Collaborative Approaches in Chronic Disease Prevention: Factors Affecting Implementation of Evidence-based Practices in Local Public Health Coalitions

Colorado Public Health PBRN

Sarah Lampe, Lisa VanRaemdonck

The Public Health ALLIANCE of Colorado

CALPHO
Colorado Association of Local Public Health Officials

Colorado School of Public Health

Rocky Mountain Prevention Research Center

STATE OF COLORADO 1876
Colorado Department of Public Health and Environment

Outline

- **Overview of Colorado Public Health Practice Based Research Network (PHPBRN)**
- **Research Implementation Award Project**
  - **Research Questions**
  - **Evidence Based Practice**
  - **Design and Methods**
  - **Coalition Network Analysis**
  - **Next Steps**

What is Practice-based Research?

- Bridging the gap between practice and research

- What is Public Health PBR?
  - Important public health practice questions linked with rigorous research methods
    - to produce externally valid evidence that is more easily assimilated into practice
  - Adoption of an evidence-based culture
    - Places of learning with Practitioners engaged in reflective practice inquiries
    - Collaboration in search of answers to improve delivery of public health services

Note: *If you want more EBP, where is the PBE?* (L Green, 2008)

Colorado Public Health PBRN

Building infrastructure to facilitate practice-based research
Building the evidence base for PH systems and services

Partner Institutions

- **Public Health Alliance of Colorado**
  - Colorado Association of Local Public Health Officials (CALPHO) and 9 additional member organizations
- **Colorado Department of Public Health and Environment**
  - Office of Planning and Partnership
- **Colorado School of Public Health**
  - Rocky Mountain Prevention Research Center
  - Center for Public Health Practice

Background on Colorado PH PBRN

- Established in December 2008

    – Events leading up to establishment

- Funded by RWJF to build infrastructure

- Housed at the CALPHO

- Seeking to grow the number of researchers and public health professionals involved and connecting through the network
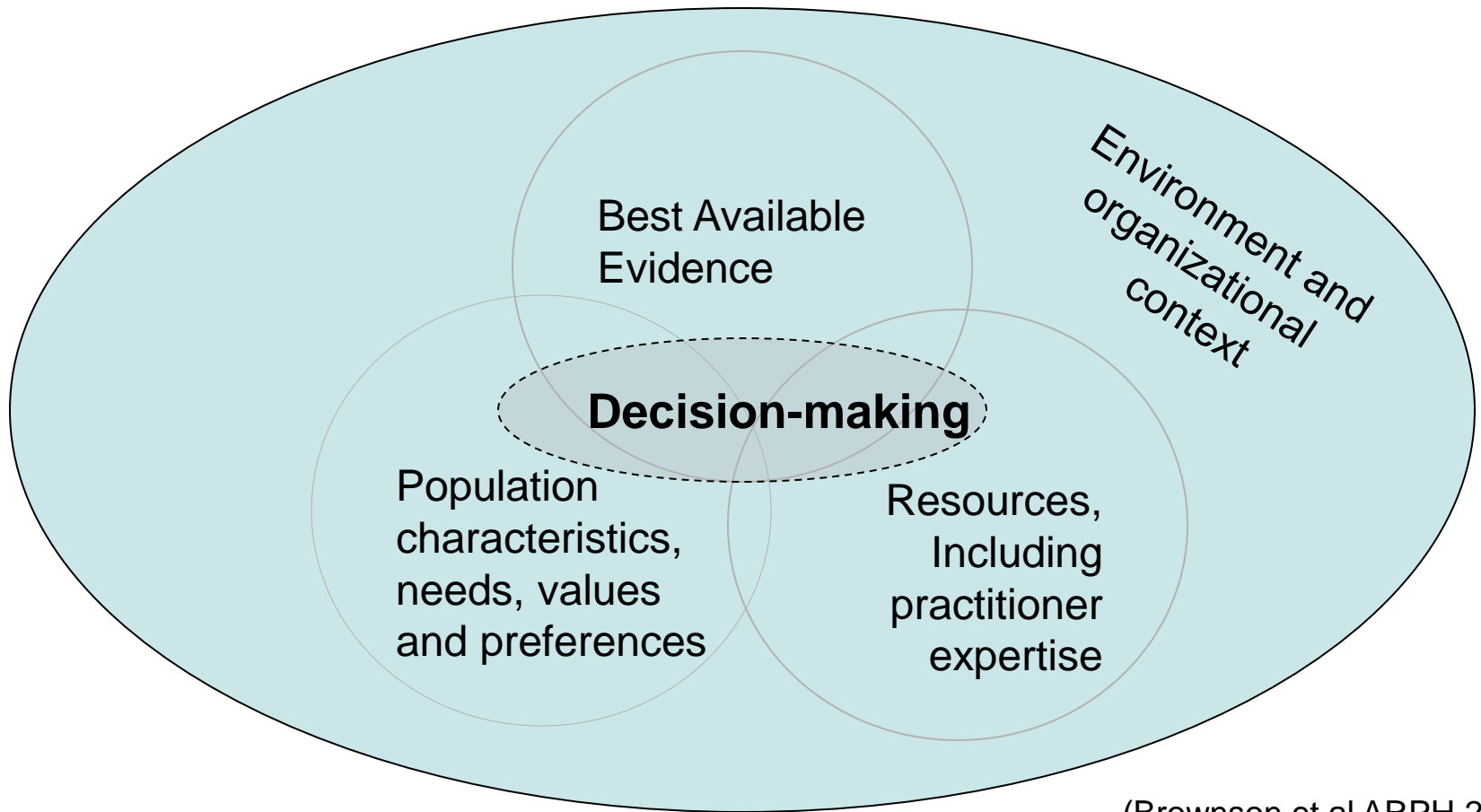
Research Implementation Award 2009

