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

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

## Authors:

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Jiann Ping Hsu College of Public Health, Georgia Southern University

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**2012 PHSSR Keeneland Conference**  
**April 18, 2012**

# Disclosure

- No Disclosures to declare.

# Objectives

## Participants will be able to:

- Describe the importance of Health Districts as Multi-Jurisdictional Entities in Georgia;
- Explain the relationship of Quality Improvement Collaborative (QIC) Assessment to Big QI (organizational culture); and
- Recognize the potential for PBRNs to develop the evidence and science for public health quality improvement and assurance.

# Practice Based Research Network in Georgia

- Collaboration of Georgia Health Districts and Georgia Southern University, Jiann Ping Hsu College of Public Health.
- PBRNs are intended to address **real life problems** facing the public health practice community.
- PBRNs 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

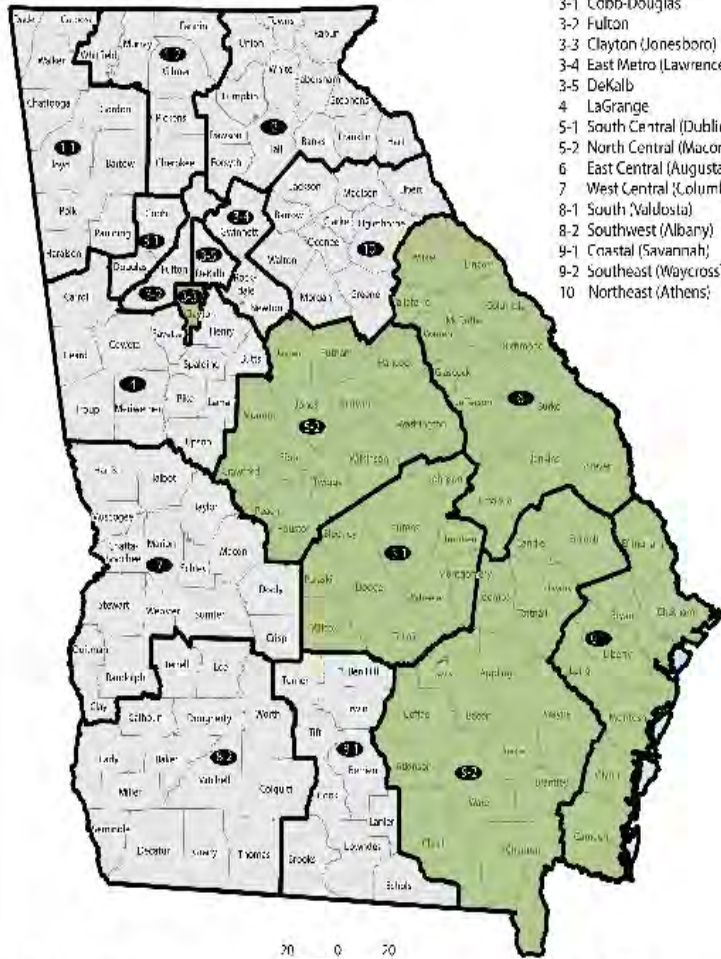
**Challenge:** How can GA Public Health PBRN capacity to build evidence support Health Districts and County Health Departments in an increasingly challenging fiscal and political environment?

