

ADOPTION OF A COMPREHENSIVE EMERGENCY MANAGEMENT PROGRAM:
VA EMPLOYEES' PERCEPTIONS

by

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Dissertation submitted to the Faculty of the
Daniel K. Inouye Graduate School of Nursing
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In partial fulfillment of the requirements for the degree of
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ABSTRACT

Adoption of a Comprehensive Emergency Management Program: VA Employees' Perceptions.

Mary Patricia Couig, Doctor of Philosophy, 2014.

Dissertation directed by: Patricia Watts Kelley, PhD, RN, FNP, GNP, FAANP, CAPT (ret) USN, Associate Professor, Daniel K Inouye Graduate School of Nursing, Uniformed Services University of the Health Sciences; Health Sciences Officer, Office of Research and Development, Department of Veterans Affairs.

Understanding Department of Veterans Affairs (VA), nurses' perceptions and experiences related to the adoption of the VA's Comprehensive Emergency Management Program (CEMP) could potentially improve the health care of Veterans affected by disasters. The purpose of this study was to explore and describe VA nurses' perceptions of the CEMP. A qualitative ethnographic methodology was used. Forty-nine clinical staff nurses and nurse managers from a large, university affiliated VA Medical Center were interviewed. Six themes were identified: 1) Lack of Familiarity with CEMP, 2) Communication, 3) Emergency and Disaster Experiences, 4) Education and Training for CEMP, 5) Leadership Engagement and 6) Preparedness (System and Personal). Major findings include: a lack of familiarity with the name of the overall program (CEMP); a lack of coordinated communication about the CEMP and related areas (drills, disasters, unit/facility emergency operations plans); a lack of a cohesive education and training program; a desire for more integration of the CEMP and stronger engagement of the nursing department and the need for nurses to develop personal preparedness plans. The findings

provide an understanding of factors contributing to an overall lack of knowledge about the VA's CEMP and suggest areas for improvement in nursing practice, education, policy and research.

Keywords: nurses, nursing staff, disasters, diffusion of innovation

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DEDICATION

To Patricia Mae Brumgard Couig
July 25, 1929 – April 17, 1995

“The great thing gained out of so tragic an experience as an epidemic was the ease of co-operation among Louisville’s public and private health agencies. There had been little doubt of this before when we were facing a question involving our ability to work together, but staff nurse, supervisors and administrative bodies stood shoulder to shoulder without one hour lost in friction or needless argument. ...Too much cannot be said in praise for the staff nurses who worked without ceasing, turned private cars into ambulances, with their owner’s permission, and acted as the only distributing relief agency during those four awful weeks. We did not suffer in any comparison to other cities and yet in proportion to our staff, we felt we had really faced a serious time.”

Influenza in Louisville, KY., by Helen Bell Lupton, (1919)

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CHAPTER 1: INTRODUCTION AND BACKGROUND

INTRODUCTION

In 2007, the Department of Veterans Affairs, Veterans Health Administration (VHA) issued a directive for a VHA-wide Comprehensive Emergency Management Program (CEMP). Beginning in 2008, a three year readiness assessment was conducted with a focus on six mission critical areas. Minimal assessments were conducted on adoption of the CEMP. Research has shown adoption of a program to be dependent on a number of factors. Minimal information exists globally about adoption of an emergency management programs.

This research sought to expand understanding of phenomena associated with the adoption of a comprehensive emergency management program. The purpose of this research was to explore and describe Department of Veterans Affairs (VA) nurses' perceptions of adoption of the VHA CEMP. It is important to know factors that affect the adoption of the VHA's CEMP and to identify barriers that could potentially be addressed through changes to programs, education or policies and identify future research needs. This knowledge might improve the health care of Veterans and others affected by disasters as well as facilitating disaster preparedness of healthcare systems. A qualitative phenomenological ethnographic methodology was used to explore the phenomena of interest. Participants included 49 clinical staff nurses and nurse managers from a large, university affiliated VA Medical Center in the Northeast.

BACKGROUND AND CONTEXT

From the beginning of recorded time, Earth's people have been exposed to natural disasters, infectious pandemics and terrorism. During the first two decades of the 21st century, the planet has experienced horrific loss of life and property due to events including: the 2001 terrorist attacks in the United States (U.S.), the 2003 European heat wave, the 2004 earthquake and tsunami in Southeast Asia, the 2005 Hurricane Katrina, the 2010 earthquake in Haiti, the 2012 Hurricane Sandy and the 2014 Ebola Virus Disease outbreak that had claimed the lives of at least 5400 as of November 20, 2014.

In the U.S., the most lethal natural disaster was Hurricane Katrina. An estimated 1800 people died as a result of the hurricane; the estimated cost of Hurricane Katrina was \$125 billion dollars (Graumann et al., 2005). The most lethal terrorist attack on U.S. soil happened on September 11, 2001 (World Trade Center towers, the Pentagon and the crash of United Airlines Flight 93). More than 2900 people died (Kean & Hamilton, 2004) and the estimated cost was as high as \$3 trillion dollars (Carter & Cox, 2011). With respect to natural disasters, the year 2012 may well prove to be one of the most expensive ever, after Hurricane Katrina. A report by the National Oceanic Atmospheric Administration (NOAA) estimated there were 11 extreme weather events in 2012, each costing at least one billion dollars for a total cost of over \$11 billion dollars (Lott, Smith, Houston, Shein, & Crouch, 2013).

In response to the lives lost, property damage, public outrage and at least one report detailing necessary changes (Obama, 2011), the U.S. enacted new legislation and requirements and earmarked funding to further support its public health infrastructure. New laws included the creation of the Department of Homeland Security (DHS) (107th Congress, 2002), the establishment within the Department of Health and Human Services

(HHS) of an Assistant Secretary for Secretary for Preparedness and Response to coordinate all public health and medical response to public health emergencies (109th Congress, 2006; 113th Congress, 2013), multiple presidential directives for managing domestic incidents, and establishing plans, e.g. the National Response Framework, for coordinated responses (Department of Homeland Security, 2010). In 2011, the President issued Presidential Policy Directive (PPD) 8: National Preparedness that directed the establishment of "core capabilities" and a system for implementing and measuring initiatives to strengthen the nation's public health preparedness at all levels (Obama, 2011). Public health emergency preparedness appropriations were increased as well. Additionally, The Joint Commission (TJC), a non-profit evaluation and accreditation organization, revised its Emergency Management standards in 2008 to help strengthen hospital and clinic preparedness (The Joint Commission, 2008).

Several federal agencies are responsible for the funding and management of public health emergency preparedness, but these activities reside primarily in DHS and HHS with the active engagement of other federal agencies during times of need (Department of Homeland Security, 2008a). In Fiscal Year (FY) 2014 DHS proposed grant programs (National Preparedness Grant Program) to strengthen public health preparedness in the amount of \$2.1 billion dollars (Department of Homeland Security, 2014, p. 26). For the DHS's Federal Emergency Management Agency (FEMA), the federal government agency responsible for coordinating emergency and disaster responses, an FY 2014 budget of over \$13 billion dollars was proposed (Department of Homeland Security, 2014, p. 171). The Centers for Disease Control and Prevention's (CDC) funding for public health preparedness and response activities has been

approximately \$1.5 billion per year since 2002. This funding supports a wide variety of activities at CDC and at state and local levels (Centers for Disease Control and Prevention, 2010). The CDC request for FY 2014 was \$1.3 billion (Centers for Disease Control and Prevention, 2014).

The Trust for America's Health (TFAH) is a non-profit organization with a primary focus on improving health through prevention. Each year TFAH publishes an annual report on the state of our nation's public health preparedness at state and national levels. The 2012 report cites some improvements but also describes continuing areas of concern (Levi et al., 2012). For the past 10 years they have assessed readiness using "key indicators," including state public health response exercises, emergency management certification, public health laboratory capability, vaccination goals, climate change plans, requirements for licensed day care facilities, participation in a nurse licensure compact agreement and funding for public health initiatives.

While there have been many improvements since the September 11, 2001 attacks, major issues and concerns persist and need to be addressed. Out of a possible 10 points for meeting the indicators: 15 states scored a seven or higher; six states received a score of four or lower and the remaining 30 states (including the District of Columbia) received either a five or a six.

The 2010 TFAH readiness publication reported that state budget cuts were threatening progress towards emergency preparedness (Levi, Vinter, Segal, & St. Laurent, 2010). Since 2009, 33 states and the District of Columbia have cut budgets \$429 billion dollars. The CDC 2013-2014 report on public health preparedness noted a decrease in Congressional appropriations for related initiatives of \$97 million from 2012

to 2013. During this same time period funding to state and local health organizations was reduced by \$34 million. Comparing years 2013 to 2002--the first year of public health emergency preparedness funding--CDC's funding is now \$1 billion less (Centers for Disease Control and Prevention, 2013). Bevington (2014) raises questions about local health departments' ability to respond to global health threats due to continued decreased funding in light of the first case of Ebola imported in the US and the subsequent nosocomial infection of two health care workers, both nurses (Centers for Disease Control and Prevention, 2014).

At a national level, the U.S. General Accountability Office (GAO) (Jenkins, 2010) reported a continued need for strengthening disaster response planning, including the development of a management plan to ensure the completion of key national policies and planning documents. Presidential Policy Directive 8 requires the Department of Homeland Security to submit an annual report detailing the nation's progress on public health emergency preparedness (Obama, 2011). The 2014 National Preparedness Report (Department of Homeland Security, 2014), a comprehensive look at progress on the national preparedness goal, identified five core capabilities as needing improvement: "Cybersecurity, Health and Social Services, Housing, Infrastructure Systems, and Long-term Vulnerability Reduction. Cybersecurity, Health and Social Services, and Housing have been areas for improvement for three consecutive years," (Federal Emergency Management Agency, 2014).

Ultimately the federal government, health systems administrators, and public health professionals must be able to affirmatively answer the question, "Are we ready to prevent, to protect, to respond to and recover from all-hazards?" To answer that question

the VA directed the implementation of the CEMP and developed a plan and procedures for evaluating the program. VA policy directs that the “VHA CEMP will ensure the resiliency and continuity of functions essential to the delivery of health care services for VA patients, military personnel, and the public, as appropriate, in the event of a disaster or emergency” (Petzel, 2013).

Department of Veterans Affairs

The mission of the VA is to "fulfill President Lincoln's promise 'To care for him who shall have borne the battle, and for his widow, and his orphan' by serving and honoring the men and women who are America's veterans" (Department of Veterans Affairs, 2009a). At the end of Fiscal Year (FY) 2012, the VA had over 8.7 million unique health care enrollees and over 6.3 million unique VA patients (Department of Veterans Affairs, 2014b). The Veterans Health Administration (VHA) is the organization within VA that manages the delivery of health care services at 151 VA Medical Centers (VAMC), 820 Community-Based Outpatient Clinics, 135 Community Living Centers (CLC) (extended care facilities) and 300 Veterans Centers (Department of Veterans Affairs, 2014b). Facilities are located in all 50 states, the District of Columbia, America Samoa, Guam, Virgin Islands, Puerto Rico, and the Philippines. In addition to providing health care, the VA system must be prepared to respond to and mitigate “all-hazards” that may affect beneficiaries or facilities and actively participate during national disasters with other federal agencies. All-hazards include any disaster event whether natural or man-made.

Planning and preparing for emergencies are a priority for the VA. VA's Strategic Plan FY 2014-2020 (Department of Veterans Affairs, 2014b), includes a strategic goal

related to public health emergency preparedness and a commitment to a "culture of preparedness." Strategic Objective 3.5 states VA will "Ensure Preparedness to Provide Services and Protect People and Assets Continuously and in Time of Crisis" (Department of Veterans Affairs, 2014b, p. 35) and the major initiative is focused on strengthening VA capabilities including the critical mission as primary backup role to the DOD Military Health Care System during war or national emergency. This strategic goal is implemented through the CEMP. The CEMP, originally published in 2007 (Kussman, 2007) and revised in 2013 (Petzel, 2013), established policy and overall guidance for management and implementation of an all-hazards emergency management program. The CEMP directive outlines responsibilities for senior management, Veterans Integrated Service Networks (VISN) and VA medical centers (VAMC). The overall goal is to ensure maximum preparedness and resiliency of the VISNs and medical centers which in turn will ensure maximum protection of VA patients, staff and visitors during an emergency event.

Since 1982, VA has been engaged in public health emergency preparedness with other federal agencies in order to be ready when directed to serve as the primary backup to the DOD military health system during wars or other events involving military personnel. In 1984, the Department of Health and Human Services (HHS), VA, DOD, and the Federal Emergency Management Agency (FEMA) signed a memorandum of understanding to form a partnership for the oversight and administration of the National Disaster Medical System (NDMS). The NDMS, in addition to the federal partners, works with civilian health organizations to provide backup during times of national emergencies (Kizer, Cushing, & Nishimi, 2000).

Not only must VA be prepared to care for its beneficiaries and infrastructure, there are also responsibilities under the National Response Framework (NRF) (Department of Homeland Security, 2013). The NRF is the Nation's guiding document that establishes a national, comprehensive, all-hazards approach to domestic incident response; it evolved from the National Response Plan (Department of Homeland Security, 2004) and is now in the second edition. VA responsibilities include serving as a cooperating agency for critical infrastructure key resources, financial management, private sector coordination, public affairs and Emergency Support Function (ESF) #8 – Public Health and Medical Services (Department of Homeland Security, 2008b). ESF #8 provides for coordinated federal assistance to support local, state, and tribal resources during a public health or medical disaster. For example, after Hurricane Rita made landfall on September 24, 2005, HHS requested VA provide personnel to care for persons in Federal Medical Stations (FMS) established in VA facilities in Waco and Marlin, Texas (Parker, 2007). More recently, over 500 VA personnel staffed FMSs during Hurricanes Gustav and Ike, and 54 responded to the Red River flooding in 2009 (Feesser & Kinder, 2009).

VHA Comprehensive Emergency Management Program Assessments

VHA contracted with Booz Allen Hamilton, to conduct a readiness assessment of the VHA healthcare system. (Department of Veterans Affairs, 2005). The result of this assessment indicated infrastructure strengths of beds, supplies and medicines, and to a more limited extent, personnel. Areas for improvement included personnel training and standardization of certain requirements and expectations across the VISNs and VAMCs. Another assessment begun in 2008, completed in 2010, had multiple purposes: to identify

benchmarks of high scoring facilities; to establish a baseline for further surveys; to help answer the question of whether or not the VHA was ready; and to identify cross-cutting issues that might need national attention.

This assessment was based on 69 identified capabilities derived from six mission critical areas: program level, incident management, safety and security, continuity and resiliency, surge response, and support to external missions. The report noted a number of strengths but also made recommendations to increase the VHA's readiness (Booz, Allen, & Hamilton, 2010). The assessment scores were based on a five-point scale with one being exemplary and five needs attention. The scores ranged from 1.84 to 3.94. During the capability assessment, interviews with senior leadership focused on knowledge of the incident command system and potential actions during scenario presentations of table top exercises. Phase III of the Emergency Medical Capability Assessment Program (EMCAP) began October 1, 2014. The program has been revised to be more streamlined and focused on performance improvement across the system (Kevin Thompson, personal communication, September 29, 2014.).

Nurses are the largest group of hospital personnel, responsible for caring for and helping to evacuate hospitalized patients. The total number of VHA registered nurses, in FY 15, was 62,548 (Department of Veterans Affairs, 2014b). Nurse executives, nurse managers and clinical nurses are integral to any response effort; nurses staff the medical centers 24 hours a day, 7 days a week, 365 days a year (Gebbie & Qureshi, 2006). While the VA has undertaken a capability assessment to evaluate facility and Veterans Integrated Service Network (VISN) preparedness with a focus on document review, table

top exercises and interviews with the facility/VISN leadership, the capability assessment minimally included nurses.

THEORETICAL FRAMEWORK AND METHODOLOGY

Theoretical Framework

One approach to strengthening the VA's readiness is to explore nurses' adoption of the CEMP. Roger's (2003) Diffusion of Innovations model has been used extensively to test individual and organizational adoption. A comprehensive literature search revealed a scarcity of information on employees' perceptions of adopting a comprehensive emergency management program. Nurses' adoption of public health emergency preparedness has not been explored and may provide insight into how to integrate the CEMP into everyday practice. Therefore, it is vital to understand the level of adoption of the CEMP amongst nurses who are the largest health care group impacting the readiness of the medical centers.

Rogers (2003) defines diffusion as the "process by which an innovation is communicated through certain channels over time among the members of a social system. Diffusion is a special type of communication concerned with the spread of messages that are perceived as new ideas," (p. 35). The four main elements in diffusion of innovations are the innovation, communication channels, time, and the social system.

An innovation is perceived as something new and can include an idea, object or practice. Adoption of an innovation is defined as, "a decision to make full use of an innovation as the best course of action available...." (Rogers, 2003, p. 21).

Methodology

Qualitative phenomenological ethnographic research (Maso, 2001) was used to explore and describe VA nurses' adoption of a comprehensive emergency management program. Public health emergency preparedness is an important component of medical facilities' operations and nurse executives, nurse managers and clinical nurses are integral to any response effort. In VHA minimal data were collected on employees' perceptions of adopting a comprehensive emergency management program. Qualitative research allowed for the exploration of the phenomena (Speciale & Carpenter, 2007) and permitted the researcher to conduct interviews with employee volunteers to explore their perceptions.

PROBLEM STATEMENT

In 2007, the VHA issued a directive for a VHA-wide Comprehensive Emergency Management Program (CEMP). An assessment was undertaken to determine readiness in six mission critical areas; however, minimal evaluations were conducted on adoption of the CEMP (Booz et al., 2010). Research has shown adoption of a program to be dependent on a number of factors. Minimal information exists about adoption of an emergency management program.

STATEMENT OF PURPOSE AND RESEARCH QUESTIONS

The purpose of this research was to explore and describe VA nurses' perceptions of adoption of the CEMP because nurses are the largest group of health professionals within the VA healthcare system. It was anticipated that understanding factors related to the adoption or non-adoption will help inform future efforts to strengthen the adoption of

CEMP and related programs, education or policies and identify future research needs. To explore the problem two research questions were developed:

1. What are the nurses' perceptions and experiences regarding VHA's Comprehensive Emergency Management Program?
2. What do the nurses perceive as factors that could facilitate and strengthen the CEMP?

RATIONALE AND SIGNIFICANCE

As the Veterans Administration's mission is expanding it is important to maximize the resources of the VA. One area that is essential to maintaining the health of the nation is responding to disasters in the most efficient and effective manner. Nursing leadership, management and education to enhance VA employees' adoption of an emergency preparedness program is critical to the overall health of nation. It is important to know factors affecting the adoption of the CEMP and to identify barriers that could potentially be addressed through changes to programs, education or policies and identify future research needs. This knowledge could improve the health care of Veterans affected by disasters and preparedness of healthcare systems. There is little research in this area. An exploratory approach that describes VHA nurses' experience and perspective is applicable. Potential VA audiences for the results include the VHA's Undersecretary for Health, the Office of Emergency Management, the Chief Nursing Officer, Nurse Executives, other senior VA leadership groups, nurse managers and others involved with preparing and responding to disasters. Federal partners and non-government, public and private sector organizations responsible for implementing all-hazards emergency preparedness programs may also benefit from the findings due to the

Joint Commission accreditation standards requirement for emergency management. The business case for identifying themes related to adoption of a comprehensive emergency management program is to decrease liability through protection of people and infrastructure.

