

# Health Districts as Quality Improvement Collaboratives and Multi-Jurisdictional Entities

## Authors:

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# Practice Based Research (PBR) in Southeast

- Collaboration of Georgia Health Districts and Georgia Southern University, Jiann Ping Hsu College of Public Health.
- PBRN are intended to address **real life problems facing** the public health practice community.
- Public health PBR Networks contribute to the scientific evidence for issues of concern to local and regional public health agencies.
- PBRN research has Implications for state and national public health infrastructure development.

# Initial Georgia PBRN

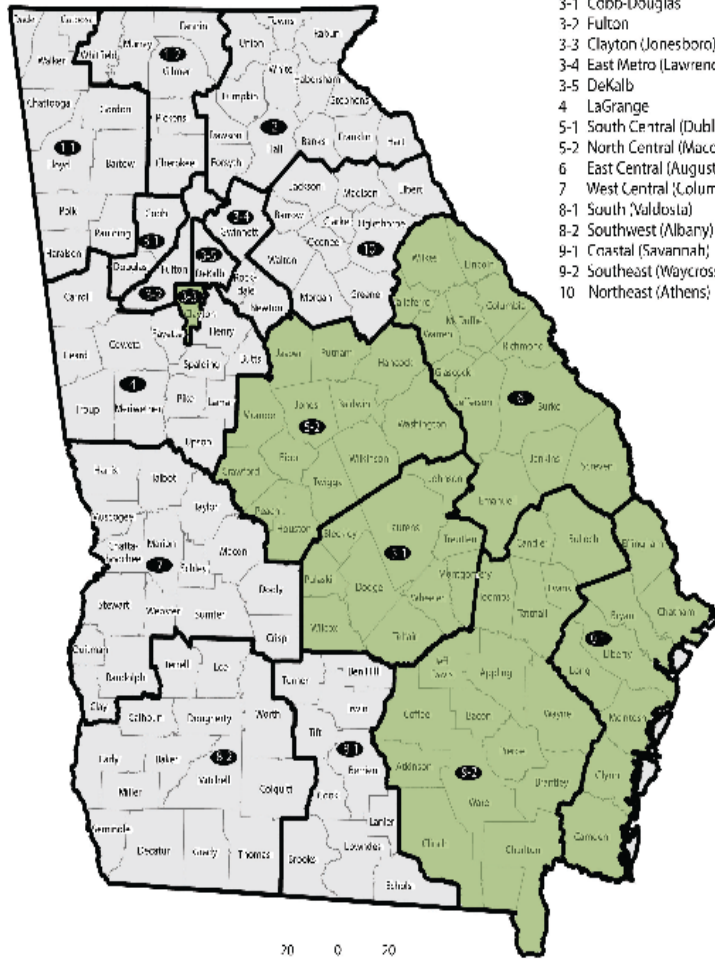
**Challenge:** How can GA Public Health PBRN capacity to build evidence support Health Districts and County Health Departments in an increasingly challenging fiscal and political environment?

## **Study:**

- Potential of the Georgia model of Health Districts to advance public health quality assurance and improvement,
- Role of regional public health model of Quality Improvement Collaboratives (QICs) for improving quality improvement for local public health agencies.

# GA PBRN Founding Membership

## GEORGIA Public Health Districts



- 1-1 Northwest (Rome)
- 1-2 North Georgia (Dalton)
- 2 North (Gainesville)
- 3-1 Cobb-Douglas
- 3-2 Fulton
- 3-3 Clayton (Jonesboro)
- 3-4 East Metro (Lawrenceville)
- 3-5 DeKalb
- 4 LaGrange
- 5-1 South Central (Dublin)
- 5-2 North Central (Macon)
- 6 East Central (Augusta)
- 7 West Central (Columbus)
- 8-1 South (Valdosta)
- 8-2 Southwest (Albany)
- 9-1 Coastal (Savannah)
- 9-2 Southeast (Waycross)
- 10 Northeast (Athens)

