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The Makings of an Evidence-Based Local Health Department: Identifying Administrative and Management Practices

Peg Allen
Prevention Research Center in St. Louis, Brown School, Washington University in St. Louis, pegallen@wustl.edu

Ross C. Brownson
Prevention Research Center in St. Louis, Brown School;Division of Public Health Sciences and Alvin J. Siteman Cancer Center, Washington University School of Medicine; Washington University in St. Louis, rbrownson@wustl.edu

Kathleen Duggan
Prevention Research Center in St. Louis, Brown School, Washington University in St. Louis, Katewduggan@gmail.com

Katherine A. Stamatakis
Division of Public Health Sciences and Alvin J. Siteman Cancer Center, Washington University School of Medicine, Washington University in St. Louis, stamatakisk@wudosis.wustl.edu

Paul C. Erwin
Department of Public Health, University of Tennessee, Knoxville, TN, perwin@utk.edu

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The Makings of an Evidence-Based Local Health Department: Identifying Administrative and Management Practices

Abstract

There is a gap in knowledge about how to best organize and administer practice in local health departments to implement sustained evidence-based policies, programs, and interventions. This report identifies administrative and management evidence-based practices to inform ongoing initiatives in local public health system quality improvement, accreditation processes, and performance. The article presents administrative elements in workforce development, leadership, organizational climate and culture, relationships and partnerships, and financial processes that local health departments can address at modest cost within a few years or less. Local public health systems can further identify, implement and evaluate evidence-based administrative practices.

Keywords

evidence-based practice, organization and administration, public health practice, quality improvement, translational research, public health services and systems research, phssr

Cover Page Footnote

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Introduction

There is now considerable evidence regarding effective public health policies, programs, and interventions (e.g., guidelines on what works in public health). However, there is less evidence on *how* to best organize and administer practice in local health departments (LHDs) to implement sustained evidence-based approaches, especially for injury and chronic disease prevention. This report identifies administrative and management evidence-based practices (A-EBPs) to inform ongoing initiatives in local public health system quality improvement, accreditation processes, and performance. To do this, public health researchers at the Prevention Research Center in St. Louis and the University of Tennessee abstracted 30 reviews from the scientific literature in public health and related fields to identify administrative practices associated with implementation, service quality, performance, or health. This article presents 11 modifiable administrative elements in workforce development, leadership, organizational climate and culture, relationships and partnerships, and financial processes that LHDs can address at modest cost in less than a year or within a few years. In-service training of public health administrators and staff; leadership skills, values, and communication of expectations; and extensiveness of inter-organizational partnerships are key. The main implications are for public health practitioners to identify, implement and evaluate A-EBPs locally in collaboration with applied researchers.

Methods

Evidence review articles published from January 2000 to March 2012 or in press in peer-reviewed journals were found primarily by searching electronic databases and hand-searching article bibliographies.[1] We developed a simple logic model to inform the literature search. The priority was reviews of findings from original empiric research studies that had quantitatively tested relationships between administrative practices and performance, quality improvement, or health. Through the Washington University Library System one author searched PubMed, Web of Science, Academic Search Premier, EconLit, Business Source Complete, PsychInfo, Social Work Abstracts, and ERIC. We screened titles, abstracts, and if needed, full text to determine relevance to local public health practice. Search terms included keywords and synonyms for administrative domains in combination with “performance” or “health”. We also checked our list of articles against the University of Kentucky’s public health systems research database. We hand-searched the Journal of Public Health Management and Practice titles from January 2009 through March 2012 issues to find studies too new for review articles. We summarized the 30 included reviews in a database

with 20 fields. The full team participated in synthesis of the evidence to identify locally modifiable micro-level A-EBPs.

Results

Table 1 shows A-EBPs that met criteria established by the authors to be labeled high priority: 1) association of administrative or management practices with performance, quality, health, implementation, or other dependent variables of interest in multiple original research studies; 2) association with a dependent variable of interest in one or more review articles; 3) micro-level administrative or management practices; and 4) local modification potential as deemed by the research team.[1] The identified A-EBPs were in the domains of workforce development, leadership, organizational climate and culture, relationships and partnerships, and financial processes.

In-service training of employees was a common and consistent finding, as highlighted in Table 1. This included multi-disciplinary training in several areas: analytic skills for evidence-based decision-making (EBDM), quality improvement processes, organizational and systems change, communication skills, use of technological innovations to access evidence-based interventions and promote free flow of information, and topic-specific skill-building such as preparedness and cancer control evidence-based interventions.

Leadership associations with performance and other dependent variables included: 1) leadership and middle management training; 2) support of directors and managers for EBDM and implementation processes; and 3) making decisions within a management team, by seeking employee input, or other participatory methods. Reviews from the fields of organizational behavior, implementation science, public administration, and public health identified leaders and middle managers as vital to the creation of organizational environments conducive to EBDM and implementation of innovations. Communication of expectations that staff will implement evidence-based approaches and that the organization values EBDM and learning were associated with use of information and implementation.