RWJF supports PH PBRNs with supplemental research funding

- Open to 5 initial PH PBRN grantees

- Theme: *enhancing adoption and implementation of evidence-based public health practices for disease prevention*

Colorado Research Question

- *How does the Local PH system influence adoption and implementation of evidence-based public health practices in chronic disease prevention? More specifically,*

  - *How do coalitions based in local public health agencies find, select, and use evidence…? And,*

  - *What is the role of local public health agencies in the coalitions' networks…?*

Domains that influence evidence-based decision making

Best Available Evidence

Environment and organizational context

Decision-making

Population characteristics, needs, values and preferences

Resources, Including practitioner expertise

(Brownson et al ARPH 2009)

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Best Available Evidence

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Population characteristics, needs, values and preferences

Resources, Including practitioner expertise

Key characteristics

- Making decisions using <u>best available</u> peer-reviewed evidence

- Using data & information systems systematically

- Applying program planning frameworks

- Engaging the community in assessment & decision making

- Conducting sound evaluation

- Disseminating what is learned to key stakeholders & decision makers

(Brownson et al ARPH 2009)

Research Design and Methods: The Plan

- **Project Advisory Committee (PAC)**

- **Phase 1:** *Survey of Chronic Disease Coalitions and their use of evidence-based practice in Colorado (54 LPHAs).*
  - ➢ Map of community coalitions for sharing best practices

- **Phase 2:** *Detailed assessment of prevention strategies and coalition network (8-10 coalitions).*
 - – Network analysis, Document review and key informant interviews
  - ➢ Consultation on network analysis & developing action plan

Research Design and Methods: Reality

- **Project Advisory Committee (PAC)**

- **Phase 1:** *Survey of Chronic Disease Coalitions and their use of evidence-based practice in Colorado (54 LPHAs).*
  - After 2 months: 10 coalitions

- **Phase 1.5:** *Survey/phone calls to all LPHAs to understand why no responses*
  - 80% of LPHAs responded, results following

- **Phase 2:** *Detailed assessment of prevention strategies and coalition network (8 coalitions).*
  - Network analysis, Document review and key informant interviews

PHASE 1: Collaborations Survey

- Target all chronic disease and related risk factors prevention coalitions with local public health as the lead
  - All LPHA Directors
  - All PAC contacts
  - All CDPHE coalition contacts

- Internet survey
  - Coalition vision/mission, membership, staffing, oversight, funding, communication, planning, activities and upload of workplan, budget, and dissemination materials
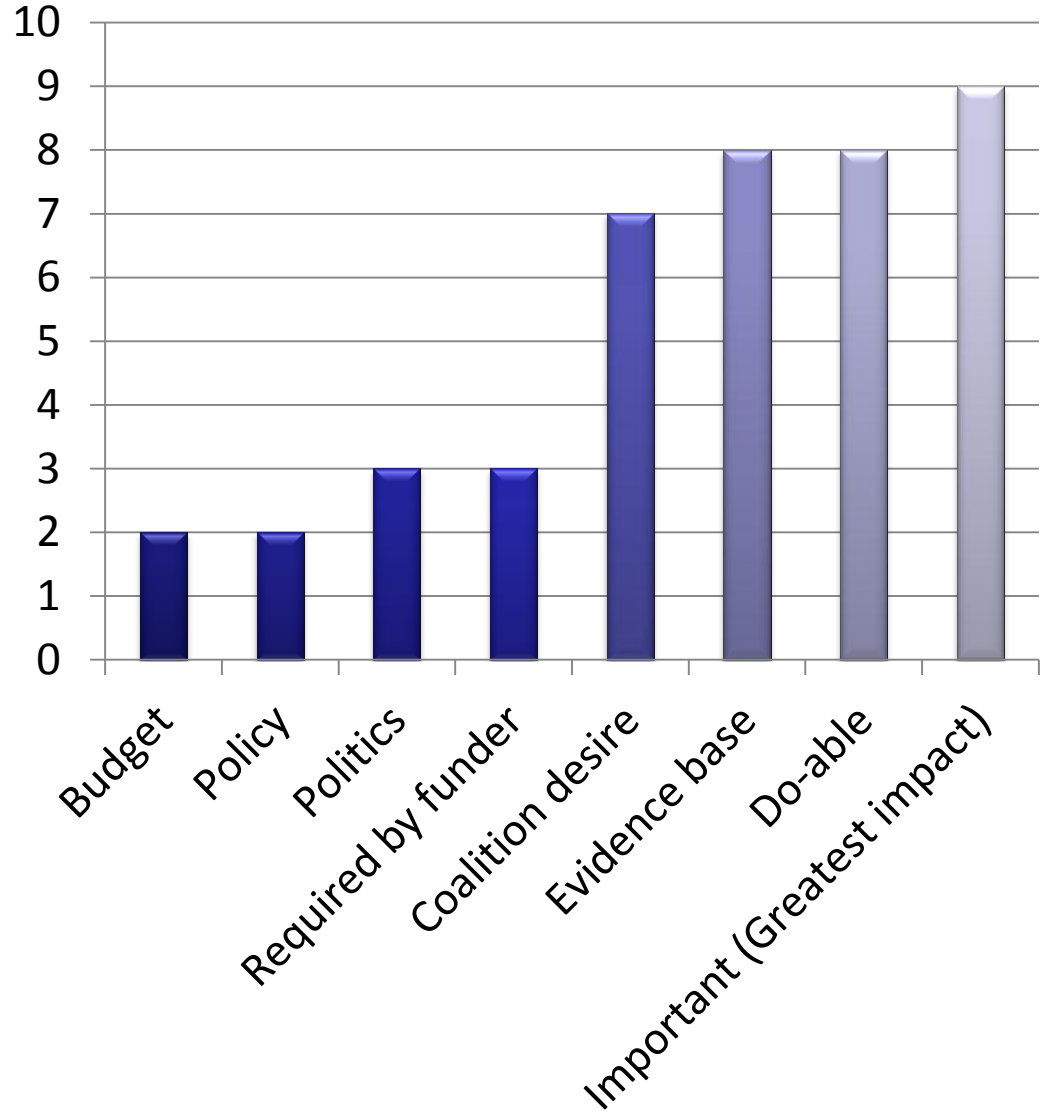 - Use of evidence-based practice