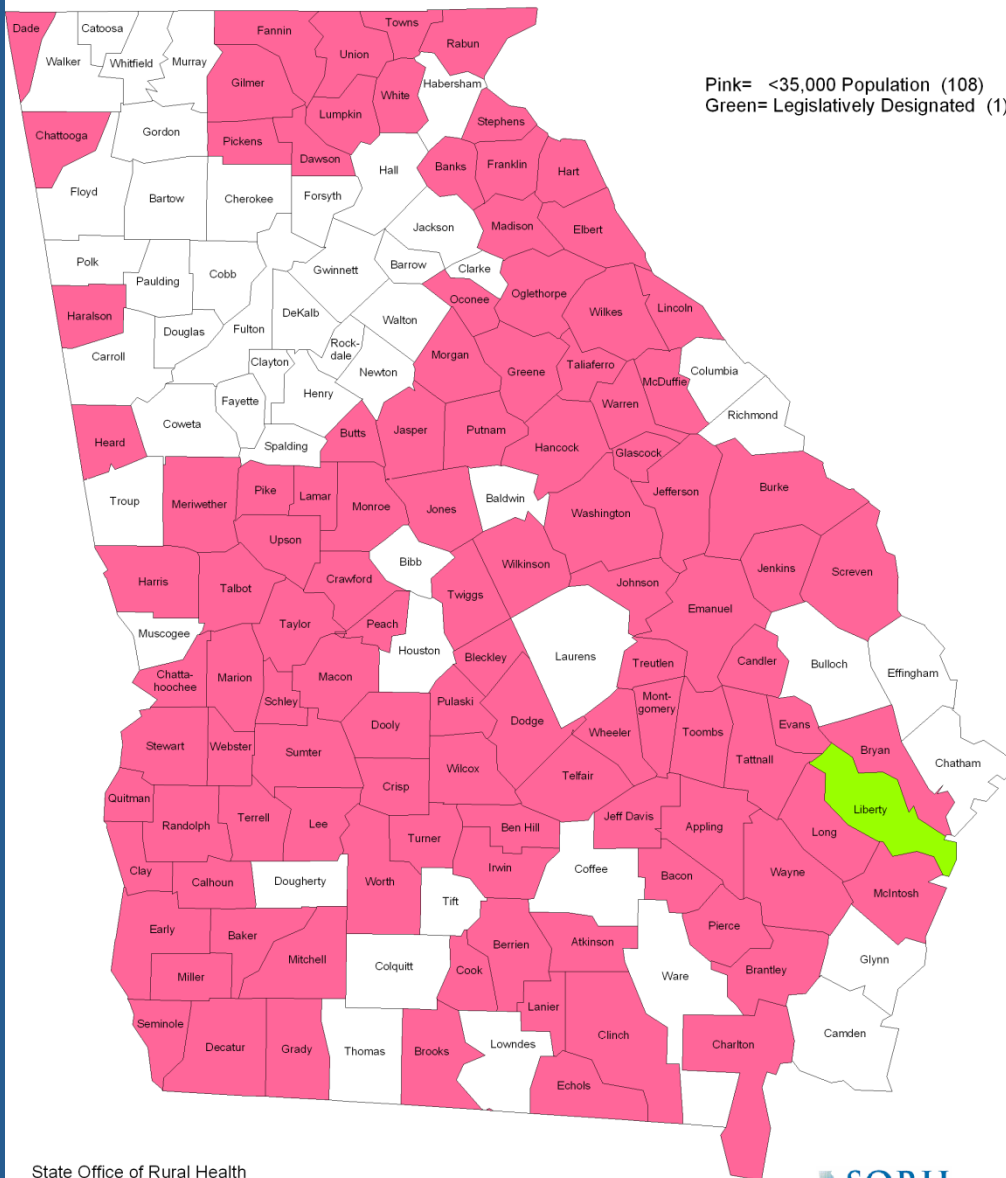
- GA Health District 3-3
- GA Health District 5-1
- GA Health District 5-2
- GA Health District 6
- GA Health District 9-1
- GA Health District 9-2
- GSU Jiann-Ping Hsu College of Public Health - Academic Affairs Office
- Center for Rural Health
- Public Health Practice Office
- GA Department of Public Health Office of Performance Improvement
- GA Public Health Association (GPHA)
- GA State Office of Rural Health (SORH)

Health Districts

0 20 Miles



## Georgia's Rural Counties



## Georgia's Rural Counties

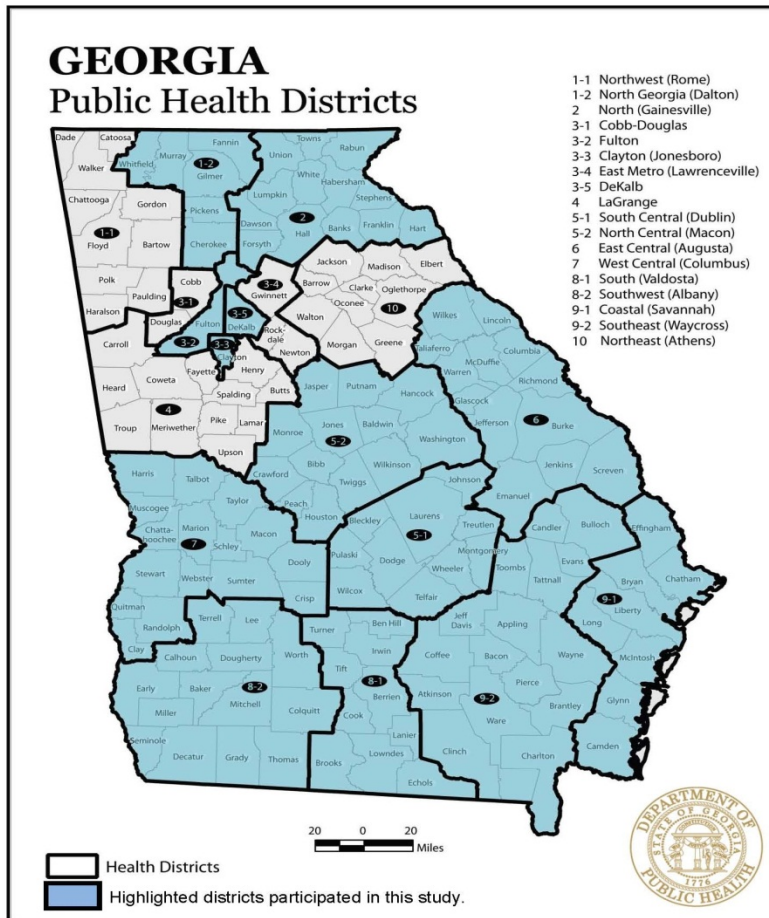
- Pink < 35,000 (108)
- Green Legislatively designated

State Office of Rural Health  
502 South 7<sup>th</sup> Street  
Cordele, GA 31015

Sept 30, 2011

# Participating Districts & County Health Departments in initial study

Figure 1. Geographic distribution of participating health districts



Georgia Department of Public Health (2011). Counties and Districts retrieved from <http://health.state.ga.us/>.

