MAPPING INTERORGANIZATIONAL COLLABORATION AND RELATIONSHIPS IN A COMMUNITY HEALTH PARTNERSHIP

Heather R. Clark, MSPH
Brandy N. Kelly, PhD(c)
Corliss Outley, PhD
Center for Community Health Development
Texas A&M Health Science Center
School of Rural Public Health

American Evaluation Association Annual Conference
October 26, 2012

Center for Community Health Development
a Prevention Research Center

PROJECT OVERVIEW

- Brazos Valley Health Partnership
  - Founded in 2002
  - Main purpose: address access to health care for low income residents of the Brazos Valley, Texas
  - Received ORPH HCAP Grant in 2003
  - Established 5 health resource centers in 4 counties
  - Evaluation of HCAP grant included an interorganizational network analysis
  - Continued to survey past the end of grant funding
- Why a network survey?
  - Provides an overall picture of the partnership
  - How the network has changed over time
  - Development of ties with resource centers

PROJECT OVERVIEW

- How is network analysis helpful to the BVHP?
  - Helps identify key players, opinion leaders
  - Identifies areas/organizations to target
  - Provides a “picture” of what the partnership looks like
  - Depicts those driving the process (re: BVHP actions)
  - How the end of HCAP funds affected the network

WHAT IS NETWORK ANALYSIS?

Network analysis is a technique used to look at the interactions between a group of organizations.

Interactions

- Relationships
- Information flow
- Connections (i.e. know other person, collaborations, etc.)

Brazos Valley Survey - Connections

Actors

- Individuals (i.e. friends, students, co-workers)
- Organizations

Brazos Valley Survey - Organizations

METHODS

- Network survey of original BVHP membership in 2004; adapted each administration to include new partners or remove inactive/closed organizations
- Mailed to Executive Directors, CEOs
- Non-responders varied year to year, but span all types of organizations

	Mailed Out	Returned	Response Rate
2004	**36**	**27**	**75%**
2006	**35**	**31**	**89%**
2009	**33**	**23**	**70%**

METHODS: SURVEY DESIGN

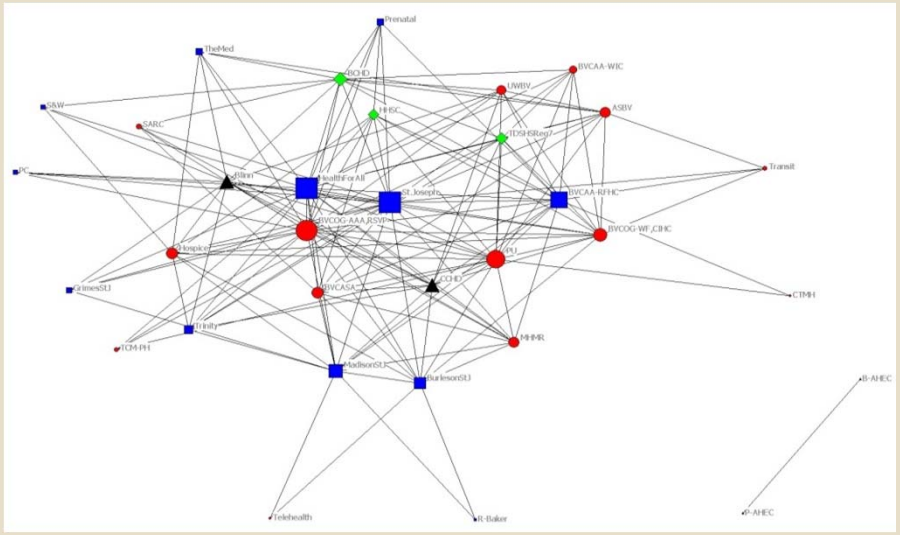
- Network Survey Questions:
  - Information sharing
  - Jointly plan, coordinate, and implement an activity
  - Sharing of tangible resources
  - Formal MOA/contracts in place
- Questions increase in relationship complexity

DATA ANALYSIS

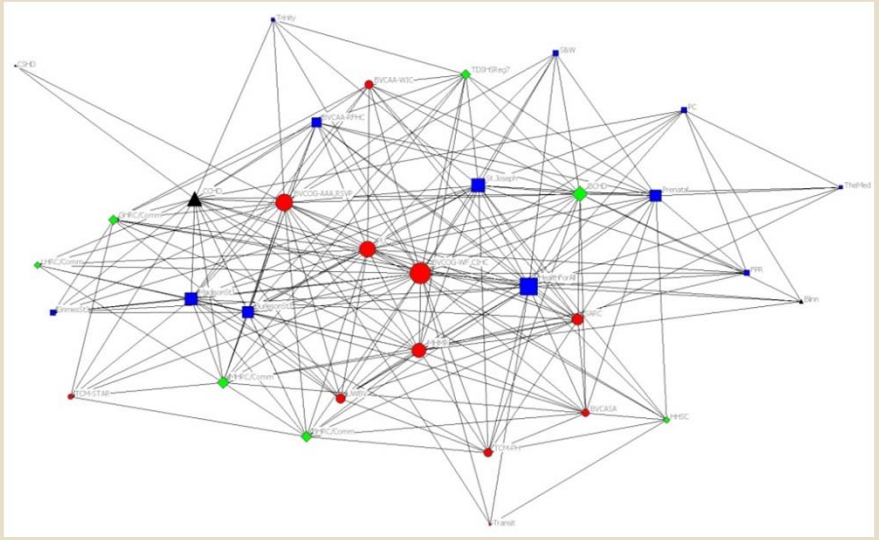
- Original analysis - organizational ties (links)
  - How many ties?
  - In which direction does information flow?
  - Are the ties reciprocated between organizations?
  - Of all the total ties that can exist, how many do? (density)
  - The extent to which links are focused on one or a few participants (centralization)
  - Which organizations could be best for selection to quickly spread information through the network? (key players)
- Newer analysis – relationship complexity (multiplexity)
  - Have relationships matured over time – moving towards more complex relationships such as sharing resources?

