VAMC WPB Hurricane Kimo SWS, HBPC, Code Amber and Field Employee Safety Hurricane Kimo Functional Exercise

05/13/2016

AFTER ACTION REPORT/

IMPROVEMENT PLAN

05/20/2016

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ADMINISTRATIVE HANDLING INSTRUCTIONS

1. The title of this document is the 2016 VAMC WPB Hurricane Kimo SWS, HBPC, Code Amber and Field Employee Safety Hurricane Kimo Functional Exercise After Action Report.

2. Handling of this Report is such that the contents are to be shared with all interested parties who could benefit from the lessons learned and improvements suggested herein as they apply to the VAMC WPB.

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"Pathfinder Virtual Badge software allows us to be able to immediately track a child registered in the Family Support Program who has been reported as missing. With this software, we are able to identify the child with a photograph and information that is scanned into the system while live tracking our units who were searching for the child on our campus."

- **LT Eric Golden**
VA Police
VAMC WPB

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EXECUTIVE SUMMARY

"The Pathfinder Virtual Badge program appears to be especially beneficial in the areas of employee safety, accountability, and real-time reporting. In addition to the safety benefit, employees and program managers can download data related to time and location to use for patient documentation and in the case of legal incidents."

- **Robert Gawel**
- **Supervisory Vocational Rehabilitation Specialist**
VAMC WPB

The West Palm Beach Veteran's Affairs Medical Center conducted a half-day Functional Exercise to evaluate the effectiveness of replacing traditional information management systems with mobile technology to improve the timeliness, accuracy, and scope for managing critical information during emergency operations. The exercise was held in conjunction with the Florida Division of Emergency Management's annual HURREX (Hurricane Kimo). At the time of the exercise, Tropical Storm Kimo was approaching the west coast of Florida and expected to strengthen into a hurricane over the weekend. While the exercise tested other functions, the primary focus was on preparations for a hurricane strike.

The 2016 VAMC WPB Hurricane Kimo SWS, HBPC, Code Amber and Field Employee Safety Hurricane Kimo Functional Exercise was developed to evaluate improvements to the VAMC's Access Control and Identity Verification, Situational Assessment, On-Scene Security, Protection, and Law Enforcement, and Health and Social Services capabilities. The exercise planning team was composed of VAMC personnel and Disaster Solutions consultants who were able to collaborate on innovative ways to improve existing processes for VAMC emergency operations.

Based on the exercise planning team's deliberations, the following objectives are developed for the Functional Exercise:

- **Objective 1:** Evaluate the advantages of using an electronic system to manage the identities and status for VA Employees, Contractors, and Visitors that will require access to the medical center during emergency operations.
- **Objective 2:** Test and validate the improvements in the scope of data collection when using an electronic platform to manage Home Based Primary Care and Homeless Veteran Outreach operations.
- **Objective 3:** Evaluate the changes in processes for managing an unaccompanied minor that has gone missing at the medical center.
- **Objective 4:** Develop improvements in field personnel safety and accountability when monitoring the real-time location and check-ins for VA mobile operations.

The purpose of this report is to analyze exercise results, identify strengths to be maintained and built upon, identify potential areas for further improvement, and support development of corrective actions. A company named Disaster Solutions assisted in the exercise and relied upon its mobile software systems, (Virtual Badge and Pathfinder VA) and a Type V Pathfinders Task Force support team of four credentialed, field personnel under a GSA Schedule 84 contract. [1]

