

## **I. INTRODUCTION**

Accreditation of public health agencies is of national significance and historical importance. It is described as a potential solution to some fundamental public health problems, an energizer for public health capacity, and a catalyst to promote quality improvement (QI) within public health agencies (Turnock and Handler, 1996). In August 2006, the Exploring Accreditation Steering Committee, a 25-member national committee with representatives from local, state, federal, and the governance arms of public health organizations, proposed the development of a national voluntary public health accreditation program for state and local public health agencies (Exploring Accreditation Project Steering Committee Final Recommendations, 2006).

Efforts to implement this proposal are now well underway. A Public Health Accreditation Board (PHAB) was incorporated in 2007 and has begun the development of a national voluntary accreditation program that will take its first applications in 2011. In the meantime, several states, including Illinois, are exploring their own options for public health agency accreditation. In 2007, the Illinois Accreditation Task Force (IATF) led the development of and piloted a state-based voluntary accreditation program entitled the Illinois Voluntary Accreditation Pilot Project. Seven Illinois local health departments (LHDs) participated in the pilot program.

The knowledge gleaned from the Illinois Voluntary Accreditation Pilot Project may have implications for further development of an Illinois state-based voluntary accreditation program and be applicable to PHAB's national voluntary accreditation program. Both PHAB and IATF are in the program development stages and are designing accreditation as a tool to promote QI. Efforts to promote QI methods in public health are independent of, but intricately linked to

accreditation. If accreditation is perceived and implemented as a QI approach, it could be a catalyst for instituting QI methods throughout public health agencies nationwide. Furthermore, whether with a state or national focus, accreditation is new to most public health agencies. Understanding why public health agencies may choose to participate in a voluntary accreditation program could reveal important information to help better prepare and encourage future applicants, and help shape the program's success as a QI strategy.

This study assesses the perceived and empirical differences between the Illinois LHDs that participated in the Illinois Voluntary Accreditation Pilot Project and those that did not. The purpose of this study is to identify factors contributing to the decisions of LHDs to participate in the pilot accreditation process. The study's intent is to provide an increased understanding of why LHDs may choose to participate in accreditation, including the extent to which QI aspirations contribute to these decisions.

## A. **Background**

### 1. **Disarray of the public health system**

Public health's impact on the health status of Americans during the last century was remarkable. Successes such as the eradication of smallpox, environmental health quality controls like restaurant inspections, and policy efforts including mandated seat belt use contributed to a 30-year increase in life expectancy over the course of the twentieth century (Centers for Disease Control and Prevention, 1999). Bunker et al. (1994) attribute 25 of the 30 years of life gained to advances in public health. While years of life gained due to public health related interventions were many, the cost of public health efforts was only a small fraction of overall health expenditures. In 2000, only 3.4% of the \$1.3 trillion spent for health care in the

United States was for public health services (both population-based services and personal healthcare services) (Turnock, 2004, p. 265).

Despite its positive impact on health status, reports and events of national significance revealed that in the latter part of the 20th century the public health system was in disarray. In 1988, an Institute of Medicine (IOM) report called for the reorganization of, and new approaches to, rebuilding what was then a crumbling public health infrastructure (IOM, 1988). The 1993 Clinton health care reform agenda and Health Security Act, however, did little to place public health on the national health agenda. The Year 2000 National Health Objectives, calling for 90% of the population to be served by an LHD that was effectively addressing public health's core functions, was dropped due to lack of data; some reports found minimal progress toward this objective (Turnock and Handler, 1996).

Reasons given for public health's troubles were many. The 1988 IOM Report cited ten barriers to "effective problem solving in public health," including lack of consensus on the content of the public health mission; inadequate capacity to carry out the essential public health functions of assessment, policy development, and assurance of services; and poor public image of public health, inhibiting necessary support (pp. 107–8). Issues identified by the IOM report were further complicated by the complexity of the public health system, which encompasses many entities, including local, state, and federal public health departments; academia; and other agencies that support prevention work, such as not-for-profits, community-based health centers, and hospitals.

At the local level, the variability of the public health mission and services provided is exhibited by the uniqueness of individual health departments; each has distinctive characteristics of the population, geography, politics, history, and other environmental factors reflecting the

community it serves. This diversity is simultaneously an asset to providing community-specific interventions and a barrier to developing a common understanding and measurement of the impact of public health practice.

Despite little consensus as to the reasons, it was clear by the early 1990s that public health agencies needed to articulate a uniform mission and find ways to build upon and improve their infrastructure. Practitioners and researchers sought to define public health and measure its performance as a way to demonstrate the need for additional attention and resources.

## 2. **Public health's response and the role of accreditation with a quality improvement focus**

Shortly after the publication of the 1988 IOM report, efforts to improve and strengthen public health began to address some of the barriers identified in this report. Turnock and Handler (1996) made one of the first cases for public health agency accreditation as a potentially useful response. These authors suggested that a national program that accredits local and state health departments could energize public health capacity building, help to promote standardization and widespread adoption of public health reform programs, clarify the purpose of public health, and unify the mission of public health within the field itself. Moreover, accreditation could address several of the concerns about the public health system described in the 1988 IOM report.

Another strategy undertaken to improve agency performance was to promote QI techniques within public health agencies. Public health lacked a comprehensive system for performance improvement—how to identify and prioritize, align resources, and adjust programs or policies to meet benchmarks and goals (Landrum and Baker, 2004). In partial response, the

Robert Wood Johnson Foundation (RWJF) funded the Turning Point Performance Management Collaborative to produce one of the first public-health-based models for conducting QI within a performance management system. The system was a means to help promote an integrated, balanced, and cohesive management model for improving public health practice and ultimately community health (Landrum and Baker, 2004). QI continues to be a primary strategy to improve public health practice today.

While efforts to promote QI in public health agencies were separate from the accreditation movement, accreditation of public health agencies began with a QI focus. In August 2006, a 25-member Exploring Accreditation Steering Committee, including state and local health officials, academia, and representatives from five national public health agencies (American Public Health Association, Association of State and Territorial Health Organizations, Centers for Disease Control and Prevention [CDC], National Association of County and City Health Officials [NACCHO], and National Association of Local Boards of Health), released recommendations for a national voluntary public health accreditation system as a method to promote QI. Later that same year, RWJF funded the development of a Multi-State Learning Collaborative (MLC) to promote state and local public health agency accreditation and QI systems.

In 2010, the MLC effort is in its third funding cycle, and the recommendations of the Exploring Accreditation Steering Committee are being implemented by PHAB with a goal of having a national voluntary accreditation program in place by 2011. As a recipient of MLC funds, Illinois has developed a pilot voluntary, QI-focused, accreditation program that was implemented in the late summer and early fall of 2007. That program is the focus of this study.

## B. **Statement of the Problem**

Accreditation has been described as a key strategy for strengthening the public health infrastructure and is seen as a bold step for public health to solidify its professional standing and increase its efficiency and effectiveness (Exploring Accreditation Project Steering Committee Final Recommendations, 2006). It is vital for the program to succeed, as many public health leaders have placed great importance on accreditation as a tool to promote QI in order to achieve these goals. One of the first steps is ensuring that public health agencies participate in an accreditation program with a QI focus.

Results of NACCHO's LHD 2008 Profile indicated that only 54% of respondents agreed or strongly agreed that their LHD would seek accreditation in an unspecified time period; 38% of these positive respondents indicated that they intended to seek accreditation within the first two years of the program (N = 343). Little is known about why a public health agency might decide to participate in accreditation. A review of the literature suggests that there are three major factors that may contribute to the decision to participate in an accreditation program: (1) an agency's perception of accreditation's value; (2) resources needed to undertake an accreditation process; and (3) the influence of leadership on the decision process. These factors can serve as facilitators or barriers to participation in an accreditation program.

The first of these factors, assessing accreditation's value, may be important to the success and sustainability of the overall program. An applicant agency may be most likely to participate when it views accreditation as a QI opportunity rather than a regulatory burden; when the perceived benefits of program participation outweigh the costs; and when there is external pressure to participate in the program. Still, for voluntary public health accreditation, the value of accreditation may be difficult to determine.

One of the stated benefits of public health agency accreditation is that the process will help lead to QI within the agency. However, demonstrating actual performance improvement from an accreditation process presents challenges. Evaluation of accreditation's success is difficult; few programs can actually demonstrate that accreditation results in improved performance and health outcomes (Joly et al., 2007). In addition, the process of voluntary public health agency accreditation is still under development. This lack of clarity on the "how to" of accreditation may make it difficult not only to see how well the process leads to QI but also to determine the costs of participating in the program.

Cost may be a second factor in deciding whether to participate in an accreditation program. An applicant agency must determine whether it has sufficient resources to participate, assess the risks in participating (given the possibility of a poor outcome), and judge whether the overall program benefits are worth these costs and risks. Costs associated with accreditation programs include both the resources needed to prepare for accreditation (e.g., training staff, updating policies and procedures) and the upfront funds to pay for the application fees associated with the accreditation survey itself. New accreditation programs, and agencies new to the process, may experience additional costs due to program setup (Mihalik et al., 2003). One of the risks of participating in the process includes the possibility of not meeting accreditation standards. A poor accreditation assessment could lead to low staff morale, increased costs to address shortcomings, and overall poor public perception that may impact funding (Shaw, 2004).

The costs and risks of a new accreditation program may be a major barrier to participation, as public health agencies are already notoriously underfunded. Decisions on resource allocation are likely to include an analysis of whether resources used to participate are worth the benefits. Without clearly defined and proven benefits and without knowledge of the

extent of resources needed to participate and of possible risks with unknown consequences, deciding to participate in a public health accreditation program could be difficult. LHDs may not want to risk dedicating already limited funding to a program that is not necessarily going to lead to a positive outcome.

To offset the costs and possible risks that might be involved in accreditation, a successful accreditation process should provide sufficient incentives. This includes a consideration for how under-resourced and disadvantaged agencies that may gain the most benefit from the process can participate (Mays, 2004). It has already been demonstrated that higher performing LHDs have higher organizational capacity (Scutchfield et al., 2004); as such, higher functioning agencies may be more likely to participate in a voluntary accreditation program. Knowing how an LHD's capacity impacts the decision to participate could help guide both state and national accreditation programs' consideration for incentives in general, and especially toward agencies with fewer resources.

A third factor in the decision to engage in an accreditation process may include leadership. Leaders must have knowledge of both accreditation and QI to help prepare the organization, champion the process, and motivate and organize staff for an accreditation assessment. The crucial involvement of leaders in setting up and sustaining a QI system is also well documented (McLaughlin and Kaluzny, 2006). Ultimately, it is the agency leader who will most likely make the decision to participate in accreditation and QI. Knowing the role of leadership in this decision process may reveal ways to market accreditation and QI programs; there may be a need to pay attention to different leadership characteristics as well as to provide training to leaders with insufficient experience and knowledge of the accreditation and QI processes.



To date, the majority of research about public health accreditation has been directed to the accreditation program itself, not how the program is perceived and implemented within local public health agencies (Tremain et al., 2007). Less emphasis has been placed on the LHD experience, while past practice would suggest that considering the LHD experience is important (Handler and Turnock, 1997). If public health accreditation is to be a change agent for public health departments, there is much that can be learned from its implementation at the local level. The purpose of this study is to explore factors that influence the decision of an LHD to undertake accreditation. A proposed conceptual model based on the literature review in chapter 2 provides an initial framework for considering what factors impact an agency's decision to participate in accreditation.

### C. **Research Questions**

The central question of this exploratory study is to determine the factors that influence the decision of LHDs to undertake accreditation. The proposed conceptual framework in chapter 2 incorporates three key concepts from the theoretical and practice-based literature—an LHD's perceived value of accreditation, its capacity, and its leadership—that are used to guide the study. The research questions outlined below address these key concepts and ask how each may have affected the decision to participate in the Illinois Voluntary Accreditation Pilot Project.

#### 1. **Research Question 1**

How does an LHD's perception of accreditation's value influence its decision to participate?

- a. What are the differences in participant and nonparticipant LHDs' perceived value of accreditation?
- b. Do LHDs perceive accreditation as a process for QI?
- c. What value perceptions serve as facilitators or barriers to participating in accreditation?

2. **Research Question 2**

How does an LHD's capacity influence its decision to participate in accreditation?

- a. What are the differences in participant and nonparticipant LHDs' capacity?
- b. How does capacity facilitate or impede participation in accreditation?

3. **Research Question 3**

How does an LHD's leadership influence its decision to participate in accreditation?

- a. What are the differences in leadership between participant and nonparticipant LHDs?
- b. Which leadership factors drive the decision to participate in accreditation?

D. **Significance of the Study**

Exploring why LHDs decide to engage in an accreditation program begins to address several research and practice problems. Research on voluntary public health agency accreditation

is limited. Voluntary public health agency accreditation is relatively new to most LHDs and little guidance exists for how to prepare and what resources it will take to participate. This study not only contributes a timely and real reflection of the ground-level status of accreditation in public health, it also responds to the need for additional research to further define and clarify why LHDs may participate in voluntary public health accreditation.

Other studies have reported on programmatic lessons learned from the MLC experience, focusing mostly on the accreditation program itself (Brewer et al., 2007). Only a few local and state health departments have participated in voluntary public health accreditation programs to date, and little is known about why a public health agency might participate in a voluntary accreditation program. Factors contributing to the decision to participate in accreditation have only been hypothesized. Three factors have been identified from the literature and are explored here to contribute an in-depth description of who may participate in accreditation.

On a practice-based level, this study's findings may contribute to the development of a voluntary public health accreditation program as well as guide local public health preparedness for accreditation. This study examines current understanding of possible benefits of accreditation and ways to promote accreditation as a QI process. The various committees and workgroups of PHAB are currently developing a national voluntary accreditation process. Local and state health departments across the United States are implementing their own approaches to accreditation. If public health agencies plan to use accreditation as a means to strengthen their infrastructure, consistent approaches with a common purpose may improve program outcomes. Study results may shed light on current perceptions of accreditation at the local level and how these perceptions may have impacted one state's voluntary accreditation program.

In addition, understanding the “how to” of voluntary public health accreditation may be important to its success in leading to QI, and may result in LHDs considering participation in a voluntary accreditation process in the near future. Guidance on preparing for and executing the process will likely be needed for the national program rollout in 2011. This study may provide insights that can assist LHDs in assessing their readiness to undertake accreditation based on the experience of the Illinois Voluntary Accreditation Pilot Project. Additionally, lessons from this study may help guide LHDs in other states.

E. **Summary of Chapter One**

This chapter has described why accreditation is one important strategy to help public health agencies measure and enhance their work. Voluntary public health accreditation programs have been initiated at the national and state level, with a national voluntary program set to begin in 2011. Little research has been conducted from an LHD perspective to obtain a better understanding of why certain LHDs are interested in accreditation. The Illinois Voluntary Accreditation Pilot Project was one of the first in the country to develop a state accreditation program. This study will explore how 14 LHDs’ perceptions of accreditation’s value, their capacity, and their leadership contributed to the decision to participate in a voluntary program.

## **II. LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK**

The goal of this chapter is to present a literature review to facilitate the development of a conceptual framework for considering what factors may impact LHDs' decisions to participate in voluntary public health accreditation. The literature on accreditation and QI in both non-public health and public health fields is a starting point for proposing a conceptual model that will be applied to LHDs using a mixed-methods approach. Conceptual frameworks help to illustrate major themes found in the literature and help to address the research questions (Teddle and Tashakkori, 2009). The chapter has two sections. Section A consists of the literature review, while Section B describes the initial proposed conceptual model.

### **A. Literature Review**

The literature review presented here contributes to understanding the dimensions of accreditation and QI, focused primarily on the health and medical field. Accreditation and QI are relatively modern concepts; the literature on defining, designing, and implementing accreditation is limited and focused mostly on practice-based elements, such as guidance on how to position and accomplish accreditation. QI literature has roots in organizational behavior. Its implementation is separate from but often related to accreditation. Public health's adaptation of accreditation began with a QI focus; however, QI in public health is an independent strategy.

#### **1. What is accreditation?**

Accreditation programs have developed mostly in the last half-century, although efforts to create accreditation-type standards and processes have their roots in the late 1800s.

One of the earliest accreditation efforts began in 1870, when the United States Bureau of Education, by defining educational standards to distinguish “quack” programs from “professional” programs, published a list of all colleges and universities authorized by the states to grant degrees (Pinkam, 1955). Today, accreditation programs are present in many health, social, and public services; many private sector industries have or are considering a program. Public health organizations are notable among entities in the health sector in not having a formal accreditation program.

Accreditation is generally defined as a conformity assessment process where organizations define standards of acceptable operation/performance and measure compliance with these standards (Hamm, 2007, p. 4). Accreditation often includes basic steps that are repeated every three to five years. Agencies must complete an application containing descriptive information about the organizational structure, governance, history, and the scope of services offered by the applicant, and conduct a self-assessment that provides an internal appraisal of the organization’s degree of compliance with core standards of practice as established by the accreditation program. Representatives from the accreditation program conduct a site visit to verify results from the self-assessment and assess other elements of organizational performance. Finally, members of the site-visit committee score results from the assessments using established criteria and determine the accreditation status of the applicant (Mays, 2004).

## 2. **Factors that impact participation in an accreditation program**

Reasons for development of an accreditation program range from improving service quality and standardizing service offerings to improving the competitiveness of the service industry and insulating the field from political influence (Mays, 2004 p. i). No matter the

reason, program success and sustainability is largely defined by program participation (Shaw, 2004). As the public health community develops state-based and national accreditation programs, there are lessons from healthcare, social services, and private industry that may suggest factors that encourage or inhibit participation.

There are numerous reported benefits to participating in an accreditation program, mostly focused on improvements to process and administrative elements in the organization. Accredited agencies state that advantages to participation in an accreditation program include increased attention to performance standards; improved team work and internal cohesion; provision of staff training; lower staff turnover; and development, standardization, and internal consultation on clinical and administrative procedures (Mays, 2004; Shaw 2004). Other benefits include opportunities to raise an institution's image in the community and to attract purchasers and personnel (Shaw, 2004).

Health outcomes linked to accreditation are particularly difficult to demonstrate, but non-accredited medical sites have been shown to have higher mortality rates than accredited sites. Chen et al. (2003) found that some nonaccredited Joint Commission on Accreditation of Healthcare Organizations (JCAHO) hospitals were less likely than accredited hospitals to give aspirin and beta-blockers and acute perfusion therapy to patients. Nonaccredited hospitals also had higher 30-day mortality rates than accredited hospitals. However, these authors note that there is considerable overlap between accreditation categories, and even between hospitals that had received conditional accreditation or even nonaccredited hospitals. More recently, Lutfiyya et al. (2009) found that accredited rural hospitals scored significantly higher than nonaccredited hospitals on quality care indicators related to acute myocardial infarction, heart failure, pneumonia, and surgical infection.

Most reported benefits of accreditation are process oriented, as minimal research data exist on the actual impact of accreditation on health outcomes or the costs and benefits of accreditation programs. The impact and effectiveness of accreditation programs are not easily documented for several reasons. Research that is conducted is subject to major flaws, including, but not limited to, selection bias due to high-performing organizations disproportionately entering the accreditation program. In addition, the impact of accreditation programs is not well researched. Few studies have been conducted to explore the relationship between the accreditation program, performance improvement, and improved outcomes. Measuring change in long-term outcomes attributable to an accreditation program requires expensive longitudinal studies (Shaw, 2004; Mays, 2004).

Inability to demonstrate benefits from participating in an accreditation program that go beyond administrative improvements may be a barrier to program uptake and sustainability. Accreditation programs that are successful have a clear and realistic purpose with an accreditation process that leads to the intended outcome (Shaw, 2004). Few agencies are likely to participate in accreditation programs that tout improvement in outcomes that cannot be proven, or when outcomes to program participation are unclear. In addition, programs that focus on objectives of improvement within an overall policy for quality rather than regulation are more likely to succeed (Shaw, 2004). Moreover, having a clear understanding and perception of an accreditation program as one that promotes QI may contribute to increased program participation.

Uptake of an accreditation program also hinges on whether an agency perceives that the incentives and benefits outweigh the costs and risks of participation (Morrissey, 2004; Cross, 2003). Cost to participate in an accreditation program is one concern to applicants, especially for



new applicants that have no previous experience with an accreditation program. There are two main categories of cost associated with accreditation.

The first cost category is associated with the preparation stage, in which the applicant organization builds capacity to comply with accreditation standards. Capacity includes but is not limited to having leadership support; staff who are knowledgeable about accreditation and QI and dedicated to the process; and staff time needed to bring policies, procedures, and quality systems up to the established standard. Having a sufficient information technology system before beginning the process is also important in order to facilitate the collection, centralization, and documentation of evidence on how accreditation standards are met (Mihalik et al., 2003; Cross, 2003).

The second cost category is associated with the survey itself, including survey fees, preparation of materials, and coaching the staff (Mihalik et al., 2003). Time to prepare for an accreditation process is usually underestimated. In Canada, for example, preparation time for an external assessment process was estimated to be four times the cost of the external survey process itself (Shaw, 2004).

Cost is a factor in assessing not only whether participation is worth the resources put into the program, but also whether an agency has sufficient resources to even consider participating. Mihalik et al. (2003) argue that substantial capacity beyond what is required to conduct normal operations is needed to participate in an accreditation process. Preparation and costs associated with the process itself assume that organizations have flexible funds to dedicate and put up-front for the process. Moreover, organizations that have preexisting high capacity may be more likely to participate in accreditation. Brasure et al. (2000) reported that cost was the primary reason

why rural hospitals were much less likely than their urban counterparts to pursue JCAHO's accreditation.

Other risks involved in the decision to participate go beyond costs. Disincentives to participate may also include "poor outcomes including sanctions for shortcomings, loss of staff morale if denied accreditation, misuse of performance data, and gaining accreditation and then losing it when standards get more demanding" (Shaw, 2004 p. 21). Agencies approaching accreditation must be confident that they have enough resources to participate and that their activities meet and can sustain the accreditation standards.

Accreditation programs often acknowledge the costs and risks of participation by providing sufficient incentives to overcome perceived barriers. Incentives come in a variety of forms, although most focus on expanded funding and business opportunities. In a review of health and social sector accreditation programs, Mays (2004) found that the "strongest incentives for accreditation achieved the highest rates of adoption within their service industries"—incentives that included expanded funding and business opportunities (p.10).

Despite the measurement and cost barriers to accreditation, accreditation programs thrive. The decision to participate is ultimately one that the agency leader makes. Leaders and managers play a key role in an accreditation process by championing the agency's accreditation application. As agency leadership is ultimately responsible for addressing agency performance, the leader must weigh the positives and negatives about the decision to participate in accreditation; have the knowledge and skills to lead the process in order to determine if accreditation is feasible; be able to motivate his/her staff and prioritize their work in order to participate; and to focus on improvement and performance (Shaw, 2004).

There may be several reasons for a leader's decision to participate in voluntary accreditation. First, leaders often face strong pressures by staff, board members, consumers, or other constituent groups to respond to an organizational program, to improve the quality and value of services produced, and/or to expand the viability and competitiveness of the industries as a whole with few promising alternatives for responding to the problem (Mays, 2004, p. 1). Second, measuring and demonstrating results is one of the big questions of the last two decades, and many organizations have been working to define and quantify what strategies lead to the best outcomes (Behn, 1995). Accreditation may be one solution to measure an agency's work next to a field standard and move toward QI (Mays, 2004; Mihalik and Scherer, 2000).

### 3. **The role of quality improvement in accreditation**

While accreditation is defined as a process for organizations to assess their performance against a set of standards, the impetus behind many accreditation programs is to promote QI (Hamm, 2007; Flanagan, 1997). Accreditation programs and QI grew alongside each other as the concept and science of QI emerged steadily over the past century.

Use of QI within an organizational context stems primarily from the early- to mid-20th century industrial boom and demographic shift to urban areas, resulting in a demand for increased quantity and quality of products. QI methods began with a process of evaluating the production line in a piecemeal approach using data to drive managerial decisions, and finding solutions focused on structural reorganization (Taylor, 1911). The evolution of QI moved from what was a heavy focus on one aspect of production to one in which data should be gathered and analyzed from the entire production process on an ongoing basis. Further refinement of QI methods included development of system-based models for integrating QI at the organizational

level while also integrating it at various points throughout the production process and consideration of how culture and employee attitudes impact QI efforts (McLaughlin and Kaluzny, 2006).

Today, QI is defined as an organizational process for evaluating and adapting to the ever-changing needs of the customer. Conducting QI has philosophical and structural elements. Moreover, successfully undertaking QI “cannot occur without both an institutional will and professional leadership” (McLaughlin and Kaluzny, 2006, p. 7). It is simultaneously a managerial philosophy and management method that requires a culture of support for improvement throughout the organization (e.g., a strategic and customer-driven focus, promotion of organizational learning, and continuous improvement) and mastery of the tools needed to make the necessary changes to assess and meet customer demands (e.g., use of QI tools including flow charts, cause-and-effect diagrams, histograms, benchmarking, and staff dedicated to QI).