- 13 of 18 Health Districts
- 118 of the state's 159 counties
- Included both urban and rural counties.
- Purposeful sample of two key opinion leaders from each county identified by each district.

# Sampling and Methods

- Newly developed clinical care QIC instrument was adapted.
  - Expert Panel Review was conducted with 11 of 18 Health District Directors in GA.
- A purposeful sampling process was used to identify key informants of the practice community.
- 13 GA Health Districts participated in the study
  - Informants from 118 different counties
    - 269 key informants
      - 39 District office staff
      - 133 LHD staff
      - 97 BOH members

# Sampling and Methods

- An electronic survey was sent out utilizing *Survey Monkey*.
- This was followed by a reminder email and then a series of 3 reminder phone calls was completed by the research associates.
- This rigorous follow-up effort resulted in a satisfactory response rate of 65%.



# Health Districts as Quality Improvement Collaboratives (QIC)

Content Validity: Results from 11 person Expert Panel

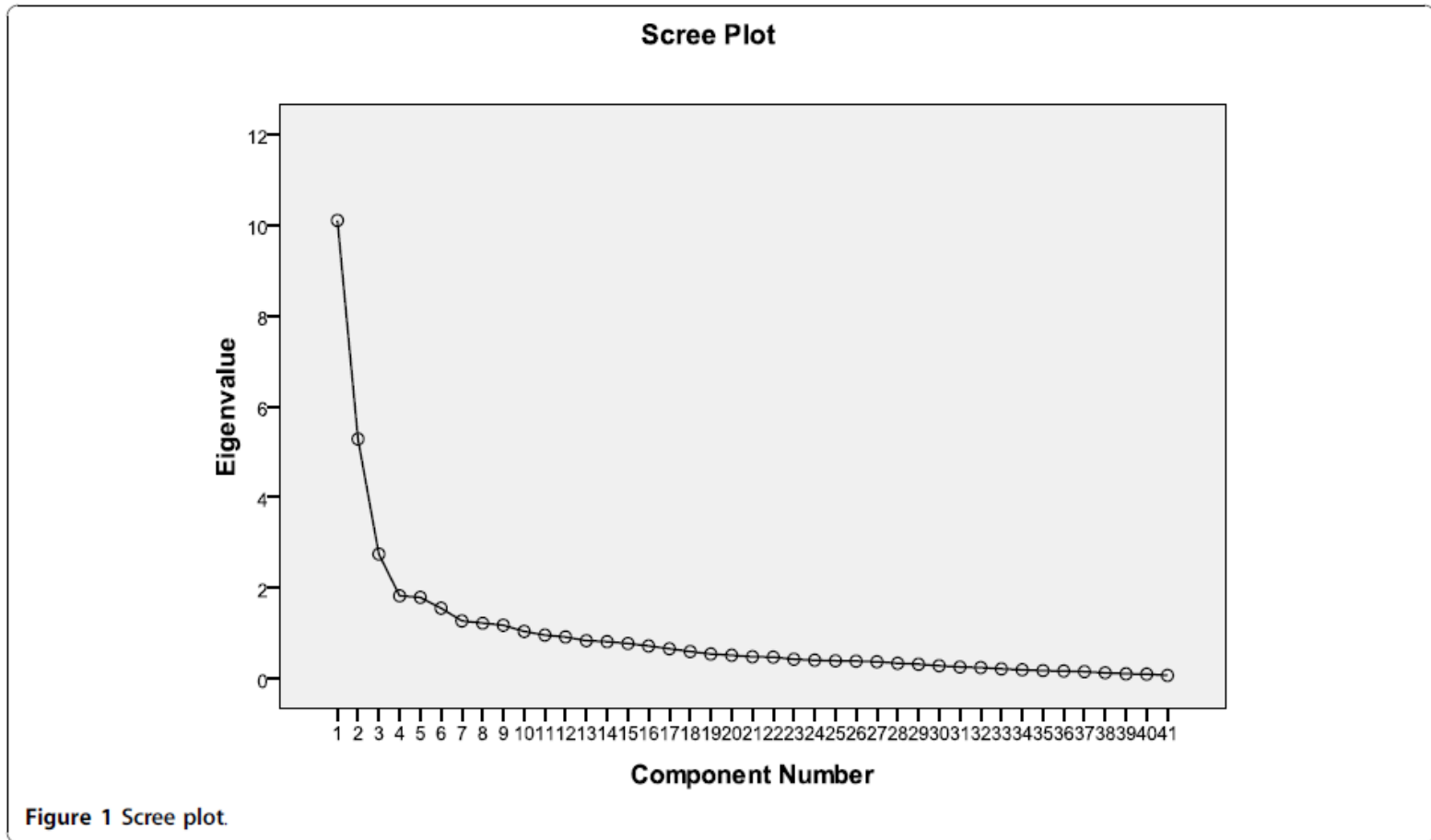
| QI Collaborative Construct                                      | Public Health Focus Score (1-5) | Public Health Focus Cronbach Alpha | Relevant in Georgia Score (1-5) | Relevant in Georgia Cronbach Alpha |
|---|---------------------------------|------------------------------------|---------------------------------|------------------------------------|
| <b>Health District Support</b><br>(item n =8)                   | 4.41                            | .954                               | 4.21                            | .950                               |
| <b>Effective multidisciplinary teamwork</b> (item n =14)        | 4.53                            | .964                               | 4.16                            | .978                               |
| <b>Appropriate use of the improvement model</b><br>(item n =12) | 4.22                            | .783                               | 4.20                            | .928                               |
| <b>Helpful collaborative processes</b> (item n =16)             | 4.19                            | .948                               | 3.77                            | .979                               |