SUMMARY

The ultimate goal of all emergency management programs is to save lives, protect property and the environment, and deliver basic services to the population (Department of Homeland Security, 2008a). This research adds to the body of knowledge related to public health emergency preparedness. Knowing factors that might affect the adoption of the VHA's CEMP and potential identified barriers that could be addressed through changes to programs, education or policies may help improve the VA's Comprehensive Emergency Management Program. This knowledge could improve the health care of Veterans affected by disasters and preparedness of health care systems. Federal partners and non-government, public and private sector organizations responsible for implementing all-hazards emergency preparedness programs may also benefit from the findings.

CHAPTER 2: REVIEW OF THE LITERATURE

INTRODUCTION

In 2007, the Department of Veterans Affairs, Veterans Health Administration (VHA) issued a directive for a VHA-wide Comprehensive Emergency Management Program (CEMP). Beginning in 2008, a three year readiness assessment was conducted with a focus on six mission critical areas. To date minimal assessments have been conducted on adoption of the CEMP. Research suggests adoption of a program to be dependent on a number of factors; but minimal information exists about adoption of an emergency management program. Understanding factors related to the adoption or non-adoption of the CEMP is important to be able to potentially address such factors through changes to programs, education or policies and identify future research needs. This knowledge could improve the health care of Veterans affected by disasters and preparedness of healthcare systems. The ultimate goal of all emergency management programs is to save lives, protect property and the environment, and deliver basic services to the population (Department of Homeland Security, 2008a).

ATTITUDES TOWARDS PUBLIC HEALTH PREPAREDNESS AND RESPONSE

After the September 11, 2001 attacks on the United States when airplanes were used as weapons of mass destruction and shortly thereafter anthrax was deliberately released via the U.S. postal system to a member of Congress and a national news anchor, there has been increased interest in learning about the willingness and ability of health professionals to respond to public health emergencies, natural or manmade. In the literature, willingness and ability to respond to a public health emergency is dependent on

a number of factors directly related to a health professional's health and family status, perceived risk to self and others, availability of prophylaxis or protective equipment, type of event, cultural norms, professional ethics, and the extent of public health emergency preparedness education.

One of the first studies to investigate willingness and ability of health care workers to respond in a disaster was conducted in Israel by Shapira and colleagues (1991). The researchers provided a scenario of a missile attack and asked a number of questions related to whether or not the responders would report to work. The researchers discovered that overall 42% of responders were willing to report to work. If guaranteed protective equipment, spectacles fitted to gas mask, an all-clear announcement by an official spokesperson and transportation to the hospital, 44% of responders would change their mind and report to work for an overall report to work rate of 86%. Not surprisingly, having young children and being female correlated negatively with willingness to report to work.

A study of emergency healthcare providers at a facility in upstate New York revealed that anywhere from 18% to 84% of providers would be willing to report to work during a mass casualty incident. The variation in willingness to report to work was dependent on several factors including whether or not: the cause of the incident was known, a treatment or a vaccine was available, providers became ill, the agent was transmissible, and family members could receive treatment (Syrett, Benitez, Livingston, & Davis, 2007). Another study examined both willingness (the personal decision of the person) and ability (the capability of the person) to report to work in a variety of catastrophic scenarios (Qureshi et al., 2005). The findings evidenced a difference in

willingness and ability to respond based on the type of event (ability to respond mass casualty incident (83%) vs. sudden acute respiratory syndrome (SARS) outbreak (64%), and willingness to respond to mass casualty incident (86%) vs. SARS (48%). Obstacles to willingness to respond included personal health problems, and concern and fear for family and self. Obstacles to ability to respond included child and eldercare responsibilities, pet care and transportation.

An integrated literature review of 27 studies conducted by Chaffee (2009) identified many of the same issues with respect to willingness and ability to respond: dependence on the type of disaster, concern for family and beloved others, concern about pets, varies with provision of personal protective equipment and personal responsibilities e.g. child and elder care. Additional findings included a positive relationship between subject matter education and willingness, the responder's perception of the significance of their role, whether or not basic physiological needs can be met, the ability to maintain contact with the outside world (email and internet access) and the maximum length of time health professionals would remain on duty as responders.

Only two of the studies from the above literature review were qualitative. The first qualitative study used group interviews to ask emergency department nurses about concerns and needs during Hurricane Floyd and compared them with the hospital disaster protocols. The nurses' priority concern was family safety (French, Sole, & Byers, 2002). The second qualitative study used semi-structured interviews to ask Australian physicians (general practitioners) to predict report to work behavior in a pandemic influenza outbreak. Overall the general practitioners indicated volunteering to work, based on

belief of duty and an unwillingness to abandoned patients (Shaw, Chilcott, Hansen, & Winzenberg, 2006).

In a separate qualitative study, Davidson and colleagues (2009) interviewed eight nurses in southern California after the 2007 wildfires. The hospital had experienced a 17% increase in absenteeism during the wildfires. The purpose of the study was to understand factors that affected the decision to work. Decisions to work were affected by perceptions of personal and family safety and nearness of the fire.

Hospital nurses and nurses in a professional nursing association in New York were asked if they were willing to respond to a radiation event. Most of the nurses were willing to respond to a radiation incident, however 15.3% were not willing to work in a severe incident. Personal safety was a primary concern (Veenema, Walden, Feinstein, & Williams, 2008).

Considine and Mitchell (2009) surveyed emergency department nurses in Australia about their ability to stay after a current shift to respond to a biological, chemical or radiological incident or disaster. Of the 64 nurses who participated 42.2% could work after their shift, 31.3% could probably work after their shift, while 14.1% would find it difficult, and 1.8% impossible. Child care responsibilities were the main difference between those who reported they could respond and those who could not or would find it difficult. They also reported issues with personal protective equipment, chemical suits, due to female nurses overall smaller size and difficulties achieving a proper seal on the face mask (Considine & Mitchell, 2009). Grimes & Mendias (2010) surveyed 292 nurses after a 2-hour class on bioterrorism and potential infectious disease outbreaks. Depending on the characteristics of the incident 8%-20% of nurses were

"extremely likely" to respond, and 21%-64% "highly likely" to respond. Of those who provided written comments 253/292, 73 reported they would respond due to professional duty.

Master's nursing students in Hong Kong were surveyed to determine what they would do if a disaster happened while they were on duty: 38.4% would follow the emergency plan; 34.8% would wait for guidance from superiors; 24.4% would inform others before leaving duty; 15.2% would remove patients and 7.3% would leave immediately (Fung, Loke, & Lai, 2008).

Hospital health care workers on 5 urban campuses in the Southwestern U.S., were surveyed regarding their intentions to return to work during a pandemic. Overall 92% reported they would respond. Similar to other studies, workers with children at home were less likely to report they would return to work. Other concerns were the availability of antivirals, safety of the hospital if conditions deteriorated into chaos and the ability of the hospital to maintain a safe environment with respect to worker protection (Good & Agan, 2011).

Essential health care workers and staff from a Midwestern healthcare network, were surveyed about their ability and willingness to report to work during a range of different disasters and for their barriers to reporting to work. The incidents included weather-related events, an infectious outbreak, chemical and radiological incidents and an explosion with mass casualties. Ability to report to work ranged from 71.1% for a weather-related event to 90.6% for a mass casualty event. Willingness to report to work ranged from 69.1% for a radiologic incident to 93% for a mass casualty event. Child care was the primary barrier to responding (Adams & Berry, 2012).

Several studies have used the Theory of Planned Behavior (TPB) (Ajzen, 1985) to examine intentions to care for patients with infectious diseases, Theory of Planned Behavior is considered one of the main theories of individual behavior (Glanz, Rimer, & Su, 2005). TPB postulates that intentions to perform a specific behavior are directly influenced by three constructs, the “attitude toward the behavior,” the “subjective norm,” and the “perceived behavioral control.” Attitude toward the behavior is the person’s assessment of positive or negative evaluation of conducting the behavior. Subjective norm is the person’s discernment of the peer or social pressure regarding the behavior. Perceived behavioral control is the extent to which the person believes they have the skills, knowledge and resources to perform the behavior.

Ko and colleagues (2004) used TPB to look at intentions of nurses to volunteer to care for patients in a potentially dangerous situation that would expose them to an infectious agent. While 74.5% of nurses believed their professional duty was to care for patients with Severe Adult Respiratory Syndrome (SARS), only 25% indicated their intent to volunteer to care for a patient with SARS. Nurses in Korea were surveyed with respect to willingness to care for patients with SARS. The results demonstrated unwillingness to care for patients with SARS and a negative attitude regarding caring for patients with SARS. The nurses believed there were strong subjective norms against caring for patients with SARS and did not feel prepared to care for these patients (Kim, Yoo, Yoo, Kwon, & Hwang, 2006).

The major finding from the ability and willingness to respond research is that even under the best circumstances--an educated, willing and able, health worker with personal protective equipment and prophylaxis for self and family--100% of health

workers will not be able to respond in any given situation. However, it should be noted that during past events such as the SARS and Ebola Virus Disease epidemics and the Fukushima Daiichi nuclear disaster, with few exceptions, healthcare workers have reported to work or volunteered to help.

THEORETICAL FOUNDATION

Diffusion Theory

Diffusion theory dates back to Europe in the early 1900's (at about the same time anthropology and sociology were developing as social sciences). In the U.S., diffusion has roots in the agriculture field. Nine major professions have incorporated diffusion research in scientific work: anthropology, sociology, education, public health and medical sociology, communication, marketing and management, and geography (Rogers, 2003, pp. 44-45). Rogers' influence on the field of knowledge utilization is substantial with his archetype, innovation diffusion. In a research article tracing the intellectual structure and substance of the knowledge utilization field, Estabrooks et al. (2008), reported on the linkage between knowledge utilization, in its many forms, and diffusion of innovations. Diffusion of innovations is included here because it is the foundation of the knowledge utilization discipline.

Rogers (2003) defines diffusion as the "process by which an innovation is communicated through certain channels over time among the members of a social system. Diffusion is a special type of communication concerned with the spread of messages that are perceived as new ideas," (p. 35). The four main elements in diffusion of innovations are the innovation, communication channels, time, and the social system.

An innovation is perceived as something new and can include an idea, object or practice. Adoption of an innovation is defined as, "a decision to make full use of an innovation as the best course of action available...." (Rogers, 2003, p. 21). The social system's perception of the innovation determines the rate of adoption. The five attributes of innovations that influence perception are relative advantage, compatibility, complexity, trialability, and observability. Relative advantage refers to the perception of whether or not the innovation is better than what exists. Compatibility refers to the degree the innovation is perceived as being a good fit with the potential needs, existing values and past experiences of the adopters. Complexity refers to the perceived degree of ease or difficulty of the innovation. Trialability relates to the ability of an innovation to be tested before fully implemented. Observability refers to the visibility of the innovation's results. The core of this model is the "...interpersonal network exchanges and social modeling by those individuals who have already adopted an innovation,..." (Rogers, 2003, p. 35).

Adoption is defined as, "a decision to make full use of an innovation as the best course of action available..." (Rogers, 2003, p. page 21). Decisions to adopt an innovation can be individual, on a unit level or organizational. Individuals within organizations are often dependent on the choices of others regarding adoption. For example, the adoption may be authoritative (individual/organization is instructed to adopt), or there may be an opportunity to vote on adoption, but the individual must abide by the group decision. The CEMP directive mandates organizational adoption of all-hazards preparedness; however, it does not guarantee the CEMP has been fully adopted (by all individuals) in the organization. While an authoritative innovation adoption

decision may hasten the adoption of an innovation, the execution may be averted (Rogers, 2003).

The organizational “innovation process” (Rogers, 2003) is divided into two phases, pre- and post-adoption decision. The pre-decision phase includes identification of problems and potential solutions (innovation) and the post-decision phase is marked by modifications, changes to the organization, refinement and eventually integration into the organization’s everyday operations. In a fully successful organizational adoption, the innovation becomes absorbed and no longer has a separate identity.

A review of the literature revealed one study of Rogers' Diffusion of Innovations model (Rogers, 2003) in relationship to adoption of emergency preparedness programs, further validating the relevance and need for this research. The study, conducted in partial fulfillment of a doctoral degree, used existing quantitative data from several sources to ascertain the status of pediatric emergency preparedness in a sample of emergency departments across the country. The author concluded, "Pediatric emergency equipment availability is a problem. Pediatrics continues to be an afterthought in emergency and disaster management, and as a nation we are not prepared for pediatric emergencies or pediatric disaster care" (Huddleston, 2008, p. 101).

However, there are a number of studies using the diffusion of innovations model or portions thereof, many associated with implementing evidenced-based practice in the healthcare setting. A search of the Cumulative Index to Nursing and Allied Health Literature (CINAHL), Pub Med, Web of Science, and the World Wide Web, for disasters, with either new programs or innovations--nursing and public health, resulted in 179 journal articles or theses. Two of the studies used a qualitative approach to assess

diffusion of innovations; one study examined nurses' adoption of a computerized care plan (Lee, 2004) and the other examined physical therapists and factors related to use of Dutch guidelines for back pain (Harting, Rutten, Rutten, & Kremers, 2009). Lee compared themes from the participant interviews of perceptions with Rogers's characteristics of innovation--relative advantage, compatibility, complexity, trialability and observability-- and found that Rogers' model described nurses' perceptions consistent with use of a computerized care plan system. Harting et. al, interviewed 30 physical therapists to determine their observance of the Dutch guidelines on managing low back pain. The study yielded important information about the lack of diffusion of the guidelines as it relates to the physical therapist's perception of "the art of caregiving" (Harting et al., 2009, p. 230) and the perceived inflexibility of the guidelines.

Greenhalgh, Robert, Macfarlane, Bate, and Kyriakidou (2004) conducted a systematic literature review of diffusion of service innovations. Based on a review and determination of the strength of individual adoption research, recommend studies on adoption behavior focus on the context and characteristics specific to the situation under study.

IMPLEMENTATION SCIENCE

Implementation science is the “investigation of methods, interventions, and variables that influence adoption of evidence-based healthcare practices by individuals and organizations to improve clinical and operational decision making and includes testing the effectiveness of interventions to promote and sustain use of evidence-based health care practices.” (Titler, Everett, & Adams, 2007).

In a systematic review of determinants of nurses use of research, a number of discrete characteristics were determined to increase research use by nurses: “positive attitudes towards research, attending conferences and/or in-services, having a graduate degree (compared to a bachelor’s degree or diploma), current role (i.e. leadership and/or advanced practice compared to staff nurse), clinical specialty (working in critical care areas compared to general hospital units), and job satisfaction.” (Squires, Estabrooks, Gustavsson, & Wallin, 2011, p. 15).

Other factors that facilitate adoption are senior leadership support, accurate data, the magnitude of changes required by the innovation, and the level of cross-departmental coordination necessary to implement the adoption (Bradley et al., 2004). In a study of health professionals on barriers to implementation of quality improvement programs, Davies and colleagues (2007) reported challenges with inter-professional collaboration. Organizational structures can affect adoption as well (Grimshaw, Eccles, Lavis, Hill, & Squires, 2012).

PERCEPTIONS

Understanding VA nurses’ perceptions as related to the CEMP is essential to learning what factors or experiences facilitate the adoption or non-adoption of the program. The Merriam-Webster dictionary defines perception as: “the way you think about or understand someone or something; the ability to understand or notice something easily; or the way that you notice or understand something using one of your senses,” (Merriam-Webster, 2014). In the *Phenomenology of Perception* (1962) Merleau-Ponty writes, “Perception opens a window on to things. This means that it is directed, quasi-teleologically, towards a truth in itself in which the reason underlying all appearances is

to be found," (p. 62). Assessing nurses' perceptions is an established research practice. A PubMed search of the literature in the last five years of "nurses and perceptions" resulted in over 2600 published papers, using both quantitative and qualitative methods. Several of these articles focus on nurses' perceptions and public health emergency preparedness related topics.

Bahrami and colleagues interviewed Iranian nurses to ascertain their perceptions of what disaster competencies are necessary for nurses to respond. Five main categories of disaster competencies emerged from the research: "management of the nursing response, legal and ethical performance in disastrous situations, team work ability, specific personal ability, technical competencies." (Bahrami, Aliakbari, & Aein, 2014, p. 4). These competencies are consistent with, although not as comprehensive as, the International Council of Nursing (ICN) Framework of Disaster Nursing Competencies (International Council of Nurses & World Health Organization Western Pacific Region, 2009).

Perceptions of a hospital's preparedness can influence willingness and intention to report to work during a disaster or emergency. A survey of 451 emergency nurses' willingness to report to work in Australasia (Australia, New Zealand and Melanesia (Merriam-Webster Dictionary, 2014)) found the nurses more willing to report to work if they perceived their hospital was prepared and their fellow health care workers and management were also prepared (Arbon et al., 2013).

Baack & Alfred (2013) surveyed 620 nurses in rural Texas towns about their perceptions of being prepared for and managing disasters. Nurses with disaster response

experience, and nurses who had work in a shelter after a disaster were confident about their ability to manage.

COMMUNICATION

Communication is essential to both adoption (Rogers, 2003) and implementation of programs (Urquhart, Porter, Sargeant, Jackson, & Grunfeld, 2014). Davies and colleagues (2007) found that barriers to program implementation may result from health professional's work structures and lack of communication between different groups.

LEADERSHIP

Nurses have been serving in leadership positions during wars, and natural and man-made disasters since Florence Nightingale tended the wounded and sick during the Crimean War. Over the years the roles have evolved and expanded to meet the health and public health needs of the U.S. and beyond. During disasters nurses provide leadership at local, county, state, regional and national levels (Knebel, Toomey, & Libby, 2012).

Deitchman (2013) compared crisis leadership traits across several different professions: miners, incident commanders, airline crews, and nuclear power plant emergency response personnel. Common traits were trustworthiness, communication, being capable, "competency," environmental awareness, and determined. King et al, (2010) conducted an exploratory study of disaster leadership characteristics. They interviewed medical directors of emergency medical services organizations at an annual conference for large U.S. cities; 21 men and 3 women participated in the focus groups. Ten themes emerged from the data: "ICS/Disaster Training/Experience; General Training/Experience; Teamwork/Interpersonal; Communication; Cognition; Problem

Solving/Decision Making; Adaptable/Flexible; Calm/Cool; Character; Performs Role,”
(King et al., 2010).

SUMMARY

The literature from the ability, willingness and intention to respond research varies by method, data collection, instrument, type of disaster, group surveyed and other factors that make direct comparisons difficult. However, all the findings are consistent in that even under the best circumstances--an educated and trained, willing and able, health worker with personal protective equipment and prophylaxis for self and family--100% of health workers will not be able to respond in any given situation. This has important implications for planning purposes particularly for those events where nurses are less likely to respond. It should be noted that during past events such as the Severe Acute Respiratory Syndrome (SARS) epidemic, the Fukushima Daiichi nuclear disaster and the Ebola Virus Disease outbreak, many healthcare workers reported to work or volunteered to help, even at risk to themselves.

CHAPTER 3: METHODOLOGY

INTRODUCTION

The purpose of this research was to explore and describe Veterans Affairs (VA) nurses' perceptions of adoption of the Comprehensive Emergency Management Program (CEMP). Nurses are the largest group of health professionals within the VA healthcare system. It is anticipated that understanding factors related to the adoption or non-adoption will help inform future efforts to strengthen the adoption of CEMP and related programs, education or policies and identify future research needs.