Major Strengths

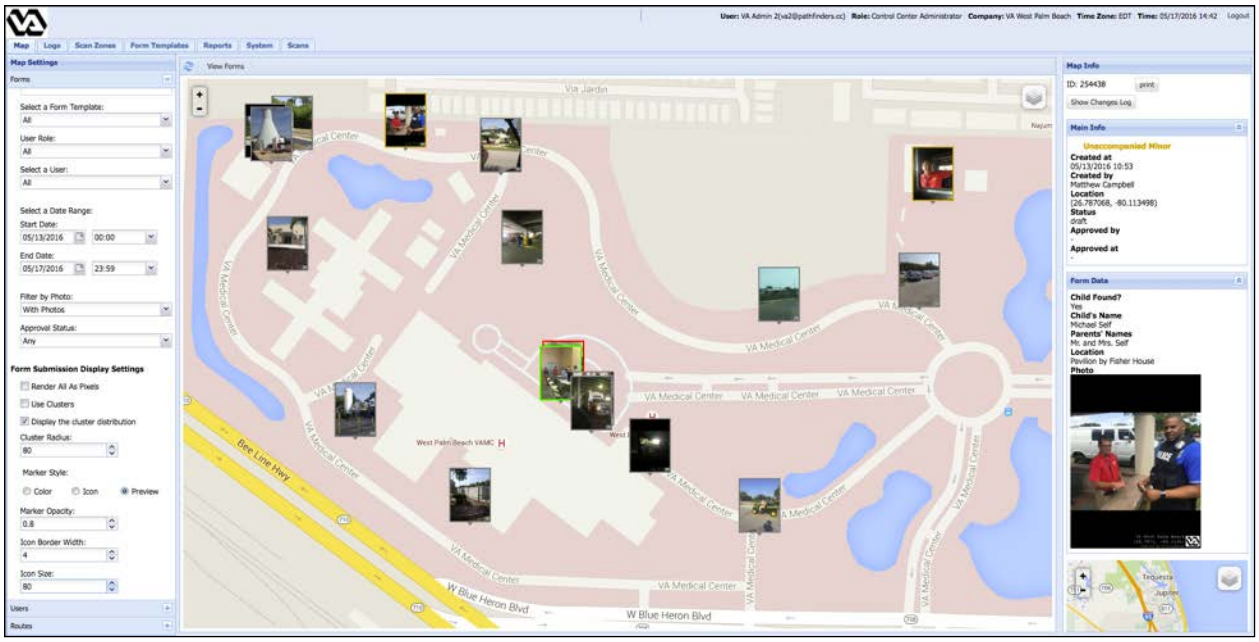
The major strengths identified during this exercise are as follows:

- Using an electronic system to manage the identities and statuses for VAMC Employees, Contractors, and Visitors greatly improved situational awareness and accountability for exercise operations
- Using mobile GIS technology for locating a (simulated) unaccompanied minor during exercise operations was an improvement over existing processes which focus on radio communications among federal police on site.
- Managing Home Based Primary Care operations using an electronic management system greatly improved the efficiency for reporting and analyzing decision-support information
- Managing Homeless Veteran Outreach operations using time/date stamped and geocoded forms greatly improved the accuracy and scope for documentation of homeless or at-risk veterans.
- GPS monitoring and periodic safety check-ins for social services operations greatly improved personnel safety and accountability when compared to traditional systems.

"Since the software program parameters can be modified for need, the possible benefits can be tailored to meet many needs and it can be a timesaver for the employees, making each individual more efficient and productive, allowing them to provide services for an increased number of veterans."

- Robert Gawel
- Supervisory Vocational Rehabilitation Specialist
Social Work Service
VAMC WPB

[1] The software is at technology Readiness Level 9 (the highest level available) and is currently in a fast track to be deployed after testing and remediation to the VA App store. Disaster Solutions was in part chosen because of this testing being done in conjunction with a VA pilot program involving 11,000 ipad devices. Given its pre-assessment compliance with a FedRAMP audit by a federally approved 3 PAO auditor, plus other testing, Virtual Badge is expected to be HIPPA compliant as well. The Pathfinders Task Force teams form a Situation Unit which has 16 years of experience, including deploying into some of the most catastrophic disasters in modern history.



Example of Electronic Monitoring During the 2016 WPB VAMC Functional Exercise.