Coalition Survey Results

- General Coalition "Demographics"
  - 20 coalitions completed survey
    - 3 removed – did not fit definition
    - N=17
  - 86% exist as a requirement of funding
  - 65% have dedicated staff (0.8 FTE)
  - Average duration = 5.9 years
  - Average active organizations = 9-10

Coalition Purpose
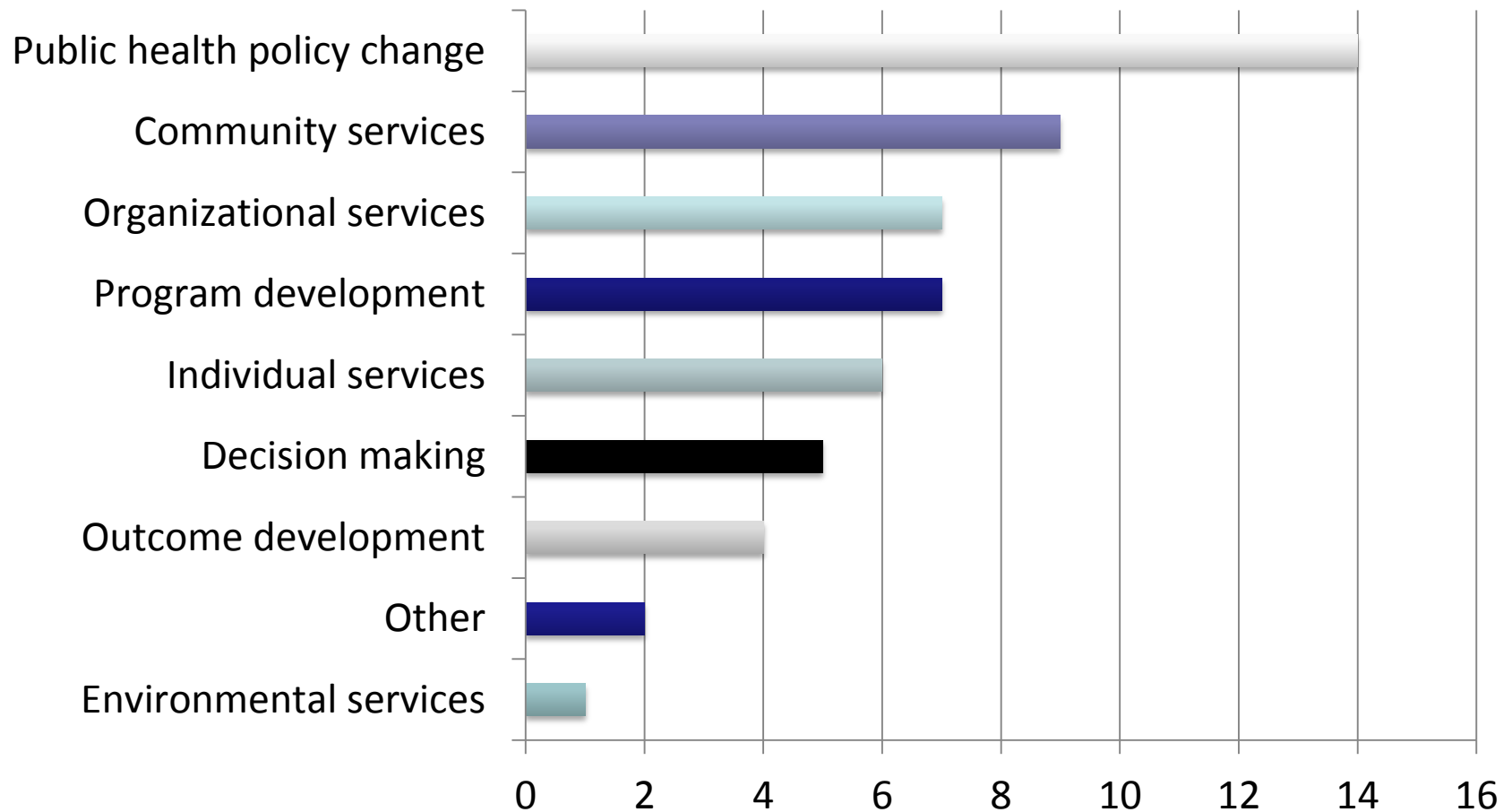
Evidence-Based Practice Characteristics

- Making decisions using <u>best available</u> peer-reviewed evidence

- Using data & information systems systematically

- Engaging the community in assessment & decision making

Bar chart showing values: Budget (2), Policy (2), Politics (3), Required by funder (3), Coalition desire (7), Evidence base (8), Do-able (8), Important (Greatest impact) (9)