## **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)

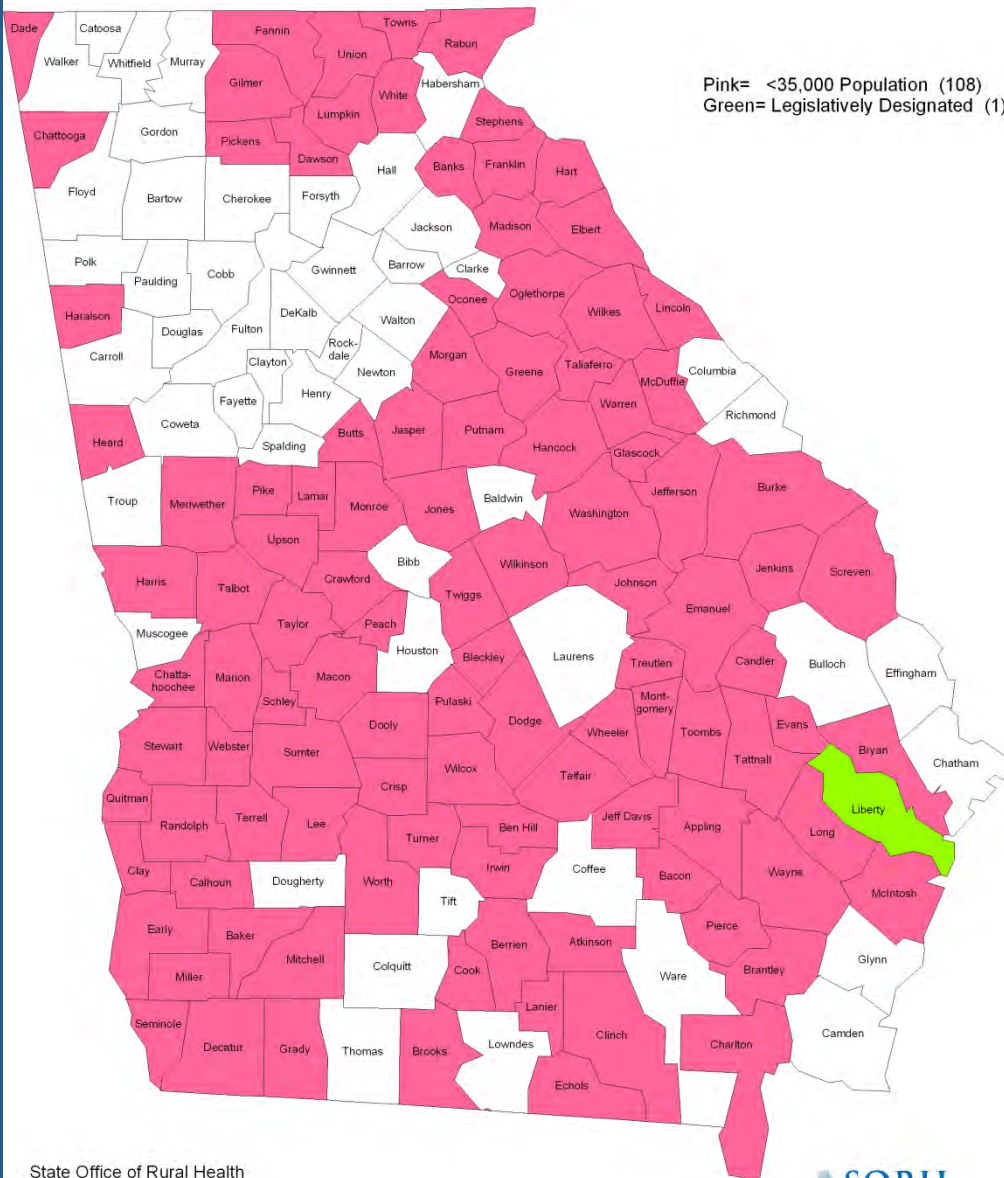
Health Districts

0 20 Miles





## Georgia's Rural Counties



## Georgia's Rural Counties

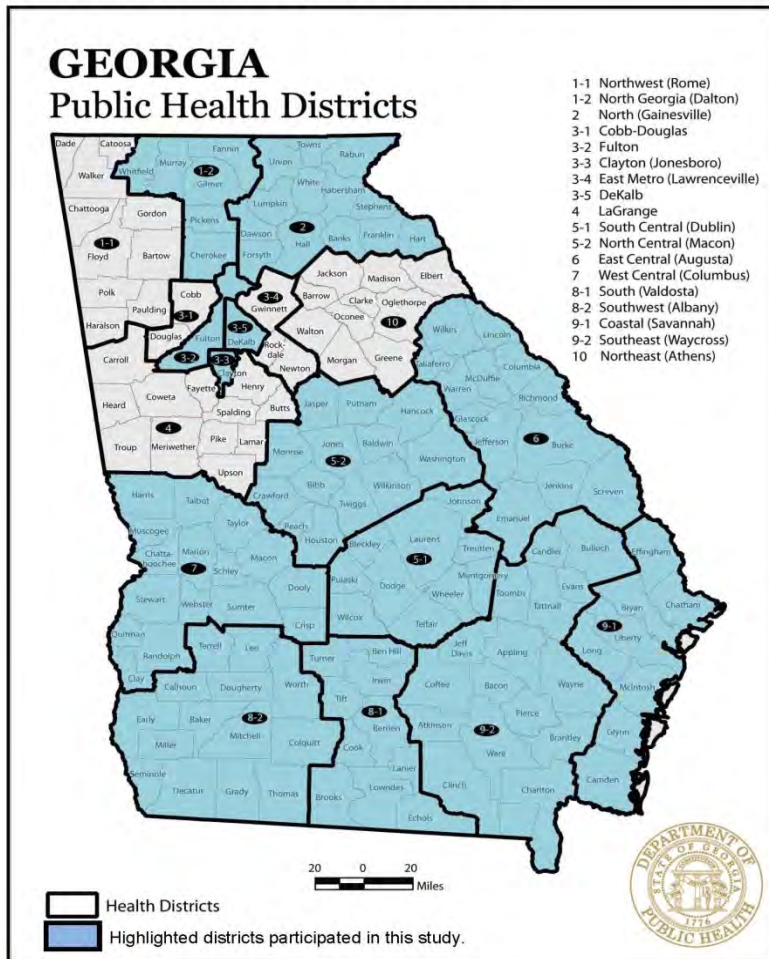
- Pink < 35,000 (108)
- Green Legislatively designated

