A Comparison of System-Level Dissemination and Implementation Strategies on Local Health Department Quality Improvement Maturity

Presented at the AcademyHealth Annual Research Meeting. Boston, MA. June 27th, 2016.



A Comparison of System-Level Dissemination and Implementation Strategies on Local Health Department Quality Improvement Maturity



Adam Atherly¹, PhD, Lisa VanRaemdonck², MPH, MSW & Melanie Whittington¹ MS

1 University of Colorado Anschutz Medical Campus, Aurora, CO 2 Colorado Association of Local Public Health Officials, Denver, CO

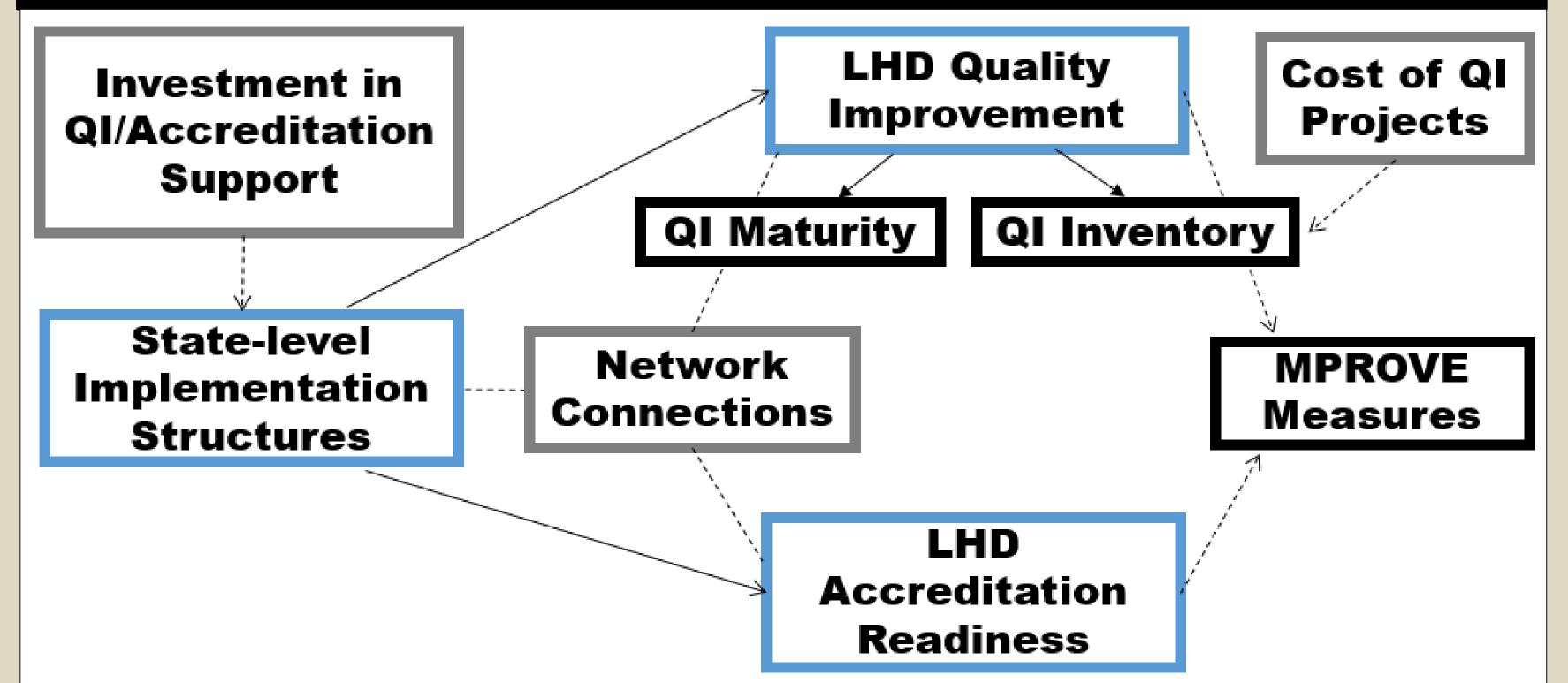
RESEARCH QUESTION

Do local health departments (LHDs) in states with more system-level investments and initiatives for Quality Improvement (QI) have higher QI Maturity and higher Accreditation Readiness (AR)?

States Included in Analysis:

- Colorado: mean of ~\$25,000 for QI per LHD
- Kansas: mean of ~\$30,000 for QI per LHD
- Nebraska: mean of ~\$55,000 for QI per LHD

CONCEPTUAL MODEL



PRACTICE DISSEMINATION

QI MATURITY AND ACCREDITATION READINESS REPORT

for Pine County Public Health Department (sample)

August | 2015 | Produced by Colorado Public Health Practice-Based Research Network

INTRODUCTION

In late 2014 and early 2015, local public health agencies (LPHAs) in Colorado were surveyed about their interest in and readiness for national, voluntary public health accreditation and about the extent to which they were using quality improvement in their work. The questions were answered by the LPHA Director and 36 LPHAs participated. The results of the survey are presented here along with the individual results from Pine.