METHODOLOGY

Qualitative phenomenological ethnographic approach (Maso, 2001) was used to explore and describe VA nurses' adoption of a comprehensive emergency management program. A phenomenological ethnographic approach recognizes "...that there are individual differences as well as different ways of looking between each other and within a group....these differences lead to, as well as being the result of, different constructions of reality" (Maso, 2001, p. 144). Public health emergency preparedness is an important component of medical facilities' operations and nurse executives, nurse managers and clinical nurses are integral to any response effort (Coyle, Sapnas, & Ward-Presson, 2007; Fahlgren & Drenkard, 2002; Gebbie & Qureshi, 2006; Minami, 2007). There are minimal data of employees' perceptions of adopting a comprehensive emergency management program. Qualitative research allows exploration of the phenomena and permits the researcher to conduct interviews with nurse volunteers to explore perceptions (Speciale & Carpenter, 2007).

A number of studies have been conducted to determine preparedness for individual natural and man-made disasters and a very few to determine program preparedness. It may be possible to identify other factors related to adoption and data can be triangulated with existing studies by interviewing the employees responsible for implementing disaster programs. Qualitative data can often reveal the reason “why” when researching a problem (Donaldson, Rutledge, & Ashley, 2004). Thomas (2005) provides an excellent example of a quantitative study examining women and stress that did not capture what caused women the most stress. For that reason a phenomenological ethnographic method was used to guide the researcher in discovering factors related to CEMP.

RESEARCH DESIGN

Group interviews were the data collection method of choice for this study. Due to the potentially sensitive nature of the interview questions it was important that the participants felt comfortable and that the interviews were conducted in a non-judgmental manner that facilitated free exchanges of information. Group interviews provided a more relaxed forum for interviewing subjects thus the participant tends to feel safe to discuss sensitive issues or occurrences because of the presence of others who may have had similar experiences. The group interview method tends to be more effective than individual interviews because the group members may stimulate memories, ideas or situations of other group members (Krueger & Casey, 2009).

During group interviews, the attention of the interviewer(s) is dispersed across the group which may help calm those who might be nervous about an individual interview. Using the term group interview or small group discussion may also help make the

participants comfortable. According to Krueger & Casey (2009), group interviews "...work particularly well to determine the perceptions, feelings, and thinking of consumers about issues, products, services or opportunities," (p. 8). This is consistent with the purpose of the study to explore and describe the perception of VA nurses' adoption of a comprehensive emergency management program. Additionally, group interviews are a cost-effective and a timely approach to reach the projected number of study participants. In this study interview groups with approximately four to six participants were used to conduct the interviews unless a participant specifically requested an individual interview for personal or scheduling reasons.

The protocol was approved for both group and individual interviews. The only reason potential participants requested individual interviews were scheduling conflicts with focus group dates and times. Participants not interviewed individually were interviewed as part of a stratified group, (e.g. nurse managers with nurse managers and clinical staff nurses with clinical staff nurses). Stratifying the groups by position was appropriate to prevent an imbalance of power within the groups (Krueger & Casey, 2009, p. 186). Interviews were conducted on work time or before or after work, in quiet, private rooms at three physical locations within the healthcare system.

RESEARCH QUESTIONS

To explore the problem two research questions were developed:

1. What are the nurses' perceptions and experiences regarding the VHA's Comprehensive Emergency Management Program?
2. What do the nurses perceive as factors that could facilitate and strengthen the CEMP?

STUDY PROCEDURES

Following IRB approval, the participants who met the inclusion criteria were recruited. Inclusion criteria consisted of two components: 1) VA employee in the designated health system and 2) a member of one of three categories registered nurses either clinical staff nurse or nurse manager and medical center senior executive team (Appendix A).

SUBJECTS AND SAMPLE

Participants were recruited based on their role in the medical facility. Senior executives and registered nurses from a large, university affiliated Veterans Affairs Medical Center (VAMC) in the Northeast were invited to participate in the study. Snow ball sampling was used to recruit participants from different units and at two satellite sites. A large, university affiliated VAMC was selected for several reasons: its location in a large metropolitan area; the all-hazards vulnerabilities (DC Homeland Security and Emergency Management, 2011); its' established research programs and populations large enough to support the proposed study. The primary objective of the study was to interview as many participants as possible who had experience with the phenomena of interest. The total projected number of 64 was based on a majority of the senior leadership, half of the total number of nurse executives and 10 % of the total number of staff nurses (Speciale & Carpenter, 2007, p. 29). The phenomena of interest was VA nurses' perceptions of adoption of the Comprehensive Emergency Management Program.

Setting

The setting was a large, university affiliated VAMC in the Northeast. The VAMC is part of a larger healthcare system with two medical centers, one urban and one rural, a long term care facility and several community based outpatient clinics. The urban university affiliated facility provides acute medical and surgical care and offers a full range of inpatient, outpatient and primary care services. The second facility specializes in providing rehabilitation and post-acute care to include hospice and nursing home care to Veterans requiring non-acute inpatient care, in addition to offering specialized treatment for patients with Alzheimer's disease and other forms of dementia. The third facility provides a broad range of inpatient, outpatient and primary care services, including inpatient medical, intermediate and long-term care programs--nursing home care, rehabilitation services, geriatric evaluation and management, respite care, chronic ventilator care and hospice care. These three facilities have a total of over 700 inpatient beds.

Recruitment

Three groups of VA personnel (senior executives, nurse managers and clinical staff nurses) were targeted to provide information about the study and invited to participate. The senior executive staff usually consists of some combination of the following: VAMC Director, Associate Director, Assistant Director; Chief of Staff; and Nurse Executive/Associate Director for Patient Care Services. The PI and research team members met with senior executive staff, individually, to explain the study, answer any questions and invite them to participate. A separate presentation was given to a group of

nurse managers and staff nurses to inform them of the purpose of the study, the study objectives and the study procedures.

Interviews with VAMC employees--the facility senior management team, nurse managers/supervisors and clinical staff nurses could provide a broad range of experiences of the professionals engaged in implementing the CEMP. Registered nurses are an important group to study for several reasons. Registered nurses are the largest group of professional direct care providers in the VA; The FY15 total number was 62,548 (Department of Veterans Affairs, 2014b). Nurses are a critical component of any public health emergency event that involves any aspect of caring for patients and are included as a key component of emergency operations plans for managing patients. Nurse executives are part of the medical center executive leadership team. Depending on the circumstances, e.g. late at night or if the nurse executive is serving in an acting capacity for the Medical Center Director, the nurse executive or a nurse manager may serve as an Incident Commander (the official with overall responsibility for the event). Nurses staff the VAMCs and nursing homes 24 hours a day and seven (7) days a week. Nurses are a key component of public health emergency preparedness.

Volunteers were recruited via emails, flyers (Appendix B) and posters distributed within a large, university affiliated VAMC in the Northeast. Volunteers were also recruited by email at two of the other sites within the same system.

HUMAN RESEARCH PROTECTION

The study protocol was approved by a VA Human Subjects Institutional Review Board (IRB) and the Uniformed Services University of the Health Sciences, Human Subjects IRB.

Informed consent

Prior to participation the principal investigator (PI) explained the study to each potential participant in a private setting, answered questions and secured a witnessed informed consent. Participants were required to sign an informed consent (Appendix C), a consent for audio recording (Appendix D) and a Health Insurance Portability and Accountability Act form stating that no protected information would be collected (Appendix E). Participants were asked if they would complete an anonymous demographic graphic sheet that requested information on age, sex, number of years worked as a registered nurse, number of years worked at the VA, prior military experience, current of prior military reserves experience, highest level of education including highest level of nursing education, degrees other than nursing and whether or not they were enrolled in the Disaster Emergency Medical Personnel System (Appendix F).

Data collection

The interview process followed a protocol (Appendix G). The total time for the consent process and interview was between 60-90 minutes depending on whether the interviews were individual or group interviews as well as the size of the group. The first 20-30 minutes were used to consent the participants (individual or group). At the scheduled date and time, the participants for each individual interview or group interview entered the meeting room. Before beginning the interviews, the study was explained to all participants. Study participants were given the consent form to read and were invited to ask questions before signing their study consent forms. After the participants signed their informed consents and the consents were witnessed, study participants were given

an anonymous demographic information sheet to complete. The anonymous demographic data sheet did not request any identifiable protected information and participants were not required to complete the demographic data sheet.

Open-ended questions were used to ask about the adoption or integration of the VA's comprehensive emergency management program in that facility. The opening question was, "Please tell me about your experience with the implementation of the VHA's Comprehensive Emergency Management Program." Examples of probes included: Would you explain further? Can you give us an example? Would you say more? Tell us more. Please describe what you mean. Is there anything else you would like to tell us? (Appendix F). If the following topics were not mentioned during an interview, specific questions were asked about a nursing emergency operations plan, DEMPS, personal preparedness plans, shelter in place, training and exercises, experience with actual disasters or emergencies and recommendations.

There was only one encounter for each individual; the encounter included the consent process, an opportunity to complete the anonymous demographic data sheet and to participate in interview. The interviews were conducted between January and June of 2013. The interviews were tape recorded using two digital devices--one as a back-up. Participants were given numbers for identification purposes, to protect their identities; no identifying information was collected.

The recorders and all documents were maintained in a locked, secure location. Data integrity and security requirements were followed according to the IRB and VA regulations and requirements (Department of Veterans Affairs, 2012) (Appendix H).

DATA ANALYSIS

All interviews were taped and transcribed. Any possible identifying factor such as name, place, or facility was de-identified or deleted. The researcher validated the transcription process by listening to each taped interview four times (two times for each recorder). The researcher and the dissertation committee chair read the narratives separately then together. Both classified the narratives, based on agreed upon definitions, according to the themes of perceptions expressed by the participants. ATLAS.ti software program was used for the qualitative data analysis organization (ATLAS.ti Scientific Software Development GmbH, 2010) and to manage the data and thematic analysis (ATLAS.ti Scientific Software Development GmbH, 2010). After the overall thematic structure, with supporting evidence, was completed all the data was provided to the expert panel (the dissertation committee) for review. The anonymous demographic data were collected and analyzed (Appendix F). SPSS version 22.0 was used to facilitate the analysis of the demographic data (IBM Corporation, 2013).

LIMITATIONS

The findings represent the perspectives of the clinical staff nurses and the nurse managers from a large metropolitan area in the northeast. The findings provide the perspective of these nurses' experiences with the adoption of a comprehensive emergency management program, within a larger organizational context. Additionally, there was limited participation from the senior executives. Finally, there are potential biases from the "researcher as instrument" (Bloomberg & Volpe, 2008, p. 150) in qualitative research and the researcher's experiences in public health emergency preparedness over the past 13 years. To minimize potential bias, the dissertation

committee reviewed the proposed themes and quotations for congruence and other potential interpretations.

SUMMARY

The purpose of the study was to explore and describe VA employees' perceptions of adoption of the VHA's CEMP, with a focus on the largest group of VA healthcare employees, nurses. Qualitative phenomenological ethnographic research was used to explore and describe VA nurses' adoption of a comprehensive emergency management program. The phenomena of interest was VA nurses' perceptions of adoption of the Comprehensive Emergency Management Program.

CHAPTER 4: FINDINGS

INTRODUCTION

The purpose of this research was to explore and describe Veterans Affairs (VA) nurses' perceptions of adoption of the Comprehensive Emergency Management Program (CEMP). It was anticipated that understanding factors related to the adoption or non-adoption would help to inform future efforts to strengthen the adoption of CEMP, and related disaster programs, education and policies as well as identify future areas of research. Only one senior executive was interviewed; therefore the data presented only represents two groups of registered nurses: clinical staff nurses and nurse managers. The goal was to recruit a total of 64 participants from a large university affiliated hospital in the Northeast. A total of 49 nurses participated. Within the clinical staff nurse group, 4 of 32 (13%) were interviewed individually due to scheduling conflicts. The group sizes varied from two to seven. Within the nurse manager group, 3 of 17 (18%) were interviewed individually, due to scheduling conflicts, and the remaining participants in focus groups of two to six. The interviews were conducted between January and June of 2013. After an overview of the demographics, the main findings that emerged for both groups are presented.

DEMOGRAPHIC ANALYSIS

Demographic data were collected (Appendix F) after participants signed the informed consent form. The results of gender, type of nursing education, active duty by service, reserve service and organization and Disaster Emergency Medical Personnel System volunteer status are displayed in Table 1. With the exception of gender, the data

is displayed by group: Registered Nurse (RN=clinical staff nurse) or Nurse Manager (NM). The RN group is comprised of the clinical staff nurses and the NM group is comprised of the nurse managers. Gender is displayed by the total group to prevent unintentional identification of male participants (small number of male participants and an unknown number of male registered nurses at the facilities). A total of 49 nurses participated, 45 females and 4 males.

Table 1. Demographic Information of Study Participants

Demographic Information*			
Gender	Female 45 (92.3%)	Male 4 (7.7%)	49 (100%)
	RN 32 (65.3%)	NM 17 (34.7%)	Total 49 (100%)
Level of Nursing Education			
AA	2	0	2
BS/BSN	14	4	18
MS/MSN	15	12	27
DNP	0	1	1
Degree –other	5	5	10
Active Duty			
Air Force	4	1	5
Army	4	3	7
Marines	1	0	1
Navy	1	0	1
Total	10	4	14
Currently in reserves			
Yes	2	0	2
No	30	17	47
Reserves service			
Air Force	1	0	1
Army	1	2	3
Enrolled in DEMPS			
Yes	11	5	16
No	20	12	32

* Totals do not always = 49

The average age of the participants was 50. Overall the participants had an average of 23 years of experience in nursing and 10 years' experience in the VA. For those who served on active duty (14 but only 11 reported their length of time on active duty), the average length of service was 2 years. And for those who served in the reserves, the average length of time was seven months, (see Table 2).

Table 2. Mean Statistics for Age, Experience, Active Duty and Reserves.

Years	N	Mean	Minimum	Maximum	Std. Deviation
Age	44	49.86	29	63	7.639
VA experience	49	10.47	.3	31.0	8.3217
Nursing – experience	48	22.92	1.0	44.0	10.0400
Active Duty	47	2.21	0.0	22.0	5.5880
Reserves	49	.67	0.0	14.0	2.6012
Valid N (listwise)	41				

FINDINGS

From the interviews, six major themes emerged along with a number of recommendations. The major themes were:

1. Lack of Familiarity with CEMP. This theme included data related to the Comprehensive Emergency Management Program: positive, negative and whether or not the participants were familiar with the CEMP. The majority of the clinical staff nurses and nurse managers equated the CEMP with the facility emergency operations plan. Very few clinical staff nurses and nurse managers were familiar with the name of the program, CEMP or the concept of a comprehensive management program.

2. Communication. This theme included data on communication about programs, disasters, drills, infrastructure, ways of communicating—good or bad—or a lack of communication. The majority of the clinical staff nurses wanted more communication.
3. Emergency and disaster experience. This theme included data on actual disasters or emergencies experienced by the participants. Both the clinical staff nurses and the nurse managers had experiences with different types of emergencies/disasters including snowstorms, an anthrax exposure, hurricanes, flooding and an earthquake.
4. Education and training for CEMP. This theme included data on anything related to training and education—Talent Management System (web-based), drills, mandatory training, classes and Disaster Emergency Medical Personnel System (DEMPS) training. The majority of the clinical staff nurses wanted more and different methods of education delivery and wanted more training (drills). Some of the nurses and nurse managers had never participated in a disaster or emergency drill at their current facility.
5. Leadership engagement. This theme included data on nursing and facility leadership, accountability and responsibility. The majority of clinical staff nurses wanted nursing leadership to be more engaged overall and in the facility's comprehensive emergency management.
6. Preparedness—system and personal. This theme included data on personal preparedness, information about personal preparedness, and whether or not the participants thought the nation was prepared. The

majority of the clinical staff nurses were not familiar with the term personal preparedness. Both clinical staff nurses and nurse managers expressed concern over the lack of system preparedness.

Each of the findings are discussed and supported by “thick description” (Geertz, 2000) that are detailed quotes from different participants to provide a broad perspective of the perceptions of the participants. Under each theme both groups’ findings are presented. RN refers to clinical staff nurses and NM refers to nurse managers.

Theme 1. Lack of Familiarity with the CEMP program

Clinical Staff Nurses

The majority of clinical staff nurses, designated (RN), were not familiar with the CEMP. When asked about their experiences with the CEMP, the clinical nurses equated it with their facility’s Emergency Operations Plan (EOP). There was unfamiliarity with the title of the program, CEMP. Participants expressed their perceptions in the following ways:

RN “I work in the emergency room and one of my concerns is that there was no implementation of the VA Emergency Management System with the nurses who are supposed to go out and be in the front of any emergency that we would be having....There is a group that does go out and they train, and I’m trying to remember what the name of that group is...I think there’s one ER Nurse on that committee. And (phone beeped) they trained for setting up equipment. Um, they trained in triage. But one nurse training out of the whole ER doesn’t help the ER. They need to send more people. In fact, they need to send everyone that works in the ER to the Emergency Management, whatever it is they’re going to have. Um, we do have another nurse who had been going to some of the other formal programs that they have been having that are up a level, and I went to a couple of them myself. But like I said, everybody needs to know the information. It’s not disseminated throughout, so that needs to happen. And they’ve got a long way to go. We did have a physician who was in

charge, um, of Emergency Management Program, who did give us some instructions, like just before we were supposed to be having a disaster drill. But he, um, left the VA. And since then, we haven't had anyone take as an active role as he did when he was here."

RN "And I'm really not familiar with this program. Uh, I'm trying to recall, I...in orientation I recall there are a certain amount of nurses that are identified according to their badges with a red stripe, and they're to...and they're kind of like the primary team. But that's the only thing I...it...I might be wrong in that. But that's all I know. I don't know too much. ... And there's also a TMS that also incorporates fire, and bomb threats, and electrical problems, and things like that, yes. Is that all part of this emergency comprehensive program?"

RN "Um, I really don't have any specific information other than if there was to be a disaster that I would report to my supervisor, and they would announce, um, code green, some type of an emergency."

RN "Only...the only plan that I have right now is the...you know, once I get a call then I know that I'm supposed to report in. And all the other stuff is kind of from the hip. And we have...we've been trained, um, doing CEUs and classroom time on different nerve agents, the drugs and the antidotes."

RN "I know that there is a, um, like registry where you provide your information, you know contact information, uh...things of that nature. But as far as an actual plan, I couldn't tell you what it is....So I knew something must exist as far as notification, and that thing. But as far as how that's implemented, and what that means if you were to be contacted, I have no idea....Like my new badge doesn't have it. But my old badge used to have on the bottom emergency responder, or emergency...something.....I don't have one here. But my question, you know when I look at those, I say, "Well what does that mean?" I... I... I didn't have any idea. So I said...and because I was going to school at the time and we were talking about, you know, those kind of things...what is our emergency preparedness plan? What is our plan? Especially having worked at, uh, other facilities where you actually do your drills. Okay, we're losing power, we need...or whatever it is...we need to evacuate. Um, our ICU patients are on a ventilator. This is when you would evacuate, or...or how you would evac....So I... my personal opinion is, is its lacking. Severely lacking. 'Cause I couldn't tell you what the plan is."

RN "I, Um, all of this stuff that you're talking about, like the training in the ER and management. None of that has ever really trickled down to

me. I'm a nurse in the outpatient clinic, so I really don't know what my role would be, I know I'm on some kind of a call list. And they, every year I have to update my information."