# Health Districts as Quality Improvement Collaboratives (QIC)

Internal Reliability (Cronbach alpha) with 176 key informants

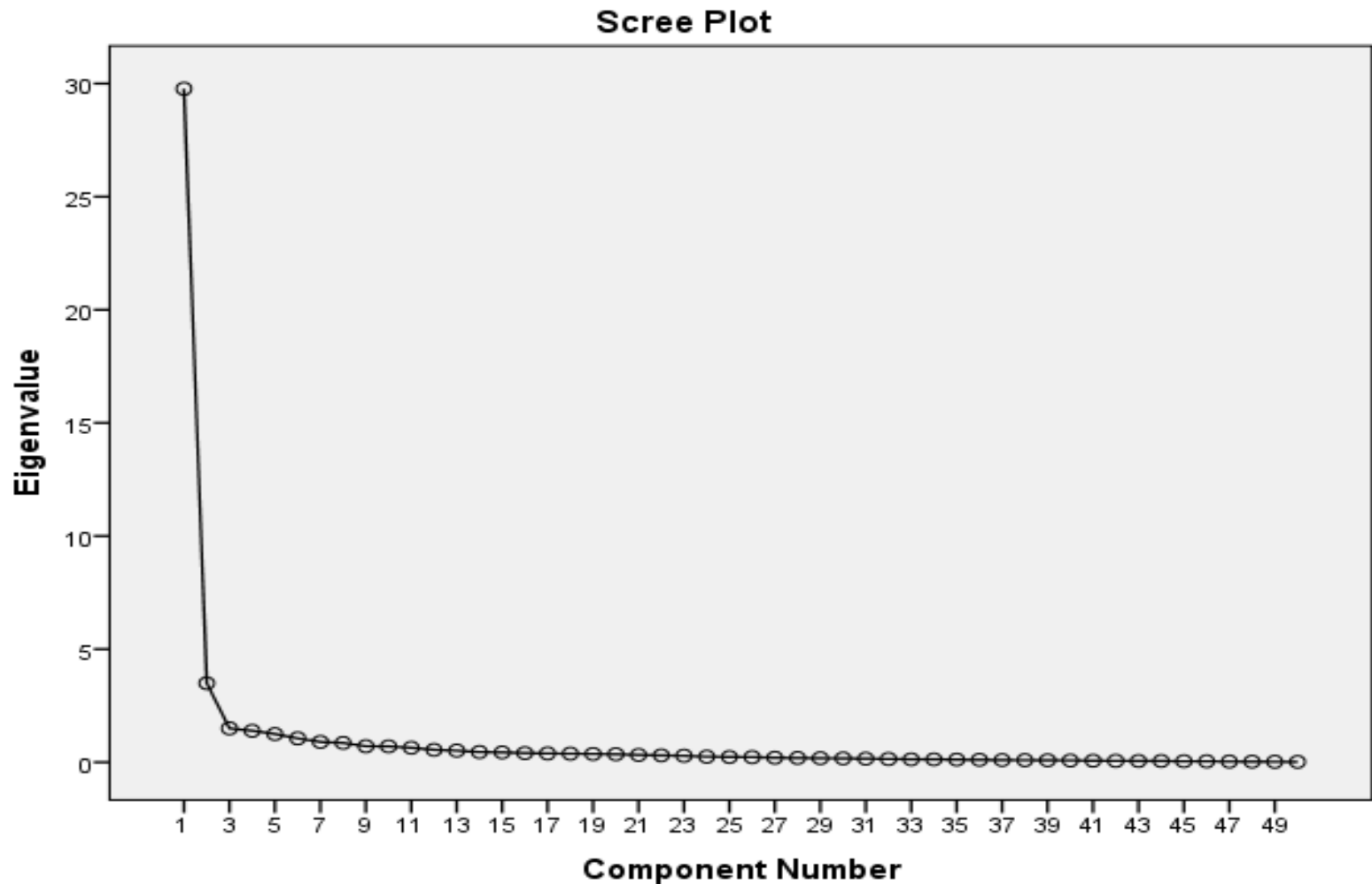
| Factor/Construct Name                                   | GA DISTRICT PH QIC | Schouten PC QIC |
|---|--------------------|-----------------|
| Health District support/Sufficient expert panel support | .956 (item n=8)    | .85 (item n=7)  |
| Effective multidisciplinary teamwork                    | .967 (item n=14)   | .89 (item n=18) |
| Appropriate use of the improvement model                | .956 (item n=12)   | n/a             |
| Helpful collaborative process                           | .965 (item n=16)   | .88 (item n=15) |

# Schouten Psychometric Instrument Development for QIC Assessment



Schouten et al.: Factors influencing success in quality-improvement collaboratives: development and psychometric testing of an instrument. *Implementation Science* 2010 5:84.

