Factors Associated with Local Health Department Intent to Apply for Public Health Accreditation

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Background

- Efforts to encourage voluntary accreditation are underway
- Based on the assumption that adhering to accreditation standards will strengthen performance and ultimately population health

Background

- Factors that may influence the intent of Local Health Departments (LHDs) to apply for voluntary national accreditation by the Public Health Accreditation Board are not well understood.
  - Shah, Beatty, & Leep, 2013[1] examined the relationship between accreditation prerequisites [community health assessment (CHA), community health improvement plan (CHIP), and strategic plan] and intention to seek accreditation
    - Performance related activities, use of QI tools, having one or more local boards of health, and having an epidemiologist on staff increased LHD tendency to express interest in pursuing accreditation.
    - Negative association between recent completion of a CHA or CHIP and intention to seek accreditation.
  - Madamala et al. 2012[2] examined the bivariate relationship between accreditation intentions and leadership at the state level
    - State Health Officers with a medical degree reported greater percentage of agreement that they would seek accreditation than State Health Officers without a medical degree.

[1]Shah, Beatty, and Leep. (2013.) Do PHAB accreditation prerequisites predict local health departments' intentions to seek voluntary national accreditation? *Frontiers in PHSSR*, 2(3).

[2]Madamala, Sellers, Beitsch, Pearsol, and Jarris. (2012.) Quality Improvement and Accreditation Readiness in State Public Health Agencies, Journal of Public Health Management and Practice 18(1): 9-18.

Research Objective

- This cross-sectional study uses data from the 2010 and 2013 NACCHO Profile surveys of local health departments (LHDs) to examine the relationship between LHD characteristics and the intention to apply for voluntary public health accreditation.

Methods and Analysis

- 2010 Dependent Variables:
  - Intention to participate in accreditation within the first 2 years of accreditation
  - Intention to participate in accreditation at some future point
- 2013 Dependent Variables:
  - Completed or Initiated Accreditation Process
  - Intention to participate in accreditation within the first 2 years of accreditation
  - Intention to participate in accreditation at some future point
- Independent variables included:
  - whether an LHD reported the use of any formal quality improvement
  - the number of full time equivalent (FTE) employees
  - having conducted a community health assessment within the last 3 years
  - the presence of a local board of health with governing authority
  - Structural governance (decentralized, centralized, shared governance)
  - whether the LHD provides comprehensive primary care services

Methods and Analysis

- Bivariate Analyses (chi-squared tests and t-tests)
- Multivariate Analyses (logistic regression)

Dependent Variable

Likelihood to Participate in Accreditation =

2010 Dependent Variables:
- Intention to participate in accreditation within the first 2 years of accreditation
- Intention to participate in accreditation at some future point

2013 Dependent Variables:
- Completed or Initiated Accreditation Process
- Intention to participate in accreditation within the first 2 years of accreditation
- Intention to participate in accreditation at some future point

Independent Variables

f (x1, x2, x3, x4, x5, x6)

- whether an LHD reported the use of any formal quality improvement
- the number of full time equivalent (FTE) employees
- having conducted a community health assessment within the last 3 years
- the presence of a local board of health with governing authority
- Structural governance (decentralized, centralized, shared governance)
- whether the LHD provides comprehensive primary care services

Table 1: Descriptive Characteristics of LHD Samples

LHD Characteristic	2010	2013
Intention to Participate in Accreditation within the next 2 years		
Yes	141 (31.5%)	100 (30.7%)
No	307 (68.5%)	226 (69.3%)
Intention to Participate in Accreditation in the future		
Yes	242 (46.7%)	162 (41.8%)
No	212 (53.3%)	226 (58.2%)
Completed or Initiated the Accreditation Process		
Yes	Not Applicable	34 (8.8%)
No		354 (91.2%)
Any formal quality improvement		
Yes	255 (48.8%)	280 (58.7%)
No	267 (51.2%)	197 (41.3%)
Number of Full Time Equivalent Employees [Mean (SD)]	70.5 (270.1)	64.7 (233.6)
Completed a community health assessment in the last 3 years		
Yes	908 (43.4%)	1148 (58.4%)
No	1183 (56.6%)	816 (41.6%)
Local Board of Health with governing authority		
Yes	1045 (49.8%)	914 (46.3%)
No	1054 (50.2%)	1060 (53.7%)
Structural Governance		
Decentralized	1544 (73.3%)	1430 (71.5%)
Centralized	392 (18.6%)	392 (18.6%)
Shared	171 (8.1%)	178 (8.9%)
Comprehensive Primary Care Provided by the LHD		
Yes	626 (30.6%)	221 (11.4%)
No	1419 (69.4%)	1724 (88.6%)