While the RNs knew there was a hospital emergency operations plan, there was a lack of knowledge about the plan. There was confusion between the emergency operations plan and the Veterans Affairs Veterans Affairs Personnel Accountability System (VA-PAS) a program that alerts personnel about an emergency and collects personnel safety information during an emergency. For some there was also a lack of knowledge about their role during an emergency. There was a lack of familiarity regarding portions of the CEMP (mitigation, preparedness and recovery).

Nurse Managers

The majority of Nurse Managers, designated NM, were not familiar with the CEMP. When asked about their experiences with the CEMP, the Nurse Managers equated it with their facility's Emergency Operations Plan (EOP). There was a general unfamiliarity with the title of the program, CEMP. Participants expressed their perceptions in the following ways:

NM "And when a situation comes like blizzard or bad weather, then nursing...talking about nursing per se, or management, we all get together and then we follow instructions from...from top management about what are we going to do, then we get all organized but it...and it may happen the day before that we get an announcement about it. (...) Or the day...or the day of. Nothing way in advance that we have something we can be in place of policy or SOP or anything that. We just all get together, depends on what is going on and then we make all those decisions; what are we going to do with the staff, who needs to stay, who's going to cover, where are they going to be spending the night, how many beds we have available, how many stretchers we have available, all that kind of information. But usually it may happen the day before of the...of the

blizzard for example, or and then we go through 24 hours, sometimes 48 hours, just to keep up with what is going on.”

NM “Only thing I can tell you is they have a disaster management policy and plan. I’ve never heard of it called what you just said (...) Um, there’s also a policy here in the hospital and then we, um, we have a policy where people have to stay and then we look at how many patients are here and how many, you know, we do the whole re-triaging of patients and disposition so that people can go home if possible or we establish how many beds we have if needed. And that goes up the leadership chain, we have radios, a pre-established radio channel that we use.”

NM “As a Nurse Manager (...) I’m one of the responding officials and I’m responsible for gathering the information for Medical Nursing Service as to availability of staff and wheelchairs and beds and how many patients we can get out. I coordinate all that, uh, whenever we have a Code Green, which is how...how we have emergencies.”

NM “Well, honestly, I haven’t had much exposure here. As a Nurse Manager, I have not had much exposure of the Emergency Management System here. I had exposure in X [another VHA facility] but that was only because I was one of the Associate Chief Nurses and I had to be involved in that, but I think that the Nurse Managers need more exposure. I mean I’ve been a Nurse Manager for three years.”

NM “Well, um, seems how I’m relatively new in the VA, I have participated in the Emergency Preparedness drills at, um, A, um, where they did tabletop drills, whereas B needed to evacuate their facility. And then we actually had a VISN-wide, um, drill where on paper, um, we actually evacuated B and we had volunteers that would have been the, um...the B patients arrive. And so we, um, opened up our, um, triage ED and processed them through all the way up to putting them in a bed, as patients being transferred from that facility at the, um, C and D campus.”

Overall the Nurse Managers were very familiar with their role in a disaster or emergency. They were however unfamiliar with the CEMP and when asked about the CEMP interpreted it to mean the emergency operations plan.

Theme 2. Communication

Clinical Staff Nurses

Most of the participants expressed concern about the lack of overall communication. Participants expressed their perceptions of a lack of communication in several areas: communications during or immediately after a disaster or emergency; general information about the DEMPS program and enrollment; notification about drills and direction during drills; and debriefings or after action meetings. The first participant expressed perception in relationship to communication about the earthquake:

RN "We had...I work with mental health patients and they were very scared, you know, most of them...many of them are paranoid and suspicious to begin with, so it was difficult because we didn't know what was going on and we weren't told what to do (Intercom), so to kind of calm them or give them guidance on how to respond, it was hard for them."

This participant's perception reflected prior experience with anthrax:

RN "I think, uh, the VA could improve in far as their communication, uh, with the employees during disaster situations. And the reason I say this is 'cause I'm going back, uh, a while ago when they had some kind of powder, white powder, forget, that was out. An..was it anthrax? Yeah, and, uh, it was found in the cafeteria here at the VA, and nobody knew about this. I didn't find out until after I got home and my family members asked me 'cause it was all over the news. And I worked at...and I said I've been working in this place all day long and nobody ever mentioned anything to us about this anthrax. So, this is the reason why I say that, uh, I think the communication is, uh, need...is important and needs to improve here at the VA as far as, uh, emergency situations."

This participant's perception was related to the DEMPS program:

RN "The...the only time I got involved on this is when...when the news...when the news started to come out, and they had contact person to call, certain person...certain...call this certain number if you're interested to help and volunteer. That's the only time I was able to join for that, to call who. But the...the DEMPS, no, it's just put out there. If you know it, you join it. If not, nobody tells you to or what."

This participant's perception reflected experience with a drill in one of the facilities:

RN “Well, in one instance, you know, you’re...we were...we were supposed to report to an area...well, that was just as, you know, an employee having to report to where I needed to go, and um, the area I was to report to was the auditorium, well, it was totally black. Um, because they had to simulate, you know, a power outage and it was totally black, there was nothing and it was kinda like very uncomfortable that we’re sitting in this area and it’s all dark. And uh, not getting very good instructions as to what to do.”

This participant’s perception was related to feedback after a drill:

RN “Um, hav...again, having worked in several departments, I believe that it’s different for each department, uh, how well that feedback is, um, distributed both ways. Um, I have been in areas where, you know, the chief or whoever’s running the drill would walk through and just say, “Oh, everything was good,” you know, okay, blah, blah, blah, but there...I...I haven’t seen a formal, um, sit down and let’s talk about what happened, what we could do better, um, what went wrong. You know, it’s just been kind of a cursory, okay, yeah, or if it was really bad then you hear more, but if it’s, you know, mediocre or what have you, not...not a formalized exchange of ideas and information.”

There was a lack of communication in many areas related to the CEMP. There was a lack of communication during disasters, a lack of communication during drills, a lack of opportunity to provide feedback on drills and a lack of communication regarding disaster related programs like DEMPS. This would seem to indicate communication issues within the organization at various hierarchal levels and between different programs within the organization. In the VAMCs the CEMP is managed by an Area Emergency Manager (AEM); not all facilities have full-time AEMs. The AEM reporting structure varies by facility. However, the nursing department usually reports to the Nurse Executive/Associate Director for Patient Care Services and the Nurse Executive reports to the Medical Center Director.

Nurse Managers

Some of the nurse managers expressed perceptions of communication challenges.

The first participant's perception relates to the communication of information on a unit:

NM "Case in point uh X came around the other day, probably about a week ago. Um, talked about if we see water somewhere, but he didn't talk to the whole staff. And I felt like that sort of information, you don't just give to one person...to branch out. If you want somebody to know it, you needed to have stood there and made sure everybody was in agreeance to what you needed...what we needed done. So he brought this paper around and...but I felt like, you know, some of the nurses were busy, let's bring them all together in a huddle and you give this same information so everybody can be on the same page. (...) I...um, I don't know, there was some water leakage somewhere before but he wanted to know if you do see water make sure, you know, we call whatever number that was on the paper. But I just felt like that should've been addressed to everybody as a whole, not just being, you know, trickled down."

This participant's perception was related to information about the DEMPS program:

NM "It's not active recruitment that I've seen since I've been here. A few nurses...I have at least two or three nurses that are on that, um, list, but they have not done anything with that. (...) So with the DEMPS, there's two nurses, but there's no advertisement, there's no active recruitment, there's no, "This is what the DEMPS is and you can join it if you want to," I've not seen that."

The premise of an all-hazards approach is to identify potential risks and develop plans to address them and communicate the plan to the appropriate facility staff. The Nurse Manager wanted all the staff to hear the information so if there was a water leak everyone would know what steps to take. Communication about the DEMPS program is important to recruit and train employees, clinical and non-clinical, for internal or external deployments. Nurse Managers need to know about the program because supervisory approval is required for entry into the DEMPS program and nurse manager roles are part of every DEMPS team.

Theme 3. Emergency and Disaster Experiences

Both the clinical staff nurses and the nurse managers had experiences with different emergencies and disasters including: an earthquake, snowstorms, hurricanes, and an anthrax exposure.

Clinical staff nurses

General

Several of the participants expressed their perceptions about “working with what you have” during a disaster or emergency as represented in the following excerpt.

RN “Basically you’ve...you’ve got to work with what you have. Um, in regard to, uh, staffing, um, staff is just not able to go home. Uh, you try to implement, um, breaks where you have, you know, some staff go and then they rest while the other staff carry on. Um, care may not be as optimal as you would like it to be, but where you just maintain just to make sure that everyone is safe and their basic needs are met and, um, you work very closely with, uh, the doctors that may happen to be there. Um, your nurse officers of the day are very important because they’re, you know, navigating through the whole VA where we are, um, which can be, you know, a little bit remote if people can’t come in and people can’t get out. So, um, your kitchen staff is, um, very limited, so you’re putting together meals and making sure your diabetics are taken care of, and so...”.

Earthquake

In the early afternoon of August 23, 2011, the U.S. Geological Survey (USGS) confirmed an earthquake struck central Virginia. The earthquake, a magnitude 5.8 was felt over a large part of the eastern U.S. The nurses who were working at one of the sites on the day of the earthquake expressed their perceptions about confusion during the event and the lack of communication with respect to what was going on in general and what the employees were supposed to do.

RN “I was in the emergency room interviewing a patient and it was really strange, my patient was from California. And we all went like that, shaking...and it was like what was and it did it again. And he said, “You

just had an earthquake. Was that your first one?" I'm like, yeah. He said, "Yeah, that's an earthquake." I'm like, "Ok." He said, "That's just a little one." I said, "Okay." (group laughter). And by the time we had that little brief conversation, when I turned around people were running out the door, because we had this big exit into the breezeway. And I said, "You know, you guys can't leave. You can't leave your patients in here." So when I finished saying that...and it stopped...I went to the door and said, "Come back inside. You can't leave your patients in here." Um, and then they came back in. But the rest of the people were standing outside of the building. And the thing that I kept thinking about was, okay, if this was really an earthquake and if something really happened doesn't it fall this way? You're standing right up under where everything is gonna fall on you. That was my thought. I don't know anything about earthquakes. But anyway, I did get the staff to come back in. But the majority of the hospital staff and every level of personnel that I can think of that I saw was standing outside across the street looking back at the hospital. We were standing inside the hospital looking at them like, you all need to come back in here. But someone did address it a little while later. They did make an announcement, I believe."

Snow storm

In early February 2010, parts of the northeast received as much as 60 inches of snow from back-to-back snowstorms on February 5-6 and 9-10.

RN "Years ago? [Cross talk] yeah, that was three years ago, snowmageddon. When we had the two blizzards back to back, they did...they had...their plan, they put it in place, and so that this way they could test it. So, did 96 hours worth of food last for the staff, the patients that were in house they couldn't discharge because it was already a disaster outside, and that kind of thing. And they found out that, um, some of the systems did not hold, uh, some of them. I think water became an issue and, uh...and then of course your staffing. The staff that's here has to stay. Nobody came in. So, you know, that kind of thing. What about fatigue, all kinds of things."

RN "Um, three years ago we had the snow storm and, um, real bad, like they call it white out that you can't see anything, that nobody should be walking in the street except you have your ID, and we were trapped in here. The problem was there was no bed, like, to be given, and there was a fight going on. I don't know if I should say this, but this was so bad that arguments that went through with the, uh, X nurses trying to reserve some mattresses for the night, and the control came from upstairs. Administration comes down and says that the...the bed has to be divided accordingly. They had made plans, and I know it's...coming from the

administration point of view, I used to be in administration, too, in my previous job, and I know how hard it is, and you have your staff telling you they had made...made their nest that where they're gonna sleep and prepared them for the night, and here comes administration taking it away from these nurses. And so the nurses were kind of upset, and now...to make the story short, there was argument, and it went higher. It went to all this news that came out throughout the hospital, fighting about that mattresses, who gets who, who...where did it go, (...) That...that was the whole story, and it was bad because they looked really bad because the nurse who stayed few nights had been trapped in here. She wants her bed, but the administration says, no, you guys have to give that bed. And found out the next day some were being hosted into the next door hotels close by, and some had some good place, and the X needed some bed to sleep all they need is just a mattress that they were trying to pull it to the X to sleep, and not fighting with the cubicle. Well, they just wanted a mattress, but administration said that, no, that mattress belongs here. That mattress is already assigned to someone, so there was a confusion of.... I guess to make it better they should have a hand of how many beds, um, what kind of word I wanna use, that they...they need to have their hands on to see what their inventory of...their inventory of what available bed is there, chairs, and what. That these things should be...should be planned just like a disaster plan what they have for the nurses to spend the night for, what to use or what bed, what cubicle, and...and...and during the time when everybody's tired, too, instead of discussing more I said, okay, like, take it and we'll find something else. But, no, this person was very not giving in, and that person was not giving in, and so it was like...it was not a good time to talk about it because everybody got trapped, everybody tired, it's been a few days in here."

This is an example of a positive experience with a disaster. There were very few positive emergency or disaster experiences described during the clinical staff nurse group interviews.

RN "I actually was working in the staffing office during our last heavy snowstorm, and that was the central...that was the central office, the NODs office, in which we had actually set up, you know, the hub of all the information as to staffing who was available, census, where we would actually direct the nurse...the nurses, you know, in the area. So very, very, you know, active in that part and how we would actually delegate areas for staff to sleep and um, housekeeping, and just food...just the whole...that was great. That was good because we had had a couple of snowstorms before that, which we couldn't get people out. And thank goodness, I lived...I was in X so I was able to just come over here, and you know, to help out as much as possible during that time. But they brought that down

to us. That was really good. We were really good with that. I'm really proud of us about that, because everyone had somewhere to sleep. Everybody had food. They had, um, um, what do you call it, coupons, certificates, whatever they call it. And they had beds. They had...I mean, everything was made available to the staff accordingly. And it was...you know, and it went off without a hitch."

Many of the RNs expressed frustration and anger about the lack of facility planning and preparedness for disasters. The planning and preparedness have improved over time, however, there are still major gaps, e.g. training and preparing for an earthquake. While an earthquake in the Northeast is a relatively rare event, it is still a hazard. Most surprising was to learn that "leadership left the building." Instead of fulfilling their duties with respect to their leadership roles, they left the building and left behind staff and patients, to protect themselves and escape from potential danger.

Nurse Managers

General

NM "Support services during disasters have been very difficult to get. They will basically say, well, they couldn't come in. Um, you know, the expectation of us people who are doing patient care, our expectation is that you will be in...No matter what. And uh, yeah, no matter what. So that's been...it's been a problem here. I've been here, the last hurricane I was here as the X and of course I was here for the...for the earthquake too, but that was just a temporary thing, but we couldn't find...you wouldn't be able to find an Engineer or an IRM person for nothing." (Group laughter)

Earthquake

NM "Well, we were all here during the earthquake um, and I...it took a while, I think, for people to realize what it was, um, and then after they realized, then things kind of fell into place, but, um, I think for the most part, with regard to the earthquake, everything was appropriate. There wasn't anything that, um, seemed out of place or out of touch. You know, we...it was business as normal."

Hurricane

NM “Sometimes when I call there for Nursing Sup...Supervisor, or for my...my supervisor, uh, we have talk about, specially [sic] during a natural disasters, like you know, there’s a warning, there’s a tornado, hurricane, so we’ll talk about that and in collaboration with A and B. So we took accountability of how many residents we have here, uh, what kind of support do we need, resources. Most of the time we have the staff here, we bring like cots and everything for them to stay. We also arrange with the kitchen to make sure we have like food bags, you know, snack bags for the both residents and staff. So we kind of coordinate pretty much. We have to give them, you know, the bed status and what the residency situation is, if we have any issue, staff accountability. Kind of, uh, the last time we met here was about the hurricane that was coming this way. We did coordinate with, uh, uh, some kind of transportation for the staff who live nearby, ‘cause they could, uh, pick them up. So, uh, basically, most of the staff stayed here and they work overtime, and I’m glad nothing serious happened. We also arranged for...make sure that we had the clean water. All that for the rest, and so that was like done like two or three days in advance, you know, the coordination.”

The Nurse Manager’s described their role in a disaster or emergency as primarily one of coordination—coordination of nurse staffing, food and water for both staff and patients, and sleeping arrangements for staff if necessary. Concern was expressed about the inability to get support staff to either stay or come in during a disaster. Staff support is important to allow the nurses to provide direct care and not have to focus on housecleaning or other related support activities.

Theme 4. Education and Training for CEMP

Clinical staff nurses

With the exception of fire drills, there was great variation with perceptions about the education and training experiences.

Education

RN “Um, I know that there’s a TMS, um, course that we are supposed to be taking. That’s about it.”

RN “I’ve been with the VA, this is my fifth year. Um, during orientation I do not recall the mentioning any disaster planning or any kind of education regarding that topic.”

RN “They’re assigned, um, for, I think it’s out through education, the ones that are mandatory, and then they have an end date on it so you have to complete so much training per year. And I think fire response and emergency and...and the...what to do like in a hurricane or tornado, and those kind of things are addressed in those TMS learning modules. Bomb threat’s addressed in there, security risk, all the...the major information is up within those TMS.”

Training/drills

RN “I remember there was one drill during my five years at the X VA, and I’m not sure it’s the same one that you mentioned, but we were all, um, required to evacuate our...our area...work areas, and that was the only time that I remember.”

RN “I’ve been here six years and I have not participated or been asked to participate in any Emergency Disaster, um, you know, exercises or anything here at the VA. Um, and I...I was hired into the emergency room full-time. That was my first job when I came here to the emergency room, uh-huh.”

RN “We used to do drills...not necessarily drills...but we’d have in-services and...and just I mean, right off the bat how to triage, you know, during the nursing orientation whenever we went to a new hospital...where the triages went, like if we were doing triage in med-surge area, or there was designated areas. And um, since I’ve gotten here I don’t...I haven’t even heard of it. I mean, I know what it is, but I wouldn’t have a clue where it’s being done. I’m assuming the emergency room, but that’s a big influx if it’s a large (phone beeping) emergency.”

RN “Right, now, I’ve worked in outside...I’ve worked in outside facilities where you actually had to go and you had to like...you were working with triaging and moving people. You were actually...you weren’t just pulled to the pool, you were like moving people and you were doing stuff.”

Another perspective was that of participating in drills.

RN “We are...we’ve actually had people supposedly from the disaster deployed to us for care. I’m in...in a clinical area that all these persons [inaudible segment], they’re sent to you for care. Now, usually it’s just whenever the code is called, it’s a matter of saying, you know, what we

have available, whether we have someone on our procedure table, um, what kind of staff we have, and how many stretchers we have so that they know where the resources are available that if they need them they can come after them. And then we're also...we have the...the walkie-talkies so that supposedly if it's just a routine case we would finish the case that we're in and be available to do emergencies as they came up."

Fire drills

Every participant was familiar with TMS training and had experiences with fire drills. Some nurses felt fire drills only trained you up to a certain point then you were left wondering what to do.

RN "It kinda depends on which department, and I can say that it varies from department to department, having worked in different areas. Um, some areas are...are very good, and especially when you have new people, um, some areas are really good at making sure the new people know what to do. Um, that's an important thing I think. Um, but in regard to shutting the door, making sure that that hallways are clear, I find that there's kinda maybe a gap what to do after that point. Say, if we really have to get out of the building with these patients, if we really have to move I would say that that would probably be a learning curve, um, after that...after what do you do after you shut the doors and something really is happening. So, that would be room for [inaudible segment] there, 'cause I can recall over my years at the VA when you go through your fire...fire drill, everyone shuts the door, you know, get whatever documents you need to have, and then you wait and then the drills over."