Successfully undertaking QI requires that QI elements are integrated into the organization and that the organization has the necessary capacity to support ongoing improvement. Activities leading to QI usually require an organization to have a strategic plan with a clear QI focus; leadership support and participation; provision of staff training; mechanisms for selecting improvement opportunities; formation of process improvement teams; staff support for QI process analysis and redesign; and personnel policies that motivate and support staff participation in process improvement (McLaughlin and Kaluzny, 2006).

Benefits of implementing QI principles, whether focused on a program or organization, are reported to be many, including increased profits, employee satisfaction, cost savings, and some health outcomes (McLaughlin and Kaluzny, 2006). Calculating costs of conducting QI

activities includes weighing the costs of poor quality versus the costs of conducting QI activities. Attributing costs directly to QI is difficult, as each institution uses different approaches depending on the culture of the organization and customer demand. For example, in a survey of four acute care hospitals, total reported costs for inpatient QI ranged from \$2 million to \$21 million (Chen et al., 2009).

Accreditation and QI are intertwined yet distinct processes. Like accreditation, QI programs often emerge from customer pressure for increased quality, or from an external pressure to improve efficiency, effectiveness, and quality within the organization. Accreditation, however, is a formal recognition at one point in time acknowledging that an organization has met a specified set of standards, whereas QI is an agency-wide or even program-specific process to *continually* review and promote quality. While many accreditation programs exist with the intent to promote QI, QI initiatives do not require, and many argue should exist before, an accreditation process is in place (Hamm, 2007; Baker et al., 2007).

Leadership is key to ensuring the design and implementation of QI processes before an accreditation process begins (Hamm, 2007), and is vital in change management initiatives such as QI (Bryson, 2004; Kotter, 1996; Vinzant and Vinzant, 1996; Denhardt, 1993). Many quality-based programs such as the Malcolm Baldrige National Quality Award require demonstration that leadership promotes key principles needed for QI activities to occur, including, but not limited to, how leaders implement strategic planning efforts, communicate with the workforce, encourage high performance, consider accountability, address legal and ethical behavior, involve key communities, and contribute to community health (Baldrige National Quality Program, 2010). Guidance on instituting QI within an organization almost always highlights that having leaders with QI technical expertise and involvement in the development and maintenance of and

commitment to QI systems is vital to ensuring the success of a QI program (Beecroft et al., 2003).

While leadership is emphasized as vital to implementing and sustaining QI, measuring and understanding leadership's influence on QI initiatives is not well researched. Much of the existing literature on the relationship between leadership and QI is based on consultant or personal experiences (Øvretveit, 2005). Leadership characteristics cited as important to initiating and sustaining QI include but are not limited to the following characteristics.

First, leadership's knowledge of QI and change management process is important. Implementation of QI requires leaders' technical knowledge of the various QI techniques and the ability to apply the appropriate techniques in diverse settings while simultaneously promoting a culture of improvement (McLaughlin and Kaluzny, 2006; Beecroft et al., 2003).

Second, experience as an administrator and tenure in a leadership position can impact the ability to successfully implement a QI effort. A leader's experience as an administrator contributes to how well the leader can analyze organizational problems, understand and balance options, be comfortable in motivating and incentivizing employees to complete the task, and demonstrate self-confidence in implementing change management techniques such as QI (Fredericksen and London, 2000). QI also works best when there is continuity in leadership and not a recent leadership change (Vinzant and Vinzant, 1996).

Third and finally, the ability to adopt and promote innovation within the organization is another hallmark leadership characteristic that may help to promote QI efforts. Organizational improvement is undertaken and sustained when leaders are able to set and constantly reevaluate the vision of the organization, and are able find ways for mobilizing the organization to implement the vision (Beecroft et al., 2003). Adoption of accreditation with a QI focus may be

perceived by leaders as an innovative way to help implement the organization's vision and promote improvement within the organization.

#### 4. **Public health accreditation with a quality improvement focus**

Over the past two decades, the public health practice community has been wrestling with a number of issues that a voluntary national public health accreditation program may be able to address. These include the lack of consensus as to the definition of public health and a common set of standards by which to measure public health agencies' efforts. The purpose behind voluntary accreditation is to promote QI within public health agencies as a means to assess and enhance public health agency activities.

Responding to the 1988 IOM report on the plight of public health, efforts to define, measure, and improve the public health system have included the following: articulation of public health standards and measures (Bakes-Martin et al., 2005; Lenihan et al., 2007); design of a conceptual model of a public health system (Handler et al., 2001); creation of performance measurement and assessment tools (Handler and Turnock, 1997); provision of performance management guidance (Liachello and Turnock, 1999; Landrum and Baker, 2004); and creation of planning processes to help public health build its capacity (Turnock et al., 1995; Lenihan, 2005). These initiatives have helped to promote the development of QI and accreditation models for the public health communities.

The voluntary public health accreditation movement is relatively new, but efforts to define and measure the efforts of public health date back nearly 90 years (Handler and Turnock, 1997). Accreditation in public health was first officially proposed in 1996 by Turnock and Handler as a means to develop a national program that would formalize and integrate what many

of these activities attempted to achieve. Their recommendation led in part to a movement to develop an accreditation program. Ten years later, in 2006, the Exploring Accreditation Steering Committee recommended that a national voluntary accreditation program be developed. Implementation of the recommendations began quickly with the formation of PHAB in 2007, which took on the task of developing a national voluntary public health accreditation program for state and local health departments by 2011.

Unlike many other accreditation programs that began more as a compliance review and evolved into promoting QI, voluntary public health accreditation is being developed with a QI focus from the beginning. As noted above, QI and accreditation emerged alongside but independent of one another. In addition, principles and practices of public health have some inherent similarities to QI. Public health practice and QI use a system perspective to identify problems and develop interventions. Both are firmly grounded in scientific methods that allow the measurement of problems and tracking of system performance; both also reflect the desire to meet customer or community needs (Mays and Halverson, 2006, p. 358).

The public health research and practice community has spent fifteen years working to develop specific QI capacity. One of the first targeted efforts to promote a public health specific QI process was the Turning Point Performance Management Collaborative funded by RWJF in the late 1990s. The Collaborative produced a series of tools to promote understanding and implementation of performance management, including QI, within public health agencies. In addition, the Public Health Foundation (PHF) and its national partners from American Public Health Association, CDC, Association of State and Territorial Health Organizations, and



NACCHO have supported multiple QI activities and resources over the past ten years, such as those found on the PHF website.<sup>1</sup>

Local public health agencies' use of QI has undoubtedly advanced in recent years due to the aforementioned efforts. According to the most recent NACCHO LHD Profile (2008), 55% of LHDs out of 447 surveyed participated in a formal performance improvement activity in the last two years. Adoption of a national accreditation system that promotes QI would help serve as a catalyst to improve QI implementation. To help promote QI and its link to accreditation, one primary initiative is the RWJF- funded MLC. The MLC is a three-phase multi-year opportunity to develop accreditation programs and support QI opportunities. The MLC program funded several states, including Illinois, which received funds to explore the development of a state-based accreditation process, providing the backdrop for the data used in this thesis.

#### 5. **Factors that impact participation in a public health accreditation program with a quality improvement focus**

Designing a voluntary accreditation program with a QI focus requires careful planning so that the process of accreditation leads to the intended results and is not left up to chance alone (Baker et al, 2007). Resources and processes for both QI and accreditation need to be in place for a successful QI-focused accreditation. Elements of both these processes were outlined in the accreditation and QI literature. For a new accreditation program, authors note that several key factors are important to ensuring the program is a success (Shaw, 2004; Mays, 2004). These include: (1) perception of the accreditation program as a QI initiative rather than a regulatory one, and perception that the costs and risks of participating do not outweigh the

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<sup>1</sup> The PHF Website Performance Management and Quality Improvement Resource page is located at: <http://www.phf.org/pmqi/resources.htm#authorsfeatured>.

benefits; (2) external pressure and stakeholder support to participate in the program; and (3) organizations have sufficient resources and support to prepare and participate in the accreditation process. A QI-focused accreditation program also should include implementation of QI prior to undertaking the accreditation process. This requires that the agency leadership, management, and staff have the appropriate knowledge, and there should be a culture of continuous improvement coupled with the technical knowledge to participate.

These general factors play out similarly in the public health practice community as agencies develop and prepare for a QI-focused accreditation program. Intended benefits of a voluntary public health accreditation program are to promote QI that leads to both short- and long-term outcomes. In the short term, public health agencies will be increasingly responsive to community priorities, will more effectively and efficiently use resources, and will have strengthened organizational capacity. Longer term, there will be an overall strengthened public health system, improved community health indicators, increased public investment in public health agencies, and increased public recognition of public health's role and value (Public Health Accreditation Steering Committee Recommendations, 2006).

Whether these benefits are widely accepted in the public health community, however, is debatable. Perceptions about the program's value may determine program participation and, ultimately, a program's success. An accreditation program's purpose must be clear and realistic (Shaw, 2004). Public health's accreditation model is new and in development. Knowledge of accreditation may be low due to limited exposure to the new public health accreditation model; the costs and benefits of participating in the program may be unclear to some; and the overall accreditation process and how it leads to QI is still evolving. The newness of voluntary public health accreditation is evident in NACCHO's recent profile results, as only 23% (N = 433) of

LHD respondents were very familiar or somewhat familiar with national voluntary accreditation (NACCHO LHD Profile, 2008). There is also reported limited knowledge of QI. Fifty-six percent of LHDs reported implementing QI activities, with 30% of these same LHDs indicating that they have been engaged in consistent efforts for less than two years (Joly et al., 2010).

In addition to low knowledge about public health accreditation, there is noted disagreement about whether an accreditation program will actually promote QI. Opponents of public health accreditation see it as a “bureaucratic exercise without meaningful positive outcomes [and one that] would be costly in terms of staff time and resources,” while proponents see accreditation as a way to “provide accountability and a platform for improving performance” (Russo, 2007, p. 329). To determine whether LHDs perceive accreditation to be a QI opportunity, a survey completed in July 2009 by the Muskie Evaluation Team from the University of Southern Maine assessed the perception of, and willingness to adopt, an accreditation and QI program in states participating in MLC.<sup>2</sup> It is important to note that MLC states receive funding to build capacity toward QI and accreditation efforts; therefore respondents may be biased based on their experiences in the MLC program. However, when respondents were asked about LHDs’ beliefs about accreditation, only 46% indicated they believe that receiving national accreditation would improve the quality of services (N = 301). This finding implies that the public health practice community continues to have mixed opinions about whether accreditation leads to QI.

Mays (2004) suggests that accreditation programs succeed when there is perceived pressure to participate. This point is validated by the results of the MLC survey, in which 64% of respondents indicated that endorsement from elected officials would enhance their agency's

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<sup>2</sup> The overall survey response rate was 60%. Approximately 94% of respondents were the lead public health official for their agencies.

ability to apply for national accreditation. However, current encouragement to participate in voluntary accreditation is low. Only 23% of respondents indicated that there was an expectation among board members that the LHD would apply for national accreditation; 21% indicated that there was an expectation among funders to apply for national accreditation; and 27% of LHDs said that there is an expectation among program managers to apply for national accreditation. Finally, 67% of respondents did believe that receiving national accreditation would enhance credibility of their agency (N = 433).

Another important consideration in the development of a voluntary public health accreditation program is the type and amount of incentives. Incentives are vital to facilitate participation so that the costs of participating do not outweigh the benefits. In addition, new voluntary accreditation programs should include incentives that go beyond QI, as QI opportunities may not be enough to encourage participation, and startup costs for new applicants are extensive (Nolan et al., 2007; Hamm, 2007; Shaw, 2004).

Davis et al. (2009) recently examined what types of incentives might work to encourage participation in a voluntary accreditation program. According to their results, state and local public health agencies indicated that financial incentives would be most likely to encourage their participation in accreditation; QI training and infrastructure improvements were noted as the second most requested type of incentives. Furthermore, of the MLC survey participants, 86% of respondents indicated that additional funding would enhance the agency's ability to apply for national accreditation and 65% reported that additional incentives would enhance the agency's ability to apply for national accreditation.

Literature on participating in accreditation and QI indicates that organizations may need sufficient resources to undertake the process (Mihalik et al., 2003; Shaw, 2004; Mays, 2004;

McLaughlin and Kaluzny, 2006). Concerns over limited public health organizational capacity have been well published (1988 IOM report; 2001 CDC Infrastructure Report; Joly et al, 2007). Limited public health agency resources are also noted from the MLC survey results. Only 45% of respondents to the MLC State Survey (2009) indicated that they were confident in their agency's capacity to obtain national accreditation. Public health agencies also face unique challenges to promote QI, regardless of accreditation. Baker et al. (2007) note that system barriers to promoting QI for public health agencies include but are not limited to "categorical funding streams, program requirements, lack of incentives for improvement or systems thinking, lack of leadership, unavailability of QI-skilled personnel, and technical assistance resources" (p. 429).

The link between capacity and high performance is also well published. Scutchfield et al. (2004) reviewed the relationship between LHD characteristics and public health system performance and found that areas of funding, organizational leadership, and certain non-provider partnerships were significantly related to public health system performance. Specifically, LHDs with large numbers of staff, larger budgets, agency executives with a master's or bachelor's degree versus a medical degree, presence of a board of health, and outside partnerships are capacity variables significantly related to performance. Erwin (2008) also reviewed the relationship between public health capacity and performance in a meta-analysis of research on LHDs and performance. In the 23 studies reviewed, LHDs with larger staffs, serving populations of more than 50,000 and with higher funding per capita, were found to have better functioning local public health systems, based on their National Public Health Performance Standards assessments. As Mays (2004) noted, agencies with lower capacity may be unable to afford the costs of participation.

Performance of public health agencies may also play into the decision to participate. As noted earlier, an agency's decision to undertake an accreditation program must include an analysis of the risks involved (Shaw, 2004). Higher performing LHDs (which are also likely to have higher capacity) may be more confident in their ability to undertake accreditation and thereby more likely to participate. Davis et al. (2009) also noted that several respondents in their recent research study commented that financial incentives could become a "disincentive," i.e., the carrot to participate in voluntary accreditation could look like a stick. If LHDs participate in voluntary accreditation and perform poorly, the incentives could be taken away. Davis et al. note that "respondents were clearly aware that, if they failed in their attempts to become accredited or lost their accreditation status, they could lose access to funds" (p. 1710). Public health agencies' confidence in their performance may be an influence in their decision to participate.

The QI and accreditation literature suggest that public health agencies must also be ready for an accreditation program to promote QI. In addition to the organizational capacity to support ongoing QI before an accreditation process begins (for example, fiscal resources, a strategic plan), leadership was one factor mentioned in the literature as key to the success of both QI and accreditation. Organizations must have knowledgeable leadership that can help prepare and motivate the agency in these endeavors (Bialek et al., 2010; McLaughlin and Kaluzny, 2006).

Leaders may also have an important role in the decision process to participate in a voluntary accreditation program. Voluntary public health accreditation is new to most public health agency leaders, and there is noted suspicion that participating in accreditation may not be worth the costs. An early understanding of who is undertaking accreditation may help to better prepare public health agencies for the process and promote program uptake.

Reasons for early adoption of a voluntary accreditation program in public health are unknown, but diffusion of innovation theory for new programs such as accreditation would suggest that the order of adoption for a new program has to do with the leadership's innovativeness and role as a change agent (Dearing, 2008). Leaders adopt an "innovation" to help gather additional information and learn more about it. Their uncertainty typically leads to a "search for information and, if the innovation is perceived to be important in terms of having consequences for a potential adopter, a search for evaluative judgments of trusted and respected others" (p. 100). Moreover, the first adopters of voluntary public health accreditation are likely to undertake accreditation to learn more about the process, perceive the process to be an important innovation in public health and of value to their agency in some way, and be interested in having their work and that of their organization evaluated by respected outside entities.

## B. **Conceptual Framework**

The literature review about accreditation as a means to promote QI and public health accreditation with a QI focus reveals what factors may facilitate participation in an accreditation program. Details about how these factors influence the decision process have not been explored from the LHD perspective. Developing a further understanding as to how these factors—whether individually or combined—influence LHD efforts to participate in and implement accreditation is the basis for this study.

The literature review outlined major factors and specific elements that may be involved in undertaking a voluntary accreditation process. Three factors and corresponding elements are drawn from the literature to create a conceptual framework for what influences the decision process for an LHD to participate in accreditation. The three factors include: Perception of value

for a voluntary public health accreditation program; capacity of the LHD; and leadership. The section first provides an overview of these three factors and their various elements that may contribute to the decision to participate in accreditation. Next, using the information gathered from the literature review, a proposed conceptual framework is offered for how the identified factors might contribute to an LHD's decision to participate in voluntary accreditation based on the above literature review.

1. **Factors that impact the decision to undertake accreditation**

a. **Perception of accreditation's value**

Perception of the value of accreditation is an important factor in the decision to participate for many reasons, including, but not limited to, the following:

- Voluntary public health accreditation is still under development. As a result, knowledge about accomplishing accreditation, QI, and the link between them may be limited. Additionally, whether accreditation truly leads to QI is already doubted and unproven.
- There is still need for clarity on how to accomplish accreditation. LHDs may be unaware of the application steps, and even more important, preparation and survey costs may contribute to whether an LHD values the program enough to participate. Incentives provided to help overcome any known costs are important, especially when startup costs are known to exceed expectations.
- Pressure from external partners, including the board of health and funders, and their perception of accreditation's value, may sway LHDs to participate.



b. **Organizational capacity**

Accreditation is a tool to promote QI, enhancing the performance of the agency toward improved efficiency and effectiveness and good public health outcomes. To participate in accreditation and performance-improvement-related activities may require adequate capacity to undertake the process. Having sufficient resources to participate in accreditation is a major concern of LHDs.

Both the cost and the risk of participating in accreditation were noted in the literature to be factors in the decision to participate in voluntary accreditation. Costs were defined as related to preparation steps as well as to the accreditation survey itself. Additional resources may be needed for undertaking QI activities before, during, and after an accreditation process. The risks of participating include fear of losing financial resources for a failed accreditation attempt and/or sanctions for low performing aspects on the accreditation survey.

Sufficient organizational capacity is needed to participate in both organizational QI activities and accreditation with a QI focus. Formal definitions of organizational capacity encompass both structural and process components (Goodman et al., 1997). Handler et al. (2001) suggest that elements of structural capacity include information resources, organizational resources, physical resources, human resources, and fiscal resources. Structural capacity includes elements outlined in the literature as necessary for the preparation and survey stages of accreditation: leadership participation and support; having policies and procedures in place for business operations (e.g., human resources) and to promote QI; fiscal capacity and flexibility; information technology; a competent and sufficiently sized workforce; and external partnerships (Erwin, 2008; Dato et al., 2001; Fredricksen and London, 2000; Goodman et al., 1997).

Process capacity is defined as how these structural capacities are implemented in the delivery of agency activities and outcomes. In public health, processes that make up the public health enterprise are described in terms of the essential public health services framework (Handler et al., 2001). Process capacity is important to have in QI and accreditation, as it is the actual work measured to an accreditation standard. In public health, the essential public health services framework has served as the basis for measurement of performance, including but not limited to the National Public Health Performance Standards (NPHPS) and Operational Definition of a Local Health Department (NACCHO). It is important to note that this framework has been used at both the national level and in Illinois to develop standards and measures for the Illinois Voluntary Public Health Accreditation Pilot Project.

c. **Leadership**

Leadership's role in an accreditation process that promotes QI is well founded in practice and vital to the success of the program (Hamm, 2007; Mays, 2004). Leaders are the primary individuals to make the decision to participate in an accreditation program. Leadership characteristics—including a leader's level of education (Scutchfield et al., 2004), knowledge of accreditation and QI (McLaughlin and Kaluzny, 2006; Beecroft et al., 2003), experience as an administrator, and tenure within the organization (Fredericksen and London, 2000; Vinzant and Vinzant, 1996)—may impact the decision to participate in voluntary accreditation. Further, understanding whether those who undertake accreditation early possess “early adopter” characteristics (e.g., participate to learn more about the process and receive external feedback) will also help evaluate the central research question (Dearing, 2008; Beecroft et al., 2003; Vinzant and Vinzant, 1996).

## 2. **Proposed conceptual model**

The following is a proposed conceptual model for what factors may contribute to an LHD's decision to participate in accreditation. The model's outcome is the decision to participate in a voluntary public health accreditation pilot program with a QI focus. In the model, the LHD's decision to participate in accreditation may be influenced by contextual factors. These factors include the events occurring at the time that the Illinois Voluntary Accreditation Pilot Project was being implemented as well as the broader political, social, and economic context in which LHDs function. There are three proposed factors—perception of accreditation's value, capacity, and leadership—that impact the decision to participate in accreditation. The perception of accreditation's value is defined as whether the LHD perceives accreditation as a QI opportunity, calculates that the benefits of participating outweigh the costs, and perceives there to be external pressure to participate. Capacity is determined by whether the LHDs have reasonable structural and process capacity to undertake accreditation. Elements of structural capacity include information resources, organizational resources, physical resources, human resources, and fiscal resources necessary to prepare for and conduct an accreditation process; process capacity is measured by public health performance standards and measures that reflect the work of an LHD. Leadership is defined as tenure and education, knowledge and experience of accreditation and QI, and why leaders are early adopters of voluntary accreditation. The framework also proposes that these various factors may work together to impact the decision to participate in accreditation, as well as the ability to implement accreditation using a QI approach. The proposed conceptual model will provide a framework for exploring and describing what influences the decision to participate in accreditation (see Figure 1).

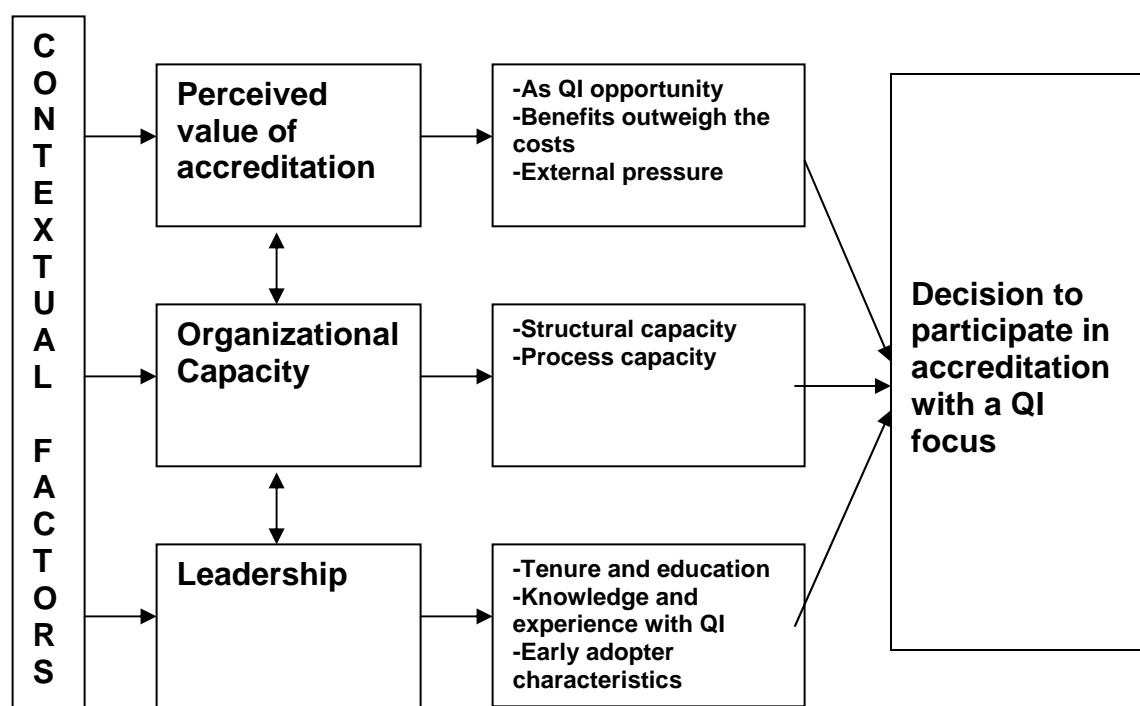


Figure 1. Proposed conceptual model of the decision to undertake voluntary accreditation in Illinois local health departments.

### C. Summary of Chapter Two

In this chapter, the theoretical and applied literature was reviewed to define and understand accreditation as a QI process, particularly in the health and medical fields. The perceived value of accreditation, organizational capacity, and leadership were identified as important to the decision to participate in voluntary public health accreditation. These factors and their related elements were presented in a proposed conceptual model to help describe what might contribute to the decision-making process to participate in voluntary public health accreditation.