Notes: LHD is Local Health Department

Table 2: Bivariate Relationship between the Likelihood of Participating in Accreditation and LHD Characteristics

LHD Characteristic	2010				2013					
	Intention to Participate in Accreditation within 2 years (n=141)		Intention to Participate in Accreditation in the future (n=242)		Completed or Initiated Accreditation Process (n=34)		Intention to Participate in Accreditation within 2 years (n=100)		Intention to Participate in Accreditation in the future (n=162)	
Any formal quality improvement										
Yes	**92 (65.3%)**	**p<0.001**	**143 (59.1%)**	**p<0.001**	**32 (94.1%)**	**p<0.001**	**80 (80.8)**	**p<0.001**	**118 (74.7%)**	**p<0.001**
No	**49 (34.8%)**		**99 (40.9%)**		**2 (5.9%)**		**19 (19.2%)**		**40 (25.3%)**	
Number of Full Time Equivalent Employees [Mean (SD)]										
Yes	168 (53.1)	p=0.37	135 (30.8)	p=0.9	**296 (168.8)**	**p=0.002**	**261.2 (70.4)**	**p<0.001**	**185.3 (44.8)**	**p=0.0003**
No	119 (28.6)		129 (41.2)		**83.2 (13.4)**		**41.3 (5.5)**		**41.3 (5.5)**	
Completed a community health assessment in the last 3 years										
Yes	67 (47.5%)	p=0.33	116 (47.9%)	p=0.25	**28 (82.4%)**	**P=0.003**	66 (67.4%)	p=0.02	104 (65.8%)	p=0.02
No	74 (52.5%)		126 (52.1%)		**6 (17.6%)**		32 (32.6%)		54 (34.2%)	
Local Board of Health with governing authority										
Yes	74 (52.5%)	p=0.79	119 (49.4%)	p=0.43	17 (50%)	p=0.73	49 (49%)	p=0.93	71 (43.8%)	p=0.27
No	67 (47.5%)		122 (50.6%)		17 (50%)		51 (51%)		91 (56.2%)	
Structural Governance										
Decentralized	111 (78.7%)		**191 (78.9%)**		26 (76.5%)		77 (77%)		122 (75.3%)	
Centralized	13 (9.2%)	p=0.1	**22 (9.1%)**	**p=0.002**	5 (14.7%)	p=0.87	9 (9%)	p=0.043	23 (14.2%)	p=0.12
Shared	17 (12.6%)		**29 (12%)**		3 (8.8%)		14 (14%)		17 (10.5%)	
Comprehensive Primary Care Provided by the LHD										
Yes	20 (14.5%)	p=0.83	34 (14.0%)	p=0.87	4 (11.8%)	p=0.3	**14 (14.1%)**	**p=0.001**	**19 (11.8%)**	**p=0.004**
No	118 (85.5%)		204 (85.7%)		30 (88.2%)		**85 (85.9%)**		**142 (88.2%)**	

Notes: LHD is Local Health Department. Completed or Initiated Accreditation Process was determined if a LHD indicated having already achieved accreditation, submitted an application for accreditation, or submitted a statement of intent to pursue accreditation. Local Board of Health with governing authority was determined if a LHD indicated that any three of the following five characteristics were true of the local board of health's authority: can hire or fire the agency head, can approve the LHD budget, can adopt public health regulations, can set and impose fees, can impose taxes for public health.

Principal Findings

- Bivariate analyses indicate that there are relationships between likelihood to participate in accreditation and:
  - Conducting *any formal quality improvement* (all dependent variables both 2010 and 2013)
  - 2013: *number of full time equivalent employees* (all dependent variables)
  - 2013: *having conducted a community health assessment within the last 3 years (only those that have been accredited or initiated the process)*
  - *2013 Comprehensive primary care provided by the LHD* (only those with *intention to participate in accreditation within next 2 years* or *in the future*)
  - 2010 *Structural governance* was related to the *intention to participate in accreditation within the next 2 years*

Table 3: Multivariate Relationship between the Likelihood of Participating in Accreditation and LHD Characteristics