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



- 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 for public health.
  - 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

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

# 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%.

# Why focus on Quality Improvement Collaborative (QIC) Assessment?

- Importance of Big QI versus Little QI
- Big QI = Organizational Culture of QI
- Little QI = Specific QI project, or use of specific QI techniques (root cause analysis, Pareto Chart, Plan-Do-Study-Act cycle)

# Examples of QIC Assessment re: QI Culture Items

- 1.4 The Health District **provides sufficient time** for public health essential services quality improvement.
- 2.21 Our Health District staff work with county health department staff to **focus on improving public health essential services outcomes**.
- 3.31 Our Health District staff work with county health department staff to **use measurements to track progress**.
- 4.46 Our Health District staff and county health department staff **support one another** during quality improvement working meetings.

# Health Districts as Quality Improvement Collaboratives (QIC)

Validation Process to adapt instrument to Public Health  
 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> (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> (item n =12)	4.22	.783	4.20	.928
<b>Helpful collaborative processes</b> (item n =16)	4.19	.948	3.77	.979

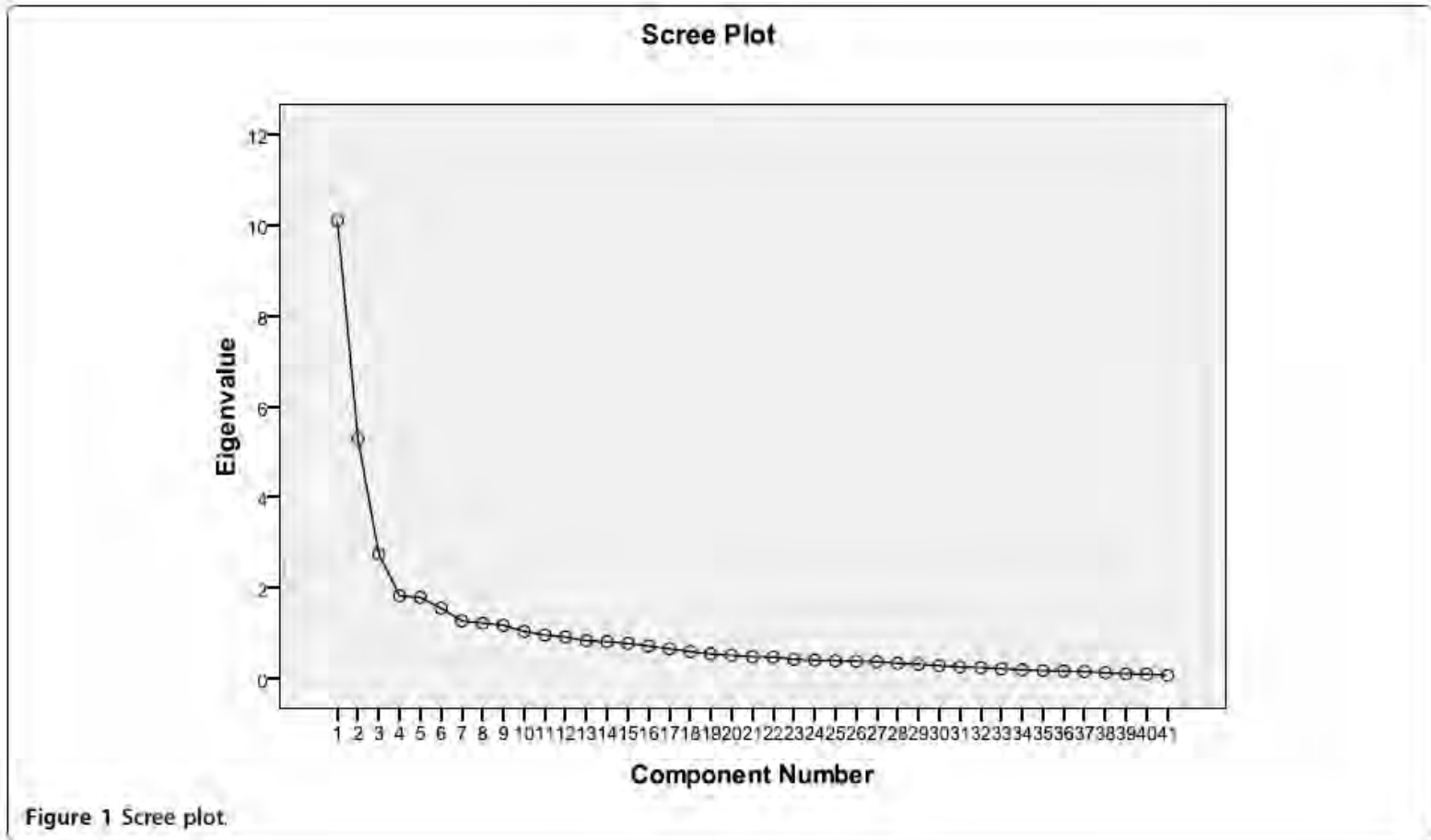
# Health Districts as Quality Improvement Collaboratives (QIC)