### **III. THE DESIGN OF THE STUDY**

#### **A. Review of the Proposed Study**

The purpose of this study is to explore factors influencing the decision of an LHD to undertake accreditation. As seen in chapter 2, Figure 1 is a proposed conceptual model that outlines how an LHD's perception of the value of accreditation, its capacity, and leadership may be critical factors influencing the decision to undertake accreditation. The specific goal of this study is to better understand how these factors impact the decision to participate in a voluntary accreditation program. The following provides a description of the study setting, proposed study design, methods used, and analysis conducted.

#### **B. Study Setting**

##### **1. Illinois Voluntary Accreditation Pilot Project background**

Illinois has been a recipient of the multi-year RWJF-funded MLC. With leadership from the funding recipient, IPHI, MLC has provided an opportunity for Illinois to develop a specific accreditation program framework and build QI capacity in interested LHDs. Round One funding helped Illinois create an accreditation taskforce whose members developed an accreditation program model. This model included a transition proposal to adopt accreditation within Illinois with or without linkage to the existing state certification program, establishment of an Illinois Accreditation Board, and development of a panel of performance measures for each of the eight practice standards. The eight practice standards are listed in Appendix A. The 50 measures associated with these eight standards are available on the IPHI website

The second funding phase was entitled the Illinois Voluntary Accreditation Pilot Project, or Illinois' MLC-2. It is this phase of the MLC project that provided the data for the focus of this study. During this phase, all Illinois LHDs were invited to respond to a request for proposals for participation in a pilot voluntary public health accreditation model that included a small amount of funding attached (approximately \$4,000.00). Of the 95 LHDs in Illinois, seven LHDs of diverse geography, size, budget, and programs applied to participate in the project and all were accepted. Additionally, those Illinois LHDs (N = 88) who were not participating in the pilot voluntary accreditation process completed an online accreditation readiness assessment (entitled the LHD Readiness Assessment Survey), rating their performance in meeting the newly developed 50 public health measures.

An overview of the Illinois Voluntary Accreditation Pilot Project is provided in Appendix B. A full report of the process is located on the IPHI website. All LHDs that participated in the pilot were found to be substantially in compliance with the performance measures and would likely have been accredited had a formal accreditation process been in place.

## 2. **Using Illinois as a focus for study**

For several reasons, Illinois provides a unique opportunity to explore local public health agencies' reasons for undertaking accreditation. Illinois is one of only a handful of states to receive funding for all three phases of the MLC program, offering LHDs in Illinois additional resources to build capacity toward accreditation and expansion of QI activities. The impact of the additional resources on perceptions of accreditation's value is unknown.

Formal adoption and implementation of a voluntary public health accreditation program also faces challenges in Illinois (Landrum et al., 2007). Illinois is one of the few states in the

country to have its own accreditation-like program. Illinois LHDs have been required to undergo a certification review since 1993, as outlined by the Illinois Administrative Code. The application process involves the development of an organizational capacity self-assessment and submission of a community health assessment, development of a health improvement plan (entitled I-PLAN), and demonstration that the administrator meets the basic qualifications outlined in the Code; this process must be completed every five years. The move from this preexisting accreditation-like program to a national accreditation model can result in uneasiness (Landrum et al., 2007). In addition, Illinois LHDs represent urban, suburban, and rural populations with varying capacities. Learning how various LHDs (i.e., larger versus smaller, urban versus rural) assess their ability to meet accreditation standards without additional resources may help to enhance understanding of capacity and how it impacts an LHD's ability to participate in an accreditation process.

### C. **Overview of Study Approach**

This study employs a mixed-methods approach involving four self-report survey instruments and semi-structured interviews. The study was conducted as follows:

- All 95 Illinois LHDs were invited to participate in the Illinois Voluntary Accreditation Pilot Project. Seven LHDs responded and all were accepted to participate in the program. These seven LHDs completed a paper-based self-assessment on Illinois' eight LHD practice standards using 50 public health accreditation measures, entitled the LHD Readiness Assessment Survey.

- Seven nonparticipant LHDs were matched to participant LHDs by size and geographic location (e.g., a northern Illinois participant LHD with a large jurisdiction was matched to a northern Illinois nonparticipant LHD with a similar-sized jurisdiction).
- Semi-structured interviews were conducted with each of the participant LHDs after their completion of the Illinois Voluntary Accreditation Pilot Project and with the nonparticipant LHDs approximately 16 months later. Basic information on the LHD administrator was also collected, including education and tenure in the administrator position.
- The 14 participant and nonparticipant LHDs also completed a 16-question online survey assessing structural capacity. Participants completed this survey during fall 2007; nonparticipants completed the survey approximately 16 months later.
- All nonparticipant LHDs in Illinois (N = 88) completed an online version of the LHD Readiness Assessment Survey (a self-assessment of LHD capacity related to Illinois' eight LHD practice standards based on 50 public health accreditation measures). The online survey also inquired about population size, annual budget, and full-time equivalent (FTE) staff.
- The 14 participant and nonparticipant LHDs completed a 20-question online survey assessing core public health capacity and performance (Turnock et al., 1998). Participants completed this survey during fall 2007; nonparticipants completed the survey approximately 16 months later.



#### D. **Rationale for Use of a Mixed-Methods Approach**

A mixed-methods approach was used with a primary focus on the collection and analysis of qualitative data. Qualitative data were used to explore and interpret factors impacting the decision to participate in accreditation, including perceptions of the value of accreditation, capacity, and leadership. Use of quantitative data helped to identify any additional capacity differences between LHD participants and nonparticipants. The mixed-methods approach includes use of qualitative and quantitative research approaches, in-person interviews and on-line surveys, textual and numerical data, analysis that involves non-parametric statistics and thematic coding, and results presented in both a subjective and objective manner.

With origins from the late twentieth century, mixed-methods approaches are relatively new and are an ever-growing feature of research in social and human sciences. Use of qualitative and quantitative research strategies can help to enhance the exploratory process and/or validate research findings with multiple data sources, thereby strengthening study findings. However, all mixed-methods approaches are limited by imperfect understanding of standard processes for how best to integrate study findings from multiple sources.

Mixed-methods implementation approaches are often either: (a) sequential in nature, in which either qualitative or quantitative methods are employed in phases to either explain or explore study results, or (b) concurrent in nature, in which qualitative and quantitative methods are used simultaneously and results are used to corroborate the research findings (Creswell, 2003). Creswell et al. (2003) suggest that there are four major questions involved in selecting a mixed-methods design. These include: (1) What is the implementation sequence of the quantitative and qualitative data collection in the proposed study? (2) What priority will be given to the data collection and analysis? (3) At what stage in the research project will the quantitative

and qualitative data and findings be integrated? and (4) Will an overall theoretical perspective be used in this study?

Considering these questions, this study employs a concurrent triangulation strategy. Qualitative and quantitative data were collected simultaneously; findings were integrated in the analysis stage; and the overall theoretical perspective was developed by the researcher based on a literature review. The utility of both qualitative and quantitative methods in this study, as Creswell (2003) states about a concurrent triangulation design, is to “confirm, cross-validate, or corroborate findings within a single study”(p. 217). Congruent with a concurrent triangulation design, results from the quantitative questionnaires (i.e., capacity surveys, demographic data) and qualitative interviews are used to evaluate similarities and differences between participants and nonparticipants to help provide a more comprehensive understanding of what factors contribute to the decision to participate in accreditation (Teddlie and Tashakkori, 2009). These comparisons are used to validate and revise the proposed conceptual model in chapter 2 with respect to the factors that may impact the decision for LHDs to undertake accreditation.

A mixed-methods design was selected not only to help provide quantitative comparisons between LHDs but also to develop an in-depth understanding of factors influencing the decision-making process, including those that could not be quantified in categorical ways. Qualitative approaches have been increasingly used in organizational research and are well founded for several reasons (Trice and Beyer, 1993). Qualitative methods are appropriate in studies that seek to “understand organizational phenomena and systems” as well as the “in-depth processes that operate within the organization” (Lee, 1999, p. 41). Furthermore, Lee suggests that qualitative methods are useful for “describing, interpreting, and explaining” study sites, participants, and processes (p. 38–39) to provide an in-depth understanding of the topics of interest.

The purpose of voluntary public health accreditation and how it is achieved is not well understood at the LHD level. As noted above, the state of Illinois recently completed its first experience with a voluntary public health agency accreditation process. Seven local health departments had a unique story to tell about their decision to participate in the pilot. Seven additional LHDs that did not participate may have had other perceptions and, consequently, reasons for declining to apply for accreditation. The research is inductive and exploratory, seeking to better understand what it will take for a successful participation in LHD accreditation. Qualitative methods are best suited for researching these types of questions.

E. **Target Population**

Illinois is home to 95 LHDs, all of which participated in the RWJF MLC Phase 2 Project. Eighty-eight LHDs responded to the Local Health Department Readiness Assessment Survey. Seven LHDs served as pilots in the Illinois Voluntary Accreditation Pilot Project.

This study focuses on fourteen county health departments in the state of Illinois. Seven of the fourteen LHDs responded to a request for proposal to participate in the Illinois Voluntary Accreditation Pilot Project during fall 2007. Participant sites were matched to seven nonparticipant sites by jurisdiction size and geographic location. LHDs' jurisdiction size was derived from the 2006 projected population estimates from the U.S. Bureau of the Census data (U.S. Bureau of the Census, 2006). Table I provides a summary of the selected LHDs by population and region.

**TABLE I**

COMPARISON OF PARTICIPANT AND NONPARTICIPANT LOCAL HEALTH DEPARTMENTS JURISDICTION SIZE AND GEOGRAPHIC LOCATION					
Participant LHDs			Nonparticipant LHDs matched to participant LHDs		
LHD Name	Jurisdiction Size <sup>a</sup>	Geographic Location	LHD Name	Jurisdiction Size	Geographic Location
Adams	67,221	Peoria Region	Henry	50,339	Peoria Region
Clay	14,028	Marion Region	Wayne	16,602	Marion Region
Kendall	88,158	West Chicago Region	LaSalle	113,065	Peoria Region- contiguous county
Lake	713,076	West Chicago Region	Dupage	932,670	West Chicago Region
Logan	30,302	Peoria Region	Christian	35,063	Edwardsville Region
Peoria	182,495	Peoria Region	McLean	161,202	Champaign Region
Winnebago	295,635	Rockford Region	McHenry	312,373	West Chicago Region; Nearly contiguous county

<sup>a</sup>. Based on U.S. Census 2006 Projected Data <http://quickfacts.census.gov/qfd/states/17/17097.html> accessed May 3, 2008

Nonparticipant LHDs were matched to participant LHDs first by jurisdictional-size similarity and second by proximity. An attempt was made to match LHDs to the closest county in proximity in various ways: whether the LHD was in the same Illinois Department of Public Health (IDPH) region as the participant LHD;<sup>3</sup> if the county was contiguous to the LHD but not in the IDPH region; or if the county was within one or two counties of the participant site but

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<sup>3</sup> The IDPH has organized the state into planning and service regions in which some planning and response work is conducted with other LHDs in the region.

matched closely on size. For example, Winnebago LHD's jurisdiction has a population of 296,000. No other county in its IDPH region or contiguous to Winnebago has a population even half of Winnebago's. McHenry County, two counties east of Winnebago, has a population of 315,000 and represents a mix of rural and urban settings similar to Winnebago's. Therefore, Winnebago County (a participant site) was matched to McHenry County as a nonparticipant site. Figure 2 is a map of the participant and nonparticipant sites.

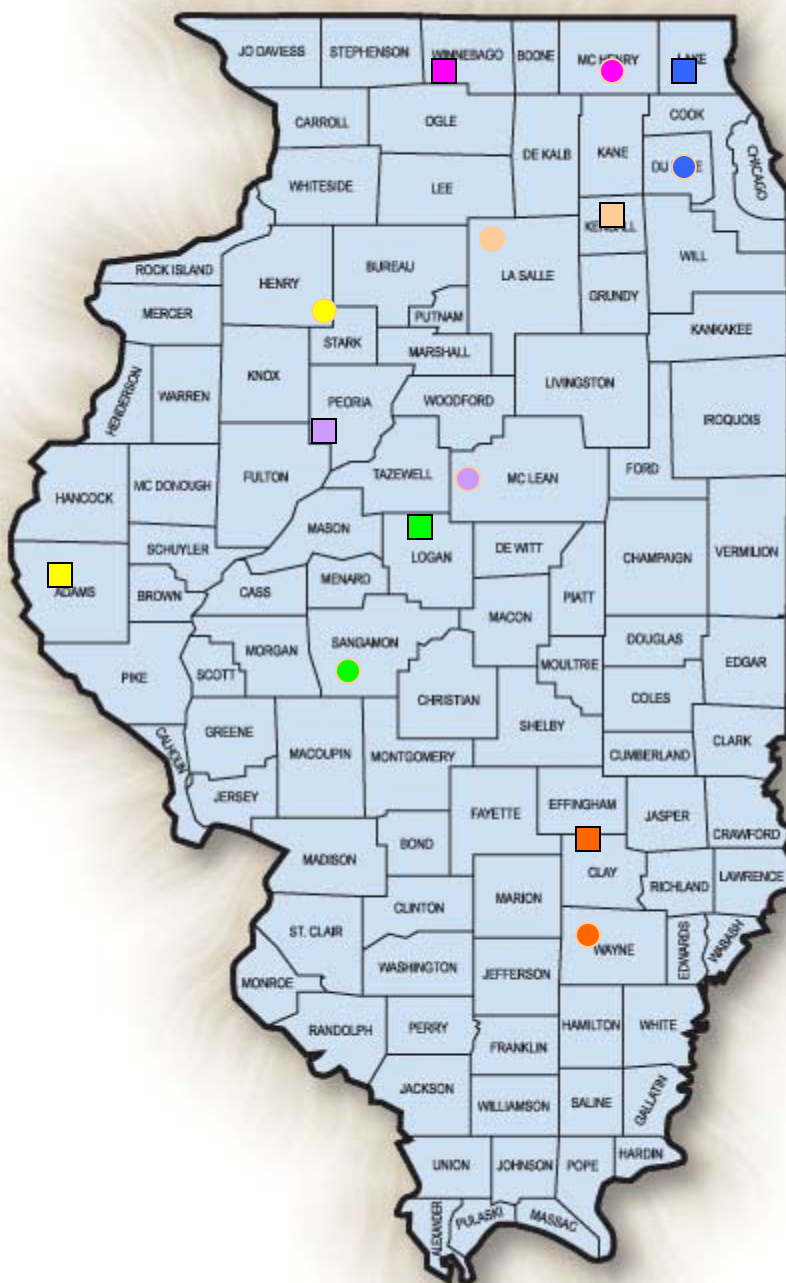


Figure 2. Map of participant and nonparticipant LHDs<sup>a</sup>  
 Map key:  = Participant Site    ○ = Nonparticipant Site

<sup>a</sup> Map Source: <http://app.idph.state.il.us/cecweb/>

The decision to match participants and nonparticipants by size first is based on well-founded research that size is associated with LHD capacity, which in turn predicts increased performance (Scutchfield et al., 2004). Comparing LHDs with similar size minimizes the probability that an LHD's decision to participate or not participate in accreditation was related to its resources and capabilities.

This study also matched participants and nonparticipants based on geography. LHDs within the same IDPH regions may have a history of working together, often coordinated by an IDPH staff person assigned to the region, and as a result may have similar attributes, including services, programs, plans, and even beliefs. An attempt to match based on IDPH region helps to reduce any geographic differences between the LHDs, which may impact perceptions of accreditation and its value.

Matching LHDs based on geography is also important to address any environmental similarities as well as the broad macro-political regional influences. Illinois is a large, geographically diverse state, with environmental factors impacting public health departments in different ways. For example, the northeast region has had the largest number of West Nile virus cases compared to the rest of the state. The northeast region is also mainly urban with more than 8.5 million people, nearly two-thirds of the state's population. Urbanization and large population are characteristics that distinguish northern health departments from those in the middle and southern parts of the state.

Sharing similar environmental and demographic characteristics has also led to a common desire for legislative and policy change. A key example of this includes the northern region of Illinois. Eight local health departments have formed the Northern Illinois Public Health Consortium, in which LHDs have coordinated, planned, and adopted joint positions on

legislation. This joint venture resulted in part from consortium LHDs addressing a greater burden of West Nile virus and their desire for a proportionate amount of funding for the region's risk and population size. As a result, NIPHC introduced and passed legislation to receive West Nile virus funding in its area. These regional factors may create differences in LHDs' perceived capacity, which may impact perception of the value of accreditation.

F. **Data Sources and Collection**

1. **Overview**

There are four sources of data for this study. Table II outlines the research questions, factors of interest, measures, and data sources by research question. Participant data were collected between August and December 2007 in conjunction with IPHI. Permission was obtained by IPHI to use these data for research purposes. Nonparticipant data were collected from February through April 2009. The University of Illinois at Chicago (UIC) Office for the Protection of Research Subjects granted an exemption for use and collection of the data (Appendix C). A letter was sent to all seven matched nonparticipant LHDs to invite them to participate in the study (Appendix D); all seven matched LHDs agreed to participate and signed a consent form to participate in the study (see Appendix E for the sample consent form). What follows is a description of each data source and its collection method.



TABLE II

RESEARCH QUESTIONS, FACTOR, CONSTRUCT, AND MEASURE MATCHED TO DATA			
Factor	Construct	Measure	Data Source
<b>Research Question 1. How does an LHD’s perception of accreditation’s value influence its decision to participate?</b>			
Perceived value of accreditation	As QI opportunity	<ul style="list-style-type: none"><li>• Accreditation leads to improvement versus a regulatory process</li></ul>	<ul style="list-style-type: none"><li>• Qualitative Interviews, Section A; Section B Question 2, 3 (participants); 3 (nonparticipants);</li><li>• Section C</li></ul>
	Benefits outweigh the costs	<ul style="list-style-type: none"><li>• Reasons for participation suggest benefits outweigh cost/risks</li></ul>	
	External pressure	<ul style="list-style-type: none"><li>• Achieving accreditation is linked to external validation/perception/value</li></ul>	
<b>Research Question 2. How does an LHD’s capacity influence its decision to participate in accreditation?</b>			
Organizational Capacity	Structural capacity: Differences between LHDs	<ul style="list-style-type: none"><li>• LHD Budget and FTE</li><li>• Self-assessed organizational capacity survey</li><li>• Readiness</li></ul>	<ul style="list-style-type: none"><li>• Qualitative Interviews, Section B</li><li>• Budget and FTE Data collected during pilot and 50 measures survey</li><li>• LHD Structural Capacity Online Survey</li></ul>
	Structural capacity: Facilitate/barriers	<ul style="list-style-type: none"><li>• Characteristics of successful participation</li><li>• How and what capacity factors are important to achieving accreditation including leadership support; strategic plan, goals, and objectives; policies and procedures; information technology; fiscal; workforce size and capacity; and partnerships</li></ul>	<ul style="list-style-type: none"><li>• Qualitative Interviews, Section B; Section C1</li></ul>
	Process capacity	<ul style="list-style-type: none"><li>• Self-assessed public health capacity on 50 measures</li><li>• Self-assessed public health capacity on 20 questions</li></ul>	<ul style="list-style-type: none"><li>• LHD Readiness Assessment Survey</li><li>• LHD Core Public Health Capacity Online Survey</li></ul>

RESEARCH QUESTIONS, FACTOR, CONSTRUCT, AND MEASURE MATCHED TO DATA			
Factor	Construct	Measure	Data Source
<b><i>Research Question 3. How does an LHD's leadership influence its decision to participate in accreditation?</i></b>			
Leadership	Education	<ul style="list-style-type: none"> <li>• Educational attainment</li> </ul>	<ul style="list-style-type: none"> <li>• Qualitative interviews</li> </ul>
	Tenure	<ul style="list-style-type: none"> <li>• Length of time in current position</li> </ul>	<ul style="list-style-type: none"> <li>• Qualitative interviews</li> </ul>
	Knowledge and experience with accreditation and QI	<ul style="list-style-type: none"> <li>• Whether a plan was in place</li> </ul>	<ul style="list-style-type: none"> <li>• Qualitative interviews, Section A</li> </ul>
	Early adopter	<ul style="list-style-type: none"> <li>• Interest in accreditation to influence and/or learn about the process</li> <li>• Interest in accreditation to obtain external feedback</li> </ul>	<ul style="list-style-type: none"> <li>• Qualitative interviews, Section A</li> </ul>

## 2. **Semi-structured interviews**

Semi-structured interviews with participant LHDs were conducted as a part of the RWJF MLC to evaluate the Illinois Voluntary Accreditation Pilot Project process. In November through December 2007, two UIC School of Public Health doctoral students interviewed each LHD participating in the pilot accreditation process within two months of the accreditation site visit. An interview guide was developed by the doctoral students and IPHI staff. Interview questions reflected aspects of accreditation undertaken during this pilot, including, but not limited to, what motivated LHDs to participate in the process, barriers to participation, how LHDs organized their accreditation response, and participant opinions of each step of accreditation (e.g., the measures, study tool, and site visit). The interview guide questions were based on concepts and variables described in the literature review in order to capture information about the LHD's preparation and overall experience in the Illinois Voluntary Accreditation Pilot Project. The final interview guide for participant LHDs is located in Appendix F.

The LHD administrator and any key staff involved in the process were invited to attend the participant LHD evaluation interview. Three LHD administrators participated directly in the interviews.<sup>4</sup> At the other four sites, management staff involved in the accreditation process were interviewed. Three interviews were conducted in person; the four others were conducted via telephone. Interviews were taped and transcribed by one IPHI staff member and two IPHI interns. Interview transcripts were checked for accuracy by the interviewers.

In February through March 2009 a UIC School of Public Health doctoral student interviewed each LHD nonparticipant site. Qualitative interviews were conducted to assess perceptions of accreditation, capacity, and reasons for not participating in the voluntary

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<sup>4</sup> A fourth LHD administrator also submitted responses in writing; management staff at this LHD participated in a phone interview.

accreditation process. The nonparticipant interview guide included questions similar to those asked of participants, with the exception of questions regarding the pilot accreditation process. The final interview guide for nonparticipant LHDs is located in Appendix G.

Six nonparticipant interviews were conducted via telephone; one interview was conducted in person. The LHD administrator was the respondent in all seven of the nonparticipant qualitative interviews. Interviews were taped and transcribed by a UIC School of Public Health master's-level student. Interview transcripts were checked for accuracy by the interviewers.

3. **Local Health Department Structural Capacity Online Survey**

An additional survey instrument was developed to assess the structural capacity of the participant and nonparticipant LHDs. Sixteen questions were developed by IPHI staff and a UIC School of Public Health doctoral student from a review of the literature. The rating scale included four responses: (1) Inadequate; (2) Partially Adequate; (3) Substantially Adequate; and (4) Adequate. All LHDs participating in the pilot accreditation project completed this online questionnaire at the same time as the LHD Core Public Health Capacity Survey. Confidential participant surveys were collected on [www.surveymonkey.com](http://www.surveymonkey.com) early in the accreditation process, from September through October 2007. Nonparticipant sites completed this same online survey between February and April 2009. Appendix H presents questions from the online tool.

4. **Local Health Department Readiness Assessment Survey**

Each participant pilot LHD (N = 7) completed the LHD Readiness Assessment Survey in paper form. The LHD rated its performance on the 50 measures and provided

evidence, either written or electronic, in support of the rating. The rating scale included four responses: (1) Not Met; (2) Partially Met; (3) Substantially Met; and (4) Met.

Eighty-eight Illinois LHDs completed an online version of the LHD Readiness Assessment Survey to rate their capacity to meet the state's eight practice standards using 50 public health performance measures.<sup>5</sup> The rating scale included four responses: (1) Not Met; (2) Partially Met; (3) Substantially Met; and (4) Met. This survey was commissioned by IPHI in 2007 as part of the RWJF MLC grant, and requested by Illinois LHDs in order to ascertain the current capacity and readiness of LHDs to meet the proposed 50 accreditation measures. Confidential surveys were collected on [www.surveymonkey.com](http://www.surveymonkey.com) from September 2007 through January 2008. The LHD Readiness Assessment Survey may be accessed online.<sup>6</sup>

#### 5. **Local Health Department Core Public Health Capacity Online Survey**

Participant LHDs completed a 20-question online survey assessing core public health capacity and performance (Turnock et al., 1998). The rating scale included four responses: (1) Not Met; (2) Partially Met; (3) Substantially Met; and, (4) Met. Confidential surveys were collected on [www.surveymonkey.com](http://www.surveymonkey.com) early in the accreditation process, from September through October 2007. Nonparticipant sites completed this same online survey between February and April 2009. Appendix H presents the questions from the online survey instrument.

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<sup>5</sup> In some cases, one administrator had responsibility for multiple health departments and submitted one set of responses for all of the relevant jurisdictions. As such, all eighty-eight LHDs were represented; however, there were eighty-one respondents.