Evidence-Based Practice Characteristics

- Applying program planning frameworks
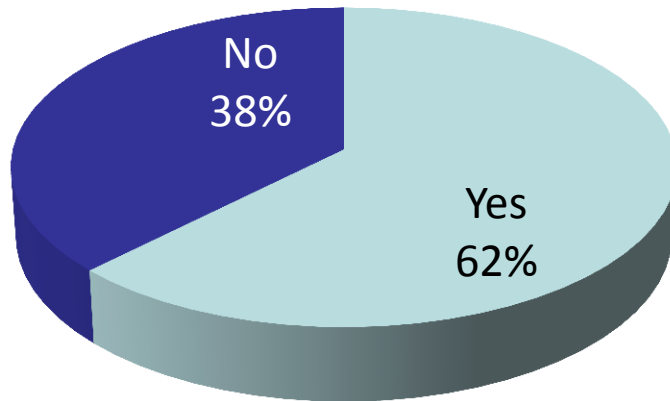

No
29%

Yes
71%
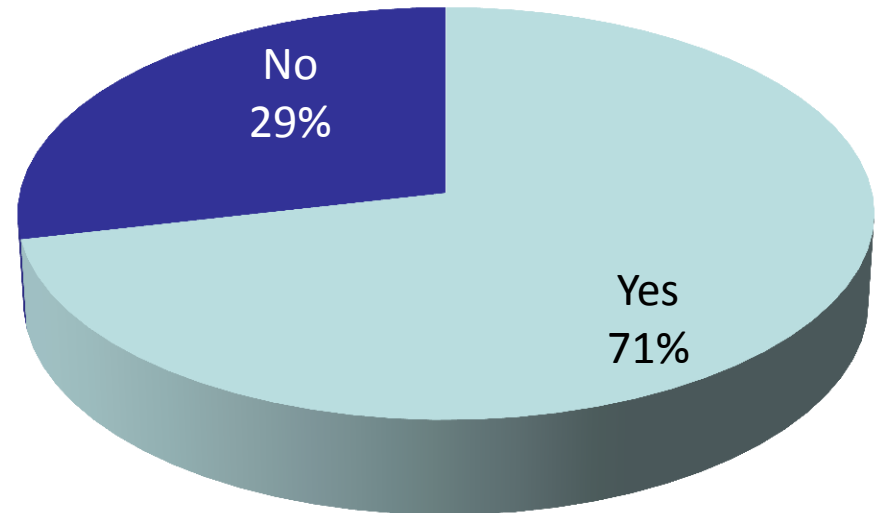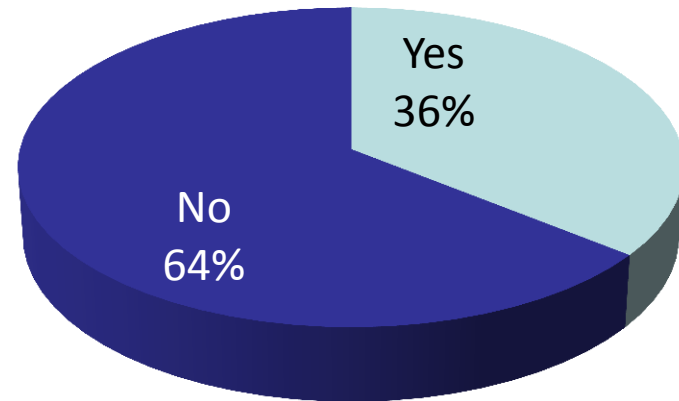
Evidence-Based Practice Characteristics
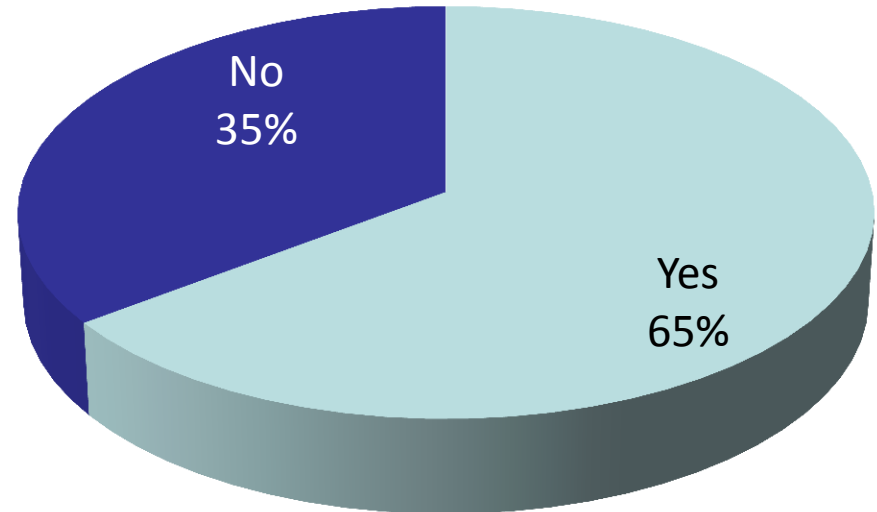
- **Conducting sound evaluation**