Internal Reliability (Cronbach alpha) with 176 key informants  
Results from Full survey

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)

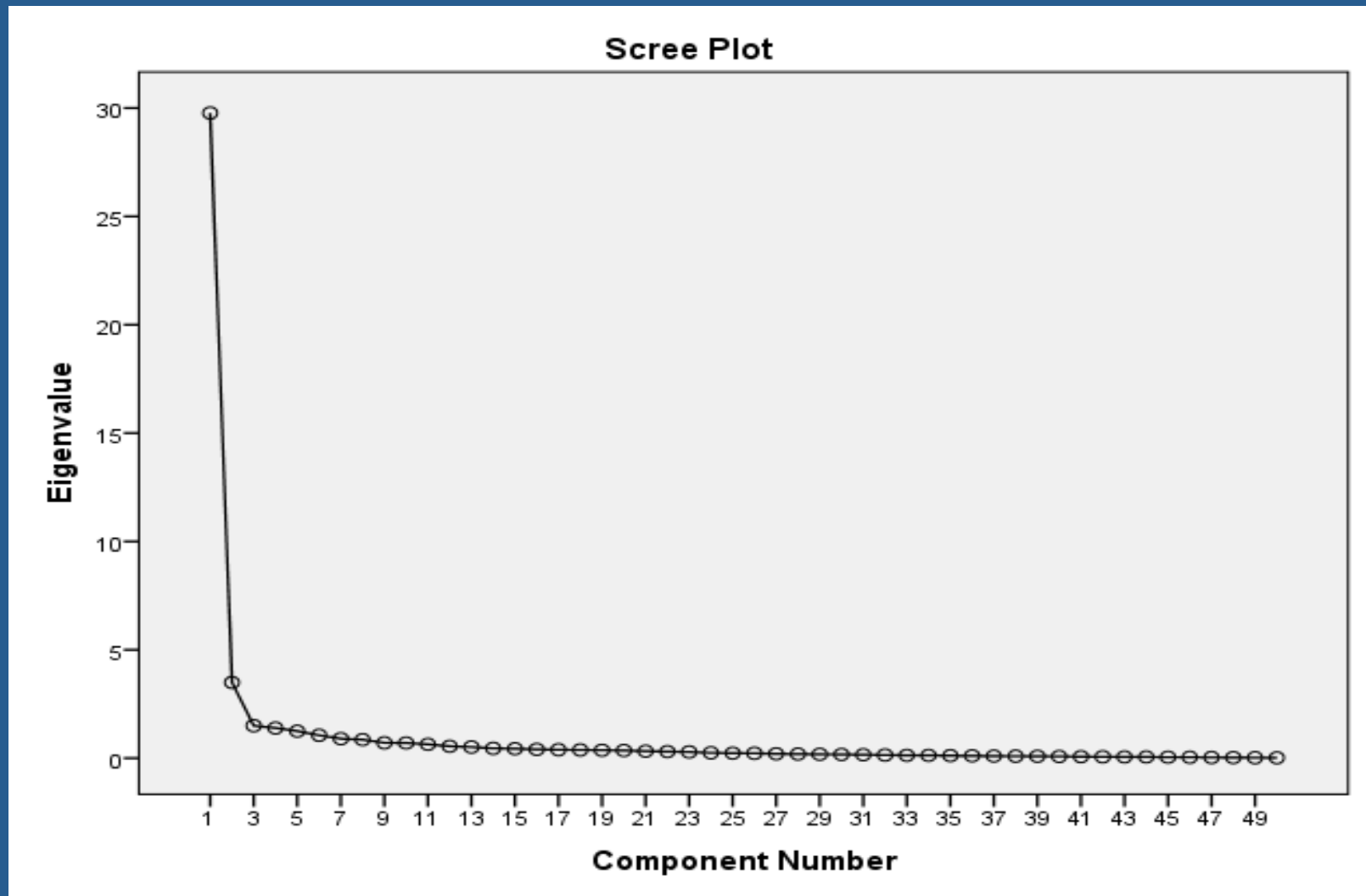