Primary Areas for Improvement

Throughout the exercise, several opportunities for improvement in the West Palm Beach Veteran's Affairs Medical Center's ability to respond to the incident are identified. The primary areas for improvement, including recommendations, are as follows:

- Combining identity management software with live time situational awareness from mapped field reports that are time/date stamped and geotagged is an excellent authentication method of validating the accuracy of field reports.
- To be properly implemented for the medical center, the Virtual Badge and Pathfinder VA platforms must be compliant with HIPAA standards for managing confidential patient information. (Note: The Virtual Badge platform is in the process of vetting by the VA App Store, and once complete, will be able to manage confidential medical information in compliance with HIPAA standards.)
- Linking the Virtual Badge and Pathfinder VA platforms with the VA Electronic Health Record system will improve data collection and analysis for Home Healthcare operations
- Improve the process for Social Work, Mental Health and Home Based Primary Care field employee safety check-ins with an automated report and inclusion of a "Panic Button" that would alert VAMC personnel of crisis situations in the field.

The 2016 VAMC Functional Exercise was successful in evaluating the use of an electronic data management platform for Identity Management, Home Healthcare, Personnel Safety, and Homeless Veteran Outreach operations.

SECTION 1: EXERCISE OVERVIEW

The West Palm Beach Veteran's Affairs Medical Center conducted a half-day functional exercise designed to evaluate how using a mobile data management system would improve the efficiency for emergency operations.

Exercise Details

Exercise Name

2016 VAMC WPB Hurricane Kimo SWS, HBPC, Code Amber and Field Employee Safety Hurricane Kimo Functional Exercise

Type of Exercise

Functional Exercise

Exercise Start Date

Friday, May 13th, 2016

Exercise End Date

Friday, May 13th, 2016

Duration

4 Hours

Location

West Palm Beach Veteran's Affairs Medical Center

7305 N Military Trail, Riviera Beach, Florida, 33410

Sponsor

West Palm Beach Veteran's Affairs Medical Center

Mission

Emergency Preparedness

Exercise Planning Team Leadership

Lead Exercise Planner:

- Michael Self: Emergency Management Specialist, VAMC WPB

Deputy Exercise Planner:

- John Yannotti: Deputy Emergency Management Specialist, VAMC WPB

Exercise Consultant:

- Scott Lewis: CEO, Disaster Solutions

Participating Organizations

During the 2016 VAMC WPB Hurricane Kimo SWS, HBPC, Code Amber and Field Employee Safety Hurricane Kimo Functional Exercise, the following VAMC WPB Services participated:

- VAMC WPB Home Based Primary Care
- VAMC WPB Facility Maintenance Service/Emergency Management
- VAMC WPB Social Work Services
- American Federation of Government Employees (VA Union)
- VA Office of Operations, Security, and Preparedness (VA Police)

SECTION 2: EXERCISE DESIGN SUMMARY

The Exercise Design for the 2016 VAMC WPB Hurricane Kimo SWS, HBPC, Code Amber and Field Employee Safety Hurricane Kimo Functional Exercise was a joint planning process between the WPB VAMC and Disaster Solutions.

Exercise Purpose and Design

The exercise was developed to evaluate how using an electronic data management platform can improve the Access Control and Identity Verification, Situational Assessment, On-Scene Security, Protection, and Law Enforcement, and Health and Social Services capabilities of the West Palm Beach Veteran's Affairs Medical Center during a hurricane preparedness exercise.

Exercise Objectives, Capabilities, and Activities

Capabilities-based planning allows for exercise planning teams to develop exercise objectives and observe exercise outcomes through a framework of specific action items were derived from the FEMA Core Capabilities List and the VHA Comprehensive Emergency Management Program's Capabilities List.

- **Objective 1:** Evaluate the advantages of using an electronic system to manage the identities and status for VA Employees, Contractors, and Visitors that will require access to the WPB VAMC facility during emergency operations.
  - **Access Control and Identity Verification**: Managing the location and status for employees, visitors, and contractors for the WPB VAMC.