Drills: positive experiences

RN "We did have two disaster drills last year, I think it was, and I thought it was a wonderful experience, because we had patients...mock patients come in on a bus from X, I think it was...and they were tagged with all different types of injuries. And we were tasked with triaging them and sending them to the appropriate site for care. Registration, having to see that set up and how it was set up and making a triage area to send the patients to once they were immediately tagged, vital signs and care. And it worked well. And we did get a chance afterwards to rate, our..um, feelings about what happened and you know, what we felt we could do better or...and we were given some type of an evaluation, but I don't remember it being widely disseminated through the staff as to what the results really were in the end, you know, the end evaluation."

RN "My part would be to, for the nursing services pretty much to, uh, communicate and also to help prepare. What happens is, when we get the notice from, let's just say Central Office that we need to have these mandated drills and how many we need to have per year, uh, I work closely with, um, I forgot what X's title is Emergency Management. I forget what his title is, but I work with him and the rest of the leadership team and basically deciding on how we're gonna implement the, um, the disaster. So some of the planning that we have to do is first we're briefed on the type of emergency plan that they want to do. Example; a train derailed, or an explosion or whatever it may be. And then how we're gonna respond; are we ready for staffing, do we have enough supplies, is everyone been informed, have we communicated, has everyone been notified by either email or by their pager or the notification system. I forgot the name of the notification system that we have right now, but has that happened, and also preparing our cascades, for callbacks. So once these, uh, it's pretty much like, um, housekeeping, things have been done for us for nursing service, then its, nursing leadership's job to communicate that to the, um, Associate Chief Nurses and then for the Nurse Managers. Of course a lot of the meetings are open but they can come and they can get it first hand, but because of time management and their busyness, they can't always make it, so they rely on other...others to give them that information on what they need to do. Um, how many patients we have and how many could we discharge is always an issue."

Drills: negative experiences

RN "And I think the staff knew about it better with this past one than previous ones, because I had a lot of people show up downstairs as I showed up, and they were, "Oh, what do we do? We heard something was going on. What do we do?" So of course, I thought the planning of it was done very poorly, because there were nurses standing around and physicians, "What do we do?" And I finally, not...not being in charge or anything... started to help run the program, like what we should do, because I said... I mean, I knew that we were gonna have patients coming in from another facility, which was the mock scenario coming from X. So I said we need to go the ER because that's where there's gonna be triage, too, when I found that out. And so I kind of started having people do what they needed to do."

There was great variability in the RNs perceptions of their disaster education and training/drills. All of them were familiar with fire drills, however several expressed concern that the fire drills only went so far and wondered what would happen if you actually had to evacuate a patient. Some RNs who had been working for 5 or 6 years

could not recall ever participating in a disaster drill. Their perceptions reflect incomplete education and training of the nursing staff. At orientation, each new employee should be educated about a facility's emergency operations plan and their responsibilities.

Nurse Managers

NM "And basically (...) we do have training in TMS and I don't think they use the hands on, and we might do it once in a blue moon, but you know, we...we kinda need more training."

NM "I...I find that...our drills to be somewhat disorganized. I don't know if we don't do it enough, God forbid, I don't...I don't even wanna suggest that we should do it more often, because it's very disruptive for your day. And your day is just blown. I don't feel that I get a whole lot out of it. Uh, we did do a drill where patients came across from the X and we did a triage in the hallway and that was the most hands-on drill that...that I'd ever participated in. I guess because it's...everything is...it's a paper drill. So if you actually have patients coming in and you triage, to me that's a little bit more meaningful, you see how things work, but for the most part, they seem sort of scattered and disorganized."

NM "I come from a prior military institution so, no...they're not drills we're having here, no. Unless you have to break out equipment and actually put hands on it."

Several of the nurse managers had participated in drills and were familiar with TMS disaster modules. However, the drills were disorganized and the web-based training was a good start but more hands on, practical experience was needed. One nurse manager with prior military experience expressed that the drills could not be considered real drills because they did not include a full range of capabilities (e.g. taking out equipment to make sure it is used correctly).

Theme 5. Leadership Engagement

Clinical staff nurses

The majority of the clinical staff nurses expressed a desire for more integration of the CEMP with their organization and stronger engagement of the nursing department in the CEMP.

RN “I don’t think it’s just well done, period. Um, I don’t...I just don’t think there’s interconnectedness. Uh, one of the issues that I speak about a great deal are silos, and as I say one team owns disaster preparedness. You have to reach out, and that’s the person I spoke to about this thing, and to this date, and I’ve been here now almost seven years, we have not done that. We need to get nursing at the table, get, um, housekeeping at the table, whoever else you need to get. Get those people at the table. Let’s plan this date, bring your...all of your people together and...and plan it. It’s not planned. They just do it and that person has their central core of disaster people and Hazmat people, and so”

RN “I... I think everybody works in a silo here. This is a huge problem. It’s not nursing alone. We... we still very much have this is my service, and I’m protecting it, and I’ll do my piece that I need to do, and here it is. And there’s no communication, there’s no cooperation. It’s not... we... around... are getting to zero for the MRSA campaign, that’s part of what we learn is that you’ve got to have all the players at the table to... to even come up with a plan that... because I don’t know what they do. They don’t know what I do. None of us... we have ideas. Our ideas sound great to us, but when you put them out there with everybody, you get all the different input and you’re like, “Oh, true, never thought of that.” And that just doesn’t occur in this facility well at all.”

RN “And we’ve had, with the snow emergencies and stuff, we’ve actually gone to leadership and said, “We need something. We need a list of people who are close by. We need some foresight into this.” And I would say the reception was less than optimal for the first time, the second time. I do think they’re starting to do a little bit better now. There was a little bit of preplanning for this last storm, I’m going to say that. There was some beds set up in the hospital. There were some ideas that people would stay. I don’t... I’m not sure why that was not thought of before. And they were a bit defensive in administration when you went to them and said, ‘You know, these things occurred.’ And they were like, “No, we fixed them.” And then they occurred at the next storm and the next storm, so. The feedback and the process, it was like... it wasn’t to be mean that we were saying it. It was to say, here we are in the trenches and here is what we see, and how can we... we wanted to work with them to get it better, and that wasn’t met very friendly. (...)The same thing happens around storms and everything. It’s more of a threatening type culture, like

if you go you're abandoning. You know, there's no thought to perhaps you have children at home who can't be left... there's nothing... it's like you have to be here. And it's not...and the bad part isn't for me... it's anything can happen and you're not prepared for it. But then when you continue to be not prepared for it over and over, that's wrong. That's where the wrong comes in. And that's, I think, what we do here, is we don't... or it maybe it gets discussed, like I said, in meetings. And... and it does... I know, because I go... but it just never comes to fruition. A real thing never happens."

RN "That was a total disaster. Because they made all the staff nurses... no direction for the nurses taking care of patients. We were very upset about that [cross talk]. There was no direction [Cross talk] and leadership left the building. Leadership left the building (...) and we was all left with our patients."

RN "That's what I was gonna say. I agree, because when I... when we came back in...because we didn't... we didn't know should we stay or not... the staff nurses were told on the unit, do not leave. You are not allowed to leave. It's abandonment. And... and they didn't leave... they... they didn't know what to do. They were just... they went on there caring for the patients not really realizing it was an earthquake. But they were told they were not allowed to leave, there was no other direction from them."

RN "I stayed over a couple...couple nights here at the VA. As far as administration, uh, I really...administration wasn't very visible to, uh...to us. I heard they were here. Um, that was...I just heard that they were here. They said they was upstairs. Uh, a lot of 'em got suites and stuff upstairs, and they were getting hot meals, and you know...and employees, you know, they look at stuff like that. Oh, they upstairs getting hot meals, and here we downstairs getting cold meals. I think during a disaster, um, administration should make theirself a little bit more visible to, uh...to the staff, you know, come down and also help them and make sure things are alright. Sure, yes, you got a, uh, NOD, here, a supervisor, here, but I'm talking about administration."

RN "And I think that right there is a...is a problem, because we have a lot of, um...we have a lot of nurse...nursing desk people, and they are in charge of a lot of things around here. We have a lot of clipboard...you know, whatever. And the big thing is I think that that needs to be done. I think that administration needs to let them know that we're going to need you to participate to be on the floor to direct, show, that there's some support around here. (...) But I say that to say there needs...they need to be out there. They need to be physically out there, seeing the floors. Would be nice if you can touch and see and have...you know, see you know, see

how this floor runs so in an emergency, when we have a staffing crunch, when we have the, you know, the sky falls, whatever the case may be, that they are actively involved in what's going on here, because bottom line we are all RNs."

RN "One thing (background noise) every winter season, one thing this organization does very good is saying, everyone here is essential personnel, you know...it's on the screensaver, medical center's director...if it's snowing, weather, anything, you come to work. After that, it's like there's nothing about if there is an emergency and you're considered essential personnel, you know, I nurse the desk, but I've never been asked, okay, in an emergency you need to do X, Y, Z, so."

Several of the clinical staff nurses expressed the perspective that nurses are expected to do everything.

RN "We have systems problems and nursing always... I think a lot of times... they're like, 'Okay, we'll fix it.' We... we can't fix it. We've got to stop doing that. We cannot fix it. And... and it... and I think that's probably why it comes down to us all the time. It's like, 'Oh, documentation isn't good. Okay, have the nurses watch the doctors. Okay, this isn't good. Have the nurses do that. Okay, this isn't good. Have the nurse'... everything... okay, we're doing enough and we need to stop taking that responsibility and we need to put it back on the leadership as nursing leaders, I think. And I think we fail in that here, that we don't have a lot of nursing leaders strong for nursing here. It's like, well, they're running... this is outside of disaster... they're running a clinic. And it's like, well, the doctor said... well, you know, what, great the doctor said that. We're a team. We're colleagues. Good, you have your opinion. I have mine. Let's get in the middle, let's talk about it, and let's come up with something that happens. And I don't know about you guys, but I think that lacks seriously in this facility."

RN "We the driving force... we are the driving force, so but we can't do it all by ourselves. And a lot of times we will start the process or it will fall on us... it will fall on nursing... to fix the problem. But you still need others to help you. No matter what, nurses gonna be here 24-7."

The RNs expressed their frustration with nursing and organizational leadership and their perception that if there was a problem, the common response was "nursing can fix it". The nurses felt that they were the default for fixing all of the problems in the

facility. Overall facility management was described as in “siloes” with units protecting their own interests and not working together across programs. One exception was the Methicillin-Resistant *Staphylococcus aureus* (MRSA) Getting to Zero program (VA Pittsburgh Healthcare System, 2004). This program was described as well integrated with everyone who had a role working together to achieve a common goal. Part of the program was teaching the participants the importance of including everyone who needed to be “at the table.” The facility could use Getting to Zero as a model for the implementation of the CEMP.

Nurse Managers

Some of the nurse managers expressed their perceptions about a reactive organization and unequal expectations of all facility employees with respect to disaster and emergency response and ramifications of not showing up to work.

NM “Um, we’re...we’re a knee-jerk organization as it is, and I...you know, the Evacuated was started a couple years ago, uh, they did some training, didn’t capture everyone, waited several months, almost a year, they did some last year and captured a few people, not everyone, um, it’s not something that people wanna face or do, but it’s, unfortunately part of our reality and I just think the whole system needs to be done better. It’s not done well at all.(...) As an organization, they, you know, when we have a snow emergency, ‘cause that’s been our biggest emergency so far. Our snow emergency, um, the...the administrative staff, the secretaries, customer service, I just use them, not saying they personally, but I’m just using that for..[cross talk]...if they don’t come in, it’s okay, they just get AL. If we don’t come in, it’s considered AWOL, which is...it’s okay that it’s AWOL, but everybody that works in this building should be required to come to work because if you can’t do nothing but feed a patient ...would be helpful. To taking them in a wheelchair and taking them downstairs to x-ray would be helpful. Every individual, if you’re gonna work in a hospital...I don’t care what you do in a hospital, then you should be required to be able to help in an emergency.”

NM “Um, they, um, were concerned that people did not report, um, to the, um...to the labor pool. And, um, we had told them that since the drill actually came off about four hours later than had planned that we actually

indeed had veterans to take care of. And given the fact that we knew this was a drill, we opted not to pull people away from patient care. And, um, that if it really truly was an emergency, then we would have, um, scaled back patient care instead of continuing full force open clinics and...because we had really kind of closed things down for the morning for our labor pool. Um, and so they were really a little upset that we didn't have a hundred people sitting in the auditorium waiting to be dispersed. And, um, we had told them that, you know, basically these people had sat around for four hours this morning doing nothing and then we had dispersed them to catch up on the things that we needed to do to run a hospital. And then they...they were kind of okay with that because we actually did have a plan how we were going to pull, you know, all the nonclinical nurses into, um, the clinical areas to support the nurses then who could move to the triage who had the clinical skills that they used every day, um, and making sure that, you know, if a risk manager was going to hear, they had the right competency and skill set to take care of this situation while the ED nurse actually took care of the people coming in. So we had all of that, but they would have actually liked to have seen that a little more operationalized. But, you know, when it comes right down to it if veterans need care, we opted to provide the care that we needed instead of pulling them off to participate in the drill.”

Managing a hospital requires the support of health care workers, support staff, engineers, environmental workers, food services, information technology, communications and more. Direct health care providers need a facility's infrastructure to provide care in a safe, clean environment. That is difficult to do on a daily basis and more difficult during an emergency or disaster if there is no expectation support staff are required to work. Support staff are allowed to take annual leave while the RNs are marked absent without leave (AWOL) if they do not report to work.

The nurse manager who describes the plan for pulling nurses from non-clinical areas into clinical areas directly contradicts a report from a RN that even though she reports to work during an emergency or disaster, she has never been asked to help with clinical work for which she is competent. This is another example of the lack of communication and follow through of expectations and HCW roles and responsibilities

for planning and during an emergency or disaster. The RN did not elaborate on why she had never volunteered to help.

Theme 6. Preparedness—System and Personal

System preparedness

Both RNs and nurse managers expressed concerns about a lack of system preparedness at a facility and national level.

Clinical staff nurses

RN “And it was...it wasn’t, you know...it wasn’t like the building fell down or whatever. But, you know, just realizing that most of us didn’t know what to do.”

Nurse Managers

NM “We’re...we are not, personally, I don’t feel...we’re not prepared as a nation.”

Personal preparedness

Clinical staff nurses

There was wide variation in the perceptions of RNs’ experience with personal preparedness. RNs who believed it was important, those with prior military experience and those who lived in more rural areas were more likely to express knowledge about personal preparedness and to report that they had personal or family plans. Others expressed that their personal preparedness and VHA training allowed them to respond in community situations.

RN “No. I haven’t had anyone discuss with me, you know, what I should do past here, you know what I’m saying, you know, what I should implement or give me any ideas or anything of the sort. No.”

RN “Now on a personal level I’ve prepared my own self. I went to ...I’m certified in mortuary care for a disaster, and I’m also certified in shelter planning and setup, but I did that on my own. Um, I went through the Maryland Emergency Sessions. We had a week’s worth of training in Florida. But I did that on my own.”

RN “The only thing additionally I would like to add is I think that the training that we get wherever we are, not only helps at the VA but wherever we may be. Um, I have been in the community and had to deploy emergency training that I have had, um, you know, when you’re in a remote setting. Or you’re the only health care person there and a child is choking, or you know, you have to do what you have to do where you are. And um, this is what comes back, is when you’ve drilled something. Not what you’ve read in the policy, but what you’ve had to put your hands on and actually use or think through.”

RN “Um, for our situation we live in a more...in a more rural area, so, um, the staff and the people there are I think are more in the mindset to prepare that way because this is kind of a normal thing for them to go through, uh, um, snow storms and floods. And so, um...and it’s a good thing to really see staff pull together and say, okay, I live 10 miles from you, and I have a SUV or...or a four-wheeler. I can pick you up. So they would literally organize and...and say who could get where and who couldn’t. So, well, I know that so and so is stuck over there. They’re not gonna come in. So, let’s plan for them not to be here because they can’t get out because I know where they live. So, um, when you’re...I think it really depends on your environment and...and people that are in a rural area I find...um, I found them to really, um, be in a mindset of planning and thinking ahead and knowing what to do, and if you hear that weather (coughing in background) like that is coming to bring that extra set of clothes and toothbrush because you know you’re not getting out, or what have you.”

RN “And I think personally it would make me feel better to know what I need to do in a disaster other than report to my supervisor. I can anticipate and plan ahead, okay, what’s the next step.”

RN “I’m really familiar with that term. Um, there was...they discussed it in orientation extensively, and there was a TMS that I did for personal preparedness. And...and they outlined kind of the chain of command, who you go to. I...I couldn’t recite the chain of command. I remember there was a chain of command. Uh, what was the other thing that you...there...there were two programs you cited, personal preparedness, and...”

RN “Well according to what I have seen or done on TMS with the Disaster Preparedness Plan, has really reinforced my...my um...feeling of

doing it in case it happens, I would volunteer to be there, because it has strengthened my, um, perception of getting me to see how much I can help.

RN “Um, well, my current job is part of, um, on our routine visits...our routine initial visits to ask our patients if they have an emergency disaster plan, and it's part of our duty to educate them about emergency disaster plans, if that's what you're talking about. And with that, um, we basically educate the family, like, you know, if Sally...if...if Sally and Sue both was to come home, do you all have a plan like where to meet to know that everybody's safe so nobody don't run back in the house, when everybody is safe.”

Nurse Managers

Within the nurse manager group, their experiences ranged from reading an article in a network newsletter, to private sector experience, to extensive familiarity from military training. Others expressed that their personal preparedness and VHA training helped with preparing others.

NM “There was an article just, um, like two days ago in our VISN exchange, which talked about personal preparedness. So that's the only official or training I've...or any articles I've seen regarding personal preparedness.”

NM “Um, yes, I have some experience with Personal Preparedness, but as I said, before in the private sector before I came, uh, to the VA, um, I sat on a disaster, mass casualty disaster and we did disaster drills. I was an ER nurse and we did our disaster, mass casualty disaster drills on a regular basis, especially after, you know, the 9/11 incident. So outside of the VA, I guess I'd say that I do stay prepared.”

NM “You know, educating uh, people, but having the experience within, you know, the VA, it helps me personal and it helped me to help others, too, in the community, I guess.”

NM “I was in military for 23 years, so we always have to be ready and yeah, I'm very familiar with it, PPE, and (...) then we go through some, uh, drills and uh, actual mass casualty, triage kind of deal in different hospitals. And then, uh, personal prepare, you know, make sure you have the will, you have a living will or if you have a kid (...).”

Our nation is now 13 years post 9/11. Despite billions of dollars in funding, numerous government and non-governmental organizations there are still gaps in preparedness at both the systems and personal level. Nurses with prior military experience, personal interest and living in a rural area, report high levels of personal preparedness. Living and working in a part of the country with many identified hazards, it is curious that all of the nurses do not perceive the need to be more prepared. The organization's leadership has a responsibility to encourage personal preparedness and mandates to ensure system preparedness within their facility. Nurses, and other health and public health professionals have professional responsibilities to be prepared. Some of the nurses recognized how their preparedness could help their community become more prepared.

RECOMMENDATIONS

At the end of each interview and focus group the participants were asked if they had any recommendations. Any recommendations made during the interview process were summarized and repeated back to the participants to ensure the recommendations were clearly understood. The clinical staff nurse recommendations are presented first then the nurse manager recommendations.