Coalition Evaluation

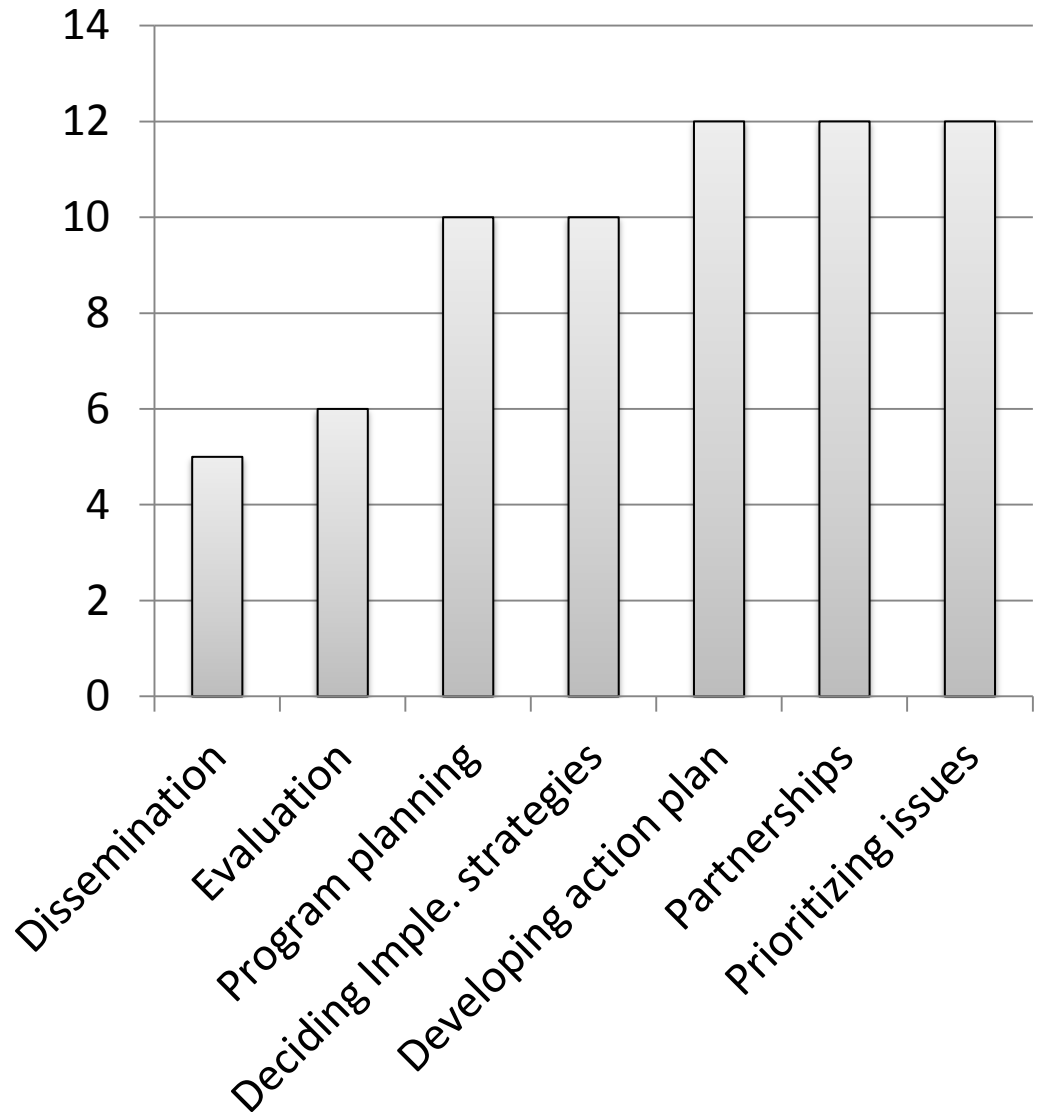**Activity Evaluation**

No
38%

Yes
62%

Yes
36%

No
64%

Evidence-Based Practice Characteristics

- Disseminating what is learned to key stakeholders & decision makers

Evidence-Based Practice Characteristics

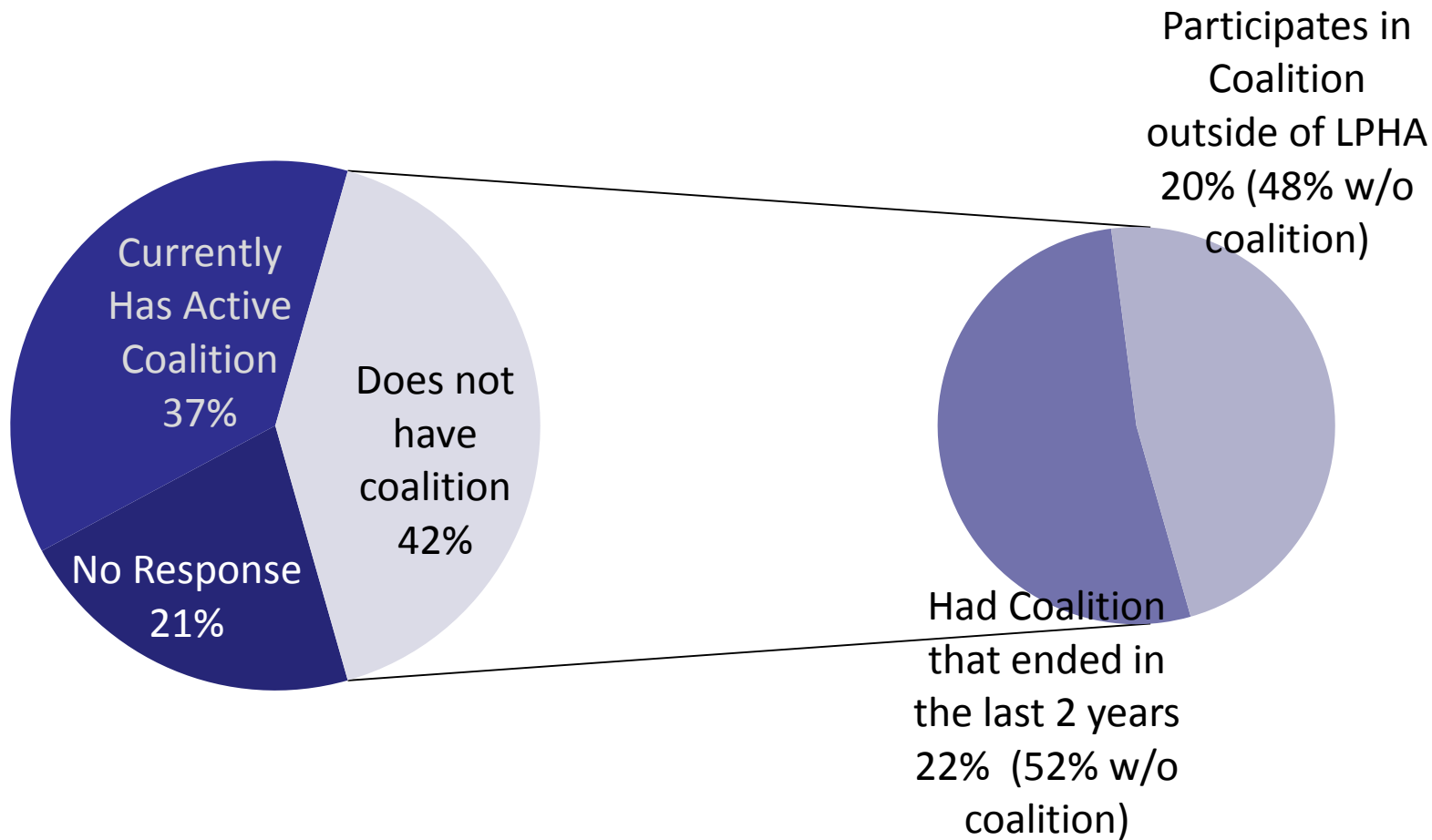When asked directly "Which aspects of EBP does your coalition actively use when selecting activities?"

