Measurement of a Public Health Department's Accreditation Readiness

Measurement of a Public Health Department’s Accreditation Readiness

Melanie Whittington¹, MS, Adam Atherly¹, PhD, & Lisa VanRaemdonck², MPH, MSW
¹University of Colorado Anschutz Medical Campus, Aurora, CO ²Colorado Association of Local Public Health Officials, Denver, CO

STUDY OBJECTIVE

Develop a reliable and valid survey that measures domains of local health department accreditation readiness.

BACKGROUND

- Accreditation improves and protects the health of the public by:
  • Improving quality of public health services
  • Standardizing public health activities
  • Stimulating continuous quality improvement
  • Encouraging local health departments (LHDs) to pursue accreditation is an ongoing national priority
- There are no current tools with established reliability and validity to measure LHD accreditation readiness

STUDY DESIGN

Survey of Local Health Departments (LHDs)

- 15 question survey that utilized a Likert scale with 5 responses (Strongly Agree to Strongly Disagree)
- LHDs in 3 states were surveyed
  • Colorado: 33 LHDs (61% response rate)
  • Kansas: 100 LHDs (100% response rate)
  • Nebraska: 20 LHDs (100% response rate)

Factor Analysis

- Responses were analyzed and grouped using a confirmatory factor analysis
- Method: maximum likelihood
- Rotation: oblique

Reliability and Validity Assessment

- Reliability assessed using Cronbach’s Alpha
- Validity assessed by comparing survey responses to responses from previously established instruments

FACTOR LOADINGS

<table>
<thead>
<tr>
<th>Factor Loadings</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support of Director</td>
<td>0.3478</td>
<td>-0.0464</td>
<td>0.4134</td>
</tr>
<tr>
<td>Support of Appointing Authority</td>
<td>0.1013</td>
<td>-0.0102</td>
<td>-0.1114</td>
</tr>
<tr>
<td>Support of Board of Health</td>
<td>-0.0618</td>
<td>-0.0396</td>
<td>1.0403</td>
</tr>
<tr>
<td>Community Health Assessment</td>
<td>0.091</td>
<td>0.076</td>
<td>-0.063</td>
</tr>
<tr>
<td>Community Health Improvement Plan</td>
<td>0.2717</td>
<td>0.2768</td>
<td>0.0408</td>
</tr>
<tr>
<td>Department Strategic Plan</td>
<td>-0.0579</td>
<td>-0.0265</td>
<td>0.034</td>
</tr>
<tr>
<td>Electronic Documentation</td>
<td>0.7862</td>
<td>-0.0856</td>
<td>-0.1654</td>
</tr>
<tr>
<td>Electronic Filing System</td>
<td>-0.0481</td>
<td>0.1434</td>
<td>-0.014</td>
</tr>
<tr>
<td>Process to Review Plans and Policies</td>
<td>0.2106</td>
<td>0.2574</td>
<td>0.121</td>
</tr>
<tr>
<td>Collaboration in Conduct of Work</td>
<td>-0.0782</td>
<td>1.0614</td>
<td>-0.054</td>
</tr>
<tr>
<td>Completed Initial Self-Study</td>
<td>0.7949</td>
<td>0.0032</td>
<td>0.0788</td>
</tr>
<tr>
<td>Implementation of Quality Improvement</td>
<td>0.4996</td>
<td>0.1512</td>
<td>0.0983</td>
</tr>
<tr>
<td>Secured Technical Assistance</td>
<td>0.1081</td>
<td>-0.0659</td>
<td>-0.1174</td>
</tr>
</tbody>
</table>

RESULTS

Factor Analysis

Identified 3 factors (Eigen value ≥ 1 & communality ≥ 0.1):

Initial Steps
- Electronic Documents
- Self-Study
- Quality Improvement

Processes
- Health Improvement Plan
- Process to Review Plans
- Collaboration in Conduct of Work

Leadership
- Support of Director
- Support of Board of Health

Variation explained by model: 36%

Reliability Assessment

- Average interitem covariance: 0.4533
- Scale reliability coefficient: 0.8127

Validity Assessment

- Initial Steps with Accreditation Intent: \( r = 0.57 \)
- Processes with QI Capacity: \( r = 0.50 \)
- Leadership with QI Staff Participation: \( r = 0.21 \)

IMPLICATIONS

- Efforts to increase the number of local health departments that are accredited will need to:
  • Focus on each dimension of readiness
  • Address different barriers for each dimension