<sup>6</sup> The survey may be accessed online at:  
[http://www.surveymonkey.com/s.aspx?sm=rR\\_2frvsuyKu6hRgAd7\\_2bgSKA\\_3d\\_3d](http://www.surveymonkey.com/s.aspx?sm=rR_2frvsuyKu6hRgAd7_2bgSKA_3d_3d)

## G. **Data Analysis**

Descriptive statistics were generated for all quantitative variables in order to make comparisons between participant and nonparticipant LHDs. The small number of cases (seven participants and seven nonparticipants) precluded the use of inferential statistics. Specifically, the non-parametric statistic Mann-Whitney Test for two independent samples with ordinal data was used to compare participant and nonparticipant LHD capacity scores between the two samples. The Mann-Whitney Test was conducted on each individual measure, all measures combined within a particular standard, and on all measures together within the particular survey instrument. This process was conducted to assess if there were any particular measures that might provide insight into the differences between participant and nonparticipant LHDs.

As noted above, all nonparticipant semi-structured interviews were transcribed by a master's-level graduate student; participant interviews were transcribed by a master's-level graduate student or a staff member of IPHI. Qualitative data analysis was conducted in several steps, as outlined by Miles and Huberman (1994). The entire interview transcript was read for general understanding. A codebook was created that included deductive codes based on the research questions (value of accreditation, capacity, and leadership). Transcripts were systematically read to identify common themes and to form conclusions regarding factors that influence participation. Code reports were created for participants and nonparticipants to highlight the differences between them. Themes were derived from the reports on factors that facilitate or create barriers to participation. Additional codes and sub-codes were added through the iterative process of reviewing the coding reports. Illustrative text-based quotes were gathered to support each theme (Miles and Huberman, 1994).

Data were analyzed by a UIC School of Public Health doctoral student. Table 3 highlights how data analysis was performed for each research question. Quantitative and qualitative results are located in chapter 4.

TABLE III

OVERVIEW OF DATA SOURCES AND ANALYSIS STRATEGY		
Research question	Data source	Analysis strategy
<b>Research Question 1. How does an LHD's perception of accreditation influence the decision to participate?</b>		
a. What are the differences in participant and nonparticipant LHDs' perceived value of accreditation? b. Do LHDs perceive accreditation as a process for QI?	Semi-structured interviews	Qualitative thematic coding
c. What value perceptions serve as facilitators or barriers to participating in accreditation?	Semi-structured interviews	Qualitative thematic coding
<b>Research Question 2. Does an LHD's capacity influence its decision to participate in accreditation?</b>		
a. What are the differences in participant and nonparticipant LHDs' capacity?	1. Semi-structured interviews 2. Surveys: a. Structural capacity online survey b. LHD Readiness Assessment Survey c. Core Public Health Capacity Online Survey	Qualitative thematic coding  Quantitative non-parametric statistics  Overall: triangulation of quantitative and qualitative data
b. How does capacity facilitate or impede participation in accreditation?	14 Semi-structured interviews	Qualitative thematic coding
<b>Research Question 3. What is the role of leadership in the decision-making process to participate in and undertake accreditation?</b>		
a. What are the similarities and differences in leadership between participant and nonparticipant LHDs?	14 Semi-structured interviews	Qualitative thematic coding
b. Which leadership factors drive the decision to participate in accreditation?	14 Semi-structured interviews	Qualitative thematic coding



## H. **Data Limitations**

### 1. **Semi-structured interviews**

All interview transcripts were spot-checked for transcription accuracy.

Verification of reliability of the coding process using a Cohen Kappa score was not possible because of limited funds and inability to have multiple coders.

### 2. **Online assessment tools**

One of the three online surveys was evaluated for validity. Validity of the Local Health Department Readiness Assessment Survey was assessed by asking respondents whether the measures reflected practice. Respondents said they could produce most (75%) of the suggested evidence to support the measures and several suggested additional types of evidence.

Reliability testing was not performed for any of the online survey instruments. No response criteria were required for participants' experience or expertise in responding to either self-assessments or qualitative interviews. Variation between and within respondents may have occurred. Further, some participants may be overly critical in their self-evaluation while others may be less critical; results could be either upwardly or downwardly influenced.

Compensatory rivalry is unlikely but possible if LHDs perceived that their scores on any of the self-assessments would be used to influence the future of the accreditation process or possible funding allocations. In addition, perception about LHD size and capacity may have impacted the self-assessment process—i.e., larger LHDs may have inflated their capacity while medium to smaller LHDs may have been more critical.

## I. **Summary of Chapter Three**

The purpose of this chapter was to describe the study setting, proposed study design, methods used, and analysis conducted. The Illinois Voluntary Accreditation Pilot Project is one of the first voluntary public health accreditation models in the country. The project provides a unique opportunity to explore why LHDs may choose to participate in accreditation, and offers clues to how LHDs can prepare for an accreditation program. Seven Illinois LHDs that participated in the Illinois Voluntary Accreditation Pilot Project were matched by size and geography to seven nonparticipant LHDs to examine the influence of a variety of factors on the decision-making process. A mixed-methods approach using qualitative and quantitative data was employed to address research questions. Study findings will help to highlight key differences between participant and nonparticipant LHDs, to revise the proposed conceptual model for examining this decision, and to propose implications for practice.

## **IV. STUDY RESULTS**

The purpose of this chapter is to summarize study results by research question. Research questions one through three examine factors that may influence LHD decisions to participate in the Illinois Voluntary Accreditation Pilot Project, including the perceived value of accreditation, organizational capacity, and leadership. A summary of the study results by research question is presented in Table IV.

Specific results are presented by each research question and its sub-question, as outlined in chapter 1. Qualitative results are presented first, followed by quantitative results, if applicable. Results are generally presented in accordance with factors, constructs, and measures that were detailed in the proposed conceptual model and operationalized in Table II.

TABLE IV

SUMMARY OF QUALITATIVE AND QUANTITATIVE RESULTS BY RESEARCH QUESTION		
	Participant LHDs	Nonparticipant LHDs
<b>Research Question 1: How does an LHD's perception of accreditation influence the decision to participate?</b>		
Qualitative: Differences in reasons to participate	<ul style="list-style-type: none"> <li>• Accreditation can improve overall agency performance</li> <li>• Participation increases agency value</li> </ul>	<ul style="list-style-type: none"> <li>• One of many opportunities to promote QI</li> <li>• Regulatory burden for which costs outweigh the benefits</li> </ul>
Qualitative: Facilitators to participation	<ul style="list-style-type: none"> <li>• Improve agency performance</li> <li>• Be reviewed by an outside evaluator</li> </ul>	<ul style="list-style-type: none"> <li>• External pressure</li> </ul>
Qualitative: Barriers to participation	<ul style="list-style-type: none"> <li>• Negative attitudes from staff and peers about accreditation</li> </ul>	<ul style="list-style-type: none"> <li>• Can provide QI without participation in voluntary accreditation</li> <li>• Pilot project was not worth the effort</li> </ul>
<b>Research Question 2: Does an LHD's capacity influence its decision to participate in accreditation?</b>		
Qualitative: Structural capacity differences in reasons to participate	<ul style="list-style-type: none"> <li>• Ready to participate</li> <li>• Had sufficient resources and plans in place</li> </ul>	<ul style="list-style-type: none"> <li>• Ready to participate</li> <li>• Need additional resources to participate beyond financial incentives</li> </ul>
Qualitative: Structural capacity facilitators to participation	<ul style="list-style-type: none"> <li>• Specific structural capacity items facilitated participation</li> </ul>	<ul style="list-style-type: none"> <li>• Structural capacity needed</li> </ul>
Qualitative: Structural capacity barriers to participation	<ul style="list-style-type: none"> <li>• Specific structural capacity items were barriers</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of overall structural capacity was a barrier</li> </ul>
Quantitative: Structural Capacity	<ul style="list-style-type: none"> <li>• Higher budgets and greater FTEs in some LHDs</li> </ul>	<ul style="list-style-type: none"> <li>• Lower budgets and fewer FTEs in some LHDs</li> </ul>
Quantitative: Process Capacity	<ul style="list-style-type: none"> <li>• Possible higher process capacity on select measures and standards</li> </ul>	<ul style="list-style-type: none"> <li>• Possible lower process capacity on select measures and standards</li> </ul>
<b>Research Question 3: What is the role of leadership in the decision-making process to participate in and undertake accreditation?</b>		
Qualitative: Differences in reasons to participate	<ul style="list-style-type: none"> <li>• Some knowledge about accreditation</li> </ul>	<ul style="list-style-type: none"> <li>• Less knowledge about accreditation</li> </ul>

SUMMARY OF QUALITATIVE AND QUANTITATIVE RESULTS BY RESEARCH QUESTION		
	Participant LHDs	Nonparticipant LHDs
	<ul style="list-style-type: none"> <li>• Some QI experience</li> </ul>	<ul style="list-style-type: none"> <li>• Some QI experience</li> </ul>
Qualitative: Facilitators to participation	<ul style="list-style-type: none"> <li>• Early adopters</li> </ul>	<ul style="list-style-type: none"> <li>• To participate in the pilot, organizational management desires acknowledgement</li> </ul>
Qualitative: Barriers to participation	<ul style="list-style-type: none"> <li>• None</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of knowledge</li> <li>• Undergoing other change management process</li> </ul>
Quantitative: Tenure and education	<ul style="list-style-type: none"> <li>• Administrators had slightly higher level of educational attainment</li> <li>• Varying lengths of tenure</li> </ul>	<ul style="list-style-type: none"> <li>• Administrators had lower level of educational attainment</li> <li>• Varying lengths of tenure</li> </ul>

### A. **Results for Research Question 1**

Qualitative data were collected to address research question 1. The primary research question was: How does an LHD's perception of accreditation's value influence its decision to participate? Sub-questions to further operationalize this issue included: (a) What are the differences in participant and nonparticipant LHDs' perceived value of accreditation? Do LHDs perceive accreditation as a process for QI? and (b) What value perceptions serve as facilitators or barriers to participating in accreditation? Specific results for each of these sub-questions are presented below by the major themes that emerged using qualitative analysis. Tables V, VI, and VII summarize the qualitative results for participant and nonparticipant LHDs by each sub-question.

#### 1. **Differences between participant and nonparticipant local health departments in their perceived value of accreditation**

**TABLE V**

RESULTS SUMMARY OF DIFFERENCES BETWEEN PARTICIPANT AND NONPARTICIPANT LOCAL HEALTH DEPARTMENTS' PERCEPTION OF ACCREDITATION'S VALUE	
<b>Participant LHDs</b>	<b>Nonparticipant LHDs</b>
<ul style="list-style-type: none"> <li>• Accreditation can improve overall agency performance (N = 7)</li> <li>• Participation increases agency value (N = 5)</li> </ul>	<ul style="list-style-type: none"> <li>• One of many opportunities to promote QI (N = 5)</li> <li>• Unfunded mandate/regulatory burden (N = 5)</li> <li>• Cost outweighs the benefit (especially for pilot process) (N = 4)</li> </ul>

Nearly all LHDs indicated that accreditation could be a process that promoted improvement in at least some way (N = 12). Participant LHDs indicated that accreditation (through the pilot project) would assist with existing improvement plans and/or would help to improve overall agency performance (N = 7). For example, one LHD said that participating in the Illinois Voluntary Accreditation Pilot Project was “an opportunity to improve our organization to serve our community more effectively.” The value of accreditation was also defined by its possible ability to improve services for the benefit of the community, thereby providing “best practice and excellent service” and also improving the perception of the LHD (N = 5).

Five out of seven nonparticipant LHDs indicated that accreditation could lead to some improvement process within the agency in at least some way. One of these LHDs indicated that “the process itself is good. It does ensure quality, it does ensure consistency, and in the end it’s for the benefit of the organization, it’s for the benefit of the people they serve.” However, nonparticipant LHDs predominantly saw accreditation as more of a regulatory burden or unfunded mandate (N = 5) and considered the cost not worth the benefit (N = 4). For example, one LHD said that it was already certified by IDPH and met rules and regulations for the Illinois Department of Human Services, so the Illinois Voluntary Accreditation Pilot Project “just seemed like some kind of another form of unfunded mandate that I wasn’t sure would benefit us. I saw it was something that was probably going to cost us money and time, work with few benefits.”

Further, nonparticipant LHDs indicated that the benefits of accreditation are unclear. One LHD said, “I don’t understand what the accreditation was actually going to do for us,” while another commented that “accreditation imposes a huge regulatory burden without any research to

back up that doesn't improve quality and I have not been able to find anything that is evidence based that shows that accreditation can improve quality."

2. **Perceived value of accreditation as a facilitator of participation in voluntary accreditation**

**TABLE VI**

RESULTS SUMMARY BETWEEN PARTICIPANT AND NONPARTICIPANT LOCAL HEALTH DEPARTMENTS ON HOW PERCEIVED VALUE OF ACCREDITATION FACILITATES PARTICIPATION	
<b>Participant LHDs</b>	<b>Nonparticipant LHDs</b>
<ul style="list-style-type: none"> <li>• A desire to improve on overall agency performance (N = 5)</li> <li>• An opportunity to be reviewed by an outside evaluator (N = 5)</li> </ul>	<ul style="list-style-type: none"> <li>• External pressure such as mandate, board of health objective, or national process would encourage participation (N = 3)</li> </ul>

The majority of participant LHDs indicated that the primary reason for undertaking voluntary accreditation was their desire to improve overall agency performance in some way. Several LHDs (N = 5) indicated that accreditation would "help with other existing change processes" in the LHD and noted that the accreditation process would strengthen other LHD initiatives, such as strategic planning, community health planning, and other QI programs by organizing and adding structure to these related efforts and by assessing the organization's capacity.

Five LHDs indicated that they participated in accreditation because they viewed it as an opportunity to receive outside feedback. One LHD explained: "I saw it as a good opportunity for somebody outside of our agency to help us see where we are and help us see where we need to



be in terms of QI. Because we're kind of meshed in it and outside opinion is wonderful as it is an opportunity to work with experts." Another LHD expressed that it participated in part to receive feedback from an outside third party to evaluate public health activities, "not specific issues such as primary care and behavioral health, but traditional public health issues."

Three nonparticipant LHDs mentioned that having a mandate, a board of health objective to accomplish accreditation, and/or national process in which LHDs increasingly enroll (thereby putting pressure on others to participate) would encourage participation in accreditation. One of the smallest LHDs said it would participate only if mandated and then the LHD "will do what we have to do." Another LHD suggested that it would prefer that accreditation be national to legitimize the process and help persuade its board of health to endorse its participation. Yet another LHD suggested that additional peer support, even a phone call, might have encouraged the LHD to participate and learn more about the process and how it could have helped the LHD. While two nonparticipant LHDs indicated they would participate regardless of outside pressure, the remaining suggested that without outside pressure and additional resources, the process was unlikely to be worth the costs of participating.

3. **Perceived value of accreditation as a barrier to participation in voluntary accreditation**

**TABLE VII**

RESULTS SUMMARY BETWEEN PARTICIPANT AND NONPARTICIPANT LOCAL HEALTH DEPARTMENTS ON HOW PERCEIVED VALUE OF ACCREDITATION MAY BE A BARRIER TO PARTICIPATION	
Participant LHDs	Nonparticipant LHDs
<ul style="list-style-type: none"> <li>Negative attitudes from staff and peers about accreditation (N = 4)</li> </ul>	<ul style="list-style-type: none"> <li>Can provide QI without participation in voluntary accreditation (N = 5)</li> <li>Pilot project was not worth the effort (N = 5)</li> </ul>

Overall, participant LHDs were motivated to participate in the pilot project because they had a positive view of the process; there were few barriers mentioned to participation with respect to perception of accreditation's value. However, four participant LHDs did remark that one barrier to participation was a perception that their LHD counterparts and/or their staff had a negative attitude about accreditation and would not support the LHD's application. These LHDs chose to participate regardless to demonstrate "it could be done" and to contribute feedback to the process.

While many nonparticipant LHDs responded that accreditation would promote some kind of QI, as already noted, most of them felt the cost of participating outweighed the benefit. Furthermore, nonparticipant LHDs (N = 5) indicated that they already conduct QI activities through grant mandates and by having qualified staff who are required to maintain their professional certifications. One LHD said the following about how it provides quality services:

“with the review process that we are involved with at the state level, we go through annual reviews and the interviews [that are] pretty stringent and I think as a result of those reviews those services are being provided in a quality way.”

Five nonparticipants emphasized that the benefits to participating in the pilot voluntary accreditation pilot were unclear. Three of these LHDs saw the pilot participation as a specialized project and not worth expending resources to participate in. There was no noted mention of external pressure to participate in the pilot or accreditation in general; however, external pressure may have had a negative impact for nonparticipant LHDs since at least one participant LHD mentioned that its peer LHDs questioned its participation.

#### **B. Results for Research Question 2**

Qualitative and quantitative data were collected to address research question 2. The primary research question asked: How does an LHD’s capacity influence its decision to participate in accreditation? Sub-questions to further operationalize this issue included: (a) What are the differences in participant and nonparticipant LHDs’ capacity? and (b) How does capacity facilitate or impede participation in accreditation? Specific results for each of these sub-questions are presented below. Qualitative results are presented first, followed by quantitative results, as applicable. Tables VIII, IX, and X summarize the qualitative results for participant and nonparticipant LHDs by each sub-question. Tables XI, XII, XIII, and XIV summarize the quantitative results by sub-question.

1. **Differences between participant and nonparticipant local health departments in structural capacity to participate in the Illinois Voluntary Accreditation Pilot Project**

**TABLE VIII**

RESULTS SUMMARY ON DIFFERENCES BETWEEN PARTICIPANT AND NONPARTICIPANT LOCAL HEALTH DEPARTMENTS' STRUCTURAL CAPACITY	
Participant LHDs	Nonparticipant LHDs
<ul style="list-style-type: none"> <li>• Ready to participate (N = 6)</li> <li>• Had sufficient resources and plans in place (N = 6)</li> </ul>	<ul style="list-style-type: none"> <li>• Ready to participate (N = 6)</li> <li>• Needed additional staff and resources; incentives are not enough (N = 6)</li> </ul>

The majority of participant LHDs (N = 6) indicated that they were ready to participate in the Illinois Voluntary Accreditation Pilot Project. Participant LHDs defined readiness by a completed I-PLAN, the ability to review the measures in advance, or by whether they attended a national conference where accreditation was discussed. Respondents from one participant LHD indicated that the agency was ready to participate in the project but felt unready after the project was completed. Respondents from one participant LHD indicated that they were unsure if they were ready because they “didn’t know what to expect.”

While the majority of nonparticipant LHDs indicated they were ready to participate in the Illinois Voluntary Accreditation Pilot Project (N = 6), three of these LHDs qualified their answers. Of these three, one indicated it could not conduct the QI aspects of accreditation; two others indicated that without additional staff and resources, accomplishing accreditation would be difficult and they would “do what [they] had to do” to meet the accreditation requirements.

Interestingly, two additional LHDs indicated that while they were ready to participate in accreditation and could have completed the process, the agency was undergoing another change process to build its infrastructure and institute QI processes. One nonparticipant LHD was unsure if it was ready to participate (due to lack of knowledge of the process). To nonparticipants, being ready to participate meant readiness to meet the accreditation criteria, having leadership involved in the process, having a completed I-PLAN, and having staff to dedicate to the process.

## 2. Structural capacity as a facilitator of participation

**TABLE IX**

RESULTS SUMMARY BETWEEN PARTICIPANT AND NONPARTICIPANT LOCAL HEALTH DEPARTMENTS ON HOW STRUCTURAL CAPACITY MAY FACILITATE PARTICIPATION	
<b>Participant LHDs</b>	<b>Nonparticipant LHDs</b>
<ul style="list-style-type: none"> <li>• Leadership efforts and staff support (N = 6)</li> <li>• Other improvement process is in place (N = 5)</li> </ul>	<ul style="list-style-type: none"> <li>• Strong structural capacity needed, including but not limited to incentives (N = 7)</li> </ul>

Participant LHDs indicated that staff and leadership support for an accreditation process was an important and essential factor required for the decision to participate in accreditation. Leadership support is often defined by LHDs as coming from the LHD administrator, project manager, or leader of the application process, and/or program managers/supervisors at several levels within the agency. Respondents indicated that leadership's contribution to the process included but was not limited to championing the process and preparing the agency to participate, including planning for the process with staff (e.g., reviewing the measures and previous

assessments that may help to meet accreditation criteria), prioritizing other projects to allow for time to complete the self-study aspects of accreditation, and aligning agency resources to the process.

Most participant LHDs had an ongoing improvement process in place before deciding to participate in accreditation (N = 5). These activities seemed to serve both as a reason to participate in the pilot and as a reflection of capacity, such that without these plans or processes and the staff, mission, and vision that drove them to continue, the LHD would be less able to undertake accreditation. For example, one LHD had recently begun strategic planning and saw the pilot as an opportunity to conduct a more formal assessment of its services and resources.

Nonparticipant LHDs' perception of accreditation was that it is a tool that can promote QI in the agency; however, without additional staffing, time, and money, these LHDs stated they could not be diverted from their other more important activities (e.g., providing direct services to the public) to participate in such a program. Nonparticipants indicated that one factor that would facilitate their participation in accreditation would be accessing resources, such as incentives, to complete the process. However, these LHDs indicated that while additional incentives to support an accreditation application would help, having fiscal flexibility and staff designated to the process would be most needed. In fact, one LHD reported that "if you can't fix your infrastructure, you can't fix anything else." All nonparticipant LHDs mentioned the significance of having enough infrastructure to be able to support a voluntary accreditation process.

### 3. Structural capacity as a barrier to participation

**TABLE X**

RESULTS SUMMARY BETWEEN PARTICIPANT AND NONPARTICIPANT LOCAL HEALTH DEPARTMENTS ON HOW STRUCTURAL CAPACITY MAY BE A BARRIER TO PARTICIPATION	
Participant LHDs	Nonparticipant LHDs
<ul style="list-style-type: none"> <li>Organizational culture (N = 6) (new)</li> <li>Other competing projects or priorities (N = 5)</li> <li>Low capacity: Cost and needed staff (N = 4)</li> </ul>	<ul style="list-style-type: none"> <li>Other competing projects or priorities (N = 7) (new)</li> <li>Low capacity: Not enough staff, limited resources, lack of fiscal flexibility (N = 6)</li> <li>Working to build infrastructure (N = 2)</li> </ul>

After participating in the Illinois Voluntary Accreditation Pilot Project, a new structural capacity variable was raised by these by nonparticipant LHDs as important to the accreditation process. Six out of seven LHDs indicated that a barrier to participating in accreditation was whether an agency has a strong culture that supports accreditation with a QI focus. Several of these LHDs indicated that having time to train staff to both understand the process and to have a “global perspective” are needed to ensure QI activities occur before, during, and after accreditation activities. Participants identified the need to change the agency culture by “driving down the accreditation and QI process” into the agency to raise awareness, obtain buy-in, and create a “team” approach to accomplish accreditation with a QI focus.<sup>7</sup> Participant LHDs said that without a culture of understanding and support for QI and accreditation, the full benefit of accreditation could not be met.

Nearly all (N = 5) participant LHDs indicated that the timing of the accreditation process was not ideal and served as a barrier to their participation. The process began in late summer

<sup>7</sup> It is important to note that participant sites only had approximately six weeks to complete the Illinois voluntary accreditation self-assessment, thereby limiting time to train and engage staff across the agency.

2007 when LHDs reported having several competing priorities such as staff vacations, annual performance reviews, back-to-school initiatives (e.g., childhood immunizations), and a natural disaster (a large storm that caused flooding in the northern part of Illinois).

While only one LHD was motivated to participate in the voluntary accreditation pilot because of the financial incentive, many commented on the cost of participating after completing the program. Staff time dedicated to the program, even for the largest health departments, exceeded what was expected. Several participant LHDs indicated that cost would be a barrier to participating if not addressed in future voluntary public health accreditation programs.

All nonparticipant LHDs (N = 7) indicated that one important reason for not participating in the pilot was a commitment to other public health priorities and projects. Projects included ongoing strategic planning processes, workforce development, implementing grants, and providing direct services. Additionally, two LHDs said agency priorities were more important than accreditation and, in particular, the pilot project. One of these LHDs indicated that since this project was voluntary,

it is basically to participate in a research project to determine how this works at a local level. While certainly there would be some evidence to maybe fine tune it, to an organization such as ours, there wasn't any immediate return to participate on a voluntary basis particularly in this beta phase. . . . We were not getting any reimbursements, we are not receiving any special deemed status or Illinois public health certification.