INFORMATION SHARING

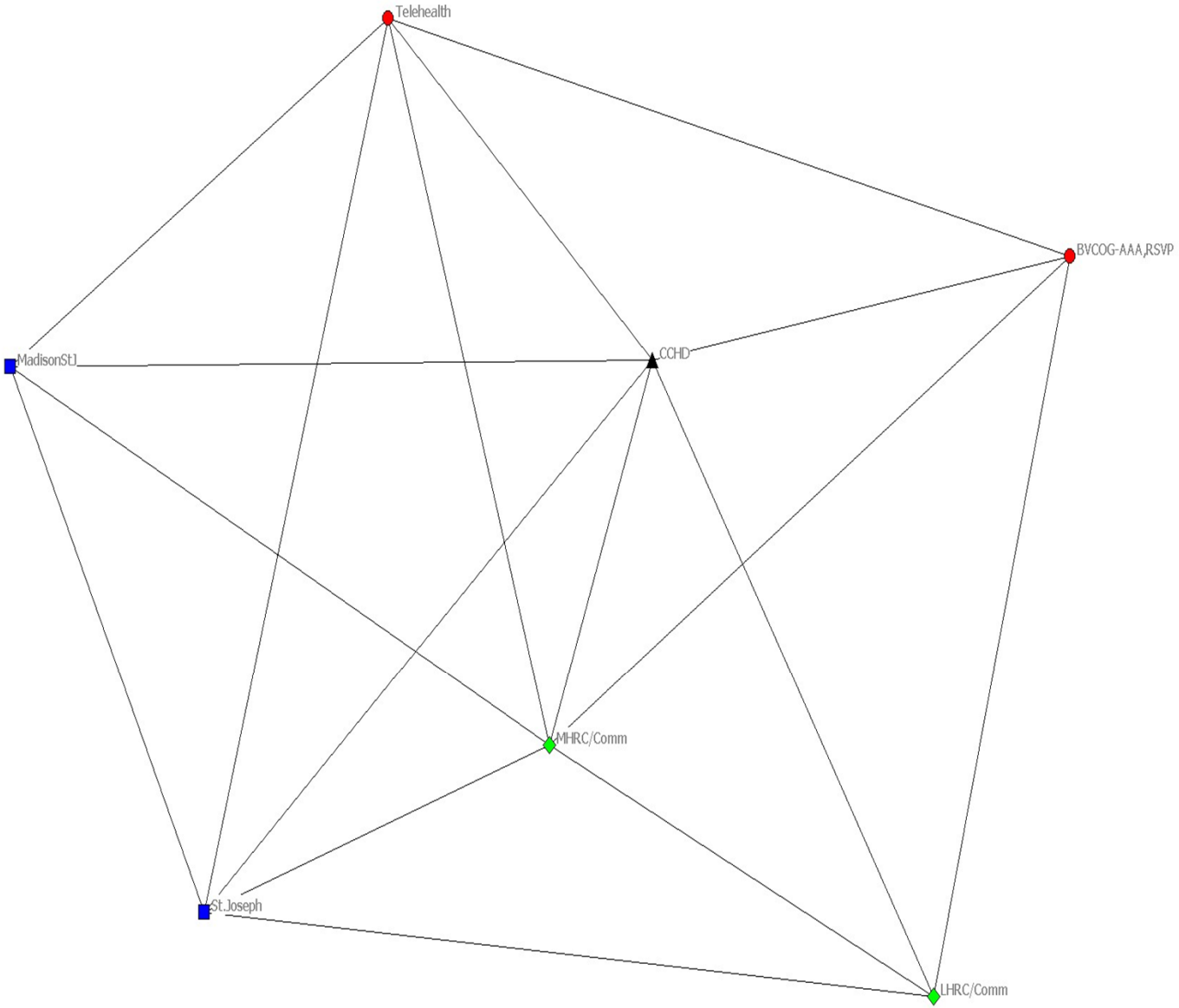
All respondents who shared information AT LEAST MONTHLY (2004)



All respondents who shared information AT LEAST MONTHLY (2009)