QI MATURITY

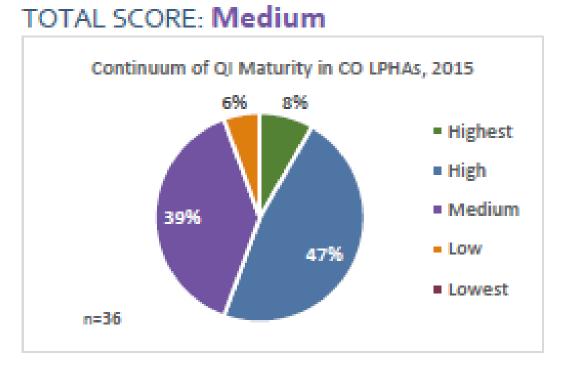
DEFINITION OF QUALITY IMPROVEMENT MATURITY

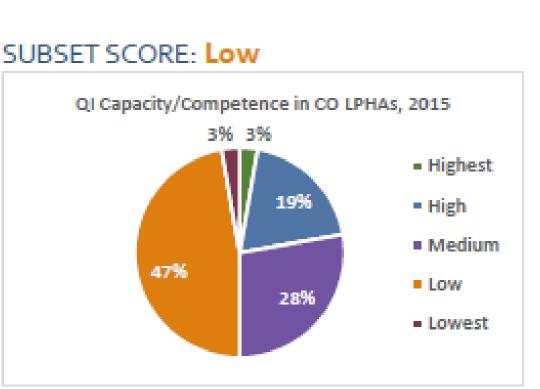
Quality Improvement Maturity is a concept that encompasses an agency's culture, capacity, and alignment of ongoing and systematic improvement efforts (Joly, 2013). The concept aligns with the Quality Improvement Roadmap, www.qiroadmap.org, a resource that helps guide LPHAs through creating a culture of quality improvement throughout their agency. For this report, QI Maturity is separated into three subsets: Organizational Culture, Capacity and Competence, Alignment and Spread.

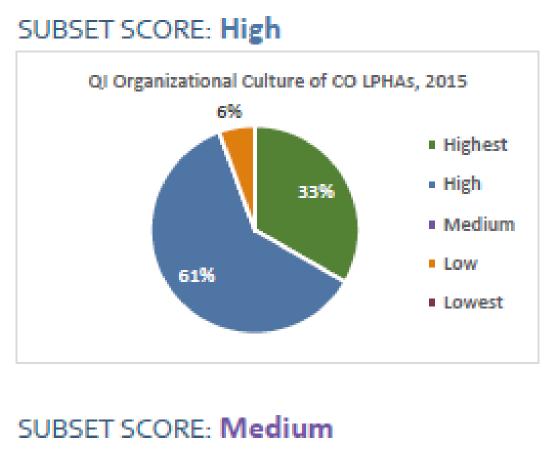
QI IS MORE THAN JUST A STATE OF MIND

OVERALL ORGANIZATIONAL QI MATURITY

Pine: Overall QI Maturity = Medium







SUBSET SCORE: Medium	
QI Alignment and Spread in CO LPI	As, 2015
	Highest
33%	 High
31%	 Medium
	Low
28%	Lowest

FINDINGS			
Accreditation	Quality Improvement		
Readiness	Maturity	Inventory	
Survey: LHD Accreditation Readiness Survey Respondents: LHD Directors	Survey: Organizational QI Maturity Survey Respondents: LHD Directors	Survey: QI Inventory Respondents: LHD QI Coordinators	
Initial Leader- Steps Process ship	QI Capacity and Maturity Competence	42 Projects TotalCO: 22	
CO 8.9 10.4 6.2	<i>CO</i> 3.51 2.72	• KS: 9	
KS 9.3 10.6 6.8	KS 3.73 2.99	• NE: 11	
NE 11.9 11.2 8.2	<i>NE</i> 3.8 3.35	Single Activity Focus	
Significant differences in initials steps and leadership domains.	Significant differences in capacity and competence domain.	Immunizations: 12Screening: 4Nutrition: 4	
Significantly higher scores in Initial Steps and Leadership domains in states with higher levels of system-level investments in QI.	Significantly higher scores in Capacity and Competence domain in states with higher levels of system-level investments and initiatives in QI.	Many projects were agency process improvements with a broad impact and not designed to impact one specific public health activity.	

IMPLICATIONS

Conclusions

- Accreditation Readiness and QI Maturity scores are higher in states with more system-level investments and initiatives for QI (Nebraska > Kansas > Colorado)
- QI projects often focus on agency-wide improvements, rather than one single public health activity

Implications

- System-level investments to improve QI in LHDs can both improve local implementation of QI and promote accreditation readiness
- System-level investments should be encouraged as a mechanism to improve QI implementation and enhance accreditation readiness

Limitations

- Endogeneity: Potential for estimates to be biased due to omitted variables
- Response bias: No significant differences between responders and non-responders in their accreditation intent

NEXT STEPS

- Incorporate network analysis results of connections among LHDs and state-level partners
- Determine degree to which system-level investments relate to QI Maturity and Accreditation Readiness
- Determine degree to which QI Maturity and Accreditation Readiness are related to immunization delivery and vaccination coverage
- Estimate cost of implementing QI projects intended to impact immunizations