Clinical staff nurses

The clinical staff nurses recommendations include improving communication, more and different types of educational topics, more training and drills, and general preparedness.

Communication

Clinical staff nurse communication recommendations included improved communication to all employees, during drills and disasters, collecting feedback after a drill and emergency event, informing all employees about the CEMP, and informing all employees about the facility emergency operations plan/unit plan.

RN “Communication and I guess that’s for everything here. Communication to the bedside nurse, to the nurse that’s actually touching the patients.”

RN “I think, uh, the VA could improve in far as their communication, uh, with the employees during disaster situations.”

RN “Maybe would be better if they...if the time is lesser than 40 minutes to give feedback to what is happening or to give us information on what is going on and what to do for that, you know, instead of waiting that long, ‘cause...we might be anxious too much to do, what’s going on and a lot of thing can happen too, ‘cause 40 minutes is a pretty long time.”

RN “Um, definitely feedback, debrief after a drill would be very helpful, um, especially for new employees coming through because you see your module, you...you review your TMS module each year or what have you, but until you actually put your hands on it and...and do a drill, just like a mock code, and you practice other than shutting the door and, you know, wait for, you know, them to tell you it’s over, um, that would be very helpful and, um, to discuss it, maybe have the fire chief or whoever’s, um, running the drill to talk about some things. What would you do if, you know, um, where do you go, how do you get the patients out, how do you...you know, to kind of go through that process would be helpful.”

Education

RN “Give us...what is it, adult theory. We need to learn just, you know, for a reason.”

RN “...preparedness plan should be known to all employees at all levels, you know, and, uh, if you’re unit specific you should know what to do, uh, an emergency or disaster on your unit specific.”

RN “I just think that one thing that’s lacking is education, continuous education. I think that we should be having education constantly, constantly no matter what. This is evidence based practice land. We have to make sure we’re practicing what we’re supposed to do, constantly, constantly, and updated with the new technology, the new, um...you know, just new information. I mean, this is the information age and we have that ability.”

Training/drills

The recommendations for training/drills included more drills, unit drills, functional organized drills and unannounced drills.

RN “Like in our unit, we have training for emergencies with patients. We do mock codes and of course in addition to the every two years ACLS certification. So something like that would really be helpful where we can...for not just as a group but individual units can say in case of an emergency this is the plan and how we’re gonna exit or where we’re gonna be, you know, um, focused with patients, what we should do with the patients.”

RN “Preparation time, for us to know our role and what we’re doing. I think you need to have your scenario in place and this is...you’re gonna be part of the pool. We already know that. So, you’re coming down here. This is what we want you to do. Um, and, you know, give us something to...give us something to do because there was so much chaos. People would think people were there. Their folks were going to lunch (laughter). Honest, this is true. You know, and, uh, you know, so they just say, “Well, I had nurses here, and there’s only one nurse,” ‘cause I’m sitting there and the other four went to lunch. You know, that kind of thing, that’s chaos. I mean, we’re not all being really trained. So, and the perception of training is...is not important to the staff.”

RN “Yes. But it’s, you know...I’m not sure that’s the most effective way when it comes to...I certainly think it obviously should be there, but I don’t think that you should rely on a computer program to...you know. I think that there needs to be drills.”

RN “Well go down to MICU one day and pretend like something’s happening. So you catch all those nurses off guard you know. Go on the third floor one day, pretend like something’s happening. Catch ‘em all off guard. And just, you know, periodically every quarter go somewhere and just continuously have drills like that all the time, and see how people react, and what they do.

RN “You know, we really need to be trained with that more than maybe once a year, if you get a little drill like that.”

Preparedness

There were a number of general recommendations for improving the overall preparedness of facilities.

RN “And I think that right there is a...is a problem, because we have a lot of, um...we have a lot of nurse...nursing desk people, and they are in charge of a lot of things around here. We have a lot of clipboard...you know, whatever. And the big thing is I think that that needs to be done. I think that administration needs to let them know that we’re going to need you to participate to be on the floor to direct, show, that there’s some support around here. Because it’s very difficult.”

RN “And that’s what I’m saying, you can have a person assigned, like well-trained within each department, like, you know, because we’re trained to do the mock codes. We do them bi-annually. And then you can have the person trained so that they can do this emergency preparedness, so everybody doesn’t forget and fall behind.”

RN “You can even incorporate your volunteers because the, um, Veteran Volunteer Service they even drive veterans to different appointments and places like that. Some of them would be willing to come and stay and cook. You know, some of them would be willing to come and bring mattresses or...or what have you, um, during times of disaster.”

RN “I definitely agree with the...the drills. And doing them as a unit with your fellow coworkers so that provides a cohesiveness that you would need in order to be effective at carrying out your role.”

Nurse Managers

The nurse managers’ recommendations included improving communication, education on unit and facility emergency operations plans, more training and drills, better planning, and the need for all hospital employees to be available during a disaster or emergency.

Communication

NM “If the DEMPS program that you mentioned, if that’s something that the VA relies on then they should actively recruit and train for that. I’ve not seen that. And if I haven’t seen it, I’m sure I’m not unique and that other people probably haven’t seen it either, I’m not sure.”

Education

NM “Everything, pretty much, is on TMS, so, um, I don’t necessarily feel like that’s a good thing. I think at some point, people need face-to-face.

NM “And, um, I think that, with regard to maybe some facets of, um, of emergency, um, kind of training or education, then maybe there should be some face-to-face versus TMS. Um, in other facilities, I’ve done, um, kind of hands-on kind of stuff. Emergency kind of training, um, in addition to any, um, regular computerized training that, um, most employees are asked to do annually through, um, one program or another, TMS or um, I can’t remember the name of the other one, but um, um, here we have, um, normal fire drills and...and those kinds of things and, um, employees participate in that as, as it comes up.”

NM “We need a concrete plan. I need to see a concrete plan.”

Training

NM “Um, I...I would suggest to use the military model, and basically what we would do is on a day when we’re gonna do a drill, is we’d shut down all our outpatient clinics, um, and everyone that worked in an outpatient clinic would be participating in the drill. Everyone. You have patients in a bed, it’s a little more difficult. But there would be one or two people that are assigned to also participate in that drill..just enough that they’re gonna get a flavor of it and they rotate so that everybody kind of gets a flavor or, you know, what a real life situation’s gonna be and then you have a real drill, the equipment gets out, you see the gauze, you see the Band-Aids, you see...you see the stuff. Um, and you apply it, so, um, you know, if you’re really gonna make this place prepared, you’ve gotta prepare for the cost and the cost is gonna be closed clinics. Uh, and my veterans, that I was serving then, active duty, they understood it, because they had drills too, when their Engineering squadron and were shut down and we couldn’t get help from them, so, you know, it’s just part of the mindset.”

Mandatory response

NM “And then making it...making some things have to be mandatory that all staff, you know, I just feel here sometimes if they come, they come. It has to be mandatory, everybody needs to show up and not just day shift, night shift also.”

Preparedness

NM “I just feel like preparedness is the key, because you have to be ready at the point when things happen, not waiting for them to happen, then trying to get things done. I think we need preventative training for certain issues and concerns. ‘Cause I...what happened...if what happened in Oklahoma City would’ve happened here, we wouldn’t have been ready. That’s just how I feel.”

The RNs and nurse managers offered many relevant suggestions for improving facility preparedness including: improved communication to all employees especially during drills and disasters; collecting feedback after a drill and emergency event; informing all employees about the CEMP; informing all employees about the facility emergency operations plan/unit plan; specific unit education; more training and drills; better planning, and the need for all hospital employees to be available during a disaster or emergency.

SUMMARY

From the interviews, six major themes emerged along with a number of recommendations. The themes were: Lack of Familiarity with CEMP; Communication; Emergency and Disaster Experiences; Education and Training for CEMP; Leadership Engagement and Preparedness—System and Personal. At the end of each interview and focus group the participants were asked if they had any recommendations. The recommendations reflected the nurses’ experiences and included a broad range of suggestions to improve facility preparedness: communication, education and training,

coordination, feedback, mandatory response for all facility personnel and a culture of preparedness. Nurses who volunteered to participate may have had different experiences than those nurses who did not volunteer and their experiences may not have been captured.

CHAPTER 5: INTERPRETATION and DISCUSSION

INTRODUCTION

The purpose of this research was to explore and describe Department of Veterans Affairs (VA) nurses' perceptions of adoption of the Veterans Health Administration's (VHA) Comprehensive Emergency Management Program (CEMP), with a focus on nurses. It is important to know factors affecting the adoption of the VHA's CEMP and to identify barriers that could potentially be addressed through changes to programs, education or policies and identify future research needs. This knowledge could improve the health care of Veterans affected by disasters and preparedness of healthcare systems.

A qualitative phenomenological ethnographic study design was used to explore and describe VA nurses' adoption of a comprehensive emergency management program. A total of 64 participants were recruited, from a large university affiliated hospital in the northeast region. Of the recruited participants 49 nurses participated. A semi-structured interview process was used to collect data from focus group and individual discussions. The data were coded and analyzed then organized by theme. From the interviews, six themes emerged: Lack of Familiarity with CEMP; Communication; Emergency and Disaster Experiences; Education and Training for CEMP; Leadership Engagement and Preparedness—System and Personal. Additionally, the nurses provided a number of recommendations for improving preparedness.

DISCUSSION OF THE RESULTS

Two research questions were used to guide the study:

1. What are the nurses' perceptions and experiences regarding the VHA's Comprehensive Emergency Management Program?
2. What do the nurses perceive as factors that could facilitate and strengthen the CEMP?

The first research question served as a guide to understanding the nurses' experiences and thinking and knowing about the CEMP. The second research question sought to ascertain factors the nurses believed could help improve the CEMP. The findings from chapter 4 address the research questions. The primary finding in this study revealed that while the majority of nurses knew there was an emergency plan, very few were familiar with the name and purpose of the overall program—Comprehensive Emergency Management Program. Other major findings include: concerns about the lack of overall communication; negative experiences with disaster responses, inconsistent education and training; a desire for more nursing and facility leadership engagement and concerns about the lack of system and personal preparedness.

Demographic Variables

The average age of the participants was almost six years older than the average age of a nurse in an urban area (Department of Health and Human Services, 2013). The percentage of nurses with a bachelor's degree in nursing was lower than the average in the urban nurses' population but the percentage with a master's degree or higher was 5 times greater. Overall the participants had an average of 23 years of experience in nursing and 10 years' experience in the VA.

Age

According to the most recent report from the Health Resources and Services Administration's, Bureau of Health Professions, National Center for Health Workforce Analysis, the average age of a registered nurse in an urban area is 44.6 (Department of Health and Human Services, 2013, p. 15). The average age of the participants was 50; 5.4 years older than the average.

The ageing of the nursing workforce is a current and projected factor affecting overall nursing workforce development in clinical and academic settings (Tri-Council for Nursing, 2014). An aging nursing work force has the potential to adversely affect the ability of our nation to respond if there are not enough qualified health care workers, especially nurses. The VHA needs to continue recruiting and seeking ways to retain nurses in order to maintain a robust nursing workforce.

Education

In urban settings, 6.8% of registered nurses have a diploma, 35.3% have an associate's degree, 46.6% have a bachelor's degree in nursing and 11.4% have a master's and doctoral degree (Department of Health and Human Services, 2013, p. 15). Overall the nurses in the study had attained higher degrees of education. No nurses reported a diploma, 4% have an associate's degree, 37% have a bachelor's degree in nursing and 57% have a master's degree or higher. While it is difficult to draw conclusions without gathering more information, there are several potential contributing factors for the higher percentage of nurses with a master's degree or higher—access to higher education (traditional brick and mortar and online programs), VHA support for continuing education (Department of Veterans Affairs, 2014d) and VHA nursing qualification

standards for appointment and promotion according to the position. Nurse II positions require a bachelor's degree and all higher levels require a minimum of a master's degree (Department of Veterans Affairs, 2009b).

Experience

The participants had an average of 23 years of experience in nursing and 10 years' experience in the VA. Some of the participants had experience at one or more VAMCs and many had experience working in other non-federal hospital systems. This was reflected in perceptions related to training, especially drills. In almost all cases, the perceptions reflected less training than in their previous workplace.

Themes

Lack of Familiarity with CEMP

The primary finding in this study revealed that while the majority of nurses knew there was a facility emergency plan, very few were familiar with the name of the overall program—Comprehensive Emergency Management Program and the concept of comprehensive emergency management—mitigation, preparedness, response and recovery. This finding is not surprising based on the nurses' perceptions of a lack of communication, an organization with “silos,” inconsistent education and training and limited nursing leadership engagement with respect to the CEMP. It is vital nurses know what to do in an emergency or disaster, however, opportunities to contribute to the three other phases of the emergency management cycle—mitigation/prevention, preparedness and recovery—might be missed due to a lack of knowledge or understanding.

The VHA has several programs designed to manage, support and implement VA's mission to ensure continued preparedness every day. The CEMP policy states that

the Under Secretary for Health's responsibilities include, "Providing adequate resources for the VHA CEMP. (...) Authorizing policy and ensuring research, guidance, education, and training to support the development, maintenance, evaluation, and improvement of the VHA CEMP." (Petzel, 2013, p. 1)

The Office of Emergency Management (OEM) is the designated office for the management of the CEMP; OEM has the overall responsibility for CEMP program development and implementation, including facilitating Veterans Integrated Service Networks (VISN) and VA medical centers CEMP development, implementation, sustainment and improvement, as well as assessing program capability (Veterans Health Administration, 2011). Over the past couple of years the office has undergone leadership changes, a reorganization, and major program revisions. A new position classification has been established for emergency management (Office of Personnel Management, 2012). In September 2014, the Emergency Management Capability Assessment Program began phase III with a revised, updated assessment.

At the local level the facility director is responsible for: appointing an emergency manager to coordinate VAMC initiatives; creating a budget; developing plans that address all-hazards threats, exercising the plans yearly and coordinating with local, county, state, tribal and public and private organizations; coordinating all aspects of facility emergencies or disasters; first receiver decontamination capability; managing aspects of local emergencies and any humanitarian assistance to the public; and managing the DEMPS program and supporting National Emergency Medical Response Teams. The Emergency Program Coordinator (EPC) is the person charged with the development and coordination of the Emergency Management Program within the VAMC. Not all

VAMCs have a full-time EPC; in some the position is in addition to other responsibilities, e.g. Safety/Emergency Manager and Fire Chief/Emergency Manager. Only the VISNs are required to have a full-time Emergency Program Coordinator (EPC) (Veterans Health Administration, 2011).

Implementation science research has identified factors related to adoption of research and programs that have implications for this study. In a systematic review of determinants of nurses use of research, a number of discrete characteristics were determined to increase research use by nurses: “positive attitudes towards research, attending conferences and/or in-services, having a graduate degree (compared to a bachelor’s degree or diploma), current role (i.e. leadership and/or advanced practice compared to staff nurse), clinical specialty (working in critical care areas compared to general hospital units), and job satisfaction.” (Squires et al., 2011, p. 15). Other factors that facilitate adoption are senior leadership support, accurate data, the magnitude of changes required by the innovation, and the level of cross-departmental coordination necessary to implement the adoption (Bradley et al., 2004). In a study of health professionals on barriers to implementation of quality improvement programs, Davies and colleagues (2007) reported challenges with inter-professional collaboration. Organizational structures can affect adoption as well (Grimshaw, Eccles, Lavis, Hill, & Squires, 2012).

VHA has resources that could be helpful in identifying factors to facilitate the adoption and implementation of the CEMP. The Veterans Emergency Management Evaluation Center’s (VEMEC) mission is to identify best practices, create evidence based tools, consult, and collaborate with local, national, and global partners to improve public

health emergency preparedness (Department of Veterans Affairs, 2013). The Center for Healthcare Organization and Implementation Research (CHOIR). CHOIR's mission is to "improve Veterans' health outcomes by developing, studying, and applying evidence-based practices that will be widely implemented and sustained." (Department of Veterans Affairs, 2014a). Additionally the Veterans Engineering Resource Center (VERC) has systems engineering resources to help address systems challenges (VA Pittsburgh Healthcare System, 2014). VHA has expertise in the field of implementation science and could potentially be engaged to look at organizational factors and implementation of the CEMP (Luck et al., 2009; C. B. Stetler, McQueen, Demakis, & Mittman, 2008; Cheryl B Stetler, Ritchie, Rycroft-Malone, & Charns, 2014; Yano, 2008).

Organizational context matters when implementing quality improvement programs (Benn et al., 2009; Glasgow et al., 2013). By definition the CEMP is not a quality improvement program, but an important program designed to increase the resiliency and ability of VA to provide services and protect patients and staff at all times.

Despite policies, programs and personnel, there is a lack of a coordinated CEMP implementation and as a result there is incomplete adoption of the CEMP as evidenced by the nurses' lack of familiarity with the program.

Communication

A major finding of this study revealed a lack of coordinated communication about the CEMP. Both the clinical staff nurses and the nurse managers reported issues with communication about related subjects including drills, disasters, DEMPS, feedback for after action reports, and information about unit/facility emergency operations plans. The perceptions reflected concerns and issues with lateral, vertical and interdepartmental

communications. Communication is essential to both adoption (Rogers, 2003) and implementation of programs (Urquhart, Porter, Sargeant, Jackson, & Grunfeld, 2014). Communication is also important to an organization's capability to maintain quality improvements over time (Glasgow, Yano, & Kaboli, 2013; Cheryl B Stetler et al., 2014). The nurses stated they want and need more communication about CEMP and CEMP-related initiatives especially during the planning and response phases of the emergency management cycle.

Emergency and Disaster Experiences

Both the clinical staff nurses and the nurse managers had experiences with different emergencies and disasters including: an earthquake, snowstorms, hurricanes, and an anthrax exposure. The nurses' experiences underscore the need for all-hazards education and training to prepare for potential disasters or emergencies. Most of the nurses who were working the day of the 2011 earthquake reflected their concern about what was happening at the time and the realization they did not know what to do. They recalled a lack of current information and timely instructions from leadership. While earthquakes may be a somewhat rare event in the northeast, they are still a real possibility and should be included in facility emergency operations plans, education and drills.

From the interviews it seemed that facility emergency response had improved over time, but that there are continuing issues with logistics; personnel management; policy and practice inconsistency with respect to using personnel assets during an event; and integration of the CEMP. The employees need education about the facility's all-hazards risks and training on how to respond to those risks based on their response roles.

Education and Training for CEMP

The major findings for education and training for CEMP were, with the exception of fire drills, inconsistency and a lack of a cohesive education and training program. All of the participants were familiar with fire drills and some expressed concern that the fire drills did not follow through to evacuation. There were limited opportunities for feedback not just on fire drills but on all drills.

For the CEMP to be adopted and integrated into the facility operations there needs to be a plan for educating and training all employees from the time they start their orientation training to the time they leave the facility. The Talent Management System (primarily a web-based training modality) provides much of the mandatory training related to the CEMP and other VHA mandatory training (e.g. ethics) (Department of Veterans Affairs, 2014c). A few of the nurses specifically requested education and training using adult learning theory. A method for tracking individual education and training would help prevent the experience of some of the nurses who had been at the facility for 5 or 6 years and never participated in a drill

A few of the nurses reported that they had done education and training on their own time because they felt it was important to be prepared. Their actions are consistent with the American Nurses Association Code of Ethics number 6, “The nurse participates in establishing, maintaining, and improving healthcare environments and conditions of employment conducive to the provision of quality health care and consistent with the values of the profession through individual and collective action,” (American Nurses Association, 2001). While the system may not provide all the necessary components for education and training for CEMP, the nurses have a professional responsibility to be prepared for their response role.