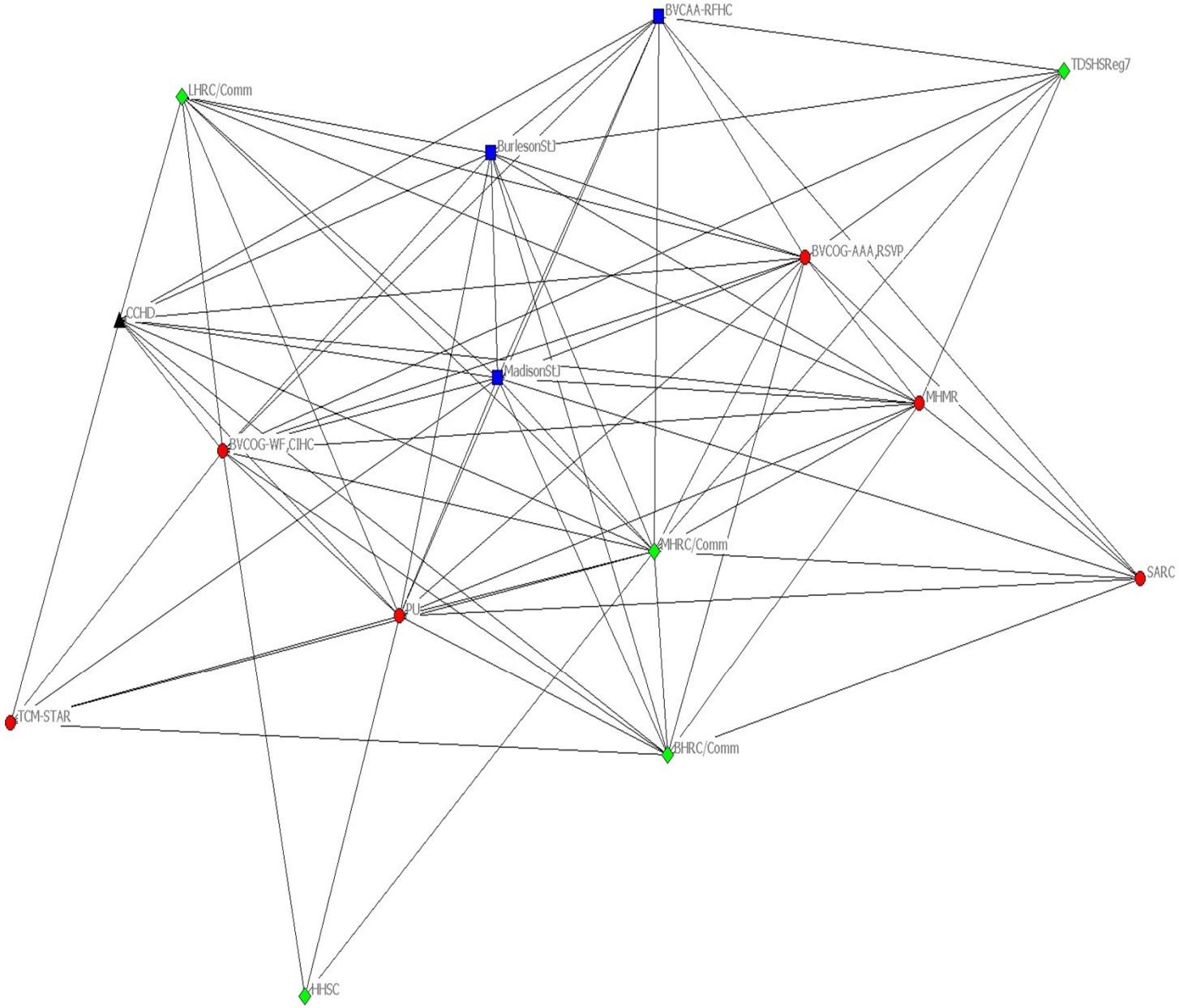
Health Care Organization = ■
Social Service Organization = ●
Education Entity = ▲
Governmental Organization= ◆



INFORMATION SHARING AT LEAST MONTHLY:

MHRC/ COMMISSION 2006

Ties with MHRC: 6



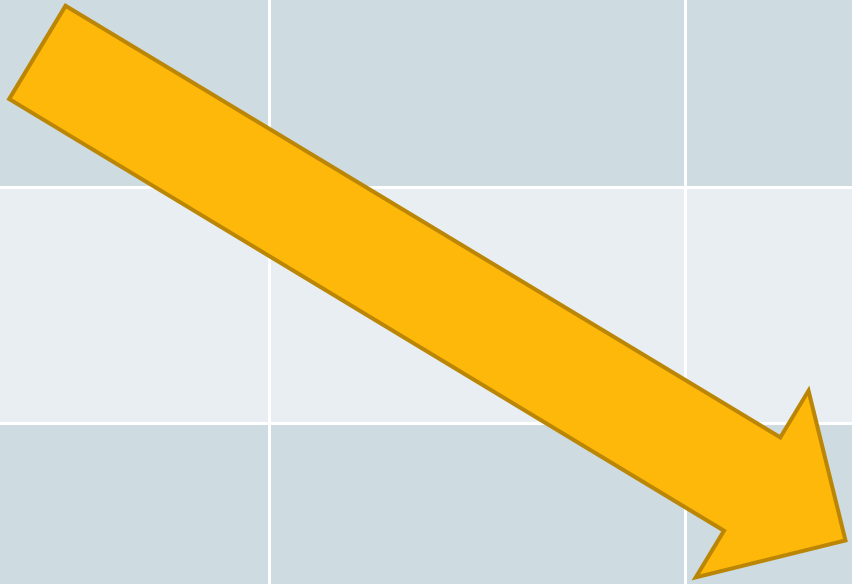
INFORMATION SHARING AT LEAST MONTHLY: MHRC/

COMMISSION 2009

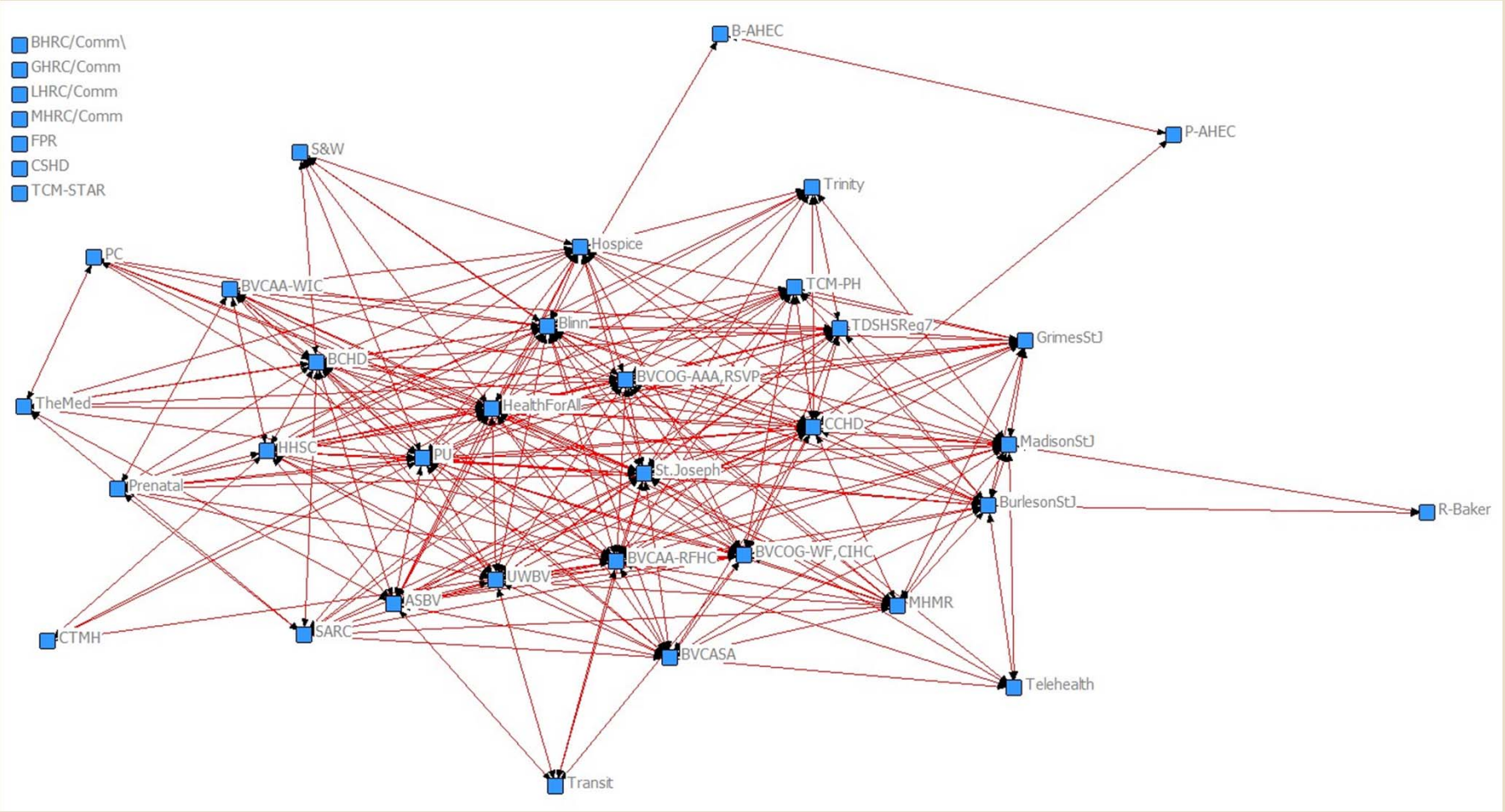
Ties with MHRC: 14

MULTIPLEX ANALYSIS

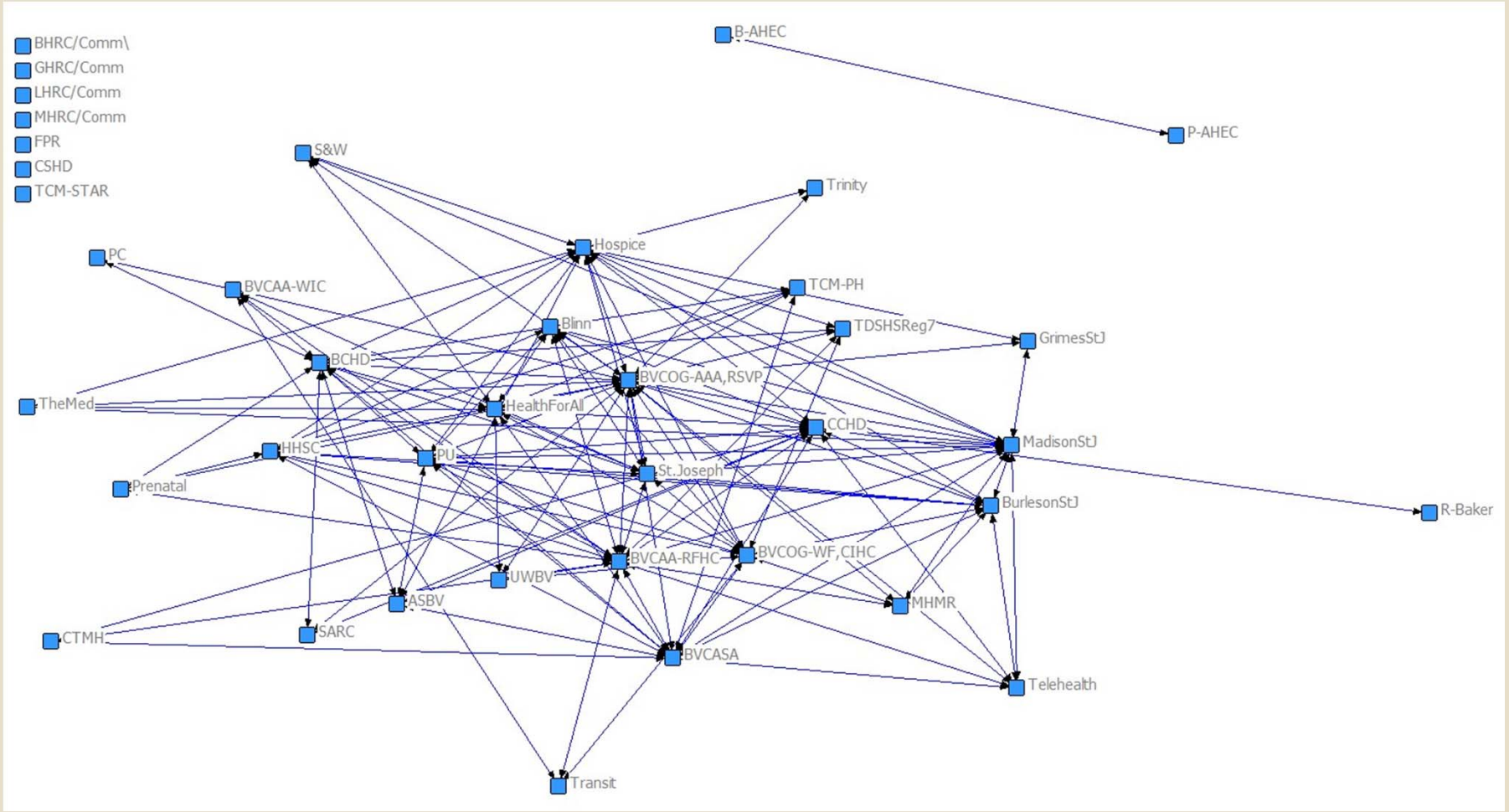
	2004	2006	2009
Information Sharing			
Jointly Planning			
Sharing Tangible Resources			