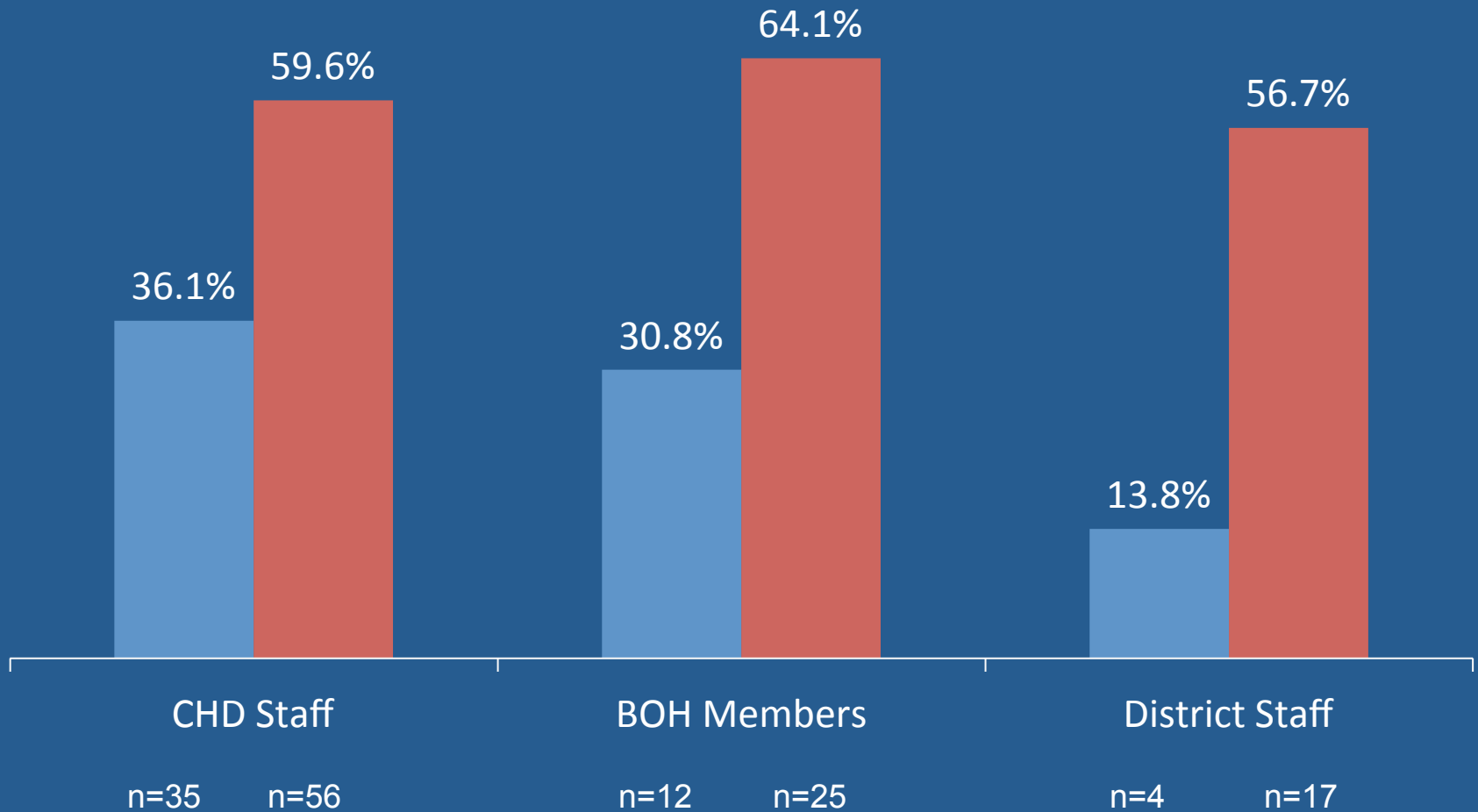
# GA PH PBRN Study of Districts as QICs Factor Analysis Results