The nurses stated they want to be educated and trained. The implementation of a comprehensive program addressing the nurses' needs from the time they start employment to the time they terminate their employment along with a more formal tracking mechanism would help improve the facility's readiness.

Leadership Engagement

The majority of the clinical staff nurses expressed a desire for more integration of the CEMP with their organization and stronger engagement of the nursing department in the CEMP. These perceptions were expressed through statements about a lack of integration and not just nursing service but the whole organization; concerns about everyone protecting their own turf; concerns about leadership being defensive when issues or concerns were raised; concerns about unequal treatment of hospital employees with respect to mandatory disaster response; concerns about inconsistencies between policy and practice with respect to non-clinical nurses and the concern that nurses are expected to do everything.

Preparedness—System and Personal

Several of the nurses expressed concern about a lack of system preparedness and not knowing what to do in case of an event. Many of the nurses were familiar with the term personal preparedness. Some recalled seeing emails or notices on their computers regarding personal preparedness. Some who had prior military experience were very familiar with the concept.

All disasters are local. Every home should be prepared with water, food, medicine, supplies and other items as necessary for at least 72 hours. Workplaces can

help reinforce the need for personal preparedness with messaging including tailored messages depending on the time of year or type of threat.

Additional Findings

One additional finding was a lack of participation by some members of the senior management team. Two members of the senior management team accepted an invitation to attend a briefing on the research study. Invitations to participate in the study were sent to the senior management team by the PI via email. It is not clear why members of the senior management team did not participate in the study.

IMPLICATIONS FOR NURSING

There are a number of implications for nursing practice, education, policy and research.

Clinical Practice

Nurses need to know their workplace emergency operations plan and their roles within the plan. They also need to know hazards they may face while on duty and how to best respond. One participant suggested unit drills, or a unit meeting to discuss how the unit would respond to a given hazard. Nurses have a professional responsibility to be informed and prepared. If the information or training is not being provided, the nurse can inquire about opportunities and coordinate with unit leadership.

Education

Education initiatives should include information about the CEMP, facility and unit emergency operations plans and functional drills based on adult learning theory. Whenever possible the education should be competency-based (Wright, 2005). All-

hazards risks for the geographic area should be included. In addition to traditional classroom methods and web-based training, simulation and virtual reality offer education and training alternatives. A concerted effort should be made to track the participation of all employees.

Policy

At the local level the facility should: revisit the mandatory attendance policy (absent without leave [AWOL]) for health professionals during events; consider other support services employees who could help during an event; reassess the use of clinical personnel, no longer doing clinical tasks, but proficient in basic clinical skills, to determine how best to use those personnel during an event.

At the VISN level leadership should: identify best practices in education and training; identify best practices with respect to VAMC emergency operations plans and develop a mechanism for sharing among the VAMCs.

At the national level leadership should: create a template using best practices to accompany the implementation of new programs and use VEMEC and CHOIR expertise to research high performing facilities who have integrated the CEMP to identify best practices.

Research

Potential studies might include: 1. Identify a site where nursing is fully integrated in the facility CEMP activities and conduct a similar study of nurses' experiences and perceptions of the CEMP program. 2. Use the themes from both studies to develop a survey instrument which could assess nurses' adoption and knowledge at the national level.

CONCLUSION

The purpose of this research was to explore and describe Department of Veterans Affairs (VA) nurses' perceptions of adoption of the Veterans Health Administration's (VHA) Comprehensive Emergency Management Program (CEMP), with a focus on nurses. Six themes emerged from the data: Lack of Familiarity with CEMP; Communication; Emergency and Disaster Experiences; Education and Training for CEMP; Leadership Engagement and Preparedness—System and Personal. The primary finding in this study revealed that while the majority of nurses knew there was an emergency plan, very few were familiar with the name of the overall program—Comprehensive Emergency Management Program and the concept of comprehensive emergency management—mitigation, preparedness, response and recovery. Recommendations for nursing practice, education, policy and research address are included as well as recommendations for VHA. Our national challenge continues to be our ability to develop and sustain a culture of preparedness not just for health and public health professionals but for everyone.

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ACRONYMS

AEM	Area Emergency Manager
CEMP	Comprehensive Emergency Management Program
DEMPS	Disaster Emergency Medical Personnel System
DHHS	Department of Health and Human Services
DHS	Department of Homeland Security
EPC	Emergency Program Coordinator
FEMA	Federal Emergency Management Agency (part of DHS)
ICN	International Council of Nursing
NGO	Non-Governmental Organization
TJC	The Joint Commission
VHA	Veterans Health Administration
VA	Department of Veterans Affairs
VAMC	Veterans Affairs Medical Centers
VISN	Veterans Integrated Service Networks

APPENDICES

APPENDIX A - ELIGIBILITY CHECKLIST

Eligibility Checklist

Inclusion/Exclusion Criteria (once the protocol is approved, this page must be copied, used as a checklist for screening subjects, signed by investigator, and inserted in research record for every subject screened):

Inclusion Criteria

Yes	No	Criteria
☐	☐	VA employee at the Baltimore VA
☐	☐	A member of one of these three categories: Registered nurses--clinical staff nurse or nurse manager, or the medical center senior executive team (medical center director, the associate director for operations, the nurse executive, and the chief of staff)

Exclusion Criteria

Yes	No	Criteria
☐	☐	VA employees at the Baltimore VA who are not registered nurses --clinical nurses or nurse managers, or part of the senior executive team

For use during screening of subjects:

Name of Subject	Date Screened
-----------------	---------------

Reviewed and subject acceptable for study: _____ YES _____ NO

Signature of Principal Investigator

Date

APPENDIX B - RECRUITMENT FLYER

NURSE SAMPLE:

Veteran's Administration Registered Nurses

Volunteers Are Invited To Participate In A Study Entitled:

Adoption of a Comprehensive Emergency Management Program: VA Employee Perceptions

Your participation may help the Veteran's Administration improve its emergency management program.



WHO: If you are a registered nurse (clinical nurse, nurse manager, nurse executive), you may be eligible to participate in a research study to learn about the adoption of the Veteran's Health Administration Comprehensive Emergency Management Program.

WHAT: A qualitative study to explore and describe Veterans Affairs (VA) employee's perceptions of adoption of the VA's Comprehensive Emergency Management Program.

WHY: Nurses are the largest group of health professionals and are on duty in hospitals 24/7. During an emergency or disaster they are responsible for caring for and evacuating hospitalized patients. Knowledge learned may provide insight into how to integrate the Comprehensive Emergency Management Program into everyday practice and thereby help ensure maximum preparedness of the VISNs and medical centers which in turn will ensure maximum protection of VA patients, staff and visitors during an emergency event.

HOW: Dr. P. Kelley and Mary Pat Couig, MPH, RN will oversee or conduct audio-taped interviews. You will be interviewed in a small group (4-6) of your choice. No identifying information will be linked to the taped interview or the demographic information.

WHEN: The study interview dates are _____2013. Your time commitment includes 1.5 to 2 hours for the interview plus time required for the consenting process.

WHERE: The research will be conducted at the Baltimore VA. For participation information contact Mary Pat Couig, MPH, RN at Marypat.couig@va.gov or 202.465.6878.

Thank You!

APPENDIX C - INFORMED CONSENT

Research Consent Form

Participant Name:

Date: _____

Title of Study: Adoption of a Comprehensive Emergency Management Program: VA

Employee Perceptions

Principal Investigator Beverly Owens, PhD, RN, 410.637.1832

VA Facility: Baltimore_512_

STUDY No: HP-00050335

This is a research study and your participation is voluntary. You may ask questions at any time. This study will occur completely at the VA Maryland Health Care System (VAMHCS). It will be conducted by VAMHCS and VA Central Office (VACO) employees.

PURPOSE OF STUDY

The purpose of this study is to explore and describe VA Medical Center employee's perceptions related to the adoption of an emergency management program. It is important to know factors affecting the adoption of the VA's Comprehensive Emergency Management Program that could help improve the program and identify potential barriers. The knowledge learned from this study could also be used to develop further research to improve the health care of Veterans and others affected by disasters, and the preparedness of healthcare systems.

You are being asked to participate in this study because of your position and experience in the VAMC. The majority of those being asked to participate are registered nurses--a foundation in any hospital emergency management program and response involving patients. Your experience is valuable in learning how this type of a program is integrated into the medical center.

A total of 64, senior executives, nurse managers and clinical nurses from the Baltimore VAMC will be invited to participate in this study.

PROCEDURES

If you consent to participate in this qualitative, exploratory research study you will be asked to complete the following:

An audio tape recorded interview session (group or individual) of your perceptions of the VA's Comprehensive Emergency Management Program as a VA employee working in a VAMC as a registered nurse or a senior management executive.

Informed Consent Process: A study investigator will explain and provide details of the research study, allow time for your questions, and provide answers to your questions.

Pre-interview: Information about you will be collected including: age, sex, years in VA, years in nursing or profession, education level, degrees other than primary degree, e.g. public health, current or prior uniformed services and whether or not you are enrolled in VA's voluntary system, the Disaster Emergency Medical Personnel System (DEMPs). This information will not be used to identify you nor will it be linked to the taped interview.

Interview Sessions: One of the study investigators will direct the interview sessions. The researchers conducting the audio taped interviews will honor your choice to be interviewed in a group or individually. You will be asked to describe your experience with the implementation of the VHA's Comprehensive Emergency Management Program.

There is support for you to participate in this nursing research study during a scheduled shift if you request this. This study is a one-time interview at the VAMHCS and the expected length of time for your participation is 90-120 minutes.

POTENTIAL RISKS/DISCOMFORTS:

There is a risk of loss of confidentiality. Loss of confidentiality will be minimized by storing data in a secure location such as a locked office and locked cabinet. Electronic data will be password-protected. Research records will be kept in the PI's office in a locked file accessible only to the PI and the research team. At any time during the interview, you may refuse to answer a question or you may stop the interview. If the research investigator recognizes signs of distress or anxiety associated with the interview, the interview will be stopped.

POTENTIAL BENEFITS

You may or may not personally benefit from taking part in this study. Your participation in this study may lead to knowledge that could help others.

ALTERNATIVES TO PARTICIPATION

This is not a treatment study. Your alternative is to not take part. If you choose not to take part, your employment at the Baltimore VA will not be affected.

COSTS TO PARTICIPANTS

It will not cost you anything to take part in this study.

PAYMENT TO PARTICIPANTS

You will not be paid to participate in this study.

MEDICAL TREATMENT AND COMPENSATION FOR INJURY

Every reasonable safety measure will be used to protect your well-being. If you are injured as a result of taking part in this study, the VA Maryland Health Care System (VAMHCS) will provide necessary medical treatment at no cost to you unless the injury was due to your not following the study procedures. This care may be limited by local or federal law.

If you should have a medical concern or get hurt or sick as a result of taking part in this study, call:

DURING THE DAY:

Dr./Mr./Ms. Beverly Owens at 410-637-1832 and

AFTER HOURS:

Dr. /Mr./Ms. _Beverly Owens at 443-285-1695.

The VA does not normally provide any other form of compensation for injury. However, by signing this form, you have not waived any legal rights or released the VAMHCS or its agents from liability for negligence.

CONFIDENTIALITY AND ACCESS TO RECORDS

The study will involve confidential information. Only the PI, the research team and the person who does the transcription of the audio recordings will have access to the information. Research records will be kept in the PI's office in a locked file accessible only to the PI and the research team. Electronic data will be password protected. Your name will not be used in the audio tapes or on the demographic collection forms.

Study records are considered confidential; your name will not be used in reports or publications.

This study is being done as part of the requirements for a PhD program. The student is a VA employee. VHA may disclose your information to the student's dissertation committee and the person who will transcribe the interviews. The information will not be disclosed unless the members of the dissertation committee and the transcriptionist agree to keep the information confidential and to use it only for purposes related to the study.

Efforts will be made to limit your personal information, including research study records, to people who have a need to review this information. We cannot promise complete secrecy.

Organizations that may inspect and copy your information include the IRB, the VAMHCS Office of Research Compliance and other representatives of this organization. Other VA offices may review the research records: VA Office of Research & Development

(ORD), VA Office of Research Oversight (ORO), VA Office of Inspector General (OIG), and Office of Human Research Protections (OHRP). Once the research study has been completed the student will present the results at an in-service at the VAMHCS.

Your research records and/or identifiers will be retained in accordance with the VA records control schedule. The “records control schedule” is a set of rules set by the federal government that states when federal agencies are allowed to dispose of records. The VA and VHA must follow these rules.

The data from the study may be published. However, you will not be identified by name. People designated from the institutions where the study is being conducted and people from the sponsor will be allowed to inspect sections of your medical and research records related to the study.

Everyone using study information at the VAMHCS will work to keep your personal information confidential. Your personal information will not be given out unless required by law or authorized by you in the VAMHCS “HIPAA Authorization to Obtain, Use and Disclose Protected Health Information for Research”. However, if your information is disclosed to other entities, the VAMHCS no longer has control of that information. Please see the HIPAA Authorization for this study for further details.

RIGHT TO WITHDRAW

Your participation in this study is voluntary. You do not have to take part in this research. You are free to withdraw your consent at any time. Refusal to take part or to stop taking part in the study will involve no penalty or loss of benefits to which you are otherwise entitled. Your participation will not affect the way you now pay for medical care at the VAMHCS.

If you decide to stop taking part, if you have questions, concerns, or complaints, or if you need to report a medical injury related to the research, please contact the investigator Dr. Beverly Owens, VA PI at 410-637-1832.

There are no adverse consequences (physical, social, economic, legal, or psychological) to your decision to withdraw from the research.

If you withdraw from this study, already collected data may not be removed from the study database.

If you are an employee or student, your employment status or academic standing at the VAMHCS will not be affected by your participation or non-participation in this study.

CAN I BE REMOVED FROM THE RESEARCH?

The person in charge of the research study or the sponsor can remove you from the research study without your approval. Possible reasons for removal include symptoms of distress and/or anxiety.

The VA Maryland Health Care System (VAMHCS) has designated the University of Maryland Baltimore (UMB) Institutional Review Board (IRB) to review this research study.

If you wish to confirm that this study is in fact IRB approved and is being conducted at the VAMHCS, you may contact Dr. Beverly Owens at 410-637-1832.

Please read the University's statement below.

(Minimal Risk Studies)

The University of Maryland, Baltimore (UMB) is committed to providing participants in its research all rights due them under State and federal law. You give up none of your legal rights by signing this consent form or by participating in the research project. This research has been reviewed and approved by the Institutional Review Board (IRB). Please call the Institutional Review Board (IRB) if you have questions about your rights as a research participant.

The research described in this consent form has been classified as minimal risk by the IRB of the University of Maryland Baltimore. The IRB is a group of scientists, physicians, experts, and other persons. The IRB's membership includes persons who are not affiliated with UMB and persons who do not conduct research projects. The IRB's decision that the research is minimal risk does not mean that the research is risk-free. You are assuming risks of injury as a result of research participation, as discussed in the consent form.

If you are harmed as a result of the negligence of a researcher, you can make a claim for compensation. If you have questions, concerns, complaints, or believe you have been harmed through participation in this research study as a result of researcher negligence, you can contact members of the IRB or the staff of the UMB Human Research Protections Office (HRPO) to ask questions, discuss problems or concerns, obtain information, or offer input about your rights as a research participant. The contact information for the IRB and the HRPO is:

University of Maryland School of Medicine
Human Research Protections Office
BioPark I
800 W. Baltimore Street, Suite 100
Baltimore, MD 21201
410-706-5037

You may also contact the VAMHCS Human and Animal Research Protections Officer (HARPO). The contact information for the HARPO is:

VAMHCS Human and Animal Research Protections Officer
Baltimore VA Medical Center
10 North Greene Street, Mail Stop 151
Baltimore, MD 21201

Signing this consent form indicates that you have read this consent form (or have had it read to you), that your questions have been answered to your satisfaction, and that you voluntarily agree to participate in this research study. You will receive a copy of this signed consent form.

If you agree to participate in this study, please sign your name below.

Participant's Signature

Date: _____

Investigator or Designee Obtaining Consent

Signature

Date: _____

Witness*

Date: _____

HP-00050335 UM IRB Approval Date 3/12/2013
Do Not Sign this Form after this Date 3/11/2014

APPENDIX D - CONSENT FOR USE OF PICTURE AND/OR VOICE



Department of Veterans Affairs

CONSENT FOR USE OF PICTURE AND/OR VOICE

CONSENT OF (Name)

NOTE: The information requested on this form is solicited under the authority of title 38, United States Code. The execution of this form does not authorize disclosure of the materials specified below except for the purpose(s) stated. The specified material may be used within the VA for authorized purposes, such as for education of VA personnel or for VA research activities. It may also be disclosed outside the VA as permitted by law. If the material is part of a VA system of records, it may be disclosed outside the VA as stated in the 'Routine Uses' in the "VA Privacy Act Systems of Records" published in the Federal Register. A copy of the 'Routine Uses' is available upon request to the administrative office of the VA facility involved. You do not have to consent to have your picture or voice taken, recorded, or used. Your refusal to grant your consent will have no effect on any VA benefits to which you may be entitled.

I hereby voluntarily and without compensation authorize pictures and/or voice recording(s) to be made of me (or of the above-name individual if the individual is legally unable to give consent) by (specify the name of the VA facility, newspaper, magazine, television station, etc.)

While I am (describe the activity, if any to be photographed or recorded)

I authorize disclosure of the picture and/or voice recording to (specify name and address of the organization, agency, or individual(s) to whom the release is to be made)

I understand that the said picture, video and/or voice recording is intended for the following purpose(s):

I have read and understand the foregoing and I consent to the use of my picture and/or voice as specified for the above-described purpose(s). I further understand that no royalty, fee or other compensation of any character shall become payable to me by the United States for such use. I understand that consent to use my picture, video and/or voice recording is voluntary and my refusal to grant consent will have no effect on any VA benefits to which I may be entitled. I further understand that I may at any time exercise the right to cease being filmed, photographed or recorded, and may rescind my consent for up to a reasonable time before the picture, video or voice recording is used.

SIGNATURE OF INDIVIDUAL OR OTHER LEGALLY AUTHORIZED PERSON

DATE

PERMISSION OBTAINED BY (NAME - TITLE - ADDRESS)

SIGNATURE OF INTERVIEWER OR INDIVIDUAL OBTAINING CONSENT

DATE

PRODUCTION TITLE

PRODUCTION NUMBER

INDIVIDUAL'S NAME AND ADDRESS

IMPORTANT: This form must always be completed prior to the making or using pictures, video or voice recording(s) of any VA patient. If any patient health or demographic information is to be provided or released with the picture, video or voice recording, VA Form 10-5345, Request for and Authorization to Release Medical Records or Health Information is required prior to the release of such data to any source.

VA FORM

MAY 2005 10-3203

APPENDIX E - HIPPA

VHA Employees who volunteer will be interviewed for this research study.

Name of Study

Volunteer: _____

Date of Birth: _____

Name of this Research Study: *Adoption of a Comprehensive Emergency Management Program: VA Employee Perceptions*

UMB IRB Approval Number: *HP-00050335*

Researcher's Name: *Dr. Beverly Owens*

Researcher's Contact Information:

Beverly B. Owens PhD, RN, ACNS-BC, NE-BC
Nursing Education and Research Center
Managed Care
VAMHCS
10 N. Greene Street
Baltimore, Maryland 21201
410-637-1826 (Office)
Beverly.Owens@va.gov

This research study will use health information that DOES NOT identify you. If you agree to participate, this researcher will use just the health information listed below. No health information will be collected. The study will collect demographic information, for example, age, sex, years in nursing but this will be NOT BE IDENTIFIED BY NAME.