Additional findings

- 7/17 (41%) required to use EBP
  - By funder or LPHA

- 2/17 (12%) receive incentives for EBP work

- Barriers: funding (lack of or disappearing), time (staff and community), lack of evidence/data, not aligned with community passion/interests, no immediate gratification

- 8/17 (47%) identified areas/activities where it was difficult to use EBP: policy, social media, solving transportation barriers, high quality evaluation

Phase 1.5: The added phase

- Not a high response on survey

- Called-Emailed-Called each LPHA Director
  - Do you have chronic disease coalition?
  - Have you had one within the last 2 years that no longer exists?
  - Do you participate in coalitions not run by the LPHA?

Phase 1.5: Results

Currently Has Active Coalition 37%

Does not have coalition 42%

No Response 21%

Participates in Coalition outside of LPHA 20% (48% w/o coalition)

Had Coalition that ended in the last 2 years 22% (52% w/o coalition)

PHASE 2: Network Analysis, Documents & Interviews: In-depth study of 8 coalitions

- Characterize use of local data on needs & resources
- Map prevention strategies onto best available evidence
- Characterize coalition network
  - Key players and their organization attributes
  - How information is shared
  - How resources are leveraged, shared, and coordinated
  - Role of early adopters, medium of message and leadership in information diffusion
- Characterize implementation of EB strategies

Collecting Network Data

- PARTNER (Program to Analyze, Record, and Track Networks to Enhance Relationships) – www.partnertool.net

- Coalitions provide a roster of members

- Coalition members answer survey questions:

  - Organizational Information; Relationships with Other Coalition Members; Perceptions of Their Relationships; Perceptions of Process and Outcomes

Danielle Varda

The Public Health Paradigm Shift

FROM	TO
Operational planning	Strategic Planning
Focus on the agency	Focus on community & entire public health system
Needs assessment	Emphasis on assets and resources
Medically oriented model	Broad definition of health
Agency knows all	Everyone knows something

Graphic from: NACCHO (MAPP website): http://www.naccho.org/topics/infrastructure/MAPP/index.cfm

The Public Health Paradigm Shift

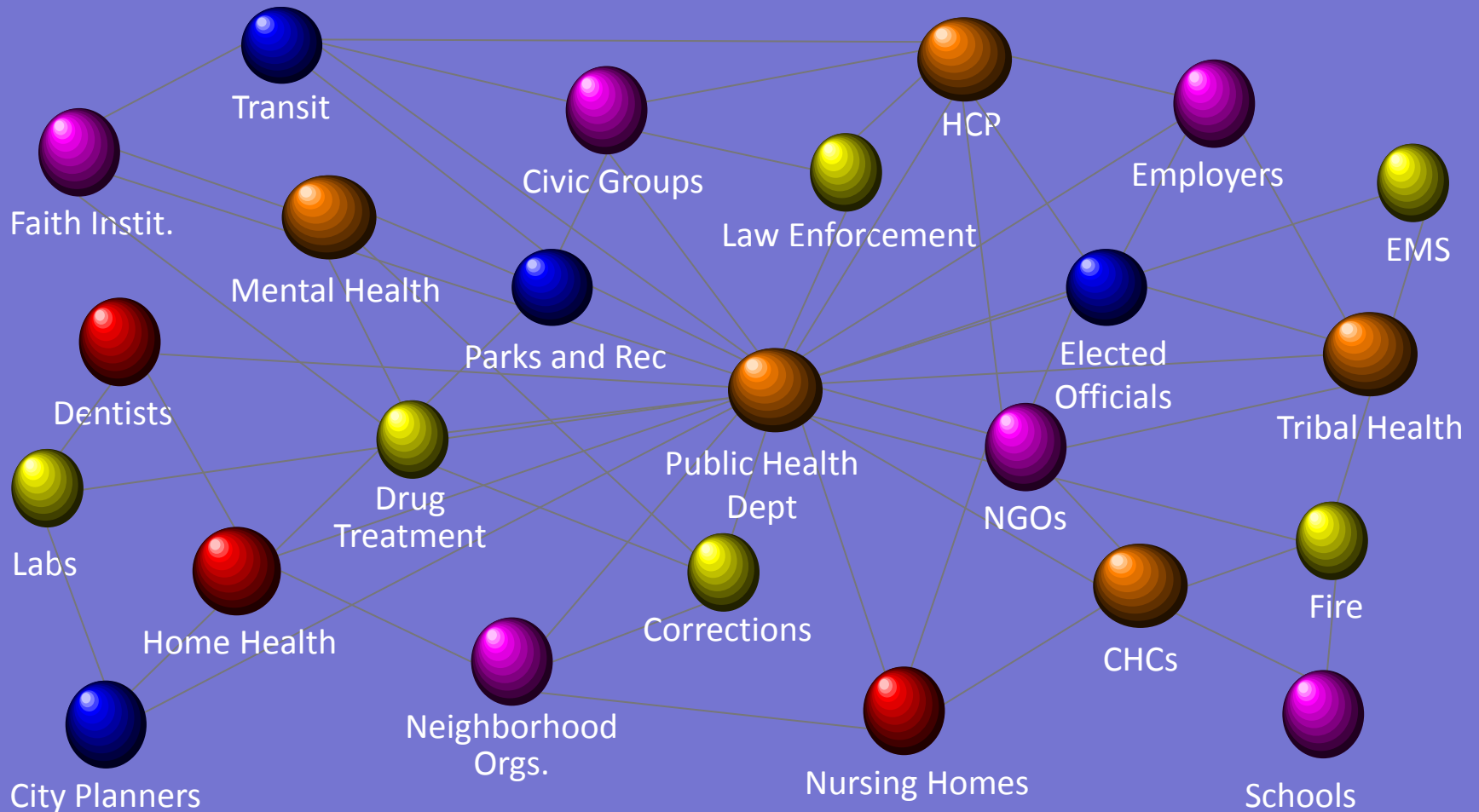| FROM	TO
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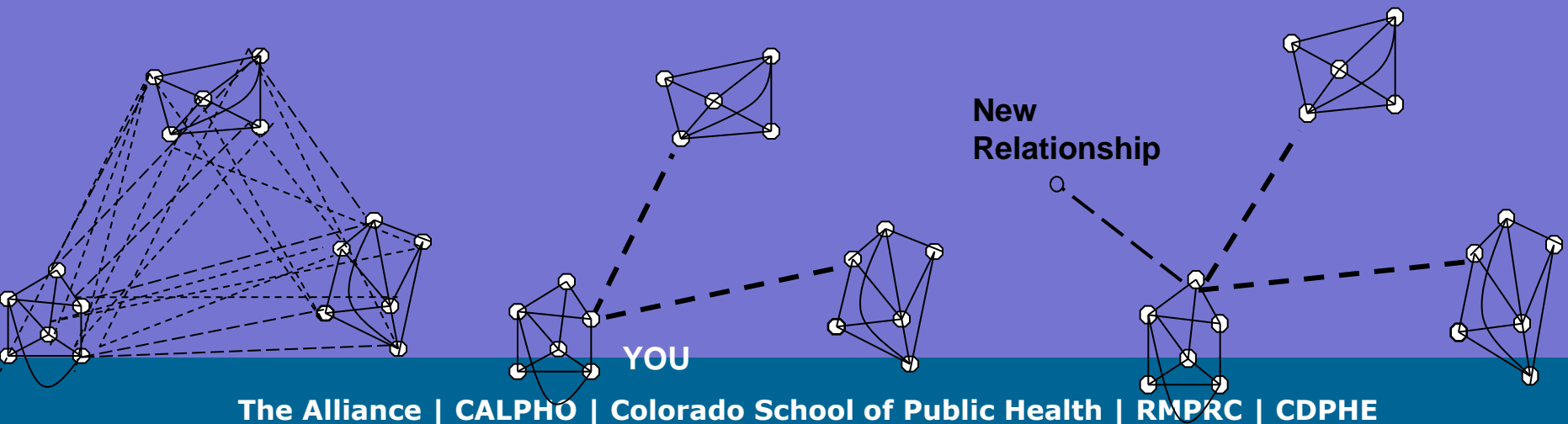
The Public Health System as a Network