# Schouten Psychometric Instrument Development for QIC Assessment



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

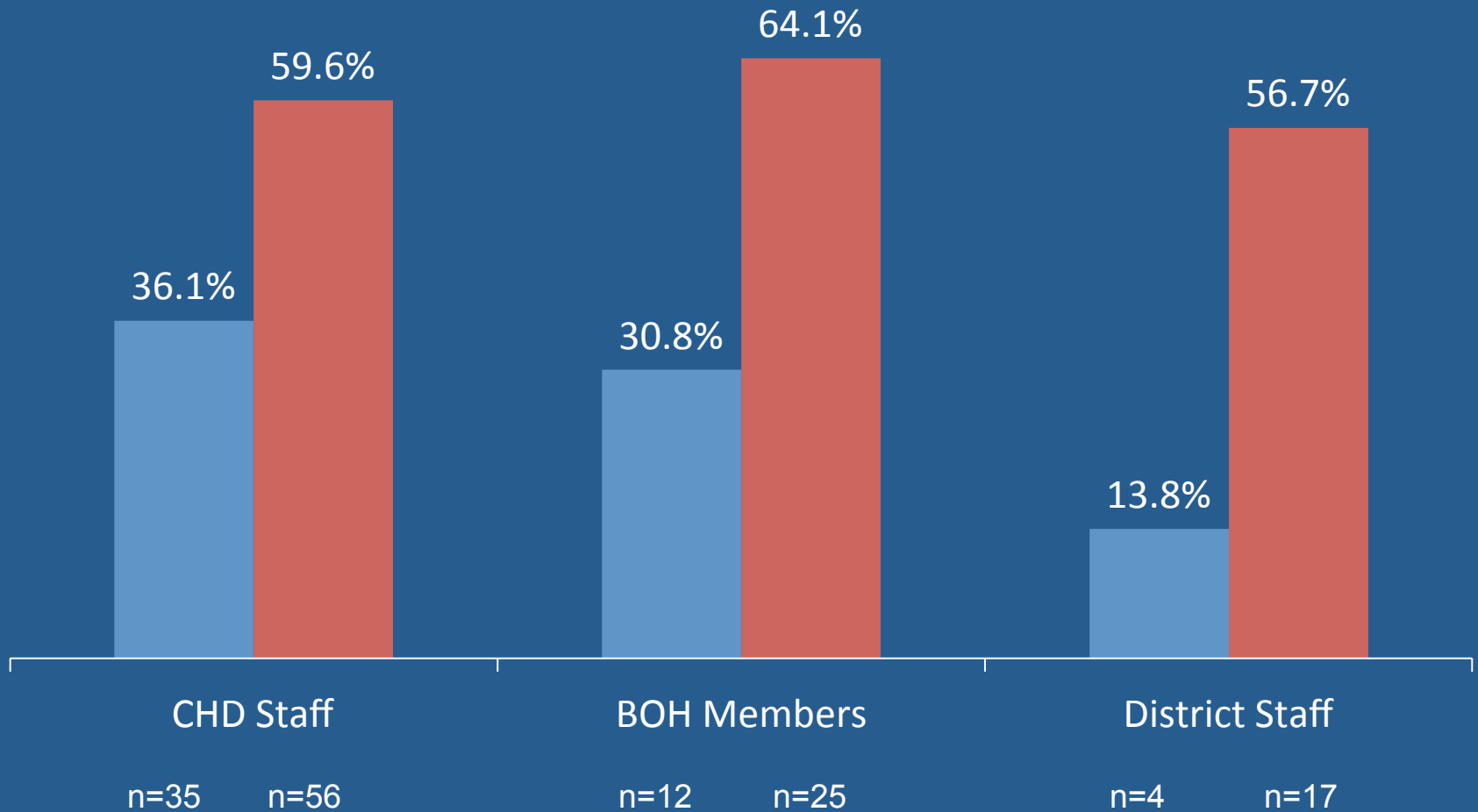
# GA PH PBRN Study of Districts as QICs Factor Analysis Results