The Specific Health Information To Be Used or Disclosed:

- *Demographic information – names will not be associated with the information collected.*

Federal laws require this researcher to protect the privacy of this health information. He/she will disclose it only with the people and groups described here.

People and Organizations Who Will Use or Disclose This Information:

- Dr. Beverly Owens and his/her research team.

Where Your Information Will Be Stored:

Information about you, gathered in connection with this study, will be stored at the “VA Maryland Health Care System” and will be under the ownership, control and security of Dr. Beverly Owens’ locked office.

The Purpose for the Use or Disclosure of this Information:

- The information will be used or disclosed for research study purposes.

This Authorization Will Expire

- At the end of the research study.

You Can Revoke this Authorization at any Time.

To revoke this Authorization, send a letter to this researcher stating your decision. He/she will stop collecting health information about you/your child. This researcher might not allow you to continue in this study. He/she can use or disclose health information already gathered.

Additional Information:

- You can refuse to sign this form. If you do not sign it, you cannot participate in this study. This will not affect the care you receive at:
 - Veteran Affairs Maryland Health Care System (VAMHCS)
 - University Physicians, Inc. (UPI)
 - University of Maryland Medical System (UMMS)Your treatment, payment, enrollment, or eligibility for benefits will not be affected if you do not sign this authorization.
- Sometimes, government agencies such as the Food and Drug Administration or the Department of Social Services request copies of health information. The law may require this researcher, the VAMHCS, UMSOM, UMB, UPI, or UMMS to give it to them.
- This researcher will take reasonable steps to protect your individually-identifiable health information [IIHI]. However, federal protection laws may not apply to people or groups outside the VAMHCS, UMSOM, UMB, UPI, or UMMS. It is possible that IIHI disclosed through this authorization may no longer be protected by Federal laws or regulations and may therefore be subject to re-disclosure by the recipients.
- Except for certain special cases, you have the right to a copy of your health information created during this research study. You may have to wait until the study ends. Ask this researcher how to get a copy of this information from him/her.

My signature indicates that I authorize the use and sharing of my protected health information for the purposes described above. I also permit my doctors and other health care providers to disclose my protected health information with this researcher for the purposes described above.

Signature: _____

Date: _____

(Participant)

Signature*: _____

Date: _____

(Personal representative/legal authority)*:

Name (printed) _____

**An individual who is qualified as a LAR [Legally Authorized Representative] to provide informed consent on behalf of a prospective research subject may not always qualify as a personal representative for purposes of consent to use or disclose a human subject's PHI (i.e. signing a HIPAA authorization). Only the following individuals may sign a HIPAA authorization: (a) The individual. (b) A court-appointed legal guardian. (c) A person legally authorized in writing by the individual (or the individual's legal guardian) to act on behalf of the individual (i.e., [Power of Attorney]). (d) If the individual is deceased, then Executor of Estate, next-of-kin, or other person who has authority to act on behalf of the individual.*

Privacy Questions? Call the VAMHCS Privacy Officer (410-605-7000 x3152) with questions about your rights and protections under privacy rules.

Other Questions? Call the researcher named on this form with any other questions.

APPENDIX F - DATA COLLECTION TOOL

DATA COLLECTION

Interview Protocol

Adoption of a Comprehensive Emergency Management Program: VA Employee Perceptions

Introduction: All participants will be given the description of the interview prior to the interview, in the interview session, the importance of sharing perceptions of the adoption of the VHA's Comprehensive Emergency Management Program will be requested. The interviewers will listen to the whole narrative, with minimal interruptions. Questions will be asked during the narrative only if it is unclear what the participants are saying. At the end of the interview, additional questions will be asked to increase the researcher's understanding and the narrator's description and expression of their perceptions.

The conversations and any discussions during this small group interview will be held in strict confidence by all group members.

Opening question: Please tell me about your experience with the implementation of the VHA's Comprehensive Emergency Management Program.

- a. Probes –examples
- b. Would you explain further?
- c. Can you give us an example?
- d. Would you say more?
- e. Tell us more.
- f. Please describe what you mean.
- g. Is there anything else you would like to tell us?

In addition to tape recording the interviews, the researchers may take notes during the interviews and add them to the typed verbatim manuscripts to help achieve the most complete description of the experience.

One of the researchers (Couig) will transcribe 10 transcripts. The remaining transcripts will be transcribed by a professional transcriptionist.

Demographic Information

1. Age at last birthday in years _____
2. Gender Male _____ Female _____
3. If not a nurse, please list your professional occupation and degree(s) and the number of years you have been working at VA. _____
_____. Please go to question 8.
4. Number of years working as a nurse in VA. _____
5. Number of years working as a nurse. _____
6. Highest Nursing Education Degree - please place a check mark next to your highest nursing degree.
 - a. Associate Degree _____
 - b. Diploma _____
 - c. Bachelor of Science in Nursing _____
 - d. Master's in Nursing _____
 - e. Doctorate Degree in Nursing
 - i. PhD _____
 - ii. DNSc _____
 - iii. DNP _____
7. Degrees other than Nursing, e.g. public health, business
 - a. MPH _____
 - b. DrPH _____
 - c. MBA _____
 - d. Other _____ (please write in)
8. Current or prior uniformed services. For each service you served on active duty, please mark the number of years. Example: If you served in the Air Force for 5 years and the Army for 15, you would mark a 5 next to Air Force and a 15 next to Army.
 - a. **Active Duty**
 - i. Air Force _____
 - ii. Army _____
 - iii. Coast Guard _____
 - iv. Marines _____
 - v. Navy _____
 - vi. National Oceanic & Atmospheric Administration _____
 - vii. US Public Health Service _____
9. **Reserves** - For each service you served reserve duty, please mark the number of years. Example: If you served in the Air Force for 5 years and the Army for 15, you would mark a 5 next to Air Force and a 15 next to Army.

- a. Are you currently on reserve duty? Yes_____ No_____
- i. Air Force_____
 - ii. Army_____
 - iii. Coast Guard_____
 - iv. Marines_____
 - v. Navy_____
 - vi. National Oceanic & Atmospheric Administration_____
 - vii. US Public Health Service_____

10. Are you enrolled in the Disaster Emergency Management Personnel System.

- a. Yes_____
- b. No

APPENDIX G - INTERVIEW PROTOCOL

Interview Protocol

Welcome. I want to thank you for coming today. My name is _____ and I will be the facilitator for today's group discussion. I am a nurse and I work for the Veterans Health Administration (VHA) in the Office of Nursing Services. I am also a Ph.D. student at the Uniformed Services University of the Health Sciences in Bethesda, MD. This research is part of a PhD dissertation. The study is funded by the VHA. Also with me today is Beverly Owens, Nurse Educator, at the VHA.

You were invited to take part in this group discussion today because you work for VHA. In your job at VHA, it is expected you will be familiar with the VA's comprehensive emergency management program. I would like to talk with you today about your perceptions of the adoption or integration of the VA's comprehensive emergency management program in your facility. Learning about your perceptions is important because it may help reveal factors or issues unique to adopting an emergency management program.

The information obtained during the discussion will help improve the adoption of the VA's comprehensive emergency management program. This in turn will save lives and property during a disaster and the information may help others external to VA who are also involved in emergency management.

Ground Rules Before we begin, I would like to review a few ground rules for the discussion.

a. I am going to ask you several questions; we do not have to go in any particular order but we do want everyone to take part in the discussion. We ask that only one person speak at a time.

b. Please free to treat this as a discussion and respond to what others are saying, whether you agree or disagree. I am interested in your opinions and whatever you have to say is fine with us. There are no right or wrong answers. I am asking for your opinions based on your own personal experience. We are here to learn from you.

c. Varying opinions are encouraged. But please respect each other's answers or opinions.

d. If there is a particular question you don't want to answer, you don't have to.

e. We will treat your answers as confidential. We are not going to ask for anything that could identify you. We also ask that each of you respect the privacy of everyone in the room and not share or repeat what is said here in any way that could identify anyone in this room.

f. We are tape recording the discussion today and also taking notes because we don't want to miss any of your comments. However, once we start the tape recorder we will not use anyone's full name and we ask that you do the same. Is everyone OK with this session being tape recorded? [GET VERBAL CONSENT TO TAPE RECORD

DISCUSSION. IF A PARTICIPANT DECIDES THAT S/HE DOES NOT WANT TO BE TAPED IT IS OK FOR THEM TO LEAVE.

g. We will not include your names or any other information that could identify you in any reports we write. We will destroy the notes and audiotapes after we complete our study and publish the results.

h. Finally, this discussion is going to take about two hours and we ask that you stay for the entire meeting.

Does anyone have any questions before we start?

3. Introductions

(5 minutes)

[START TAPE RECORDER NOW.]

I'd like to go around the table starting on my right and have each person introduce him or herself. Please tell us your first name only and your responsibilities at this facility.

4. Group Discussion - 60-90 minutes as needed
General open-ended questions will be asked.

5. At the end ask if anyone has any final thoughts not previously shared.

6. Thank everyone for coming and sharing their experiences.

APPENDIX H – DEPARTMENT OF VETERANS AFFAIRS (VA) NATIONAL RULES OF BEHAVIOR

VA Handbook 6500 September 18, 2007 Appendix G G-4

I understand, accept, and agree to the following terms and conditions that apply to my access to, and use of, information, including VA sensitive information, or information systems of the U.S. Department of Veterans Affairs.

1. GENERAL RULES OF BEHAVIOR

a. I understand that when I use any Government information system, I have NO expectation of Privacy in VA records that I create or in my activities while accessing or using such information system.

b. I understand that authorized VA personnel may review my conduct or actions concerning VA information and information systems, and take appropriate action. Authorized VA personnel include my supervisory chain of command as well as VA system administrators and Information Security Officers (ISOs). Appropriate action may include monitoring, recording, copying, inspecting, restricting access, blocking, tracking, and disclosing information to authorized Office of Inspector General (OIG), VA, and law enforcement personnel.

c. I understand that the following actions are prohibited: unauthorized access, unauthorized uploading, unauthorized downloading, unauthorized changing, unauthorized circumventing, or unauthorized deleting information on VA systems, modifying VA systems, unauthorized denying or granting access to VA systems, using VA resources for unauthorized use on VA systems, or otherwise misusing VA systems or resources. I also understand that attempting to engage in any of these unauthorized actions is also prohibited.

d. I understand that such unauthorized attempts or acts may result in disciplinary or other adverse action, as well as criminal, civil, and/or administrative penalties. Depending on the severity of the violation, disciplinary or adverse action consequences may include: suspension of

access privileges, reprimand, suspension from work, demotion, or removal. Theft, conversion, or unauthorized disposal or destruction of Federal property or information may also result in criminal sanctions.

e. I understand that I have a responsibility to report suspected or identified information security incidents (security and privacy) to my Operating Unit's Information Security Officer (ISO), Privacy Officer (PO), and my supervisor as appropriate.

f. I understand that I have a duty to report information about actual or possible criminal violations involving VA programs, operations, facilities, contracts or information systems to my supervisor, any management official or directly to the OIG, including reporting to the OIG Hotline. I also understand that I have a duty to immediately report to the OIG any possible criminal matters involving felonies, including crimes involving information systems.

g. I understand that the VA National Rules of Behavior do not and should not be relied upon to create any other right or benefit, substantive or procedural, enforceable by law, by a party to litigation with the United States Government.

h. I understand that the VA National Rules of Behavior do not supersede any local policies that provide higher levels of protection to VA's information or information systems. The VA National Rules of Behavior provide the minimal rules with which individual users must comply.

i. I understand that if I refuse to sign this VA National Rules of Behavior as required by VA policy, I will be denied access to VA information and information systems. Any refusal to sign the VA National Rules of Behavior may have an adverse impact on my employment with the Department.

2. SPECIFIC RULES OF BEHAVIOR.

a. I will follow established procedures for requesting access to any VA computer system and for notification to the VA supervisor and the ISO when the access is no longer needed.

b. I will follow established VA information security and privacy policies and procedures.

c. I will use only devices, systems, software, and data which I am authorized to use, including complying with any software licensing or copyright restrictions. This includes downloads of software offered as free trials, shareware or public domain.

d. I will only use my access for authorized and official duties, and to only access data that is needed in the fulfillment of my duties except as provided for in VA Directive 6001, Limited Personal Use of Government Office Equipment Including Information Technology. I also agree that I will not engage in any activities prohibited as stated in section 2c of VA Directive 6001.

e. I will secure VA sensitive information **in all areas** (at work and remotely) and in any form (e.g. digital, paper etc.), to include mobile media and devices that contain sensitive information, and I will follow the mandate that all VA sensitive information must be in a protected environment at all times or it must be encrypted (using FIPS 140-2 approved encryption). If clarification is needed whether or not an environment is adequately protected, I will follow the guidance of the local Chief Information Officer (CIO).

f. I will properly dispose of VA sensitive information, either in hardcopy, softcopy or electronic format, in accordance with VA policy and procedures.

g. I will not attempt to override, circumvent or disable operational, technical, or management security controls unless expressly directed to do so in writing by authorized VA staff.

h. I will not attempt to alter the security configuration of government equipment unless authorized. This includes operational, technical, or management security controls.

i. I will protect my verify codes and passwords from unauthorized use and disclosure and ensure I utilize only passwords that meet the VA minimum requirements for the systems that I am authorized to use and are contained in Appendix F of VA Handbook 6500.

j. I will not store any passwords/verify codes in any type of script file or cache on VA systems.

k. I will ensure that I log off or lock any computer or console before walking away and will not allow another user to access that computer or console while I am logged on to it.

l. I will not misrepresent, obscure, suppress, or replace a user's identity on the Internet or any VA electronic communication system.

m. I will not auto-forward e-mail messages to addresses outside the VA network.

n. I will comply with any directions from my supervisors, VA system administrators and information security officers concerning my access to, and use of, VA information and information systems or matters covered by these Rules.

o. I will ensure that any devices that I use to transmit, access, and store VA sensitive information outside of a VA protected environment will use FIPS 140-2 approved encryption (the translation of data into a form that is unintelligible without a deciphering mechanism). This includes laptops, thumb drives, and other removable storage devices and storage media (CDs, DVDs, etc.).

p. I will obtain the approval of appropriate management officials before releasing VA information for public dissemination.

q. I will not host, set up, administer, or operate any type of Internet server on any VA network or attempt to connect any personal equipment to a VA network unless explicitly

authorized **in writing** by my local CIO and I will ensure that all such activity is in compliance with Federal and VA policies.

r. I will not attempt to probe computer systems to exploit system controls or access VA sensitive data for any reason other than in the performance of official duties. Authorized penetration testing must be approved in writing by the VA CIO.

s. I will protect Government property from theft, loss, destruction, or misuse. I will follow VA policies and procedures for handling Federal Government IT equipment and will sign for items provided to me for my exclusive use and return them when no longer required for VA activities.

t. I will only use virus protection software, anti-spyware, and firewall/intrusion detection software authorized by the VA on VA equipment or on computer systems that are connected to any VA network.

u. If authorized, by waiver, to use my own personal equipment, I must use VA approved virus protection software, anti-spyware, and firewall/intrusion detection software and ensure the software is configured to meet VA configuration requirements. My local CIO will confirm that the system meets VA configuration requirements prior to connection to VA's network.

v. I will never swap or surrender VA hard drives or other storage devices to anyone other than an authorized OI&T employee at the time of system problems.

w. I will not disable or degrade software programs used by the VA that install security software updates to VA computer equipment, to computer equipment used to connect to VA information systems, or to create, store or use VA information.

x. I agree to allow examination by authorized OI&T personnel of any personal IT device [Other Equipment (OE)] that I have been granted permission to use, whether remotely or in any

setting to access VA information or information systems or to create, store or use VA information.

y. I agree to have all equipment scanned by the appropriate facility IT Operations Service prior to connecting to the VA network if the equipment has not been connected to the VA network for a period of more than three weeks.

z. I will complete mandatory periodic security and privacy awareness training within designated timeframes, and complete any additional required training for the particular systems to which I require access.

aa. I understand that if I must sign a non-VA entity's Rules of Behavior to obtain access to information or information systems controlled by that non-VA entity, I still must comply with my responsibilities under the VA National Rules of Behavior when accessing or using VA information or information systems. However, those Rules of Behavior apply to my access to or use of the non-VA entity's information and information systems as a VA user.

bb. I understand that remote access is allowed from other Federal government computers and systems to VA information systems, subject to the terms of VA and the host Federal agency's policies.

cc. I agree that I will directly connect to the VA network whenever possible. If a direct connection to the VA network is not possible, then I will use VA-approved remote access software and services. I must use VA-provided IT equipment for remote access when possible. I may be permitted to use non-VA IT equipment [Other Equipment (OE)] only if a VA-CIO-approved waiver has been issued and the equipment is configured to follow all VA security policies and requirements. I agree that VA OI&T officials may examine such devices, including

an OE device operating under an approved waiver, at any time for proper configuration and unauthorized storage of VA sensitive information.

dd. I agree that I will not have both a VA network connection and any kind of non-VA network connection (including a modem or phone line or wireless network card, etc.) physically connected to any computer at the same time unless the dual connection is explicitly authorized in writing by my local CIO.

ee. I agree that I will not allow VA sensitive information to reside on non-VA systems or devices unless specifically designated and approved in advance by the appropriate VA official (supervisor), and a waiver has been issued by the VA's CIO. I agree that I will not access, transmit or store remotely any VA sensitive information that is not encrypted using VA approved encryption.

ff. I will obtain my VA supervisor's authorization, in writing, prior to transporting, transmitting, accessing, and using VA sensitive information outside of VA's protected environment..

gg. I will ensure that VA sensitive information, in any format, and devices, systems and/or software that contain such information or that I use to access VA sensitive information or information systems are adequately secured in remote locations, e.g., at home and during travel, and agree to periodic VA inspections of the devices, systems or software from which I conduct access from remote locations. I agree that if I work from a remote location pursuant to an approved telework agreement with VA sensitive information that authorized OI&T personnel may periodically inspect the remote location for compliance with required security requirements.

hh. I will protect sensitive information from unauthorized disclosure, use, modification, or destruction, including using encryption products approved and provided by the VA to protect sensitive data.

ii. I will not store or transport any VA sensitive information on any portable storage media or device unless it is encrypted using VA approved encryption.

jj. I will use VA-provided encryption to encrypt any e-mail, including attachments to the e-mail, that contains VA sensitive information before sending the e-mail. I will not send any e-mail that contains VA sensitive information in an unencrypted form. VA sensitive information includes personally identifiable information and protected health information.

kk. I may be required to acknowledge or sign additional specific or unique rules of behavior in order to access or use specific VA systems. I understand that those specific rules of behavior may include, but are not limited to, restrictions or prohibitions on limited personal use, special requirements for access or use of the data in that system, special requirements for the devices used to access that specific system, or special restrictions on interconnections between that system and other IT resources or systems.

3. Acknowledgement and Acceptance

a. I acknowledge that I have received a copy of these Rules of Behavior.

b. I understand, accept and agree to comply with all terms and conditions of these Rules of Behavior.

[Print or type your full name] Signature

Date

Office	Phone	Position	Title
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