Thinking Like a Network Scientist Can Change the Way You Think About Collaboration
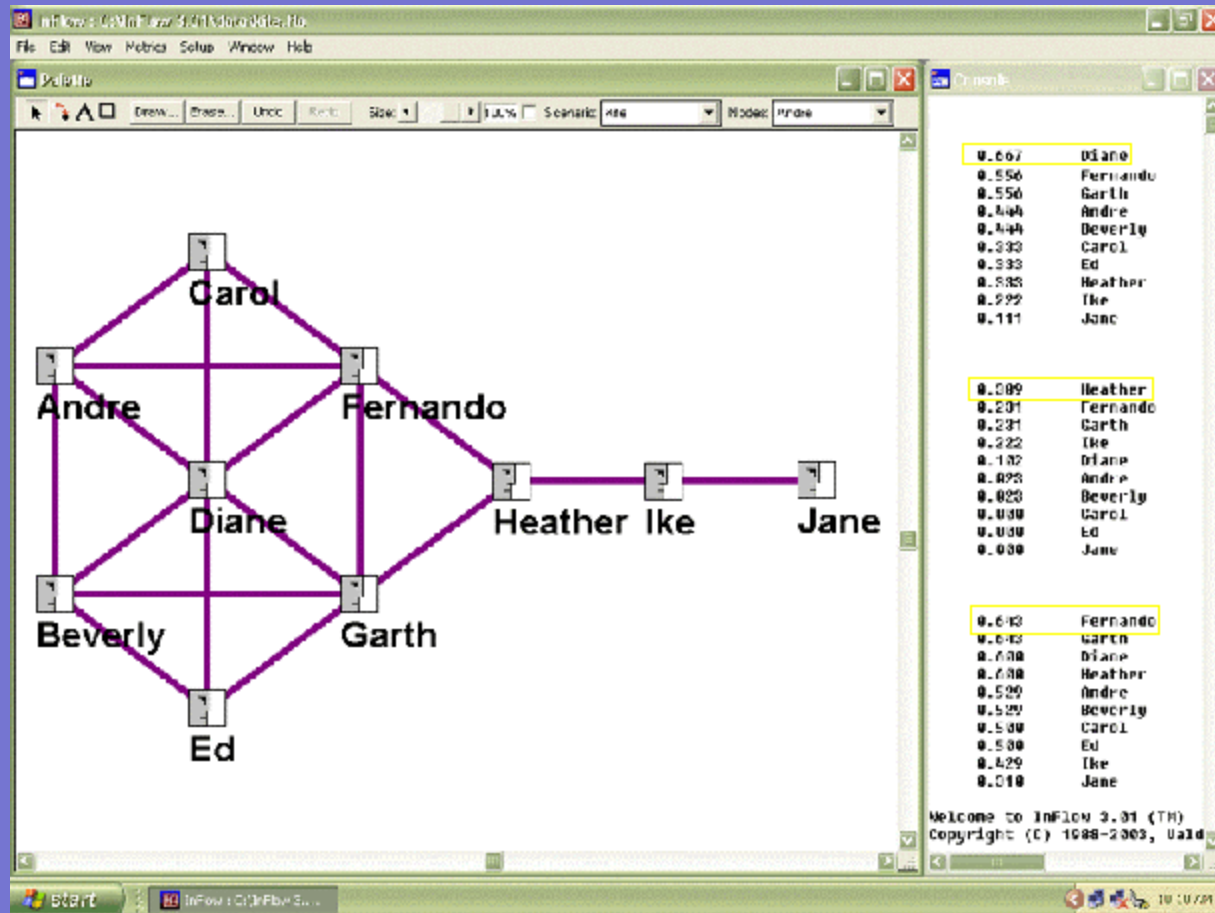
Goal of PARTNER