Nonparticipant LHDs (N = 6) indicated that lack of “fiscal flexibility” limits the ability to participate in an accreditation process, specifically the ability to hire a staff person or contractor who would be dedicated to the process, since current staff were devoted to grant-related and/or mandated activities and could not “stop” activities for an un-mandated accreditation process. Further, lack of resources contributes not only to inability to prepare and conduct the survey



process but also in part to meet the measures. For example, one LHD hypothesized that “smaller, rural health departments with fewer resources may be less inclined to participate in accreditation [not] only because of the time commitment but because some of the standards might not even be achievable and given their size.”

Interestingly and unexpectedly, two LHDs mentioned that accreditation should not be attempted without a strong infrastructure. One of these LHDs went on to further say that:

If you don't have a [centralized] business structure and you have as many different billing systems as many programs as we had small businesses we were running—that's a problem that will be a problem with accreditation. The reason I'm confident that we will succeed in accreditation is that we will have worked through those issues. So we have spent the last 3 years rebuilding infrastructure where everything comes to a centralized point. . . .

#### 4. **Structural capacity: Expenditure and workforce characteristics**

Structural capacity was evaluated in part by examining differences in LHDs' budgets and FTE staff. Table XI compares LHD reported annual budget and FTE staff data. Participant LHDs had larger budgets and more staff than nonparticipant LHDs. The total combined budget for all participant LHDs was \$98,395,323 compared to the total combined budget for all nonparticipant LHDs of \$69,274,109. The total FTE staff positions for participant LHDs was 1,265; nonparticipant LHDs had a total of 1,020 FTEs. These measures suggest that participant LHDs may have more capacity than nonparticipant LHDs as measured by financial and human resources.

**TABLE XI**

EXPENDITURE AND WORKFORCE CHARACTERISTICS OF PARTICIPANT AND NONPARTICIPANT LOCAL HEALTH DEPARTMENTS					
Participant LHDs			Nonparticipant LHDs		
LHD Name	Total Annual Expenditures	Number of FTEs	LHD Name	Total Annual Expenditures	Number of FTEs
Adams	\$3,974,015	53.2	Henry/Stark	\$4,000,000	115
Clay	\$3,100,000	55	Wayne /Hamilton	\$600,000	14
Kendall	\$3,721,308	53	LaSalle	\$3,000,000	37
Lake	\$62,000,000	746	Dupage	\$48,227,717	623
Logan	\$2,800,000	41	Christian County	\$690,000	11
Peoria	\$8,500,000	130	McLean	\$7,056,392	90
Winnebago	\$14,300,000	186.5	McHenry	\$5,700,000	130

5. **Structural capacity: Local Health Department Structural Capacity Online**

**Survey**

Measures of LHD structural capacity were captured in responses to the LHD Structural Capacity Online Survey. There was one statistically significant difference between participant and nonparticipant LHDs with respect to structural capacity. Participant LHDs scored higher than nonparticipant LHDs ( $p < .05$ ) on the question of whether LHDs conducted a strategic plan within the last three years. However, there were no statistically significant differences between participant and nonparticipant LHDs for structural capacity within each standard or all measures tested together. Table XII shows the mean and mean rank results for each structural capacity standard and all measures combined. Results for individual measures are provided in Appendix I.

**TABLE XII**

DIFFERENCES IN LOCAL HEALTH DEPARTMENT STRUCTURAL CAPACITY ONLINE SURVEY RESPONSES BETWEEN PARTICIPANT AND NONPARTICIPANT LOCAL HEALTH DEPARTMENTS				
<b>LHD Structural Capacity Online Survey</b>				
	<b>Mean</b>		<b>Mean Rank</b>	
<b>Standard</b>	Participant	Nonparticipant	Participant	Nonparticipant
Leadership support and participation	3.64	3.71	13.7	15.3
Planning: Strategic plan and policies and procedures	3.67	3.24	23.4	19.6
Operational support: Fiscal flexibility and capacity	3.40	3.29	45.7	39.3
Workforce support: Size of workforce and of trained workforce	3.50	3.32	30.6	26.4
Partnerships outside the LHD	4	4	7.5	7.5
<b>All measures</b>	3.54	3.38	119.2	105.8

6. **Process capacity: Local Health Department Readiness Assessment Survey and Local Health Department Core Public Health Capacity Online Survey results**

Measures of LHD process capacity were captured in the paper-form and online responses to the LHD Readiness Assessment Survey and the LHD Core Public Health Capacity Online Survey.

Table XII demonstrates the mean and mean rank results from the LHD Readiness Assessment Survey for each practice standard and a summary of results for the entire data set results for this survey. Results for individual measures are provided in Appendix J. There was a

statistically significant difference on two of the 50 measures: Measure Two (development of the community health profile) and Measure 49 (providing health information to individuals for behavior change). Participant LHDs scored higher than nonparticipant LHDs on these two measures with a directional, one-tailed test p-value of  $<.05$ . There was also a statistically significant difference for four of the eight practice standard categories with a directional, one-tailed test p-value of  $<.05$ . These included the practice standard categories for the Assess, Advocate, Manage, and Inform Illinois Public Health Practice Standards. In addition, there was a statistically significant difference between participant and nonparticipant LHDs for the entire set of measures ( $p <.0001$ ).

Table XIII demonstrates the mean and mean rank results from the LHD Core Public Health Capacity Online Survey for each core public health capacity standard and the results from the summary of the entire data set for this survey. Results for individual measures are provided in Appendix K. There were no significant differences between participant and nonparticipant LHDs for the LHD Core Public Health Capacity Online Survey for any individual measure, standard, or for the entire set of measures.

**TABLE XIII**

DIFFERENCES ON THE LOCAL HEALTH DEPARTMENT READINESS ASSESSMENT SURVEY BETWEEN PARTICIPANT AND NONPARTICIPANT LOCAL HEALTH DEPARTMENTS				
LHD Readiness Assessment Survey				
	Mean		Mean Ranks	
Standard	Participant	Nonparticipant	Participant	Nonparticipant
Assess	3.71	3.37	54.6	44.4 <sup>a</sup>
Investigate	3.81	3.63	67.3	59.7
Advocate	3.77	3.31	39.8	31.2 <sup>a</sup>
Develop plans and policies	3.77	3.6	37	34
Manage	3.79	3.52	47.1	37.9 <sup>a</sup>
Implement	3.54	3.27	75.5	65.5
Evaluate	3.12	2.86	30.8	26.2
Inform	3.75	3.14	34.1	22.9 <sup>a</sup>
<b>All measures</b>	3.67	3.37	382.7	318.3 <sup>b</sup>

<sup>a</sup>Significant with a p-value <.05.

<sup>b</sup>Significant with a p-value<.0001.

**TABLE XIV**

DIFFERENCES ON THE LOCAL HEALTH DEPARTMENT CORE PUBLIC HEALTH CAPACITY BETWEEN PARTICIPANT AND NONPARTICIPANT LOCAL HEALTH DEPARTMENTS				
LHD Core Public Health Capacity Online Survey Results				
	Mean		Mean Ranks	
Standard	Participant	Nonparticipant	Participant	Nonparticipant
Assessment	3.52	3.48	43.6	41.4
Policy	3.79	3.67	41.3	43.7
Assurance	3.59	3.29	61.2	51.8
<b>All measures</b>	3.63	3.46	147.5	133.5

### C. **Results for Research Question 3**

Qualitative and quantitative data were collected to address research question three. The primary research question asked: How does an LHD's leadership influence its decision to participate in accreditation? Sub-questions to operationalize this question included: (a) What are the differences in leadership between participant and nonparticipant LHDs? and (b) Which leadership factors drive the decision to participate in accreditation? Specific results for each of these sub-questions are presented below. Qualitative results are presented first, followed by quantitative results, as applicable. Tables XV, XVI, and XVII summarize the qualitative results for participant and nonparticipant LHDs by each sub-question. Table XVIII summarizes results for sub-question a.

#### 1. **Differences between participant and nonparticipant local health departments in leadership's influence on the decision-making process**

**TABLE XV**

DIFFERENCES BETWEEN PARTICIPANT AND NONPARTICIPANT LOCAL HEALTH DEPARTMENTS ON LEADERSHIP	
<b>Participant LHDs</b>	<b>Nonparticipant LHDs</b>
<ul style="list-style-type: none"> <li>• Want to learn and contribute to the process (Early adopters) (N = 7)</li> <li>• Some QI and accreditation knowledge and experience (N = 7)</li> </ul>	<ul style="list-style-type: none"> <li>• Prioritize operations (N = 7) (not early adopters)</li> <li>• Some QI and accreditation knowledge and experience (N = 5)</li> </ul>

All participant LHDs leaders indicated the decision to participate included a desire to learn more about accreditation and influence the process. In addition to the fact that

nonparticipant LHDs considered the potential costs of participating in the pilot to outweigh the benefits and indicated a need for additional resources to even consider participation, they also mentioned the need to prioritize service delivery, not extra projects. Further, several nonparticipant LHDs indicated that their health departments are not the “type that go out at least at this stage in the game and solicit things and look for things to do.”

Both participant and nonparticipant LHD respondents had some degree of QI knowledge and experience. Nonparticipant LHDs indicated having slightly less knowledge of QI and accreditation.

## 2. **Leadership’s influence to facilitate participation in accreditation**

**TABLE XVI**

LEADERSHIP’S INFLUENCE TO FACILITATE PARTICIPATION IN ACCREDITATION	
Participant LHDs	Nonparticipant LHDs
<ul style="list-style-type: none"> <li>• “Be a part of the process”; “To be a leader”; “To influence the process” (N = 7) (early adopters)</li> </ul>	<ul style="list-style-type: none"> <li>• Leaders want prestige and acknowledgement (N = 2)</li> </ul>

Participant LHDs leaders indicated that a major reason for agreeing to undertake the pilot accreditation process was “a desire to be a part of the process,” learn about accreditation, and “to be a leader.” For example, several LHDs felt it was their duty as a “larger LHD” to serve as “leader” to demonstrate the importance of accreditation. Being a leader was also important to smaller LHD respondents, although their desire to participate appeared to be driven by size for different reasons. Knowing their colleagues’ concerns about the ability of smaller, rural LHDs to

meet accreditation standards, participant smaller LHDs wanted not only to better understand accreditation but also “to have an opportunity to [have a] voice in the development of the accreditation process.”

Nonparticipant LHDs made few references to a leader’s role to facilitate participation in voluntary accreditation. Two nonparticipant LHDs did indicate that one factor that facilitates participating in accreditation, especially a pilot, is to gain prestige. One of these LHDs said, “I think one of the organizational characteristics of a culture that facilitates participation is of the organizational management. If the organization is driven by prestige, then they’d probably be more likely to participate.” In short, these nonparticipant LHDs seem to agree that early adoption of voluntary public health accreditation will occur with leaders who possess “early adopter” characteristics.

### 3. **Leadership’s influence as a barrier to participation in accreditation**

**TABLE XVII**

<b>LEADERSHIP’S INFLUENCE AS A BARRIER TO PARTICIPATION IN ACCREDITATION</b>	
<b>Participant LHDs</b>	<b>Nonparticipant LHDs</b>
None	<ul style="list-style-type: none"> <li>• Lack of knowledge about accreditation (N = 2)</li> <li>• Undergoing a change management process ( N = 2) (new)</li> </ul>

There were two leadership factors that may have served as barriers to participating in the voluntary accreditation pilot. First, leadership’s knowledge, training, and experience with the accreditation process was mentioned as a barrier by several LHDs that did not participate in the



Illinois Voluntary Accreditation Pilot Project. Information about the pilot accreditation process was shared at various Illinois LHD association meetings and at the national level. Unable to attend these meetings, several LHDs indicated one reason for not participating was lack of knowledge about accreditation. Second, two LHD leaders that were already undergoing change processes indicated that they would be interested in participating in voluntary public health accreditation in the near future. One reason they did not participate in the pilot was because they were undergoing organizational change. This result was an unexpected, new finding from this study.

4. **Leadership: Experience and educational attainment measures**

One participant LHD administrator had a longer tenure compared to nonparticipant LHD administrators. Participant LHD administrators were slightly more likely to have a higher level of education. Only one nonparticipant LHD administrator had a master's degree compared to six participant LHD administrators. Table XVIII summarizes LHD leadership characteristics by participation category.

**TABLE XVIII**

COMPARISON OF PARTICIPANT AND NONPARTICIPANT LEADERSHIP CHARACTERISTICS		
	Participant LHDs	Nonparticipant LHDs
<b>Tenure in current position</b>		
<5 years	2	2
5–9 years	1	2
10+ years	4	3
<b>Top Degree</b>		
College graduate	1	4
Master's only	3	1
RN only		2
RN and master's	3	

#### E. Summary of Chapter Four

This chapter provides study results by research question. Twelve LHDs found the value of accreditation to be linked to some QI regardless of participation status. However, nonparticipant LHDs viewed the costs and risks associated with accreditation as not worth the benefits. Nonparticipant LHDs more frequently mentioned the need for greater capacity to participate in accreditation. Participant LHDs were led by leaders who championed the process and prepared the agency to participate in the voluntary accreditation process. Their participation was encouraged by the desire to learn about and contribute to the process. Several factors served to facilitate and inhibit participation in accreditation.

Participant LHDs had larger budgets and more staff than nonparticipant LHDs. There were statistically significant differences between two measures, four standards, and the entire dataset for the Local Health Department Readiness Assessment Survey; and one measure on the LHD Structural Capacity Online Survey. No other results were found to be statistically significant

## **V. DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS**

### **A. Discussion of the Findings**

#### **1. Overview**

The following section provides an overview of findings related to the study's research questions. Though the research for this study focuses on participation in the Illinois Voluntary Accreditation Pilot Project and includes a small sample size, some findings may also be applicable to the National Public Health Accreditation Program. While Illinois is a unique case, given its existing certification program, this study explores factors that may have contributed to the decision to participate in accreditation and that may apply to other LHDs across the country, including both small rural and large urban health departments. Several of the findings, such as a need for additional education on accreditation and QI processes, are likely to be relevant for LHDs beyond the Illinois public health community.

#### **2. Research Question 1: How does a local health department's perception of accreditation's value influence its decision to participate?**

Both participant and nonparticipant LHDs perceived accreditation, to some degree, as an opportunity for improvement. However, LHDs that participated in the accreditation program had a more robust vision of what this meant and a higher sense of efficacy involving how they could make use of the accreditation program. They participated because they wanted to help influence the process, be leaders within the public health and local community, and achieve best practices in order to improve performance. Moreover, participant LHDs' vision of

accreditation was that it would help other existing change processes and improve the organization to serve the community more effectively.

Nonparticipants also viewed accreditation as leading to some improvement activities within the agency. By contrast, however, nonparticipant LHDs had a much more limited sense of how accreditation could be utilized. They referred to voluntary accreditation as a resource or tool that could lead to QI, but no different than what the LHD was already doing to promote QI. Mostly, however, these LHDs' vision of accreditation seemed to be more of a regulatory activity than a QI activity. In their view, the time and resource costs and possible risks associated with accreditation outweighed the benefits of participation. Additionally, the benefits of accreditation were unclear to several of the nonparticipant health departments.

These findings support the contention that the perceived value and vision of accreditation influences the decision to participate (Russo, 2007; Landrum et al., 2007). Shaw (2004) also reported that agencies that perceive accreditation as a regulatory activity would be less likely to participate. Further, if the costs and risks of participating cannot be clearly articulated and the link to constituent services is not made, the decision to undertake the process is unlikely.

While external pressure was identified as one contributing element to an agency's perception of accreditation, it seemed to have little role in this particular study. Nonparticipant LHDs mentioned that having outside pressure may facilitate the decision to participate, but this did not seem to be a strong factor in the decision process. Participant LHDs did not mention having outside pressure to participate, although reasons for participating did have to do with increasing the prestige of the LHD.

3. **Research Question 2: Does a local health department's capacity influence its decision to participate in accreditation?**

Study results demonstrate that LHD capacity did influence the decision process to participate in accreditation, but primarily for nonparticipants. Qualitative data results revealed that participant LHDs rarely raised the issue of capacity as a perceived facilitator or barrier to deciding to participate in accreditation. The cost of participating in the program, however, was identified as a potential barrier for these LHDs. Participant LHDs devoted greater resources than anticipated and reported that if the accreditation program went longer than six weeks, cost might have inhibited their participation. However, regardless of size and capacity, small and large LHDs with varying budgets voluntarily participated, and their capacity did not emerge from the qualitative data as a primary factor in the decision process.

On the other hand, nearly all nonparticipant LHDs perceived capacity as a contributor in some way to their decision not to participate in accreditation. The majority of nonparticipant LHDs suggested that providing public health services and/or other projects was more important than dedicating time and effort to a process that was not mandated and would not increase their resources. Furthermore, most of the nonparticipant LHDs (N = 6) indicated they had limited capacity to participate, particularly in a pilot program.

Nonparticipant LHDs also indicated that while increased incentives would encourage participation, having fiscal flexibility to assign staff and resources beyond grant and funding requirements, as well as having increased resource and infrastructure in general, would encourage participation even more. This finding somewhat disputes recent published studies in which selected state and local public health agencies indicated financial incentives were

preferred over QI training and infrastructure improvements as incentives to participate in voluntary accreditation (Davis et al., 2009).

An important and new theme not originally considered in the proposed conceptual model for this study was identified as significant to the decision process to participate in voluntary accreditation. Six out of seven participant LHDs noted after their participation in the Illinois Voluntary Accreditation Pilot Project that having an organizational culture that supports QI would be vital for a future voluntary public health accreditation program that promotes QI. Examples of having a culture that promotes QI included having trained staff who understand QI and who also have a global perspective of the agency, and having more time to implement the accreditation process so as to be sure all staff could participate and learn about the value of accreditation as a QI tool.

Having an organizational culture that supports and embodies QI activities is well documented in the literature as key to sustaining a QI system (McLaughlin and Kaluzny, 2006). Baker et al. (2007) also suggest that a QI process is essential for LHDs to prepare and implement before, during, and after accreditation. Having an organizational culture of QI requires senior management support, planning, adequate training, trust, a team rather than a silo-based mentality, good communication, staff involvement, and sufficient resources (Riley, Parsons et al., 2010). Participant LHDs validated that for the Illinois Voluntary Accreditation Pilot Project, these elements need to be in place prior to and during an accreditation process that promotes QI. This study result was not in the proposed conceptual model and has been added to the revised model outlined later in this chapter.

Quantitative data results demonstrate that there were some differences in capacity between the participant and nonparticipant agencies. Descriptive data suggest that participant

LHDs had a larger agency budget as well as more staff. There was also a significant difference between participant and nonparticipant LHD scores on one measure for the LHD Structural Capacity Online Survey and for several components of the LHD Readiness Assessment Survey for which participants self-rated as having greater capacity than nonparticipants.

The meaning of the quantitative results is difficult to interpret due to study limitations. Budget and FTE differences between participant and nonparticipant LHDs may only really confirm that in Illinois, regardless of LHD size and geopolitical location, LHDs are funded differently. These differences are more likely due to chance—some nonparticipant LHDs happened to have lower budgets and fewer FTEs than participant ones. There are other LHDs in the respective regions that did not participate in the Illinois Voluntary Accreditation Pilot Project and have larger budgets and FTEs compared to the participant LHDs. Moreover, for this study there are likely few meaningful results between participant and nonparticipant LHDs by organizational capacity as measured by budget and FTE factors.

There was also limited consistency in data results to suggest strong differences between participant and nonparticipant LHDs in any particular area of organizational capacity. For example, one structural capacity measure on strategic planning was statistically significant, but the standard was not. While four of the eight standards were statistically significant in favor of the participant LHDs, only two of the measures within these standards were statistically significant, making the findings more likely due to chance. In addition, these findings may be explained by participant LHDs having higher budgets and more FTEs. As noted previously, published research has found that increased capacity results in increased performance for LHDs (Scutchfield et al., 2004; Erwin 2008). It is not surprising then that participant LHDs with larger

budgets and FTEs overall would score higher on some process capacity measures. Finally, this study's sample size is small, limiting the power of the results.

4. **Research Question 3: How does a local health department's leadership influence its decision to participate in and undertake accreditation?**

Leadership appears to have played a role in the decision to participate in voluntary accreditation for several reasons. First, participant LHD leaders indicated that the reasons for undertaking the Illinois Voluntary Accreditation Pilot Project were related primarily to early adopter characteristics of the LHD leaders who want to contribute to the pilot process and receive external feedback. Moreover, participation in the Illinois Voluntary Accreditation Pilot Project could be explained in part by leadership's early adopter behavior. Early adopter leaders tend to be change agents and interested in innovative practices (Dearing, 2008). Leaders with innovative skills and abilities are more likely to be able to implement and sustain change management initiatives such as QI within an organization (Beecroft et al., 2003; Vinzant and Vinzant, 1996).

Second, participant LHD administrators were also slightly more likely to have a higher level of education. Only one nonparticipant LHD administrator had a master's degree compared to six participant LHD administrators. There was no notable difference in this study between participant LHDs and nonparticipant LHDs in the administrator's tenure. Third, knowledge about accreditation may have played a role in the decision to participate. At least two nonparticipant LHDs indicated that they needed more information about accreditation and QI. One stated that even a phone call would have encouraged participation.



Fourth and finally, individual leadership's impact on the decision to participate in accreditation may also relate to the leader's vision and ability to promote change within the organization. For example, it is interesting to consider why some smaller LHDs with fewer resources opted to participate in accreditation. All participant LHDs indicated they were undergoing some sort of change process. Participant LHDs indicated that they were led by leaders who championed the process and prepared the agency to participate. Leaders planned for and prioritized other projects, and assigned resources to the process. They appeared to see the accreditation process as helping existing change processes and had the skill to operationally manage this.

The nonparticipant LHDs who indicated an interest in participating in a voluntary public health accreditation process did not participate in the pilot in part because they were still undergoing change-management processes within their LHD ( $N = 2$ ). Moreover, these LHDs seemed to see the value of accreditation as a QI process and were in the process of preparing the agency for such an opportunity. The differences between these two nonparticipant LHDs and participant LHDs seems to be that participant LHDs wanted to be leaders within the state and nation on voluntary accreditation and to create additional value for the LHD.

Leaders of public health agencies that are undergoing change processes may possess transformation leadership skills that are required for instituting system-wide QI within an organization—that is, the ability to help make strategic, meaningful changes within an organization in an enduring way. Leaders with the ability to lead such change are likely to have the skills, ability, and vision to recognize the intent of accreditation as a QI process. Further, leaders who are confident in their ability to conduct change processes and are committed to

improvement opportunities are likely to see accreditation as a way to do what they already do. Accreditation becomes an engine or momentum driver for what they want to do anyway.

Leadership also plays a key role in effective and high-performing agencies (Rainey and Steinbauer, 1999). Higher performance in LHDs has also been linked to individual leadership (Handler and Turnock, 1997). In addition, it is possible that the difference between participant and nonparticipant scores on the Local Health Department Readiness Assessment Survey may be due to a leader's ability to promote a higher performing organization. Similarly, budget and staff resources were greater in some of the participant LHDs. While no causal relationship can be inferred, it is possible that leadership ability and vision also accounts for or contributes to greater capacity. It is difficult to know, however, whether leaders catalyze, contribute to, or maintain higher performance and capacity.

## 5. **Revised conceptual model**

Figure 1 is a proposed conceptual framework for this study that includes how the value of accreditation, organizational capacity, and leadership may contribute to an LHD's decision process to undertake voluntary accreditation. Study results and findings presented suggest that changes to the model are needed; new or revised factors are listed in italics. Recommended changes to the model are listed below. Figure 3 is a revised conceptual framework based on these recommendations.

- The value of accreditation was defined by the perception of accreditation as a QI process and by whether its benefits outweigh the costs and risks of participating. While external pressure was not found to be a primary element in the decision process in this study, it

was mentioned as a factor in several qualitative interviews so it is left in the conceptual framework.

- Qualitative data results demonstrated that organizational capacity may contribute to the decision process. Nonparticipant LHDs indicated that while financial incentives were important, improving the fiscal flexibility and overall agency organizational capacity was more important. After participating in the pilot, LHDs indicated that organizational capacity could impact their decision to participate in voluntary public health accreditation as the amount of resources expended was beyond what was anticipated.
- Individual leadership did play a role in the decision to participate in accreditation. For this study, experience did not appear to be a significant factor in the decision to participate; therefore, it is removed. Educational attainment may have influenced the decision to participate and remains in the proposed model. Individual leadership's reasons for participating, including a vision of the interrelatedness of change processes, the importance of how participation in voluntary accreditation could improve service to the community, and the presenting characteristics of being early adopters did seem to impact the decision to participate. Therefore, a new leadership characteristic was added for LHD administrators who are undergoing other change management processes and intend to participate in accreditation. This variable is added to the model as Change Managers.
- The revised conceptual model suggests that three factors occur simultaneously in the decision-making process when it is unclear whether one factor precedes the other (e.g., the relationship between leadership and organizational capacity). However, there is not

enough information to propose an alternative decision-making process, so the revised model has not been changed.