## PRELIMINARY FINDINGS

### Essential Services Capacity (Complete or Almost Complete) Comparison by Position Type

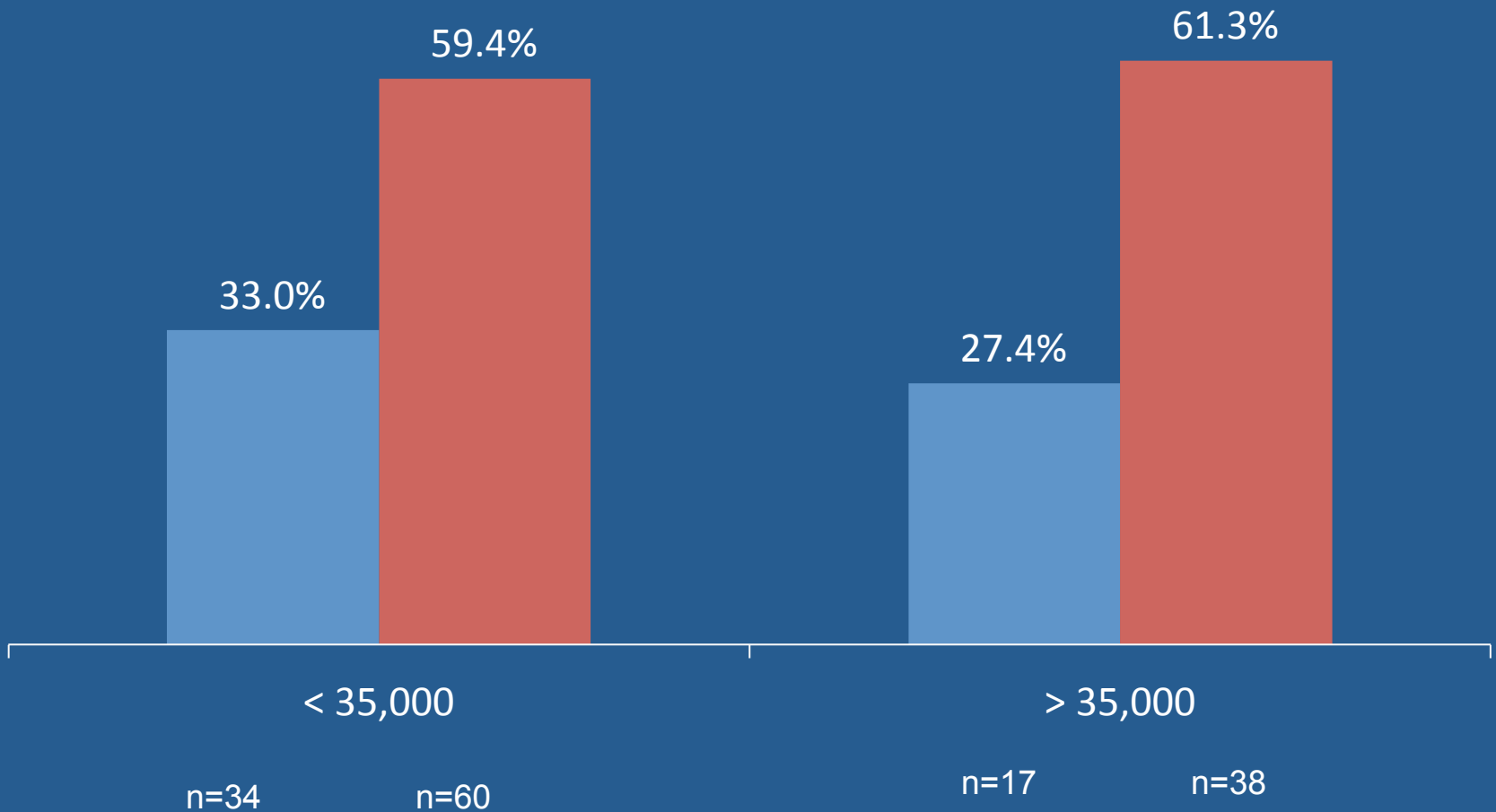
■ County Only   ■ District and County



# PRELIMINARY FINDINGS

## Essential Services Capacity (Complete or Almost Complete) Comparison by Rural vs. Non-rural

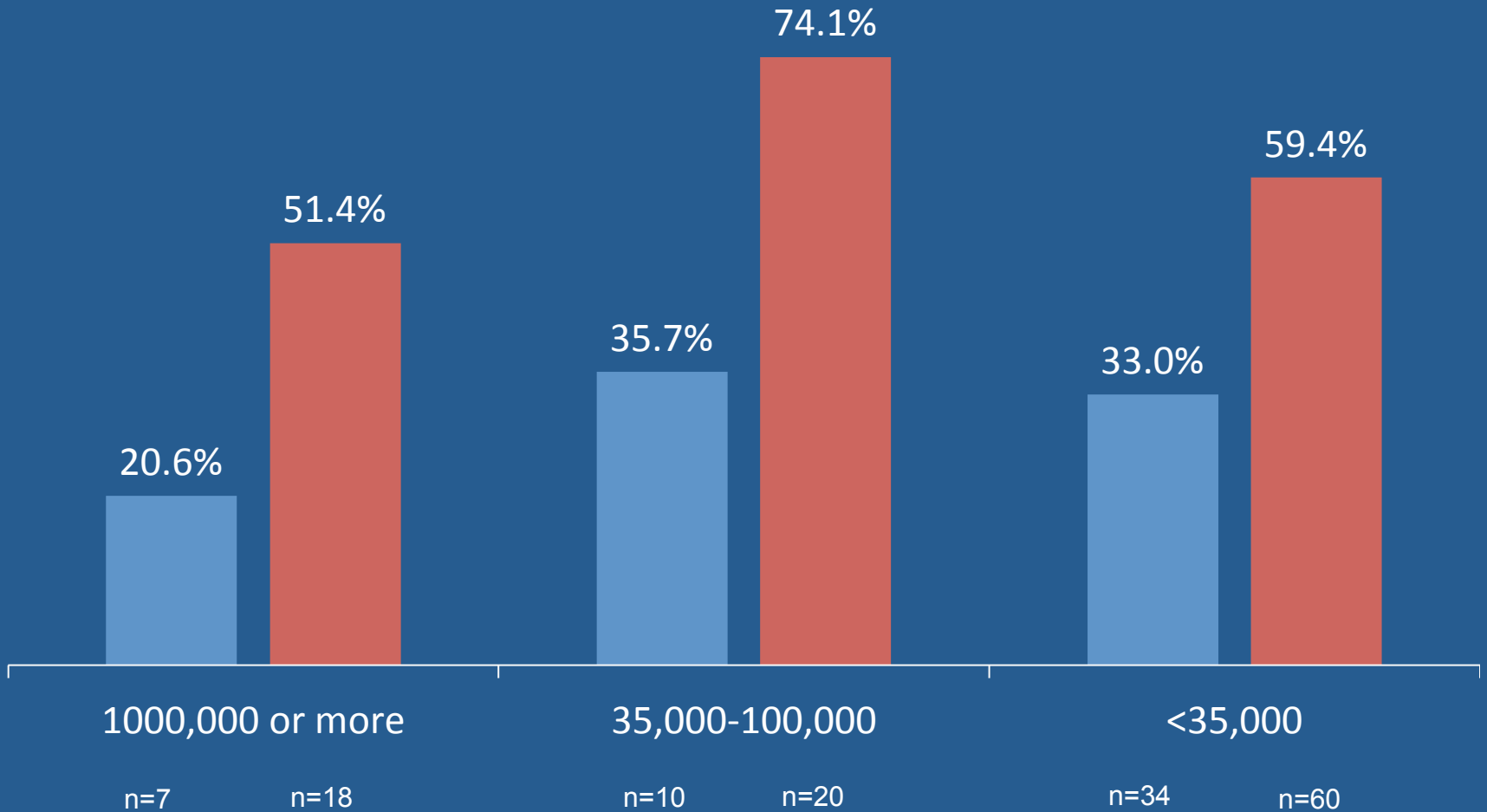
■ County Only ■ District and County



# PRELIMINARY FINDINGS

## Essential Services Capacity (Complete or Almost Complete) Comparison by Population Size

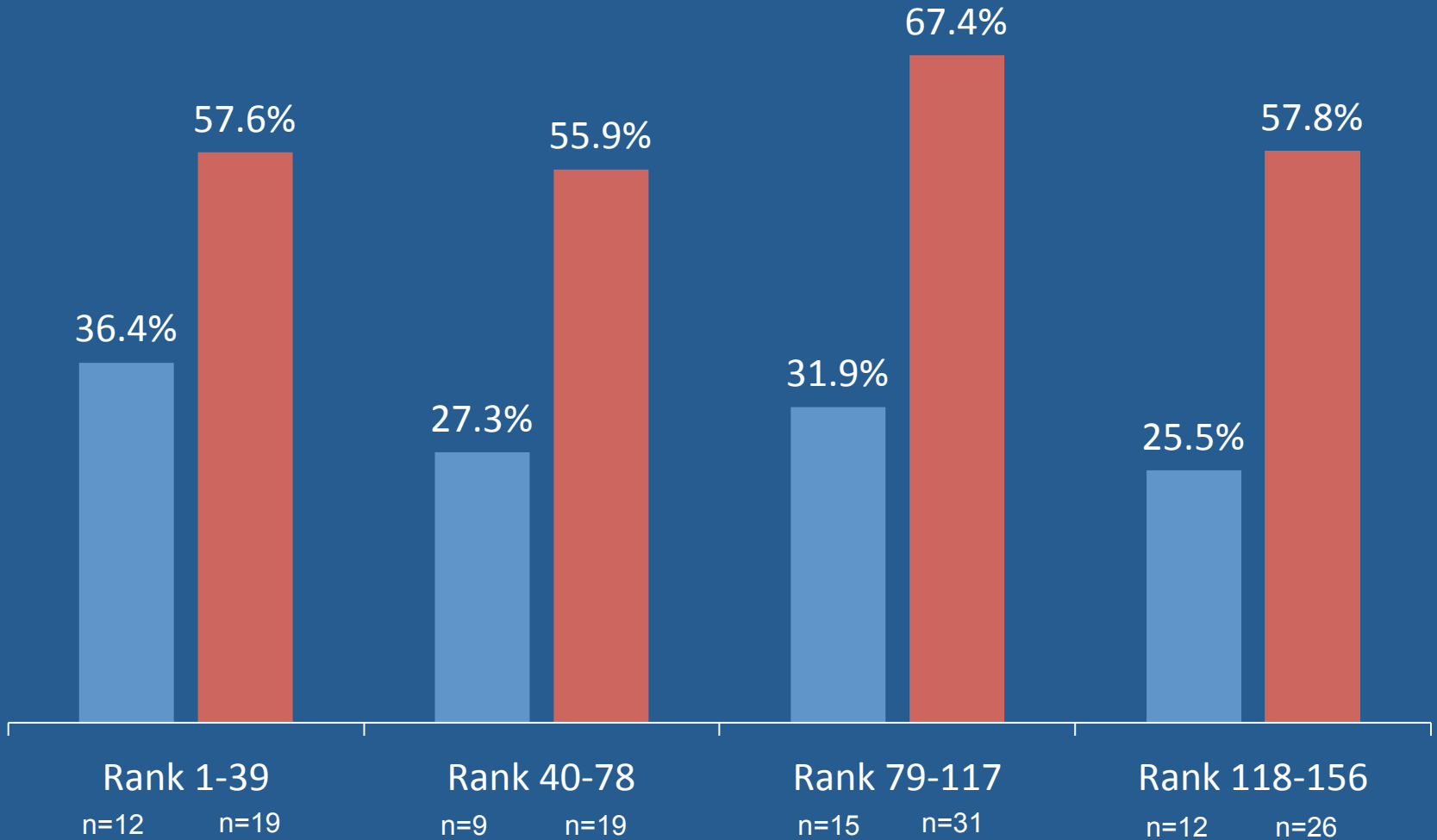
■ County Only      ■ District and County



# PRELIMINARY FINDINGS

## Essential Services Capacity (Complete or Almost Complete) Comparison by County Health Ranking

■ County Only      ■ District and County



County Health Rankings by Quartile. \*note that unranked counties and unknown responses are not shown



# Average of Mean Construct Scores: Job Title

| Job Title       | Health District Support<br>(8 statements) | Effective Multidisciplinary Support<br>(14 statements) | Appropriate Use of the Model<br>(12 statements) | Helpful Collaborative Processes<br>(16 statements) |
|-----------------|---|--|---|--|
| All Respondents | 3.83                                      | 3.80   | 3.63  | 3.60   |
| CHD Staff       | 3.72                                      | 3.70   | 3.54  | 3.44   |
| BOH Member      | 4.16                                      | 4.02   | 3.90  | 3.90   |
| District Staff  | 3.77                                      | 3.80   | 3.60  | 3.60   |
| Unknown         | 4.17                                      | 4.23   | 3.90  | 4.33   |

