Senior Hospital Administrator's Challenges on Emerging Cybersecurity in Healthcare: An Exploratory Study using Q-Methodology

Objective

The **objective** of this study is to understand the cybersecurity concerns among the Chief Information Officers (CIO) and Chief Executive Officers (CEO) of hospitals located in the greater Memphis area. Using a statistical method called Q- methodology, we will systematically identify, categorize, and understand the opinions and concerns around privacy and security of patient information and healthcare data.

The ***short-term objectives*** are:

• To identify the challenges of securing privacy and security of healthcare information.

• Create and sustain tools to empower the healthcare workforce in greater Memphis area to mitigate challenges related to security of healthcare information.

• To establish new interventions to improve privacy and security of healthcare information.

• The results from this study will be disseminated to the practice community and policy makers through peer-reviewed journal articles, policy briefs, and presentations.

Research Significant and Practical Implication

To develop innovative solutions, there is a need for accurate information on the healthcare workforce and precisely the concerns and perceptions around protecting healthcare information. Cybersecurity has emerged as a leading creator of jobs and

opportunity for all economic sectors. The talent pool of cybersecurity workers is not yet able to keep up with the demand for the challenges associated with increased number of cyber-attacks on healthcare organizations. The results from this proposed study will give baseline data about perception, preparedness, and capacity among top hospital administrators in Memphis, TN. Our long-term goal is to develop new interventions that will improve security and privacy of healthcare information. The data from this study could serve as pilot data for a proposal to generate new insights into the potential role that senior healthcare administrators play in protecting sensitive healthcare information. Moreover, based on the results, the University of Memphis could potentially develop some interdisciplinary workshops in cyber security in healthcare aiming to increase awareness and as well as building competencies of cyber privacy and security among healthcare workforce.