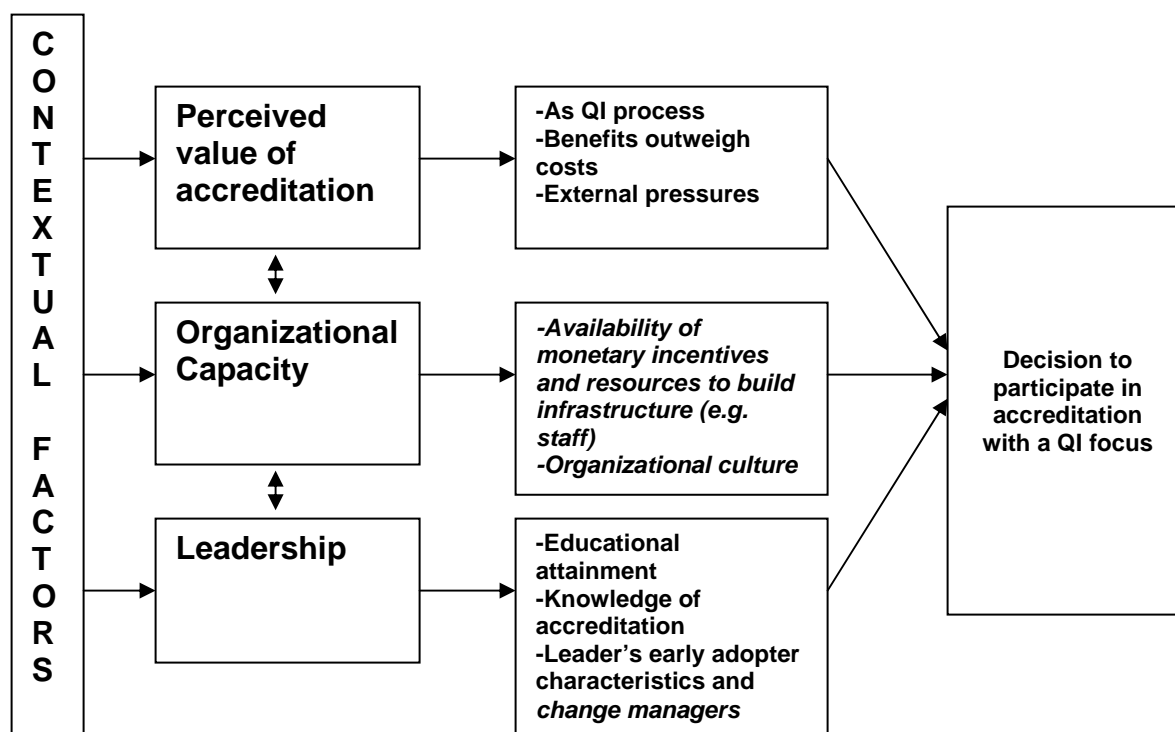


Figure 3. Revised conceptual framework of the decision to undertake voluntary accreditation in Illinois local health departments.

## B. Limitations

The findings from this study should be interpreted cautiously in view of the following limitations:

1. Findings from this study could have been influenced by the impact of the pilot project.

Participant LHDs experienced a form of an accreditation process and their opinions about accreditation could have been impacted by their experience in the pilot. While questions

in the semi-structured interviews queried LHDs' opinions of accreditation before and after the pilot to address this issue, the interview itself was conducted after the pilot was completed, and results are likely skewed by the participants' perception of the pilot project.

2. Resource differences between participant and nonparticipant LHDs are apparent, despite an attempt to limit the impact of differences in resource capacity between participant and nonparticipant LHDs by matching population and geopolitical characteristics. Previous research would suggest that greater resources and capacity are associated with higher levels of performance, possibly explaining the differences in performance detected on the Local Health Department Readiness Assessment Survey.
3. This study included a relatively small sample size with only 14 observations in total and only seven for each group. Further, only one to three individuals were interviewed in each LHD, not fully capturing the breadth of individuals in the LHD who may contribute to opinions about accreditation. Results and analysis are limited in their ability to be generalized, even within Illinois LHDs.
4. Timing may present a threat to internal validity as data were collected from the participant and nonparticipant LHDs at different times some 16 months apart. Data from participant sites were collected when these agencies were immersed in the accreditation process and had access to additional resources to assist in participating in the accreditation process. By the time the nonparticipant LHD interviews were conducted, results of the accreditation process had been released and perceptions of the process may have changed among LHDs. Recall bias for nonparticipant LHDs may have occurred since interviews occurred more than one year after the Illinois LHD accreditation process

officially began. The Local Health Department Readiness Assessment Survey was not impacted, however, as it was completed during the pilot accreditation process.

5. Interview bias may have influenced the findings as interviews were conducted by different teams. Three participant interviews were conducted by two individuals, one of whom works in an Illinois LHD. This may have unintentionally influenced the interviewing process. Four other participant interviews were conducted by a different interviewer who was not involved in LHD activities.
6. The cross-sectional nature of the data may inhibit the ability to determine the role of leadership in the decision-making process. For example, it is unclear from the study whether LHDs with preexisting strong organizational capacities attract leaders with vision to engage in QI or whether a leader who engages in QI results in a strong LHD.

### C. **Conclusions**

The findings from this study support the following conclusions:

1. Participant LHDs perceived accreditation as an opportunity to enhance existing QI activities, to improve services to the community, and to become a leader in and significant contributor to the development of an accreditation program serving Illinois LHDs. This perception distinguished them from nonparticipant LHDs.
2. Some nonparticipant LHDs also viewed voluntary accreditation as an opportunity to promote QI, but only minimally so. They did not seem to believe that the potential benefits outweighed the costs of participating in the accreditation process. Nonparticipant LHDs often viewed accreditation as only one of many tools that could be used to improve

performance. Several nonparticipant LHDs reported that they had a lack of clarity on the benefits of accreditation and had no proof that the process could lead to improved quality. These LHDs also indicated that they did not participate because they viewed the pilot as an extra project in which they could not afford to participate.

3. Perceived capacity influenced decisions to participate. The majority of the nonparticipant LHDs decided not to participate in the Illinois Voluntary Accreditation Pilot Project primarily due to their perception of capacity issues—the financial and opportunity costs of participating in the program outweighed the perceived benefits. Actual capacity differences were more difficult to assess. Finally, nonparticipant LHDs indicated that while incentives were important to facilitate participation, improvements to structural capacity were more important.
4. Leadership was important in the decision to participate in accreditation. Leaders of participant LHDs were more likely to innovate and adopt new programs with the potential to enhance agency performance and impact. Participant leaders' educational level was slightly higher than that of nonparticipants. Lack of knowledge and vision about accreditation by leaders of nonparticipant LHDs influenced the decisions of those agencies not to participate. Finally, the leader's ability to manage change influenced decisions to participate. All participant LHDs indicated they were undergoing organizational change processes before the pilot began. Two nonparticipant LHDs indicated they were undergoing organizational change processes at the time of the pilot and intended to participate in voluntary accreditation.

#### D. **Recommendations**

1. **Provide training on transformational change and quality improvement with a focus on local health department leaders.**

This study found that leaders with the skills and ability to conduct change management may be more likely to participate or intend to participate in voluntary accreditation. Leadership is noted as one of the biggest contributors to the success of a change management process such as QI (Riley, Parsons et. al., 2010; Dato et al., 2001; Fredericksen and London, 2000; Vinzant and Vinzant, 1996). Leaders can provide vision and oversight for the process and promote creativity and innovation through change processes such as the one promoted through accreditation. For example, it is often the leader's role to define the purpose and articulate the program's benefits; the leader can shape the process from the beginning.

Undertaking QI through accreditation requires transformational change within the health department (Riley, Parsons et al., 2010). Mays (2004) indicates that an accreditation program's ability to promote QI depends on the environment into which it is introduced. LHD leaders are vital in creating an organizational culture that embodies QI activities. To achieve this culture, leaders must understand that QI is a continuum that ranges from small QI-focused projects to a larger agency-wide understanding in which most staff work in a QI framework (Riley, Moran et al., 2010).

Unfortunately, LHD leaders have limited experience with QI. As previously noted, only 55% of health departments responded to the NACCHO 2008 profile as having participated in QI activities. More work is needed to ensure there is a culture of readiness to promote QI. All LHD staff would benefit from this training. Public health agency leaders are most often required to lead change initiatives; no public health leader should be without these skills.



There are several ways training on transformation change and QI could occur. Opportunities for existing national and regional public health leadership institutes such as the National Public Health Leadership Institute or Mid-American Regional Public Health Institute, as well as training programs for new public health leadership such as NACCHO's *Survive and Thrive: Roadmap for New Local Health Officials*, could include or increase transformation change and QI training in their curriculum. Additionally, while the MLC program and NACCHO are both working to provide QI training opportunities to state and local public health agencies, these efforts are limited. The MLC program for the development of QI capacity exists in only 16 states and is anticipated to end in 2012; likewise, NACCHO trainings are periodic. There need to be additional resources to enhance the frequency and availability of strategies for public health leaders, and their staff, to access and learn change management techniques such as QI.

## 2. **Study and explore differentiated ways to provide incentives**

Little research has been conducted to understand the incentives that would be needed to encourage LHDs to participate in voluntary accreditation with a QI focus. Mays (2004) noted that successful accreditation programs are those that offer the greatest incentives. This study demonstrates possibly contradictory results to a previous study (i.e., Davis et al, 2009) regarding public health voluntary accreditation incentives, in that both participant and nonparticipant LHDs indicated that having fiscal flexibility and staff were possibly more important than direct monetary contributions. More research may be needed to explore what types of incentives would most encourage participation in voluntary accreditation.

Mays (2004) also indicated that incentives are particularly important for resource-poor public health agencies. Inflexible and funding-siloed projects and programs is a well-known

limitation of how public health agencies receive funds, resulting in agency activities focused only on specifically funded grant activities (Pestronk, 2005). This may prevent public health agencies' thinking about QI and/or releasing staff to develop QI systems (Seid et al., 2006). Resource-poor public health agencies may be more likely to suffer from the problem of inflexible spending and therefore be less likely to participate in voluntary accreditation, while simultaneously these agencies may be the ones that would ultimately benefit most from an accreditation program focused on QI. More attention is needed to improve fiscal flexibility to participate in accreditation.

Understanding the need for and ways to provide incentives is even more important, given most public health agencies' current economic situation. While preparedness funding in recent years has attempted to boost the public health infrastructure, the current fiscal crisis has left many LHDs struggling. According to a NACCHO report, 45% of LHDs across the country experienced cuts to 2009 budgets (NACCHO, Research Brief, 2009). Undertaking a major change initiative such as accreditation with a QI focus is not practical or advisable during times of crisis (Bryson, 2005). A voluntary accreditation program must seriously take these factors into consideration to encourage program participation.

### 3. **Promote the role of leadership in instituting quality improvement activities and accreditation with a quality improvement focus**

Study results suggest that leaders' perception, i.e., their vision for organizational and community improvement, was an important—if not the critical—difference in deciding to participate in the Illinois Voluntary Accreditation Pilot Project. In this study, LHDs with small and large budgets and staff chose to participate in accreditation when sometimes more resource-

rich LHDs did not. While capacity matters, leadership characteristics and ability may play a role not only in the decision to participate in a QI-focused accreditation program but also in the overall success of an LHD. There is some discussion (though limited) about the importance of leadership in the public health QI programs; there are even fewer discussions of leadership in the decision to participate in and implement a voluntary public health accreditation program with a QI focus. More work is needed to promote the importance of a leader's role in QI activities, and accreditation with a QI focus.

4. **Ensure that public health accreditation programs promote quality improvement**

Those LHDs participating in the Illinois Voluntary Accreditation Pilot Project were able to identify opportunities for QI; however, LHDs emphasized the need for the program to promote QI even more explicitly. For example, participant LHDs in this pilot noted the short time frame for program implementation. Solberg et al. (2006) note that there is a need to balance the need for “push for change to occur” with sufficient time for real change and improvement to occur. Hamm (2007) emphasizes the need to “clarify the role of accreditation as a long-term improvement process rather than a single performance evaluation experience” (p. 5), and to then institute key change-making processes in order for QI to occur. Ensuring that this promise results in the intended outcome is vital for accreditation program success.

5. **Improve marketing of voluntary accreditation to more fully explicate the relation to other improvement processes and the benefits of participation**

Several nonparticipant LHDs indicated they had limited knowledge of accreditation in general. One LHD specifically reported that greater outreach may have encouraged participation. Lack of knowledge can lead to poor perception or misconceptions about the program. Those LHDs that are already in an organizational development phase and/or are perceived to be resource-poor may be more likely to perceive accreditation as a regulatory activity rather than an on-going process that will assist with their current situation. Further, in the absence of visionary leadership that perceives the value of accreditation and of the empirical data to show a definitive causal link to QI, marketing becomes crucial. This should include testimonials, expert opinions, and case studies, as well as technical expertise. Existing LHDs that have participated in accreditation processes should be considered for recruitment to assist in this process. Leadership by example can be powerful.

6. **Conduct a study with a larger sample size to explore differences in capacity and performance between participants and nonparticipants**

This study demonstrates that there may be capacity differences between participant and nonparticipant health departments. While this study had a small sample size, the results warrant further exploration to help assess the needs of all LHDs, whether accreditation with a QI focus is a good solution to the LHDs' problems, and if so, what incentives are needed to promote participation. Further, longitudinal studies on how leadership and organizational capacity relate to one another may help to better understand what about leadership impacts an organization's capacity.

E. **Final Conclusion**

The purpose of this study was to understand how an LHD's perceived value of accreditation, its capacity, and individual leadership contributed to its decision to participate in the Illinois Voluntary Accreditation Pilot Project. Study recommendations may be important for future activities of the project and have some relevance and meaning for PHAB's national public health accreditation program. In particular, if PHAB's program is to begin in less than a year, more effort is needed to: (1) inform and educate public health agencies about accreditation; (2) provide preparation, direction, and support; and (3) clarify program benefits including that of a QI focus. In the longer term, more work is needed to provide training on transformational change and QI for public health agency leaders. Additional research is also needed to fully understand the need for—and ways to provide incentives for—a voluntary accreditation process for those public health agency leaders who are more resistant to program participation.

Coming in 2011, PHAB's pending national voluntary public health accreditation program kick-off is an unprecedented moment in public health's history. Through participation in PHAB's program, public health agencies will have an opportunity to join a movement that may eventually improve community health and well being through QI approaches. However, promoting QI in public health agencies through accreditation will not happen overnight; rather, it is a long-term but worthy goal that should be intentionally adopted and implemented. Better understanding of what it will take to prepare agencies to use accreditation to improve public health's work may be vital to the program's success.

## **APPENDICES**

## APPENDIX A

<b>Illinois Eight Practice Standards</b>	
<b>Assess</b>	Assess the health needs of the community by establishing a systematic needs assessment process that periodically provides information on the health status and health needs of the community
<b>Investigate</b>	Investigate the occurrence of adverse health effects and health hazards in the community by conducting timely investigations that identify the magnitude of health problems, duration, trends, locations, and populations at risk
<b>Advocate</b>	Advocate for public health, build constituencies, and identify resources in the community by generating supportive and collaborative relationships with public and private agencies and constituent groups for the effective planning, implementation, and management of public health activities.
<b>Develop</b>	Develop plans and policies to address priority health needs by establishing goals and objectives to be achieved through a systematic course of action that focuses on local community needs and equitable distribution of resources, and involves the participation of constituents and other related governmental agencies.
<b>Manage</b>	Manage resources and develop organizational structure through the acquisition, allocation, and control of human, physical, and fiscal resources; and maximizing the operational functions of the local public health systems through coordination of community agencies' efforts and avoidance of duplication of services.
<b>Implement</b>	Implement programs and other arrangements assuring or providing direct services for priority health needs identified in the community health plan by taking actions that translate plans and policies into services.
<b>Evaluate</b>	Evaluate programs and provide quality assurance in accordance with applicable professional and regulatory standards to ensure that programs are consistent with plans and policies, and provide feedback on inadequacies and changes needed to redirect programs and resources.
<b>Inform</b>	Inform and educate the public on public health issues of concern in the community, promoting an awareness about public health services availability and health education initiatives that contribute to individual and collective changes in health knowledge, attitudes, and practices toward a healthier community.

## APPENDIX B

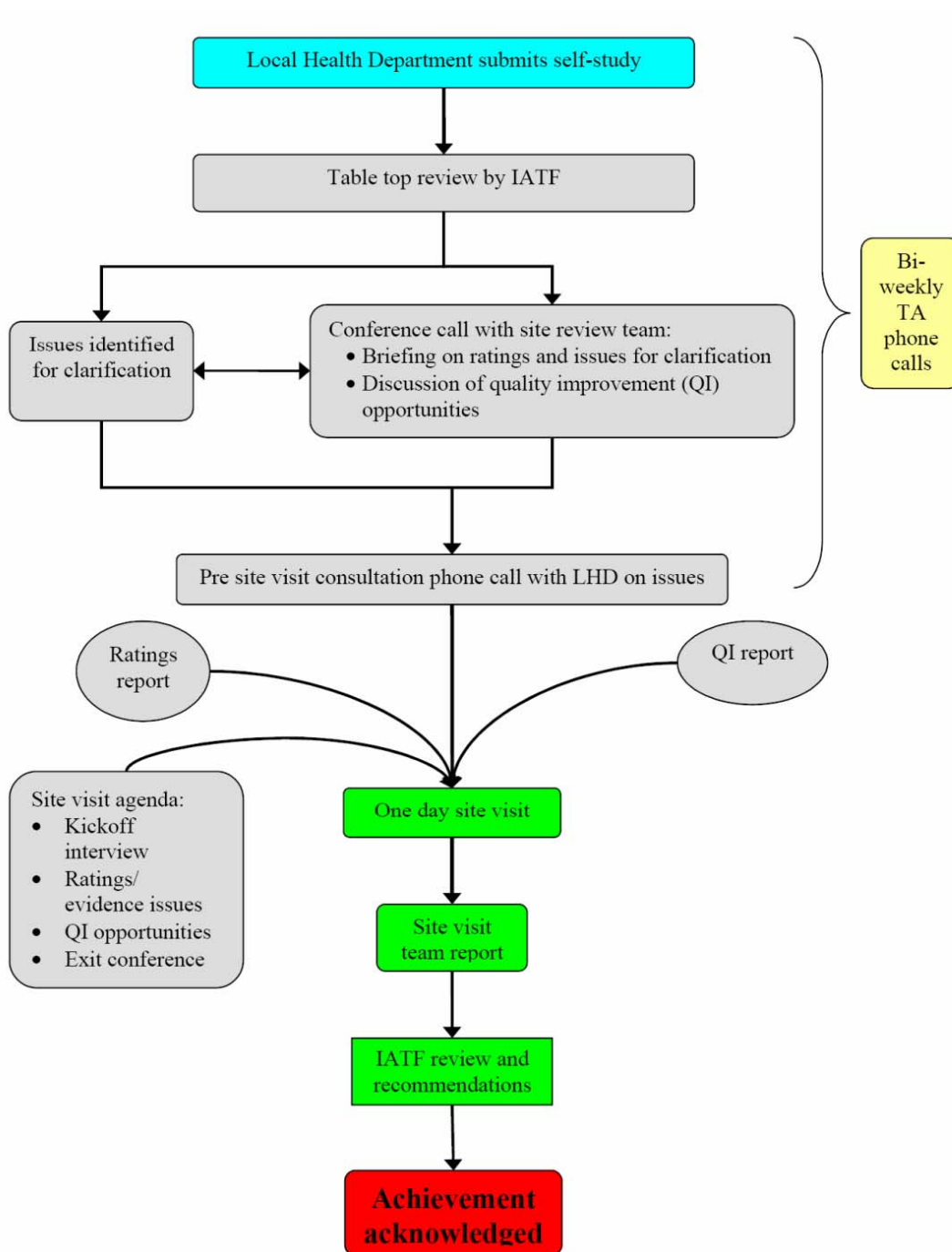


Figure 4. Illinois Voluntary Accreditation Pilot Process Map



## APPENDIX C

### Institutional Review Board Approval Letter

#### UNIVERSITY OF ILLINOIS AT CHICAGO

Office for the Protection of Research Subjects (OPRS)  
Office of the Vice Chancellor for Research (MC 672)  
203 Administrative Office Building  
1737 West Polk Street  
Chicago, Illinois 60612-7227

#### Exemption Granted

December 16, 2008

Christina Welter, MPH  
Community Health Sciences  
810 S. Maple Ave.  
Oak Park, IL 60304  
Phone: (773) 909-9905 / Fax: (773) 253-4782

**RE: Research Protocol # 2008-1112**  
**“Factors Associated with Local Health Department Participation in Voluntary Accreditation”**

Dear Ms. Welter:

Your Claim of Exemption was reviewed on December 16, 2008 and it was determined that your research protocol meets the criteria for exemption as defined in the U. S. Department of Health and Human Services Regulations for the Protection of Human Subjects [(45 CFR 46.101(b))]. You may now begin your research.

**Exemption Period: December 16, 2008 – December 15, 2011**

Your research may be conducted at UIC and with adult subjects only.

The specific exemption category under 45 CFR 46.101(b) is:

(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

You are reminded that investigators whose research involving human subjects is determined to be exempt from the federal regulations for the protection of human subjects still have responsibilities for the ethical conduct of the research under state law and UIC policy. Please be aware of the following UIC policies and responsibilities for investigators:

1. Amendments You are responsible for reporting any amendments to your research protocol that may affect the determination of the exemption and may result in your research no longer being eligible for the exemption that has been granted.
2. Record Keeping You are responsible for maintaining a copy all research related records in a secure location in the event future verification is necessary, at a minimum these documents include: the research protocol, the claim of exemption application, all questionnaires, survey instruments, interview questions and/or data collection instruments

Phone: 312-996-1711

<http://www.uic.edu/depts/ovcr/oprs/>

Fax: 312-413-2929

## APPENDIX C (continued)

2008-1112

Page 2 of 2

December 16, 2008

associated with this research protocol, recruiting or advertising materials, any consent forms or information sheets given to subjects, or any other pertinent documents.

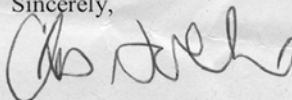
3. Final Report When you have completed work on your research protocol, you should submit a final report to the Office for Protection of Research Subjects (OPRS).
4. Information for Human Subjects UIC Policy requires investigators to provide information about the research protocol to subjects and to obtain their permission prior to their participating in the research. The information about the research protocol should be presented to subjects in writing or orally from a written script. When appropriate, the following information must be provided to all research subjects participating in exempt studies:
  - a. The researchers affiliation; UIC, JBVMAC or other institutions,
  - b. The purpose of the research,
  - c. The extent of the subject's involvement and an explanation of the procedures to be followed,
  - d. Whether the information being collected will be used for any purposes other than the proposed research,
  - e. A description of the procedures to protect the privacy of subjects and the confidentiality of the research information and data,
  - f. Description of any reasonable foreseeable risks,
  - g. Description of anticipated benefit,
  - h. A statement that participation is voluntary and subjects can refuse to participate or can stop at any time,
  - i. A statement that the researcher is available to answer any questions that the subject may have and which includes the name and phone number of the investigator(s).
  - j. A statement that the UIC IRB/OPRS or JBVMAC Patient Advocate Office is available if there are questions about subject's rights, which includes the appropriate phone numbers.

Please be sure to:

→ Use your research protocol number (listed above) on any documents or correspondence with the IRB concerning your research protocol.

We wish you the best as you conduct your research. If you have any questions or need further help, please contact me at (312) 355-2908 or the OPRS office at (312) 996-1711. Please send any correspondence about this protocol to OPRS at 203 AOB, M/C 672.

Sincerely,



Charles W. Hoehne  
Assistant Director, IRB # 2  
Office for the Protection of Research Subjects

Enclosure(s): None

cc: Bernard Turnock, Community Health Sciences, M/C 923  
Betty Neuberger, School of Public Health, M/C 923

## APPENDIX D

### **Letter to LHD Nonparticipants**

LHD Director Name  
Address  
City, State  
Zip Code

Dear:

My name is Christina R. Welter and I am a doctoral student the University of Illinois at Chicago School of Public Health. I am writing to ask you to participate in my dissertation thesis research project. As I am sure you are well aware, the Illinois Public Health community recently finished a pilot round of Voluntary Public Health Accreditation. Seven local health departments (LHDs) participated in this process.

The purpose of my study is to evaluate the differences between local health departments that participated and those that did not participate in this Accreditation project. You have been selected because your LHD jurisdiction size and geographic proximity is similar to one of the LHDs that participated in the Accreditation project.

Your participation will take approximately two hours, and is vital for the success of my project. Participation involves two online questionnaires and one in-person or phone interview. First, a twenty question survey about your LHD's practice capacity; Second, a sixteen question on-line survey on your LHD's organizational capacity; and Third, an approximately one-hour long phone interview with you and any of your selected leadership staff. Your responses will be confidential and no person will be named in the research findings. I will share a copy of the analysis results with you and anyone interested upon completion of the study.