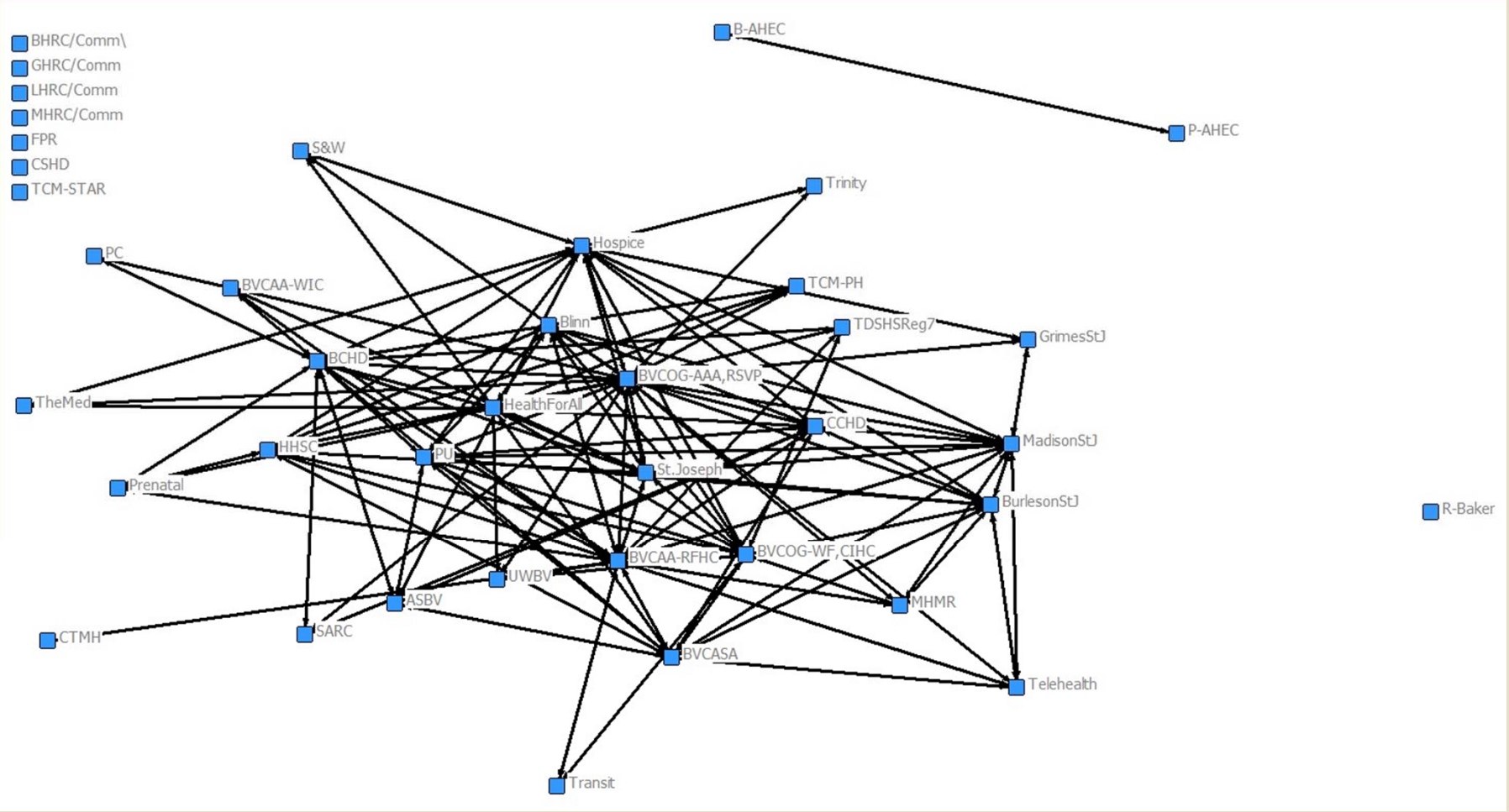
GRAPHING PROGRESSION: 2004 INFORMATION SHARING



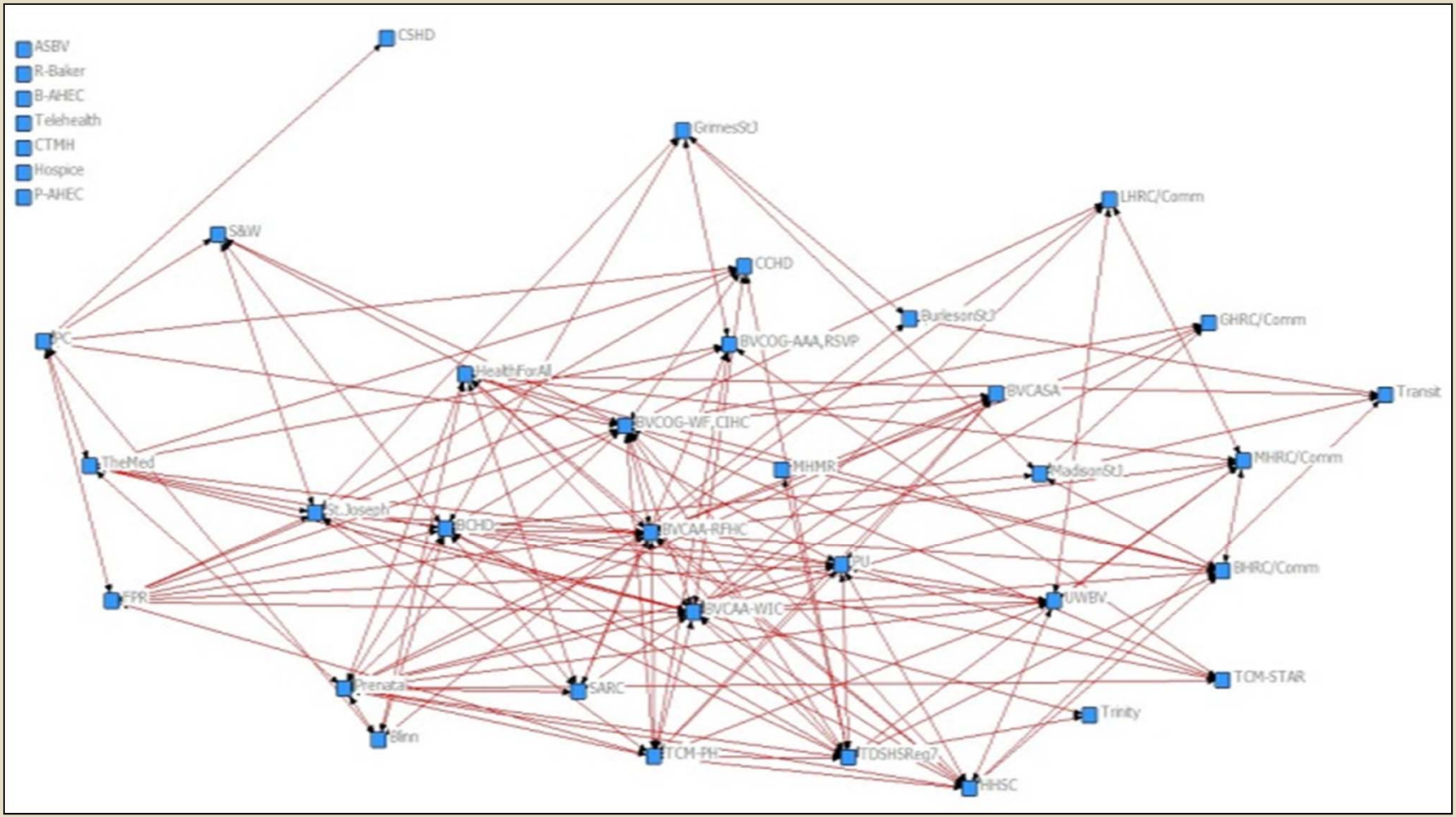
GRAPHING PROGRESSION: 2004 SHARING TANGIBLE RESOURCES



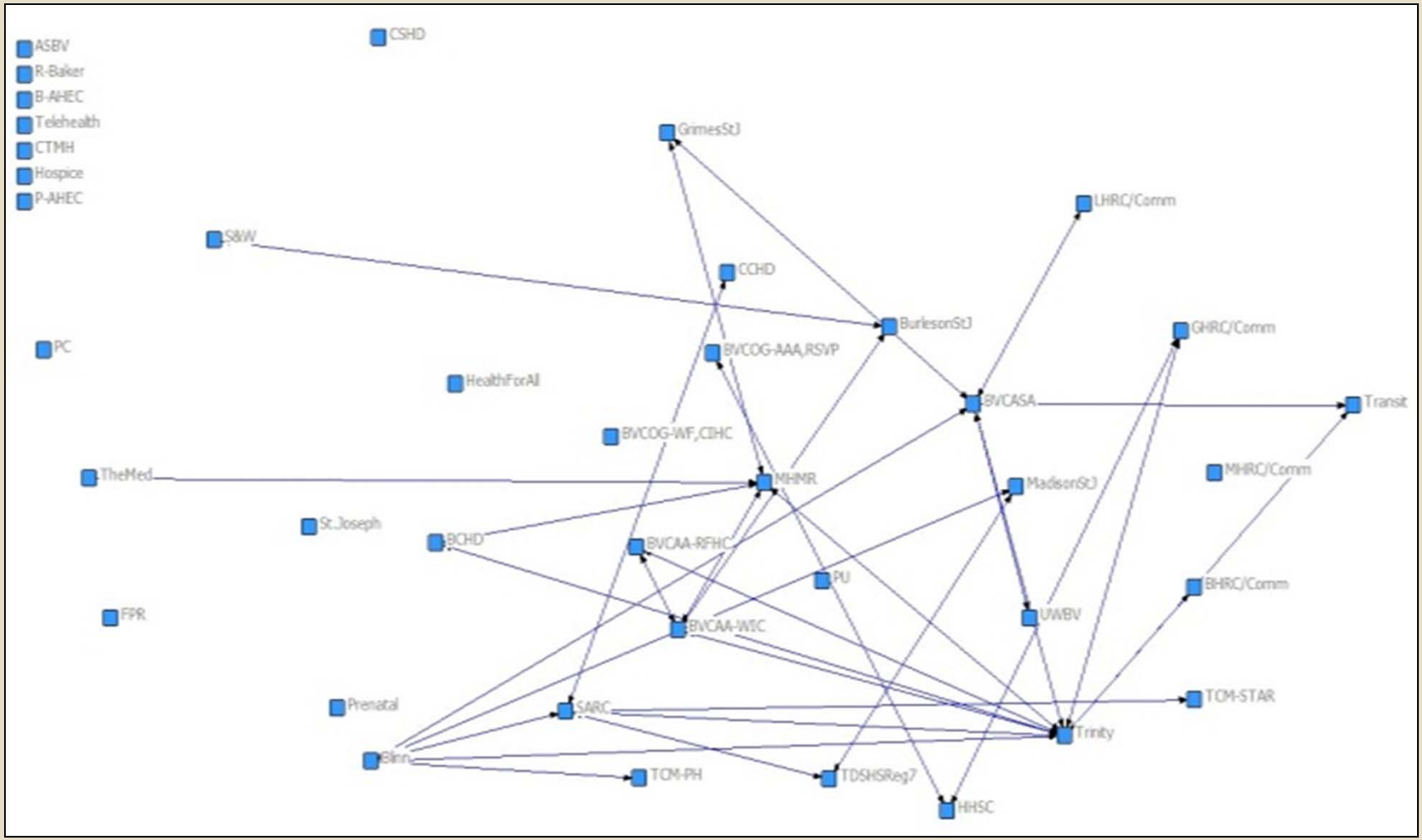
GRAPHING PROGRESSION: 2004 *BOTH* INFORMATION & RESOURCES



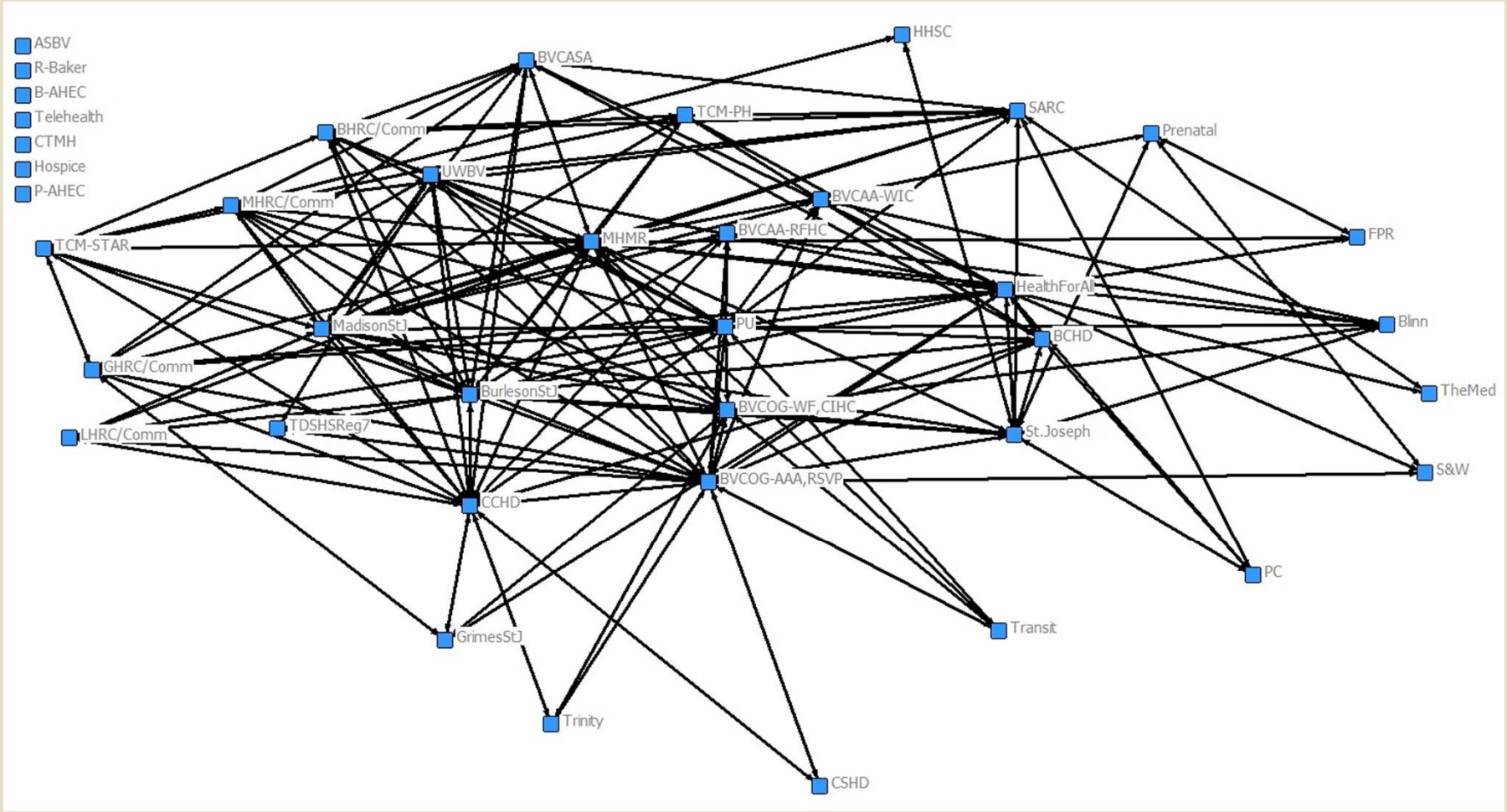
GRAPHING PROGRESSION: 2009 INFORMATION SHARING



GRAPHING PROGRESSION: 2009 SHARING TANGIBLE RESOURCES