# Individual Item Correlations for Structured QI Activities (Construct 4: Helpful Collaborative Processes)

| ITEM   | 4.35 | 4.36 | 4.37 | 4.38 | 4.39: | 4.40: | 4.41 | 4.42 | 4.43 | 4.44 | 4.45 | 4.46 | 4.47 | 4.48 | 4.49 | 4.50 |
|--|------|------|------|------|-------|-------|------|------|------|------|------|------|------|------|------|------|
| 4.35 Useful knowledge and skills given during QI meetings.                       | 1.00 |      |      |      |       |       |      |      |      |      |      |      |      |      |      |      |
| 4.36 QI meetings focus on practical application                                  | .812 | 1.00 |      |      |       |       |      |      |      |      |      |      |      |      |      |      |
| 4.37 share experiences at QI meetings.   | .748 | .842 | 1.00 |      |       |       |      |      |      |      |      |      |      |      |      |      |
| 4.38 focus on joint learning   | .705 | .790 | .880 | 1.00 |       |       |      |      |      |      |      |      |      |      |      |      |
| 4.39 develop skills in planning changes during QI meetings.                      | .727 | .780 | .840 | .872 | 1.00  |       |      |      |      |      |      |      |      |      |      |      |
| 4.40 develop skills in processing changes at QI meetings.                        | .742 | .789 | .830 | .845 | .931  | 1.00  |      |      |      |      |      |      |      |      |      |      |
| 4.41 develop confidence in achievable changes at QI meetings.                    | .761 | .788 | .786 | .794 | .856  | .858  | 1.00 |      |      |      |      |      |      |      |      |      |
| 4.42 reflect on results at QI meetings   | .735 | .837 | .854 | .882 | .910  | .896  | .876 | 1.00 |      |      |      |      |      |      |      |      |
| 4.43 work with coworkers from other agencies at QI meetings.                     | .585 | .651 | .692 | .708 | .739  | .756  | .737 | .774 | 1.00 |      |      |      |      |      |      |      |
| 4.44 learn from progress reporting by other District & CHDs at QI meetings.      | .598 | .695 | .723 | .692 | .782  | .778  | .774 | .771 | .805 | 1.00 |      |      |      |      |      |      |
| 4.45 receive feedback on progress from leadership QI meetings.                   | .719 | .759 | .755 | .782 | .791  | .791  | .810 | .828 | .764 | .776 | 1.00 |      |      |      |      |      |
| 4.46 support one another at QI meetings.   | .730 | .764 | .779 | .787 | .781  | .771  | .794 | .816 | .737 | .704 | .795 | 1.00 |      |      |      |      |
| 4.47 competition between CHDs during the joint QI meetings.                      | .003 | .034 | .067 | .000 | .047  | .082  | .010 | .041 | .075 | .055 | .050 | .003 | 1.00 |      |      |      |
| 4.48 moment to reflect on achieved results during QI meetings.                   | .489 | .694 | .628 | .631 | .633  | .622  | .598 | .657 | .549 | .550 | .586 | .524 | .245 | 1.00 |      |      |
| 4.49 Information, ideas, and suggestions are actively exchanged at QI meetings.: | .606 | .673 | .709 | .727 | .727  | .719  | .753 | .762 | .640 | .694 | .720 | .691 | .054 | .612 | 1.00 |      |
| 4.50 staff exchange information outside QI meetings                              | .529 | .539 | .586 | .607 | .573  | .579  | .564 | .572 | .457 | .463 | .524 | .552 | .032 | .443 | .598 | 1.00 |

# Individual Item Correlations for Structured QI Activities (Construct 4: Helpful Collaborative Processes)

| ITEM   | 4.45 | 4.46 | 4.47 | 4.48 | 4.49 | 4.50 |
|--|------|------|------|------|------|------|
| 4.45 receive feedback on progress from leadership QI meetings.                   | 1.00 |      |      |      |      |      |
| 4.46 support one another at QI meetings.   | .795 | 1.00 |      |      |      |      |
| 4.47 competition between CHDs during the joint QI meetings.                      | .050 | .003 | 1.00 |      |      |      |
| 4.48 moment to reflect on achieved results during QI meetings.                   | .586 | .524 | .245 | 1.00 |      |      |
| 4.49 Information, ideas, and suggestions are actively exchanged at QI meetings.: | .720 | .691 | .054 | .612 | 1.00 |      |
| 4.50 staff exchange information outside QI meetings                              | .524 | .552 | .032 | .443 | .598 | 1.00 |

# Conclusions

- Health Districts are a basic infrastructure for local public health to deliver Essential Public Health Services in Georgia.
- Districts will need to have a major role in building local health department accreditation efforts in Georgia.
- Private and public sector support for building local public health infrastructure may need to recognize potential for multi-jurisdictional entities as key elements for building local infrastructure capacity.

# Conclusions

- Qualitative responses indicate that Georgia's local public health systems have not systematically implemented Quality Improvement initiatives.
- Participatory approach of PBRNs has potential to facilitate local grass-roots agency support for QI and accreditation.
- PBRNs have the potential to advance the science of QI within public health.

# Contact Information

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