If you are interested in this project, please acknowledge your participation by filling out the attached form. I will also be calling you in approximately five business days to discuss your interest in the project. If you have any questions or would like to confirm your response, please do not hesitate to contact me at 773-909-9905 or [christinawelter@gmail.com](mailto:christinawelter@gmail.com).

Thank you in advance for your time and efforts. I look forward to talking with you soon.

Best Regards,

Christina R. Welter, M.P.H.  
Candidate, DrPH  
University of Illinois at Chicago, School of Public Health

## APPENDIX E

### **“Factors Associated with the Decision of a Local Health Department to Undertake Voluntary Accreditation”**

#### *Consent Form*

I, \_\_\_\_\_ (type name here) \_\_\_\_\_ hereby agree to participate in the study “Factors Associated with the Decision of a Local Health Department to Undertake Voluntary Accreditation” by completing two online surveys and participating in one phone or in-person interview. In total, I will spend no more than two hours on this study. I understand that my participation and that of my local health department is voluntary and that I may ask questions and/or end my participation at any time. I further understand that these responses are confidential and no person will be named in the research findings. A copy of the research results will be shared upon completion of the study.

If I have any questions on this study, I may contact the Principal Investigator, Christina Welter, M.P.H. at 773-909-9905 or [christinawelter@gmail.com](mailto:christinawelter@gmail.com). If there are any questions about my rights, I may contact the University of Illinois at Chicago Institutional Review Board, Office for the Protection of Research Subjects, at (312) 996-1711. This research has been approved as exempt by the University of Illinois at Chicago, Office for the Protection of Research Subjects (OPRS), Research Protocol #2008-1112.

**Name and Title:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

## APPENDIX F

### Participant Accreditation Evaluation Questions

<b>Illinois Voluntary Accreditation Evaluation Questions</b>
--

#### **Introduction**

Thank you for agreeing to participate in the Illinois voluntary pilot accreditation process. Your feedback is vital in the success and future of this evaluation and overall process. The purpose of this interview is to gather information about your experience as a pilot local health department (LHD) in this process. Specifically, we hope to ask you questions about why you chose to participate, how you organized your response to the requirements, what factors mattered in your ability to participate, and evaluate your thoughts on each step of the pilot accreditation process.

Please note that these interviews are being tape-recorded for documentation purposes and your comments will be used for at least two purposes: First, an overall evaluation for completion of the grant; and 2) Vamsi Vasireddy and Christina Welter hope to use your feedback for their doctoral research. No single individual will be named nor will any single health department be named in any of the reports. All your responses are confidential and will be available only to the IPHI team. We anticipate interviews taking approximately four hours. Please let us know when you need a break.

#### **A. Contextual Questions**

- 1) What role do agency characteristics and priorities play in successfully participating in the pilot accreditation process?
- 2) Why did your agency decide to participate in the pilot accreditation process?
  - a. What factors motivated you to go through the pilot accreditation process?
  - b. To what degree did the incentives offered by Illinois Accreditation Taskforce (IATF) motivate you to participate?
  - c. What other factors were motivating?
  - d. What factors did you perceive to be barriers to participating in the process?
  - e. Was cost a barrier?
  - f. What factors would have made your decision easier to participate in the pilot?
- 3) What was your attitude towards accreditation before and after participating in the pilot?
  - a. Where were you in the beginning, and did the perception change?
- 4) Were any unusual or unanticipated intervening circumstances affecting you that occurred during the pilot accreditation self-study and site visit processes?

#### **B. Inputs**

- 1) Briefly describe the process you used in your LHD to complete the pilot accreditation process. How did you organize getting the work done?
- 2) Did you feel your LHD was ready to participate in the process? Why or why not?
  - a) How was the readiness assessed?

## APPENDIX F (continued)

- b) If your agency was not ready and still went through the process, what was/ were the driving factor(s)?
- c) What, if anything, did the LHD do to get ready?
- d) Did the LHD obtain buy-in and participation from their board of health, management, staff, and stakeholders?
  - i) How did the process take place and how did it help?
  - ii) How were the perceived benefits and barriers presented to the team?
  - iii) How was the process articulated to the board, management, staff, and stakeholders?
- 3) Now I'm going to ask you about a more detailed list of how your LHD infrastructure helped or hindered your process.
  - a) How do you define infrastructure?
  - b) In general, how did your LHD's infrastructure help your application process?
  - c) Hinder your process?
- 4) Infrastructure can be defined in many different ways. I'm going to ask you a few specific questions on how leadership, a strategic plan, plans and policies, information technology, workforce competency, and partners all played into your experience in the pilot accreditation process.
  - a) What role did leadership play in the process?
  - b) How did leadership support help or hinder your ability to complete the process?
  - c) How do you see this process impacting current or future strategic planning processes?
  - d) Do your LHD programs/divisions have goals and objectives? Would this have been helpful? Why or why not?
  - e) Does your LHD have formal written policies and procedures for internal operations? Would this have been helpful? Why or why not?
  - f) How did your information technology resources capacity and capability help your application process?
    - i) Hinder your application process?
  - g) How did your fiscal resource capacity and capability help your application process?
    - i) Hinder your application process?
  - h) How did the size of your workforce impact the application process?
  - i) How did your workforce competency impact the application process?
  - j) How did your partnerships impact the process?
- 5) What other infrastructure issues impacted the process?
- 6) In thinking of the process you set up, what do you think was the biggest factor helping you to complete the process?
  - a) What hindered the process the most?
- 7) If you could do it again, what would you change?
- 8) How do you think your LHD infrastructure impacts your overall agency performance?

## APPENDIX F (continued)

### **C. Accreditation Process Components - Standards/ measures**

#### *General questions:*

- 1) What is your overall opinion on the pilot accreditation measures?
  - a) In general, what do you like about the measures?
  - b) What concerns do you have about the measures?
- 2) We will send an instrument to collect your opinions on each individual measure at a later date. If you have any thoughts on a specific measure(s), we would like to hear them now. If not, please respond to the instrument when you receive it.
- 3) Were there any areas of public health practice and functions that were not covered that should have been?

#### *Perceived benefit/ relevance:*

- 1) Does your agency perceive the pilot accreditation measures to adequately reflect your daily practice (validity and reliability)?
  - a) If not, what measures do you find to be inadequate?
- 2) To what extent did the measures help with documenting and analyzing your performance?

#### *Conclusion/ recommendations:*

- 1) What would your agency do differently if given another chance to respond to the measures?
- 2) What do you recommend to improve the pilot accreditation measures?
- 3) How would you change the listings of potential evidence where you think it is needed?
- 4) Did the pilot accreditation measures help with identifying areas for CQI in your agency? Please explain.

### **D. Accreditation Process Components - Self-study tool**

#### *General question*

- 1) What is your overall opinion of the self-study tool?
  - a) In general, what do you like about the tool?
  - b) What concerns do you have about the tool?

#### *Perceived benefit/ relevance:*

- 1) Was the self-study tool clear/ understandable? If no, please explain
- 2) How did the self-study tool help in your efforts to document and organize evidence of your organization's performance?
- 3) Was the self-study tool user-friendly? If no, please explain
- 4) Did the organization and layout of the self-study tool make sense? If no, please explain
- 5) What is your opinion on the questions in the self-study tool?
  - a) Did you think some questions were better than the others? Please explain
  - b) Do you think any questions were omitted in the self-study tool?
  - c) Would you like to have additional questions included in the tool? If so, what are they and how will that make a difference?

## **APPENDIX F (continued)**

- 6) What are the benefits/ barriers for your agency in using the self-study tool?

### Resources:

- 1) What effort did your agency put in to using the self-study tool in terms of human and fiscal resources?
- 2) What are the (resource) barriers to using the self-study tool?

### Conclusion/ recommendations:

- 1) What would your agency do differently if given another chance to use the self-study tool?
- 2) What do you recommend to improve the self-study tool?
- 3) Did the self study tool help with identifying areas for CQI in your agency? Please explain

## **E. Accreditation Process Components - Self-study process**

### General question

- 1) What is your overall opinion of the self-study process?
  - a) In general, what do you like about the process?
  - b) What concerns do you have about the process?

### Perceived benefit/ relevance:

- 1) How did completing the self study help your agency with documenting and analyzing your performance?
  - a) How did the assistance provided by IPHI help towards completing the self-study process?
    - i. To what extent did the technical assistance calls help?
    - ii. To what extent did posting the FAQ on the website help?
    - iii. To what extent did the 'LHD user guide' document help?
  - b) Was the assistance adequate? If not, please explain what would have helped you in the process
- 2) To what extent does the process of completing a self-study help in your efforts to identify QI opportunities?
- 3) What are the benefits/ barriers for your agency in completing the self-study?

### Resources:

- 1) What effort did your agency put in to completing the self-study in terms of human and fiscal resources?
- 2) What are the (resource) barriers to completing the self-study?

### Conclusion/ recommendations:

- 1) What would your agency do differently if given another chance to complete the self-study?
- 2) What do you recommend to improve the self-study process?
- 3) Did the self study process help with identifying areas for CQI in your agency? Please explain

## **F. Accreditation Process Components - Site visit**

### General question:



## **APPENDIX F (continued)**

### 1. What is your agency's overall opinion on the site visit process?

#### Perceived benefit/ relevance:

- 1) Does your agency perceive a site visit to be relevant to the accreditation process? If not, please explain.
- 2) How did the site visit help your agency in clarifying issues with the self-study?
  - a) Were all issues clarified? If not, please explain
- 3) To what extent is the site visit process useful in your efforts to develop and implement a QI process?
- 4) What does your agency think is the benefit of participating in a site-visit?
- 5) Would you prefer a site visit to be mandatory or optional?

#### Resources:

- 1) What effort did the agency put in to participating in the site visit in terms of human and fiscal resources?
- 2) Does the agency see the resources invested in the process to be worthy of the perceived benefit?
- 3) What are the barriers to participating in a site visit?

#### Conclusion/ recommendations:

- 1) What would your agency do differently if given another chance to participate in the site visit?
- 2) What do you recommend to improve the site visit process?
- 3) Did the site visit process help with identifying areas for CQI in your agency? Please explain.

### **G. Outputs**

- 1) Does your agency see the resources invested in the process to be worthy of the perceived benefit so far?
- 2) What is the most significant issue that will help you to take action on your identified priorities?
  - a) What is the least significant?
- 3) In thinking ahead, how do you think your LHD infrastructure impacts your ability to act on your identified priorities? (Prompts from question 2 & 3 in inputs)
- 4) Is there an existing plan for CQI in your agency?
  - a) If yes, do you plan to modify or implement it the way it is?
  - b) If no, do you plan on developing a plan for CQI for your agency?
    - i) If yes, how do you envision developing the plan?
    - ii) If no, what are the barriers to developing such a plan?
  - c) To what extent did participating in the pilot accreditation project prompt/ help with your decision to develop a CQI plan?
- 5) Based on the preliminary results of participating in the pilot, what areas do you envision developing a CQI plan(s) for?
  - a) Have you identified areas for CQI?
  - b) To what extent did the pilot accreditation process help with identifying these areas?

## **APPENDIX F (continued)**

- 6) Do you plan on performing periodic self-assessments in the future?
  - a) If yes, how do you envision performing those periodic self-assessments?
  - b) If no, why not? What are the barriers?
  - c) What is the role of the pilot accreditation process in helping your agency develop a plan for performing periodic self-assessments?
- 7) Do you have a better understanding of your organizational strengths and weaknesses due to participating in the accreditation process?
  - a) How did the pilot accreditation project help in identifying those strengths and weaknesses?
  - b) If no, what do you think acted as barriers in understanding your strengths and weaknesses?
- 8) Are you able to communicate your agency's activities to the community better because of the accreditation process?
  - a) How did the process help facilitate better communication?
- 9) Do you plan to use the results from the pilot accreditation project internally within your organization? If so, how do you envision doing that?
- 10) To what extent do you see the pilot accreditation project helping with your IPLAN process/objectives in the future?
- 11) To what extent do you see the pilot accreditation project helping with your certification process in the future?

### **H. Other comments and questions**

- 1) What other comments, questions, or suggestions do you have for this process?
- 2) Have you seen any of your perceived benefits (of participating in the pilot process) so far?
  - a) What did you expect to gain from the pilot accreditation project?
  - b) Did the pilot process help you in realizing those expectations? Please explain

### **Wrap-up and next steps**

Thank you again for participating in this evaluation interview. In the near future, you will receive a short, web-based survey to ascertain your opinions of the pilot accreditation process, as well as an instrument that will allow you to tell us your thoughts on specific measures. Christina and Vamsi will be contacting you in May and June to see where you are in the implementation process.

## APPENDIX G

### Non-participant Voluntary Accreditation Questions

#### Non-participant Voluntary Accreditation Questions March 2009

#### Introduction

Thank you for agreeing to participate in this research study “Factors Associated with the Decision of a Local Health Department to Undertake Voluntary Accreditation”. Your feedback is vital in the success of this study. The purpose of this interview is to gather information about why you did not choose to participate in the Illinois Voluntary Accreditation Project Pilot.

Please note that these interviews are being tape-recorded for documentation purposes and your comments will be used for my doctoral research. No single individual will be named in any of the reports. All your responses are confidential. I anticipate interviews taking approximately one hour. Please let us know when you need a break and/or have any questions. You may stop the interview at any time. You are welcome to review the research findings once my analysis is completed.

#### A. Contextual Questions

- 1) Why did your agency decide to not participate in the Illinois Voluntary Accreditation Project Pilot?
  - a. Were there any motivating factors to participating?
    - i. Did anything encourage you to participate (encouraged you to even consider participating)?
  - b. What factors did you perceive to be barriers to participating in the process?
    - i. To what degree did the incentives offered by Illinois Accreditation Taskforce (IATF) discourage or encourage you to participate?
    - ii. Was cost a barrier?
    - iii. Measures?
    - iv. Any part of the accreditation?
  - c. Were any unusual or unanticipated intervening circumstances affecting you that occurred during the pilot accreditation that prohibited you from participating?
  - d. Did the fact that this was a pilot project impact your decision to participate? If yes, how?
- 2) What factors, if any, would have helped to change your mind about participating in the pilot?
- 3) What was your attitude towards accreditation of local health departments (in general) when Illinois offered a voluntary pilot project in the summer 2007?
  - a. Possible benefits of accreditation
  - b. Disadvantages of accreditation
- 4) Has your perception of accreditation (in general) changed since the voluntary pilot, i.e. in the last year?
  - a. If yes, how has it changed? What is your current perception of accreditation?

## APPENDIX G (continued)

- b. Why has your opinion changed?
    - a. Possible benefits
    - b. Disadvantages
- 5) What are your perceptions of accreditation (in general), if different than your feelings about local public health accreditation?
- 6) What role do you think agency characteristics and priorities play in successfully participating in a pilot accreditation process?

### **B. Inputs**

- 1) What is your (and/or staff members) experience with accreditation?
  - a) Have you and/or any members of your staff participated in any part of the Illinois Voluntary Public Health Accreditation process? If yes, how?
  - b) Have you and/or any members of your staff participated in any part of any other public health accreditation process for your health department? If yes, how?
  - c) Have you and/or any members of your staff participated in any part of a non-public health accreditation process? If yes, how?
  - d) Do you have any other experiences with accreditation?
  - e) If yes to any of the above, how does or would your LHD's experience in accreditation processes impact your decision to participate in local public health accreditation?
- 2) What is the LHD's experience with performance and/or quality improvement efforts?
  - a) Do you have staff that focuses on performance management or quality improvement?
  - b) Do you have a quality improvement plan of any sort?
  - c) If yes to any of the above, how does or would your LHD's experience in performance measurement/quality improvement processes impact your decision to participate in local public health accreditation?
- 3) Do you feel your LHD was ready to participate in the process? Why or why not?
  - a) How would you assess readiness? What do you think would be important factors to being ready to participate in accreditation?
- 4) Now I'm going to ask you about a more detailed list of how your LHD infrastructure might have helped or hindered a process to participate in the Illinois Voluntary Public Health Accreditation.
  - a) How do you define infrastructure?
  - b) In general, how do you think LHD infrastructure might matter in an accreditation process?
  - c) Hinder your process?
- 5) Infrastructure can be defined in many different ways. I'm going to ask you a few specific questions on how leadership, a strategic plan, plans and policies, information technology, workforce competency, and partners all played into your experience in the pilot accreditation process.
  - a) What role might leadership play in the (accreditation) process?
  - b) How might leadership support help or hinder your ability to complete the process?
  - c) How do you think accreditation can impact current or future strategic planning processes?

## **APPENDIX G (continued)**

- d) Do the LHD programs/divisions have goals and objectives? Would this be helpful in an accreditation process? Why or why not?
- e) Does the LHD have formal written policies and procedures for internal operations? Would this be helpful in an accreditation process? Why or why not?
- f) How would the LHD's information technology resources capacity and capability help an accreditation process?
  - i) Hinder the process?
- g) How would the LHD's fiscal resource capacity and capability help an application process?
  - i) Hinder an application process?
- h) How would the size of the LHD's workforce impact the accreditation process?
- i) How would the LHD's workforce competency impact the accreditation process?
- j) How would the LHD's partnerships impact the process?
- 6) What other infrastructure issues might impact the process?
- 7) What do you think would be the biggest factor helping you to complete the process?
  - a) What would hinder the process the most?
- 8) How do you think the LHD's infrastructure impacts your overall agency performance?

### **C. Other comments and questions**

- 1) What other comments, questions, or suggestions do you have about local public health accreditation?

### **Wrap-up and next steps**

- Thank you again for participating in this interview.
- Inquire whether online survey is completed.
- Discuss timeline for study's completion.

## **APPENDIX H**

### **Core Public Health Capacity and Organizational Capacity Online Survey**

#### **INTRO EMAIL**

Dear Voluntary Accreditation Pilot Sites LHD Administrator,

Congratulations for completing the first big step toward voluntary accreditation! As we've mentioned to you during our in-person meeting in August and during our bi-weekly calls, IPHI is working to evaluate the success of the pilot Illinois Voluntary Accreditation program. As one step in this evaluation, we have one additional short self-assessment for you to complete.

The good news is that this self-assessment is short and hopefully simple. The purpose of the survey is to examine your LHD's core function performance and organizational capacity (i.e. physical, fiscal, and workforce capacity). Questions ask you to rate your LHD's ability to meet the various tasks and whether your LHD has capacity within organization's infrastructure.

The survey is on-line and should take you less than thirty minutes. Please visit [http://www.surveymonkey.com/s.aspx?sm=29rz0rQCtLa\\_2fayPlitM1Hw\\_3d\\_3d](http://www.surveymonkey.com/s.aspx?sm=29rz0rQCtLa_2fayPlitM1Hw_3d_3d) and complete the survey by no later than October 10. The survey results will not be used as a part of accreditation review process but rather are a part of the overall evaluation of the program.

If you have any questions, do not hesitate to contact me.

#### **INSTRUCTIONS ON SURVEY MONKEY**

Dear Voluntary Accreditation Sites LHD Administrator,

Thank you again for agreeing to a part of the pilot Illinois Voluntary Accreditation Program. This survey is being conducted as a part of the process to evaluate the success of the overall program. The purpose of the survey is to examine your LHD's core function performance and organizational capacity (i.e. physical, fiscal, and workforce capacity). Questions ask you to rate your LHD's ability to meet the various tasks and whether your LHD has capacity within organization's infrastructure.

This questionnaire should take approximately 30 minutes to complete. Please click on one appropriate answer. Survey results will be published and available for your review when the evaluation of the pilot Voluntary Accreditation Program is complete. If you have any questions about the questionnaire, please email or call Elissa Bassler, Executive Director of the Illinois Public Health Institute at [elissa.bassler@illinois.gov](mailto:elissa.bassler@illinois.gov) or (312)793-0851.

## **APPENDIX H (continued)**

### **Part 1. Local Health Department (LHD) Core Public Health Capacity Survey**

Rate your LHD performance, using this scale:

1. Met (85-100%)- - fully implementing activities related to this measure
2. Substantially Met (70-84%) - - significant ongoing activities related to this measure, but falls short of full implementation
3. Partially Met (55-69%) - - some activities in place related to this measure, but falls far short of full implementation
4. Not Met (<54%)- - minimal to no activities in place related to this measure

### **Assessment**

1. The LHD has a community health needs assessment process that systematically describes the prevailing health status and needs of their population
  - ☐ Met
  - ☐ Substantially met
  - ☐ Partially met
  - ☐ Not met
2. The local health department surveyed the population for behavioral risk factors in the past three years
  - ☐ Met
  - ☐ Substantially met
  - ☐ Partially met
  - ☐ Not met
3. Timely investigations of adverse health events, including communicable disease outbreaks and environmental health hazards are conducted on an ongoing basis in the LHD's jurisdiction
  - ☐ Met
  - ☐ Substantially met
  - ☐ Partially met
  - ☐ Not met
4. Necessary laboratory services are available to support investigations of adverse health events and meet routine diagnostic and surveillance needs in the LHD jurisdiction
  - ☐ Met
  - ☐ Substantially met
  - ☐ Partially met

## APPENDIX H (continued)

- ☐ Not met
- 5. An analysis of the determinants and contributing factors of priority health needs, adequacy of existing health resources, and the population groups most impacted within the LHD's jurisdiction has been undertaken and completed
  - ☐ Met
  - ☐ Substantially met
  - ☐ Partially met
  - ☐ Not met
- 6. An analysis of age-specific participation in preventive and screening services has been implemented and completed within the past three years
  - ☐ Met
  - ☐ Substantially met
  - ☐ Partially met
  - ☐ Not met

### **Policy Development**

- 7. The LHD has a network of support and communication relationships, which includes health-related organizations, the media, and the general public
  - ☐ Met
  - ☐ Substantially met
  - ☐ Partially met
  - ☐ Not met
- 8. The LHD has formally informed elected officials about the potential public health impact of actions under their consideration within the past year
  - ☐ Met
  - ☐ Substantially met
  - ☐ Partially met
  - ☐ Not met
- 9. Community health needs identified from a community needs assessment have been prioritized by the LHD
  - ☐ Met
  - ☐ Substantially met
  - ☐ Partially met
  - ☐ Not met



**APPENDIX H (continued)**

10. The LHD implemented community health initiatives consistent with established priorities within the past three years
- ☐ Met
  - ☐ Substantially met
  - ☐ Partially met
  - ☐ Not met
11. A community health action plan been developed with community participation to address community health needs
- ☐ Met
  - ☐ Substantially met
  - ☐ Partially met
  - ☐ Not met
12. The LHD has developed plans to allocate resources in a manner consistent with the community health action plan in the past three years
- ☐ Met
  - ☐ Substantially met
  - ☐ Partially met
  - ☐ Not met

**Assurance**

13. Resources have been deployed, as necessary, to address the priority health needs identified in the community health needs assessment
- ☐ Met
  - ☐ Substantially met
  - ☐ Partially met
  - ☐ Not met
14. The LHD conducted an organizational self-assessment within the past three years
- ☐ Met
  - ☐ Substantially met
  - ☐ Partially met
  - ☐ Not met
15. Age-specific priority health needs are effectively addressed through the provision of or linkage to appropriate services
- ☐ Met
  - ☐ Substantially met
  - ☐ Partially met
  - ☐ Not met

## APPENDIX H (continued)

16. The LHD has implemented all mandated programs or services within the past three years
- ☐ Met
  - ☐ Substantially met
  - ☐ Partially met
  - ☐ Not met
17. The LHD regularly evaluates the effect of public health services on community health status
- ☐ Met
  - ☐ Substantially met
  - ☐ Partially met
  - ☐ Not met
18. The LHD used professionally recognized process and outcome measures to monitor programs and redirect resources as appropriate in the past 3 years
- ☐ Met
  - ☐ Substantially met
  - ☐ Partially met
  - ☐ Not met
19. The public is regularly provided with information about current health status, health care needs, positive health behaviors, and health care policy issues
- ☐ Met
  - ☐ Substantially met
  - ☐ Partially met
  - ☐ Not met
20. The LHD provided reports to the media on a regular basis within the past year
- ☐ Met
  - ☐ Substantially met
  - ☐ Partially met
  - ☐ Not met

### **Part 2. Local Health Department (LHD) Organizational Capacity Survey**

**Instructions:** The following are measures that represent an organization's capacity to support its overall efforts and work, and in particular, to support organizational change and quality improvement initiatives. Using the same rating scale as before but with a slightly different meaning, please rate how adequately your organization meets these measures.

1. Adequate (85-100% )- - The LHD is adequately meeting this capacity measure.

**APPENDIX H (continued)**

2. Substantially Adequate (70-84%) - - The LHD is mostly meeting this capacity measure.
3. Partially Adequate (55-69%) - - The LHD is partially meeting this capacity measure.
4. Inadequate (<54%)- - The LHD is minimally or not meeting this capacity measure.