## PRELIMINARY FINDINGS

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

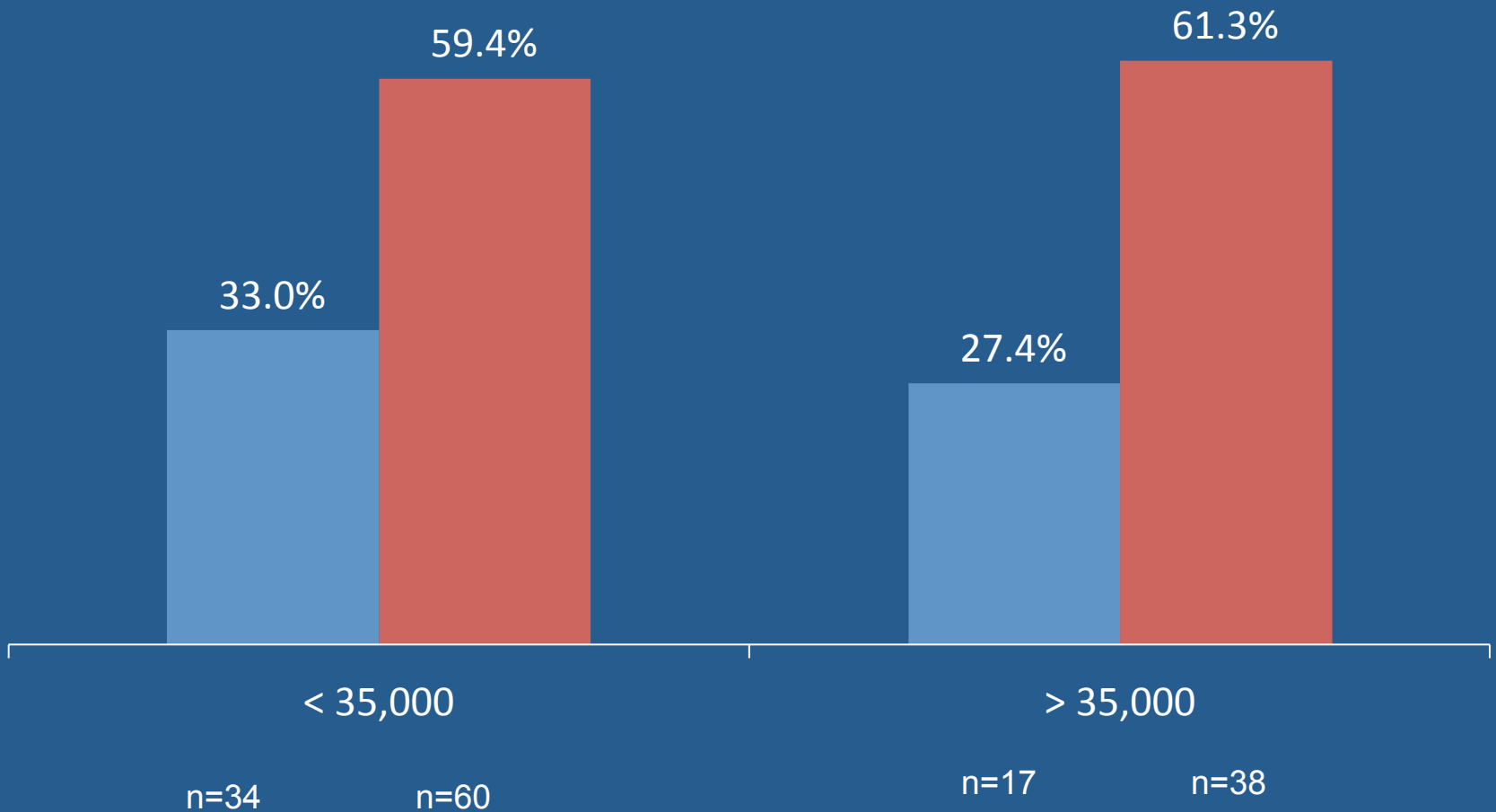
■ County Only    ■ District and County



# PRELIMINARY FINDINGS

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

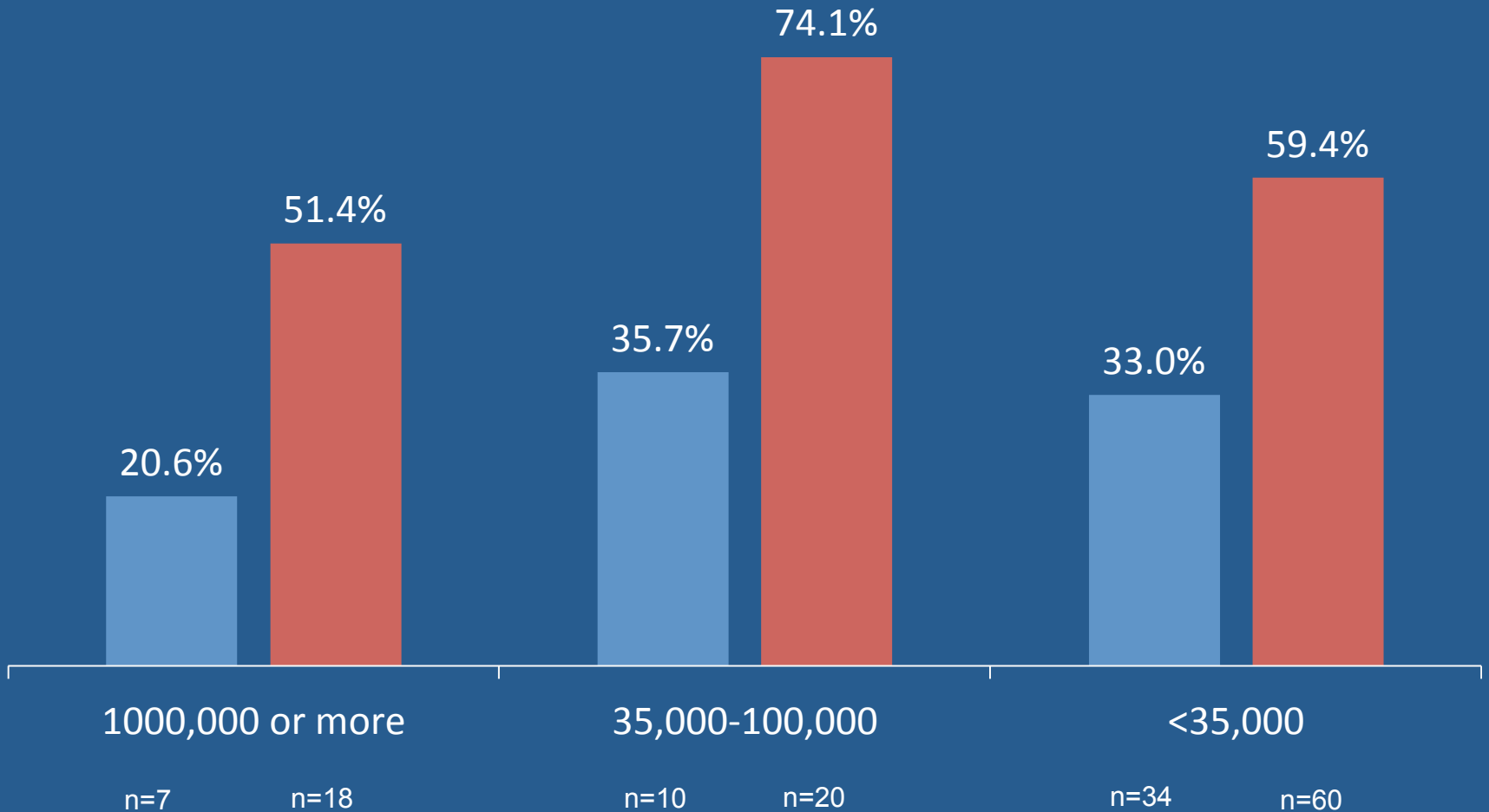
■ County Only ■ District and County