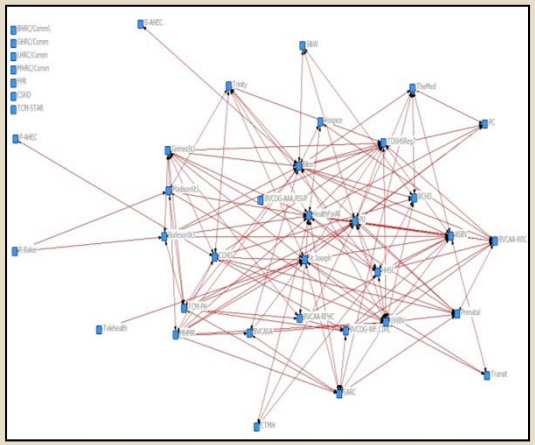


GRAPHING PROGRESSION: 2009 *BOTH* INFORMATION & RESOURCES

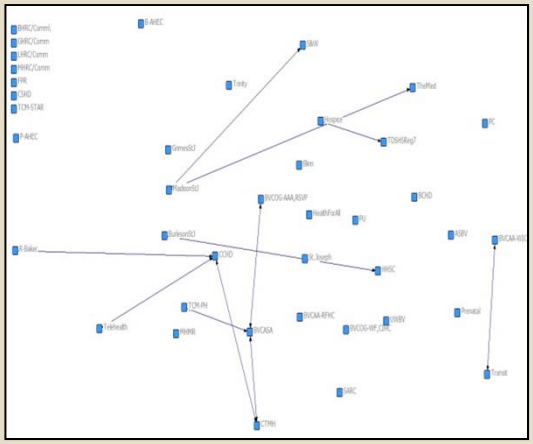


BOOLEAN SIDE BY SIDE

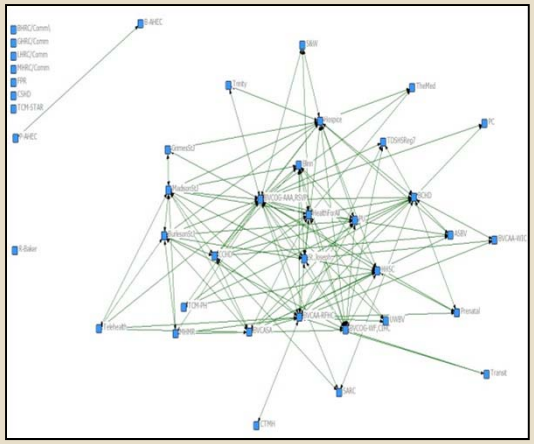
2004



Info Only

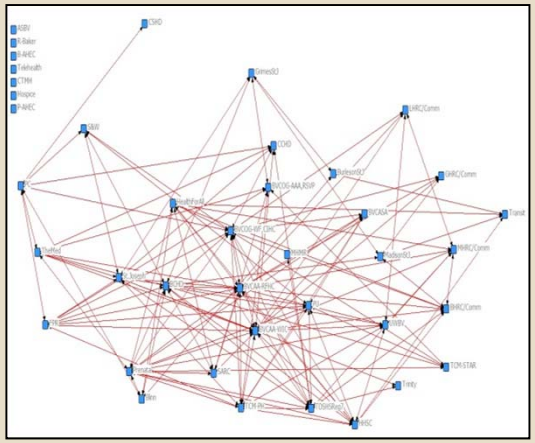


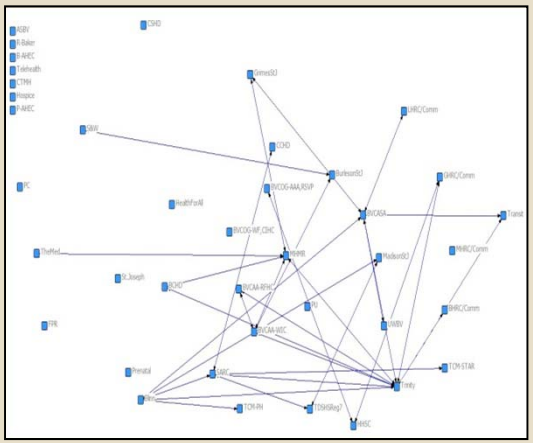
Resource Only

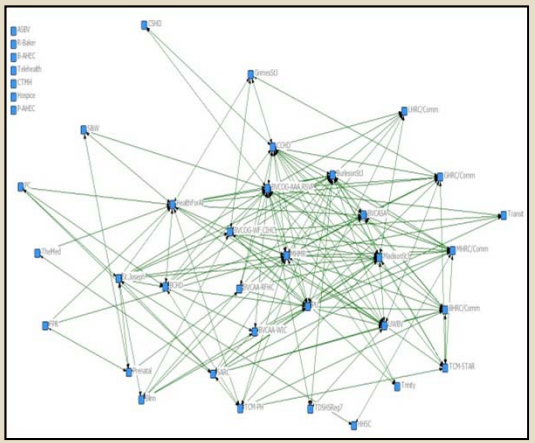


Info & Resources

2009







MULTIPLEX ANALYSIS RESULTS

	2004	2009
Information Sharing	242	358
Sharing Tangible Resources	22	62
Sharing Info & Resources	232	296

RELEVANCE

- Network analysis with community partnerships:
  - Good visualization
  - Identify those missing or central to the network
  - Organizations on the fringe that may need to be more involved
  - What types of organizations are most likely to collaborate
  - How the network changed over time (centrality and density)
  - How the network matures (multiplex analysis)

- Limitations to network analysis
  - Defining the network boundary (who to include/exclude)
  - Response rate – need 100% participation
  - Consistency of response within organizations (turn-over)

CONTACT INFORMATION

Heather R. Clark, MSPH
hrclark@srph.tamhsc.edu
979-845-6957

Center for Community Health Development
a Prevention Research Center