**Leadership support in improvement initiatives**

1. The LHD's leadership supports organizational change and quality improvement initiatives.
  - a. Adequate
  - b. Substantially adequate
  - c. Partially adequate
  - d. Inadequate
2. The LHD's leadership participates in the organizational change and quality improvement initiatives.
  - a. Adequate
  - b. Substantially adequate
  - c. Partially adequate
  - d. Inadequate

**Management and Planning**

3. The LHD has completed a strategic plan within the past three years.
  - a. Adequate
  - b. Substantially adequate
  - c. Partially adequate
  - d. Inadequate
4. The LHD's units have written goals and objectives.
  - a. Adequate
  - b. Substantially adequate
  - c. Partially adequate
  - d. Inadequate
5. The LHD has formal written policies and procedures for internal operations.
  - a. Adequate
  - b. Substantially adequate
  - c. Partially adequate
  - d. Inadequate

**APPENDIX H (continued)****Operational Support**

6. The LHD has information technology resources to monitor disease.
  - a. Adequate
  - b. Substantially adequate
  - c. Partially adequate
  - d. Inadequate
7. The LHD has information technology resources to communicate among public and private health organizations, the media, and the public.
  - a. Adequate
  - b. Substantially adequate
  - c. Partially adequate
  - d. Inadequate
8. The LHD has access to fiscal resources.
  - a. Adequate
  - b. Substantially adequate
  - c. Partially adequate
  - d. Inadequate
9. The LHD has flexibility in using its fiscal resources.
  - a. Adequate
  - b. Substantially adequate
  - c. Partially adequate
  - d. Inadequate
10. The LHD has access to physical resources.
  - a. Adequate
  - b. Substantially adequate
  - c. Partially adequate
  - d. Inadequate
11. The LHD has flexibility in using its physical resources.
  - a. Adequate
  - b. Substantially adequate
  - c. Partially adequate
  - d. Inadequate

**Workforce Support**

12. The LHD has an adequate number of workers.
  - a. Adequate
  - b. Substantially adequate
  - c. Partially adequate

**APPENDIX H (continued)**

- d. Inadequate
13. The LHD has an adequate number of trained workers.
- a. Adequate
  - b. Substantially adequate
  - c. Partially adequate
  - d. Inadequate
14. The LHD includes staff from multiple units to conduct its work.
- a. Adequate
  - b. Substantially adequate
  - c. Partially adequate
  - d. Inadequate
15. The LHD has an adequate number of trained workers to conduct organizational change and quality improvement initiatives.
- a. Adequate
  - b. Substantially adequate
  - c. Partially adequate
  - d. Inadequate

**Community and partnership support**

16. The LHD has regular connectivity with public, private and community partners.
- a. Adequate
  - b. Substantially adequate
  - c. Partially adequate
  - d. Inadequate

## APPENDIX I

TABLE XIX

LOCAL HEALTH DEPARTMENT STRUCTURAL CAPACITY ONLINE SURVEY INDIVIDUAL MEASURE DATA				
Structural Capacity Standard Survey				
Individual Measures	Mean		Mean Ranks	
	Participant	Nonparticipant	Participant	Nonparticipant
1.	3.71	3.86	6.4	8.6
2.	3.57	3.57	7.5	7.5
3.	3.57	2.57	9.6	5.4 <sup>a</sup>
4.	3.71	3.42	8	7
5.	3.71	3.71	7.5	7.5
6.	3.57	3.43	8	7
7.	3.71	3.57	8	7
8.	3.29	3.14	7.9	7.1
9.	3	3	7.5	7.5
10.	3.43	3.26	7.5	7.5
11.	3.43	3.26	7.5	7.5
12.	3.57	3.26	8.2	6.8
13.	3.71	3.43	8.5	6.5
14.	3.71	3.71	7.5	7.5
15.	3	2.86	7.9	7.1
16.	4	4	7.5	7.5

<sup>a</sup>Significant with a p-value <.05.

## APPENDIX J

TABLE XX

LOCAL HEALTH DEPARTMENT READINESS SURVEY INDIVIDUAL MEASURE DATA				
Individual Measures	Mean		Mean Ranks	
	Participant	Nonparticipant	Participant	Nonparticipant
1.	4.0	3.29	9	6
2.	3.43	2.57	9.4	5.6*
3.	3.86	3.86	7.5	7.5
4.	3.86	3.57	8.1	6.9
5.	3.57	3.29	8.1	6.9
6.	3.71	3.71	7.5	7.5
7.	3.57	3.29	8.1	6.9
8.	4.00	3.86	8	7
9.	3.71	3.86	7	8
10.	3.43	3.29	7.9	7.1
11.	4.00	3.57	8.5	6.5
12.	3.86	3.86	7.5	7.5
13.	3.86	3.86	7.5	7.5
14.	3.71	3.57	7.6	7.4
15.	4.00	3.71	8.5	6.5
16.	3.71	3.14	8.8	6.2
17.	3.71	3.57	7.6	7.4
18.	4.00	3.43	9	6
19.	4.00	3.57	8.5	6.5
20.	3.57	2.71	9.1	5.9
21.	3.57	3.29	7.7	7.3
22.	3.86	3.86	7.5	7.5
23.	4.00	4.00	7.5	7.5
24.	3.71	3.43	8.1	6.9
25.	3.57	3.29	7.9	7.1
26.	3.71	3.43	8.1	6.9
27.	3.86	3.57	8.1	6.9
28.	3.86	3.86	8.1	6.9
29.	3.86	3.71	8	7
30.	3.57	3.29	8.6	6.4
31.	3.86	3.14	9.1	5.9
32.	3.71	3.57	8	7
33.	3.43	3.57	6.8	8.2
34.	3.71	3.71	6.8	8.2
35.	3.57	3.57	7.9	7.1

## APPENDIX J (continued)

LOCAL HEALTH DEPARTMENT READINESS SURVEY INDIVIDUAL MEASURE DATA				
Individual Measures	Mean		Mean Ranks	
	Participant	Nonparticipant	Participant	Nonparticipant
36.	3.86	3.71	7.6	7.4
37.	3.29	2.86	9.3	5.7
38.	3.14	2.86	8.3	6.7
39.	3.29	3.14	7.6	7.4
40.	3.86	3.71	7.6	7.4
41.	3.86	3.29	8.6	6.4
42.	3.43	2.86	8.9	6.1
43.	3.00	2.71	8.1	6.9
44.	2.71	2.57	7.8	7.2
45.	3.14	3.00	7.9	7.1
46.	3.57	3.14	8.5	6.5
47.	3.86	3.57	8.1	6.9
48.	3.71	3.29	8.3	6.7
49.	4.0	2.86	10	5*
50.	3.43	2.86	9	6

\*Significant with a p-value <.05.



## APPENDIX K

TABLE XXI

LOCAL HEALTH DEPARTMENT CORE PUBLIC HEALTH CAPACITY INDIVIDUAL MEASURE DATA				
Standard Survey				
Individual Measures	Mean		Mean Ranks	
	Participant	Nonparticipant	Participant	Nonparticipant
1.	4	3.71	8.5	6.5
2.	3.86	3.71	8.6	6.4
3.	4	4	7.5	7.5
4.	3.29	3.86	6.4	8.6
5.	3.29	3.57	6.8	8.2
6.	2.71	2.43	7.9	7.1
7.	3.86	4	7	8
8.	3.71	3.26	8.4	6.6
9.	4	4	7.5	7.5
10.	3.57	3.57	7.5	7.5
11.	3.86	4	7	8
12.	3.71	3.14	8.8	6.2
13.	3.57	3	8.9	6.1
14.	4	3.57	8	7
15.	3.14	3.29	7.6	7.4
16.	4	4	7.5	7.5
17.	3.14	2.86	8.1	6.9
18.	3.14	2.29	9.2	5.8
19.	3.14	3.57	6.2	8.8
20.	4	3.71	8.5	6.5

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## VITA

### Christina R. Welter, DrPH, MPH

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### Education

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#### **UNIVERSITY OF ILLINOIS AT CHICAGO, DrPH: August 2005–May 2010**

School of Public Health, Doctorate in Public Health, Public Health Leadership

#### **UNIVERSITY OF MICHIGAN, MPH: August 1998–May 2000**

School of Public Health, Department of Health Behavior and Health Education

Interdepartmental Concentration in Women's and Reproductive Health

#### **CASE WESTERN RESERVE UNIVERSITY, BA: August 1994–May 1998**

Medical Anthropology Major; Women's Studies, Sociology, Gerontology Minors

Graduated Magna Cum Laude; Honors in Anthropology

### Highlights of Professional Experience

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#### **COOK COUNTY DEPARTMENT OF PUBLIC HEALTH (CCDPH)**

##### **Deputy Director, Prevention Services Unit: May 2007–Present**

- Function as the Deputy Director over the Prevention Services Unit including Community Preparedness, Chronic Disease and Health Promotion, Community Epidemiology and Health Planning, Lead Prevention and Healthy Homes, and Violence Prevention Units
- Responsible for the Prevention Service's Unit overall strategic direction and maintains overall responsibility for a staff of approximately 35 individuals
- Serve as the Principal Investigator for more than \$25 million of state and federal grants
- Provide agency-wide strategic direction with the Chief Operating Officer, particularly on agency strategic health planning
- Serve on the Illinois Accreditation Taskforce, a statewide governing body including representatives from eight statewide organizations that oversee the Multi-state Learning Collaborative-Robert Wood Johnson Foundation-funded grant program
- Serve on the Standards Development Workgroup, a national workgroup for the Public Health Accreditation Board Standards and Accreditation Activities Review Committee
- Serve as Site Team Leader for Public Health Accreditation Board's Beta Site Test

#### **NORTHERN ILLINOIS PUBLIC HEALTH CONSORTIUM**

##### **Regional Planning Consultant: August 2005–May 2007**

- Served on a national workgroup for National Association of County and City Health Officials (NACCHO) *Project Public Health Ready* (PPHR)
  - Provided strategic direction and coordinated emergency planning and response activities for eleven local health departments serving nearly 80% of the Illinois population
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**VITA (continued)**

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**NORTHERN ILLINOIS PUBLIC HEALTH CONSORTIUM****Regional Planning Consultant: August 2005–May 2007 (continued)**

- Served as regional public health liaison to local, regional, statewide, and national public health and medical, critical responder, and government preparedness and policy initiatives
- Led regional submission to the National Association of County and City Health Departments (NACCHO) for the PPHR recognition program

**PUBLIC HEALTH INSTITUTE OF METROPOLITAN CHICAGO (PHIMC)****Public Health Consultant: June 2005–July 2007**

- Designed, facilitated, and evaluated emergency preparedness planning and exercises with government clients at the local, state, and federal levels
- Co-led qualitative study that evaluated PPHR regional applicants and developed national planning guidance *Planning Beyond Borders*
- Served on three-person team to develop and validate indicators for *The Operational Definition of a Functional Local Public Health Agency*

**COOK COUNTY DEPARTMENT OF PUBLIC HEALTH (CCDPH)****Director, Community Preparedness and Coordination Unit: October 2003–August 2005**

- Led countywide initiatives to develop public health readiness plans, trainings, and exercises in collaboration with first responders, government officials, and other health care partners
- Managed and supervised a staff of nine to address agency and community preparedness planning
- Directed development of workforce competency and community training programs
- Served as emergency liaison and representative for the agency to the county and state regarding public health preparedness and emergency response issues
- Participated in grant management of \$2 million bioterrorism cooperative agreement

**Emergency Response Coordinator, Prevention Unit: August 2002–September 2003**

- Coordinated and collaborated with diverse community, professional, and government representatives from more than sixty northern and western suburban Cook County municipalities to manage development of a regional public health response plan
  - Developed and implemented department emergency operations and mass prophylaxis plan to prepare for a public health emergency
  - Co-managed and coordinated participation in a weapons of mass destruction emergency preparedness exercise, *TOPOFF 2*, with local, state, and national agencies
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### VITA (continued)

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#### **Community Advocacy Coordinator, Tobacco Control Unit: August 2001–July 2002**

- Developed and organized grassroots clean indoor air campaign in Cook County suburbs
- Facilitated strategic planning and evaluation efforts for unit and community programs
- Developed advocacy resource guides and provided technical assistance to grant-funded local and regional tobacco control coalitions
- Participated in successful application for \$1 million grant proposal for unit
- Assisted Program Director with statewide advocacy campaigns

#### **AMERICAN LUNG ASSOCIATION OF OHIO: June 2000–June 2001**

##### **Regional Policy Organizer, Tobacco-Free Ohio Project**

- Provided technical assistance to grant-funded tobacco control coalitions
- Promoted collaborative efforts through grassroots advocacy, media relations, and community outreach programs to impact local policy change
- Organized, facilitated, and presented at local, regional, and state level meetings
- Developed resources and reports for project, coalitions, policy makers, and media

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#### **Publications and Scholarly Activity**

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- Co-author: Lenihan, Patrick; Welter, Christina; Chang, Carol; and Gorenflo, Grace. “The Operational Definition of a Functional Local Public Health Agency: The Next Strategic Step in the Quest for Identity and Relevance.” *Journal of Public Health Management and Practice* 13, no. 4 (2007): 357–63.
- Co-Investigator and Author: *Operational Definition of a Local Health Department Prototype Metrics*. Served on three-person team to develop and validate indicators for local health departments. January–October 2007. Funded by NACCHO.
- Co-Investigator and Author: Co-led qualitative study that evaluated PPHR regional applicants and developed national planning guidance *Planning Beyond Borders: Using Project Public Health Ready as Regional Planning Guidance for Local Public Health*. Funded by the NACCHO PPHR. October 2005–February 2007.
- Co-author: *Women’s Health: Where Are the Girls?* Investigation of girls’ writings and activism in health and critical review of girls’ health resources and policies in the women’s health field. Fall 1998–Fall 1999. Funded by the Institute on Research for Women and Gender.
- Fellow: HIV/AIDS Perinatal Research Study, Kampala, Uganda. Developed small-business loan program and health education campaign for study participants. Funded by the Eva L. Pancoast Memorial Fellowship, June 1998.
- Author and Researcher: *The American Samoan Immunization Study*. Primary investigator conducting 66 respondent interviews in Tutuila, American Samoa, to survey, analyze,

### VITA (continued)

and report on factors contributing to childhood immunization rates. Spring 1997–Spring 1998. Awarded funding by the Mann Scholars' Program.

- Author: *Gender and Expressed Emotion: An Analysis of the Patients' Perspective*. Primary investigator conducting assessment of patient narratives. Spring 1996–Spring 1997. Funded by Howard Hughes Medical Foundation.

### Related Experience

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#### *State and National Presentations:*

- **NACCHO Webcast: August 7, 2009**  
Co-presenter: *Accreditation: The 4-1-1 on What LHDs Need to Know*.
- **5th Annual Rural Public Health Institute, Effingham, IL: March 11–13, 2009**  
Facilitator: *Vetting Session: Public Health Agency Accreditation*.
- **The 136th Annual Meeting and Exposition of the American Public Health Association (APHA), San Diego, CA: October 2008**  
Co-presenter: *Performance Management and Accreditation: Is There a Connection?*
- **Illinois Public Health Institute Annual Conference, Springfield IL: October 14–15, 2008**  
Panel Participant: *State and Local Public Health Department Accreditation Update*.
- **Paul Q. Peterson Grand Rounds Lecture Series. University of Illinois at Chicago School of Public Health, Chicago, IL: September 25, 2008**  
Panel Participant: *Voluntary Public Health Agency Accreditation as a Quality Improvement Process: The Illinois Case Study*.
- **Association of State and Local Health Organizations (ASTHO)-NACCHO Joint Conference, Sacramento, CA. September 2008**  
Co-presenter: *Role of Accreditation in Performance Management: The Illinois Experience*.
- **California Health Policy Forum, Sacramento, CA: September 2007**  
Panel Participant: *Public Health Regionalization: Opportunities and Lessons Learned*.
- **Illinois Department of Public Health Bioterrorism Summit, Oakbrook Terrace, IL: July 2007**  
Moderator and presenter: *Planning Above and Beyond Borders: How Continuous Quality Improvement Can Enhance Public Health Preparedness and Response Efforts*.
- **NACCHO Webcast: February 2007**  
*Meeting and Exceeding the Standards: A Tool for Using the Operational Definition*.

### VITA (continued)

- **NACCHO Preparedness Conference, Washington, DC: February 2007**  
Panel participant: *A Region That Does it Right*. Poster presentation: *Planning Beyond Borders: Using Project Public Health Ready as Regional Planning Guidance for Local Public Health*.
  - **Illinois Public Health Association Annual Conference, Springfield, IL: April 2006**  
Co-facilitator: *Emergency Communications in Illinois*.
  - **American Academy of Family Physicians, Midwest Region, Chicago, IL: February 2006**  
Panel participant: *Pandemic Influenza: The Local Health Department Perspective*.
  - **American Public Health Association, Philadelphia, PA: December 2005**  
Co-presenter: *Empower: A Health Communication Campaign to Increase Knowledge About Emergency Preparedness and Response*.
  - **Illinois Public Health Association Annual Conference, Springfield, IL: April 2005**  
Co-presenter: *Empower: Emergency Health Tool Kit*.
  - **Society for Public Health Educators, Washington DC: November 2004**  
Co-presenter: *Health Education and Public Health Readiness: What Is the Relationship?*
  - **Illinois Department of Public Health Bioterrorism Summit, Oakbrook, IL: July 2004**  
Co-presenter: *Best Practices for Bioterrorism Preparedness*.
  - **Illinois Department of Public Health Bioterrorism Summit, Oakbrook, IL: June 2003**  
Co-presenter: *The New Face of Public Health*; Presenter: *TOPOFF 2 Evaluation*.
  - **Illinois Department of Public Health Tobacco Control Conference, Naperville, IL: June 2002**  
Panelist: *The Use of Surveys in Tobacco Control*.
  - **Ohio Tobacco Prevention and Control Conference, Dublin, OH: September 2000**  
Panelist: *Environmental Tobacco Smoke Campaign Planning for Ohio Coalitions*.
  - **Carrie Chapman Catt Center for Women and Politics Conference, Des Moines, IA: October 1999**  
Co-presenter: *Women's Health: Where Are the Girls?*
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## VITA (continued)

### Related Experience

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#### *Highlights of Professional Presentations, Workshops, and Emergency Exercise Facilitation:*

- Meta Leadership Series Brownbag Lunch Presentation: University of Illinois at Chicago, School of Public Health, February 2009
- Pandemic Influenza Table-Top: Great Lakes Naval Base, June 2007
- CCDPH Pharmaceutical Distribution Plan Exercise, April 2007
- Community Organizing, Lecture, DePaul University. February 2007
- Pandemic Influenza Table-Tops: Facilitated Seven Exercises, December 2005–January 2007
- Three-day, 1000-participant Pharmaceutical Distribution Exercise, April 2005
- A Look Inside Cook County Public Cable Program: Co-managed public cable program development on community outreach campaign, January–March 2005
- First CCDPH Pharmaceutical Distribution First Responder Table-Top, October 2004

#### *Highlights of Professional presentations, workshops, and emergency exercise facilitation:*

- First CCDPH Mobilization Exercise, August 2004
- National Public Health Information Consortium, July 2004: Presentation on Empower
- First CCDPH Hospital Conference, April 2004
- CCDPH Communicable Disease Conference, October 2003
- Argonne National Laboratories Top Officials Training Seminar, March 2003
- World No Tobacco Day Smoke-Free Restaurant Campaign, March–June 2002

### Academic/Teaching Experience

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#### **UNIVERSITY OF ILLINOIS AT CHICAGO SCHOOL OF PUBLIC HEALTH**

##### **Adjunct Faculty, Fall 2010**

*Introduction to Public Health, Community Health Sciences Division*

##### **Lecturer, Spring 2007–current**

*Leadership Seminar in Public Health, Doctoral Program in Public Health*

##### **Research Assistant, Fall 2005–Spring 2007**

*Illinois Public Health Preparedness Center (IPHPC)*

##### **Graduate Student Instructor, Fall 2006–Spring 2007**

*Community Health Sciences*

#### **UNIVERSITY OF MICHIGAN**

##### **Graduate Student Instructor, August 1999–April 2000**

*Department of Sociology*

##### **Research Assistant: August 1998–April 1999**

*Department of Epidemiology*

## VITA (continued)

### **CASE WESTERN RESERVE UNIVERSITY**

**Research Assistant, May 1996–August 1998**

*Department of Anthropology*

### **Highlights of Professional Development**

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- Illinois Public Health Institute. An Introduction to Quality Improvement. March 2010
- SynerChange Chicago, July, 2008. Communication Styles Training
- National Incident Management Training, 2006–2007; 100, 200, 300, 400, 700, and 800
- Center for Risk Communications, 2003, 2006. Media, Crisis, and Risk Communications. Message Mapping
- The Institute of Cultural Affairs, March 2005. Participatory Strategic Planning
- Illinois Emergency Management Agency, June 2004. Emergency Planning
- The Institute of Cultural Affairs, June 2004. Group Facilitation Methods
- Jesculca and Terman, June 2004. Risk Communications
- Dave Baum Media Training Group, August 2003. Spokesperson and Crisis Communications
- Mid-America Public Health Training Center, October 2003. Crisis Communication
- Department of Homeland Security, August 2003. Weapons of Mass Destruction. Incident Command Course
- Rogen Inc., Presentation Skills Program, January 2001
- Tobacco Use Prevention Training Institute, September 2000. Clean Indoor Air Policies. Tobacco Settlement and Supreme Court FDA Decision

### **Honors and Awards**

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- Centers for Disease Control and Prevention, Communities Putting Prevention to Work: Chronic Disease Prevention Grant. 2010–current
- Illinois Violence Prevention Authority. Domestic Violence and HealthCares Grant, 2009–current
- Illinois Department of Public Health Director's Award for Emergency Preparedness Community Outreach, CCDPH Community Preparedness and Coordination Unit, 2009
- National Association of County and City Health Officials, Chronic Disease Prevention Grant, 2009–current
- Project Best Practice, Public Health Workforce Development Program, 2008–current
- Americorp, Summer Intern, 2008
- Project Public Health Ready Recognition Award, 2006
- Illinois Public Health Association: Public Health Student Worker of the Year Award, 2006
- Institute of Cultural Affairs Champion, 2005
- Mid-American Regional Public Health Leadership Institute Fellow, 2002–2003
- The World No Tobacco Day Coalition Grant. May 2002
- Institute On Research for Women and Gender Grant Award, 1999
- Eva L. Pancoast Memorial Fellowship Grant Award, Summer, 1998



### VITA (continued)

- Dean's High Honors List, Fall 1995–Spring 1998
- The Russell A. Griffin Award to a senior who has made the most significant contribution to campus life in the College of Arts and Sciences, 1998
- The Callendar Memorial Award for outstanding achievement in anthropology, 1998
- College Scholars Program, 1997–1998
- Flora Stone Mather Grant Award, *Take Back the Night*, 1997–1998
- *Who's Who in American Colleges and Universities*, 1996–1997, 1997–1998
- Mann Scholars' Program Grant Award for research in Anthropology, 1997
- Medical Anthropology Scholars' Program, Fall 1996
- Howard Hughes Medical Foundation Summer Research Grant Award, Summer 1996
- Association for Women Students, "Outstanding Student Organization," 1996

### Professional Affiliations

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- *Society of Public Health Education*: Member, 2004–5; 2010–current
- *National Public Health Information Coalition*: Member, 2006–current
- *Illinois Public Health Association*: Member, 2004–current
- *American Public Health Association*: Member, 1999–2001; 2003–2005, 2009–current
- *NACCHO PPHR Workgroup*: Member, 2006–2008.

### Community Service and Memberships

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- *Health and Medicine Policy Research Group*: Awards Committee, 2010
- *Flora Stone Mather Alumni Center for Women*: Advisory Board Member, 2005–2008
- *Doctorate in Public Health Advisory Committee*: Member, 2006–2007
- *Oak Park Smoke-Free Coalition*: Volunteer, 2005–2006
- *Institute for Cultural Affairs*: Volunteer, 2004–2006
- *Illinois Political Campaign*: Volunteer, 2001–2002
- *Columbus Women's Choir*: Member, 2000–2001
- *University of Michigan*: Diversity Committee, Co-founder, 1999–2000; Health Education Health Behavior Students Association, Co-chairperson, 1999–2000
- *Case Western Reserve University*: Women's Center Coalition, Co-founder, 1994–1998; Association for Women Students, Vice-President and President, 1994–1998; Anthropology Society, Co-founder and President, 1996–1998; University Women's Center Task Force and Coalition, Undergraduate Representative and Liaison, 1995–1998; The Greater Cleveland AIDS Taskforce, HIV/AIDS Prevention Consultant, September 1997–May 1998