# PRELIMINARY FINDINGS

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

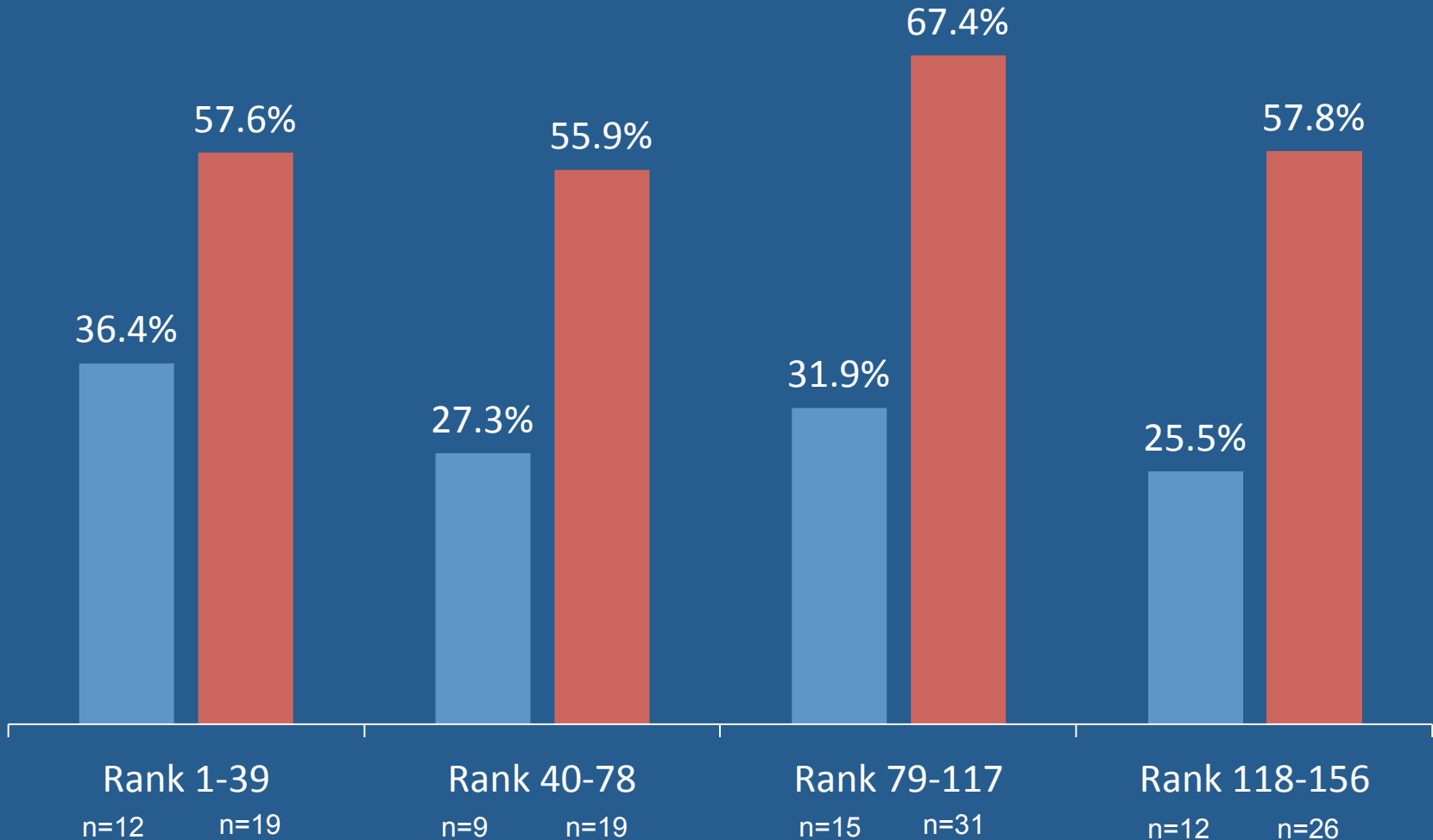
■ County Only      ■ District and County



# 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 (8 statements)	Effective Multidisciplinary Support (14 statements)	Appropriate Use of the Model (12 statements)	Helpful Collaborative Processes (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.

# Conclusions

- PBRNs have the potential to advance the science of QI within public health, particularly related to:
  - Assessment of Organizational QI Culture (BIG QI)
  - Role of multi-jurisdictional entities in advancing QI and accreditation

# Contact Information

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