- Provide an additional way to evaluate partnerships.

- Current Assumption = More is better.
  - More partners = successful collaboration (counting noses)
- PARTNER Assumption = Less can be more.
  - Not based on how many partners you have, but how they are connected.

New Relationship

YOU

Colorado Public Health Practice-Based Research Network

Q#	Question
1	Please select your organization/program/department from the list:
2	What is your role in COALTION NAME? (For example, Voluntary (non-funded) participant representing an organization, Funded participant representing an organization, Citizen member without an organizational affiliation, etc.) Please list as many roles as you play.
3	How long has your organization been a member of COALITION NAME (in months)? (example: 12)
4	Please indicate what your organization/program/department contributes, or can potentially contribute, to COALITION NAME (choose as many as apply).
5	What is your organization's most important contribution to COALTION NAME?
6	Outcomes of COALITION NAME work include: (choose all that apply).
7	Of those outcomes you selected, please choose the most important outcome of COALITION NAME:
8	How successful has COALITION NAME been at implementing programs/policies that are evidence-based?
9	Which of the following contribute to COALITION NAME's success in implementing interventions/programs/policies? (Choose all that apply)
10	From the list, select organizations/programs/departments with which you have an established relationship (either formal or informal). In subsequent questions you will be asked about your relationships with these organizations/programs/departments in the context of COALITION NAME.

Colorado Public Health Practice-Based Research Network

Q#	Questions
11	How frequently does your organization/program/department work with this organization/program/department on issues related to COALITION NAME's goals?
12	What kinds of activities does your relationship with this organization/program/department entail [note: the responses increase in level of collaboration]?
13	How valuable is this organization/program/department's power and influence to achieving the overall mission of COALITION NAME? *Power/Influence: The organization/program/department holds a prominent position in the community be being powerful, having influence, success as a change agent, and showing leadership.
14	How valuable is this organization/program/department's level of involvement to achieving the overall mission of COALITION NAME? *Level of Involvement: The organization/program/department is strongly committed and active in the partnership and gets things done.
15	How valuable is this organization/program/department/s resource contribution to achieving the overall mission of COALITION NAME? *Contributing Resources: The organization/program/department brings resources to the partnership like funding, information, data, literature, evalutation or other resources.
16	How reliable is the organization/program/department? *Reliable: this organization/prgoram/department is reliable in terms of following through on commitments.
17	To what extent does the organization/program/department share a mission to implement evidence-based practices with this community collaborative's mission and goals? *Mission Congruence: this organization/program/department shares a common vision of the end goal of implementing evidence-based practices.
18	How open to discussion is the organization/program/department? *Open to Discussion: this organization/program/department is willing to engage in frank, open and civil discussion (especially when disagreement exists). The organization/program/department is willing to consider a variety of viewpoints and talk together (rather than at each other). You are able to communicate with this organization/program/department in an open, trusting manner.

Comparing Network Structures Can Explain Differences in Process

- Spreadsheet

Colorado PH PBRN Contacts

- Julie Marshall, Principle Investigator
  – julie.marshall@ucdenver.edu

- Lisa VanRaemdonck, Project Director
  – lisa@calpho.org

- Sarah Lampe, Project Coordinator
  – sarah@calpho.org

Colorado Public Health Practice-Based Research Network

Vision, Mission and Guiding Values and Principles
Vision: *Actively engaged public health professionals, researchers and community members working together to ask and answer questions that directly influence the public health system and public health practice to improve the quality and effectiveness of public health services and improve community health in Colorado and across the region.*
Mission: *To provide the infrastructure and leadership necessary to develop and support a research agenda, and to conduct research, aimed at providing the evidence to improve the practices of the Colorado Public Health System to meet the ever-evolving needs within our communities.*
Guiding Values and Principles: *Innovative • Integrity • Population and System Focused • Leadership and Support • Collaborative • Relevant and Actionable • Diverse Partners • Engaging and Respectful • Timely and Forward Thinking*

Colorado PBRN Funded Research Questions:	Source†			
	S	FSC	PM	F
How does the Colorado Public Health Act of 2008 change staffing, qualifications, services, partnerships, budgets and structure of local public health agencies?	√			
How is law used to create and maintain regional approaches to public health service delivery?	√			
How does the public health delivery system influence adoption and implementation of evidence-based public health practices for chronic disease prevention [through coalition work]?		√		√
What agency/collaborative structure characteristics or proposal content lead to a funded Safe Routes to School grant proposal in Colorado?		√		
Which strategy of reminder/recall is most cost-effective and produces higher influenza immunization rates among pre-school aged children: Provider-based reminder/recall or Population-based reminder/recall?			√	
Are collaborative approaches to influenza vaccine delivery, involving public health entities and private practices, more effective in increasing influenza immunization rates for children than traditional delivery in the private practice setting?			√	

†Source of research questions : S=Network Staff; FSC=Founding Steering Committee; PM=Partner Meetings not funded through network: F=Funder Initiative

The Alliance | CALPHO | Colorado School of Public Health | RMPRC | CDPHE