	2010 NACCHO Profile Data		2013 NACHHO Profile Data		
LHD Characteristic	**Intention to Participate in Accreditation within 2 years (n=409)**	**Intention to Participate in Accreditation in the future (n=415)**	**Completed or Initiated Accreditation Process (n=358)**	**Intention to Participate in Accreditation within 2 years (n=303)**	**Intention to Participate in Accreditation in the future (n=358)**
Any formal quality improvement	**0.18** (0.05)**	**0.2** (0.06)**	**0.12** (0.03)**	**0.28** (0.07)**	**0.27** (0.06)**
Number of Full Time Equivalent Employees (FTEs)	0.00001 (0.00002)	-0.00004 (0.00003)	**0.0001** (0.00002)**	**0.0002* (0.00008)**	**0.0001* (0.00007)**
Completed a community health assessment in the last 3 years	-0.07* (0.04)	**-0.088** (0.04)**	0.065 (0.03)	0.033 (0.056)	0.053 (0.05)
Local Board of Health with governing authority	-0.019 (0.05)	**-0.098* (0.05)**	**0.016** (0.035)**	**-0.013* (0.06)**	**-0.03* (0.06)**
Structural Governance Decentralized Centralized Shared	 Reference **-0.14* (0.08)** -0.05 (0.11)	 Reference **-0.28** (0.1)** 0.036 (0.1)	 Reference -0.012 (0.06) -0.035 (0.04)	 Reference -0.09 (0.15) 0.13 (0.09)	 Reference 0.016 (0.14) 0.1 (0.09)
Comprehensive Primary Care Provided by the LHD	-0.029 (0.08)	-0.046 (0.073)	0.005 (0.08)	0.12 (0.12)	0.09 (0.1)

Notes: Unstandardized beta coefficients (standard errors) presented. LHD is Local Health Department. Completed or Initiated Accreditation Process was determined if a LHD indicated having already achieved accreditation, submitted an application for accreditation, or submitted a statement of intent to pursue accreditation. Local Board of Health with governing authority was determined if a LHD indicated that any three of the following five characteristics were true of their local board of health's authority: can hire or fire the agency head, approves the LHD budget, can adopt public health regulations, sets and imposes fees, can impose taxes for public health. *p<0.1, **p <0.05

Principal Findings

In 2010 multivariate regressions

- Positive correlations were found between the *intention to apply for accreditation within the next two years* or the *future* and *conducting* any formal quality improvement
- Negative correlations were found between the intention to apply for accreditation and:
  - having conducted a community health assessment within the last 3 years (only with dependent variable of *intention to apply within the future*)
  - having a local board of health with governing authority (only with dependent variable of *intention to apply within the future*)
  - and having a centralized governance structure compared to a decentralized structure (both dependent variables).

Principal Findings

- Across all three 2013 dependent variables, positive correlations were found between the intention to apply for accreditation and:
  - Conducting *any formal quality improvement*
  - The *number of full time equivalent employee*
- Having a *local board of health with governing authority* was positively related to *completing or initiating the accreditation process* only.
    - In regards to indicating an *intention to participate within the next 2 years* or *in the future*, both were found to have a marginally significant negative relationship to *having local boards of public health with governing authority*

Discussion

- 2013 findings show that LHDs with formal QI programs were significantly more inclined to pursue accreditation in both the near term (next two years) or in the future.
- Recent completion of a CHA was negatively associated with intent to apply for accreditation, which may be related to concerns about the effort required to attain accredited status.
- LHDs in states that have centralized governance models were marginally less likely to report intention to participate in accreditation, which may be related to having less authority to make strategic decisions for their LHD.
- Additionally, LHDs with local boards of health that have governing powers were marginally less likely to report intention to apply for accreditation.
- There were no significant relationships between intention to apply for accreditation and provision of primary care.

Limitations

- Intent to apply for accreditation and the nature of QI within the LHD are both self-reported indicators that may be subject to social desirability bias.
- The LHD representative who completed the NACCHO profile survey may not be familiar with all aspects of LHDs plans and operations.

Conclusions and Implications for Public Health Practice and Policy

- Continued investments in developing and expanding QI capacity may increase the intent of LHDs to apply for accreditation.
- May be valuable to develop targeted outreach to local boards of health to facilitate a better understanding of accreditation and its benefits.
- Further research is needed to continue to examine the role of QI and the role other factors may play as the national accreditation program matures.