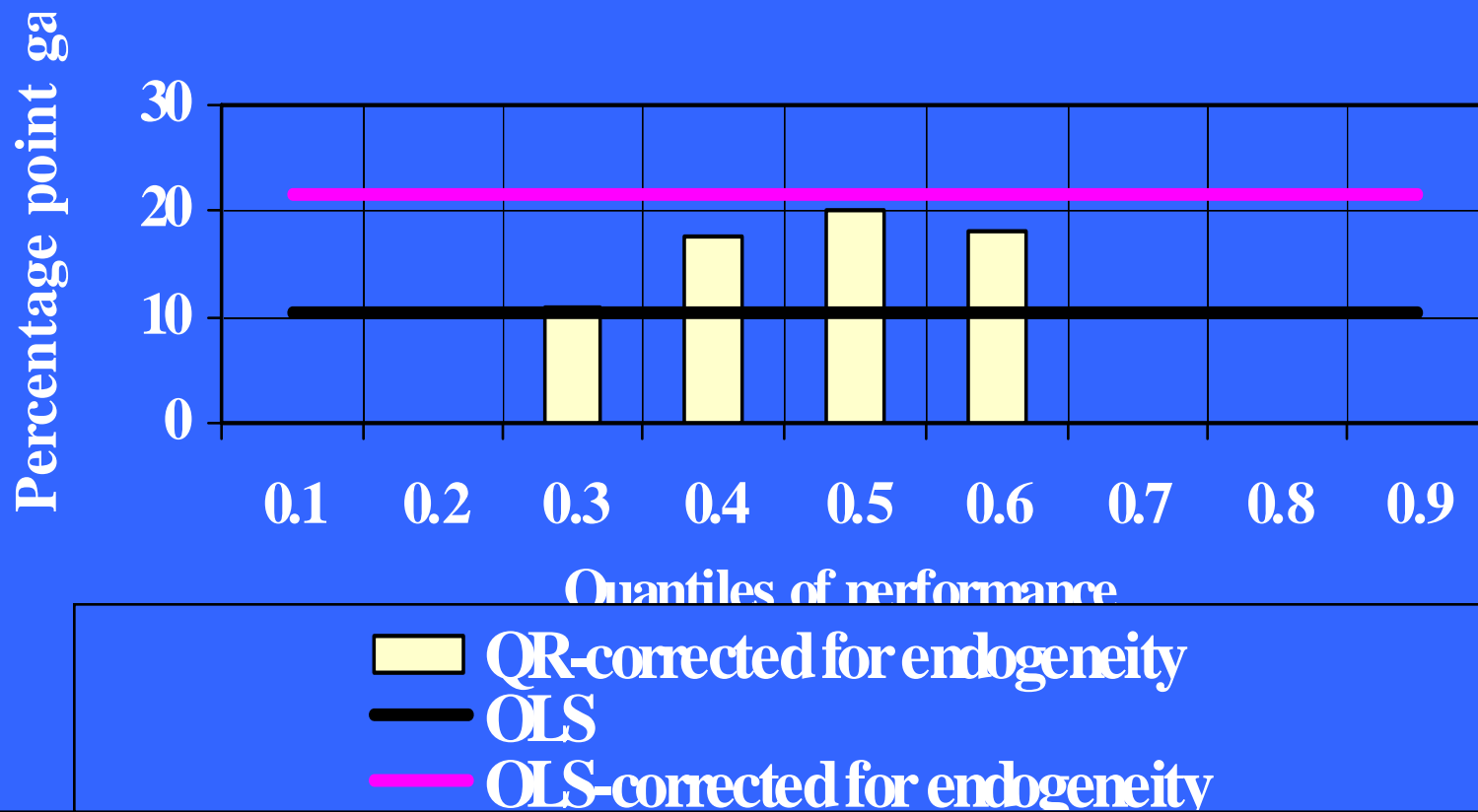




Example of using instrumental variable technique



Graph 2 Effects of private-public partnerships on LHD performance: three models compared



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3. Process Assessment: Partnership Evaluation Tool



- The literature provides numerous examples of tools with different approaches
- Partnership assessment tool is currently under development : interested parties can contact April Velasco at CDC: cwa9@cdc.gov

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PPAT – Partnership Progress Assessment Tool



- Based on a review of Public Health, Psychology, and Business Partnership literature
- Covers 17 key constructs for successful partnership process
- All but two subscales are previously validated
- Current efforts involve validation of the overall PPAT instrument

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PPAT Constructs



- Representation
- Level of involvement
- Vision/ motivation
- Goals/ objectives
- Role clarity
- Communication
- Clarity of decision making
- Resource utilization
- Governance
- Leadership effectiveness
- Satisfaction with leadership
- Trust
- Commitment
- Mutual dependence
- Resource complementarity
- Past experience
- Cultural Understanding

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Principal findings



- A majority of studies of partnership effect in public health are descriptive in nature. These case studies provide many interesting insights into the process of creation and functioning public health partnerships
- However, there is no consensus in the literature on which factors determine effectiveness of partnership
- The literature also provides numerous examples of evaluation tools. Well-designed quantitative studies on the effects of partnerships on health outcomes are rare

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Conclusions



- The body of evidence of the positive effects of partnerships on measurable public health outcomes is scarce
- Our literature review identified the need for substantial investment in research and evaluation of public health partnerships

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Implications for policy, delivery and practice



- Three potentially viable priority research areas are identified:
 1. Social networks analysis;
 2. Quasi-experimental studies to evaluate partnership effects on public health;
 3. Measurement tool development to assess effectiveness of partnerships.

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Selected literature: Measuring partnership social networks



- Provan G., Veazie M.A, Staten L.K., Teufel-Shone T.L. The Use of Network Analysis to Strengthen Community Partnerships. *Public Administration Review*, 2005; 65 (5): 603–613
- Luke D.A., Harris J.K. Network Analysis in Public Health: History, Methods, and Applications. *Annual Review of Public Health*, 2007; 28: 69-93

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Selected literature: Reviews of partnership effectiveness

- Ansari W.E. and Weiss E.S. Quality of research on community partnerships: developing the evidence base. *Health Education Research* 2006 21(2):175-180
- Berkowitz B. Studying the Outcomes of Community-Based Coalitions. *American Journal of Community Psychology*, 2001; 29(2): 213-227
- Roussos ST, Fawcett SB A review of collaborative partnerships as a strategy for improving community health. *Annual Review of Public Health*. 2000; 21: 369-402
- Zakocs R. , Edwards E. What Explains Community Coalition Effectiveness? A Review of the Literature. *American Journal of Preventive Medicine*, 2006; 30 (4): 351-361

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Selected literature: Partnership assessment tools

- Granner ML, Sharpe PA. Evaluating community coalition characteristics and functioning: a summary of measurement tools. *Health Educ Res.* 2004 Oct;19(5):514-32.
- Granner ML, Sharpe PA. An Inventory of Measurement Tools for Evaluating Community Coalition Characteristics and Functioning. Available at <http://prevention.sph.sc.edu/tools/CoalitionEvalInvent.pdf>

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Questions? Comments?

**We value your input and
participation!**

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