The extensiveness of LHD inter-organizational relationships and partnerships was also consistently associated with performance. Having a clear vision and mission for collaborative relationships was related to service delivery. Identification of best practices for partnership governance was beyond the scope of the present review.

Moderate-priority A-EBPs with evidence from at least one original research study (but not from any review articles) were also identified and will be reported elsewhere.[1]

Implications

It is time to turn our attention to *how* best to implement and sustain effective evidence-based strategies. Identification and application of A-EBPs in LHDs will support local public health system efforts in quality improvement, accreditation, and performance.[2-4] Today's economy and LHD budget cuts present challenges. Some of the recommended A-EBPs can be implemented at low cost, especially fostering a supportive organizational climate, and other organizations can be asked to help fund or provide training. Application of A-EBPs is intended to benefit the populations served by LHDs through sustained implementation of evidence-based programs, policies, and interventions. The Summary Box includes specific actions which practitioners, policy-makers, and researchers can take to apply the findings of this report. In addition, researchers and practitioners can draw from implementation science, organizational behavior, and related fields to inform next steps.[5] It is not yet known which of the recommended A-EBPs work best in small or decentralized LHDs and which are best suited for LHDs with centralized governance structures. Much can be learned in the future about which locally modifiable A-EBPs best support sustained implementation of evidence-based public health strategies in different types of LHDs when public health practitioners apply and evaluate the A-EBPs in collaboration with applied researchers.

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Summary Box

- Previous research has found local health department (LHD) or system performance is consistently positively associated with: a) LHD total expenditures; b) allocation of local resources to public health; c) number of LHD staff full-time equivalents; d) population size of the cities and/or counties served by the LHD; and e) having a health board as part of the LHD governance. These elements, while important, may require changes in governance structures, local tax laws, and funding streams.

- This report identifies administrative and management practices that LHDs can modify in a few years or less that are associated with performance, quality improvement, or implementation of evidence-based interventions. This review identifies locally modifiable elements in the five domains of workforce development, leadership, organizational climate and culture, relationships and partnerships, and financial processes.

- Implications for local and regional policy-makers are to fund higher education to train public health leaders in management practices, prepare future public health workers, support accreditation efforts, and help LHDs provide employee training.

- Implications for public health practice are that modest investments in training and capacity building of public health leaders and employees in our five domains of administrative practices may improve local public health practice quality and performance.

- Implications for research are that systematic and in-depth study of A-EBPs may be a fruitful way to improve local public health system quality and performance. Improved measurement of A-EBPs is a needed next step. Applied researchers can help LHD practitioners evaluate the impact of application of identified A-EBPs.

Table 1. High Priority, Locally-Modifiable Administrative Evidence-Based Practices

Domain	Evidence-based practice	Description	Time frame for modification[a]
Workforce development	Employee Training	• Training in quality improvement or evidence-based decision making • Training in organization and systems change Training in communicating and collaborating with employees from multiple disciplines • Training in skills needed to perform essential public health services and usual job responsibilities	Short
	Access to technical assistance	• Access and use of knowledge brokers[b] • Use of process improvement activities (e.g., accreditation, performance assessment) • Face-to-face meetings to share lessons, compare experiences, and provide updates	Short
Leadership	Skills and background of leaders	• Leadership skill development • Leadership experience • Quality of leadership • Leadership influence • Manager competency to manage change	Short to medium
	Values and expectations of leaders	• Leadership support of quality improvement, national performance standards, evidence-based decision making, innovation, accreditation • Intention to hire well-educated, experienced staff including specialists (e.g., lab scientists, epidemiologists, environmental health professionals, financial systems experts)	Short to medium
	Participatory decision-making	• Broad participation among the management team • Leaders and middle managers seek and incorporate employee input • Non-hierarchical decision-making	Medium

Organizational climate & culture	Access & free flow of information	• Communication flow • Tailored messaging for evidence-based decision making • Employee performance reviews geared to evidence-based practices and with extensive feedback • Ready access to high-quality information	Short
	Support of innovation & new methods	• Leadership/management and employee training in evidence-based decision making that includes new methods • Employees perceiving that management supports innovation • Conscious creation of environments conducive to innovation • Organizational capacity to both do usual activities and innovate	Short
	Learning orientation	• Employees agree that supervisors value learning and research evidence • Project management teams that encourage communication & collaboration • Presence of multidisciplinary, diverse management teams	Short to medium
Relationships & partnerships	Inter-organizational relationships	• Build and/or enhance partnerships with schools, hospitals, community organizations, social services, private businesses, universities, law enforcement • Cooperative agreements with state and/or local health departments quality improvement	Medium
	Vision & mission of partnerships	• Clear vision and aligned mission of partnerships • Capacity building over time among partners	Medium
Financial	Allocation & expenditure of resources	• Outcomes-based contracting • Resources allocated for quality improvement, evidence-based decision making, innovation, information access, training and implementation • Diverse funding sources	Medium

[a]Time frame definitions: short = less than 1 year; medium = 1-3 years

[b]A knowledge broker is defined as a masters-trained individual available for technical assistance.