- **Objective 2:** Test and validate the improvements in the scope of data collection when using an electronic platform to manage Home Healthcare and Homeless Veteran Outreach operations.
  - **Situational Assessment:** Manage the location and status for VA personnel conducting Home Healthcare operations for homebound veterans.

- **Objective 3:** Evaluate the changes in process for managing an unaccompanied minor (Code Amber) that has gone missing at the WPB VAMC.
  - **On-Scene Security, Protection, and Law Enforcement:** Conduct a search for an unaccompanied minor declared missing by the medical center.

- **Objective 4:** Develop improvements in field personnel safety and accountability when monitoring the real-time location and check-ins for VA mobile operations.
  - **Health and Social Services:** Conduct Homeless Veteran Outreach operations using an electronic system for documentation.

Scenario Summary

The 2016 VAMC WPB Hurricane Kimo SWS, HBPC, Code Amber and Field Employee Safety Hurricane Kimo Functional Exercise was conducted in preparation for the 2016 State of Florida HURREX (Hurricane Kimo). The exercise was designed to evaluate improvements to the Access Control and Identity Verification, Situational Assessment, On-Scene Security, Protection, and Law Enforcement, and Health and Social Services capabilities leading up to a hurricane impact. A number of injects were created to test the concept of combining a number of functions into the same software solution to stress test the concepts developed in planning the exercise rather than having to depend on multiple software solutions for the multiple functions being tested.

Access control procedures were augmented during this exercise to incorporate an electronic system for the enrollment and management of personnel information. The system was designed to incorporate a list of approved personnel that would access the medical center leading up to a hurricane impact. A dual entry system was used wherein security personnel at an outer gate would first register employees on a pre-approved entry list who also possibly could have family members coming to the facility to stay through the hurricane. Once checked in, the employee entrance check in team was notified of the time the employee and his/her family parked and came to the social services desk for check in; wrist band badges already were prepared and waiting for each family group or individual. The system would also be required to enroll personnel who were not on the approved list like vendors and/or ambulance personnel and they would have their information captured in the field as they appeared at the security gate entrance.

Home Healthcare operations were simulated in the field and documented using an electronic system that would time/date stamp and geocode the assessment information, overlaying this data on an interactive map for improved situational awareness. As this exercise simulated an emergency, the field workers had the GPS tracker turned on in their Pathfinder VA Application, allowing for a display on both each supervisors' phone map and back in the Hospital Incident Control Center maps viewed by administrative personnel.

The medical center also conducted two simulated "lost child" incidents (Code Amber) where VAMC Police were activated to locate the unaccompanied minor. First, the tracking solution in Virtual badge was used to quickly zero in VAMC Police to be able to locate the missing child who still had his phone with him. On the second Sim Cell incident, the child had lost their phone. A mobile GIS system was engaged on the Virtual Badge to discern the last known location of the minor, and VAMC Police were dispatched to seek out and then return the unaccompanied minor to VAMC authorities. For the purposes of this exercise, the VAMC WPB Emergency Manager played the role of the unaccompanied minor to avoid conflicts with privacy regulations.

Homeless Veteran Outreach operations also were simulated during the Functional Exercise and were documented using a mobile documentation system. This system documented the location and status of homeless veterans and was designed to increase the scope and accuracy for assessment operations. A 20-mile track was mapped with approximately 50 homeless persons documented in five locations spread across the county.

SECTION 3: ANALYSIS OF CAPABILITIES

This section of the report reviews the performance of the exercised capabilities, activities, and tasks. In this section, observations are organized by capability and associated activities. The capabilities linked to the exercise objectives of the 2016 VAMC WPB Hurricane Kimo SWS, HBPC, Code Amber and Field Employee Safety Hurricane Kimo Functional Exercise are listed below, followed by corresponding activities. Each activity is followed by related observations, which include references, analysis, and recommendations.

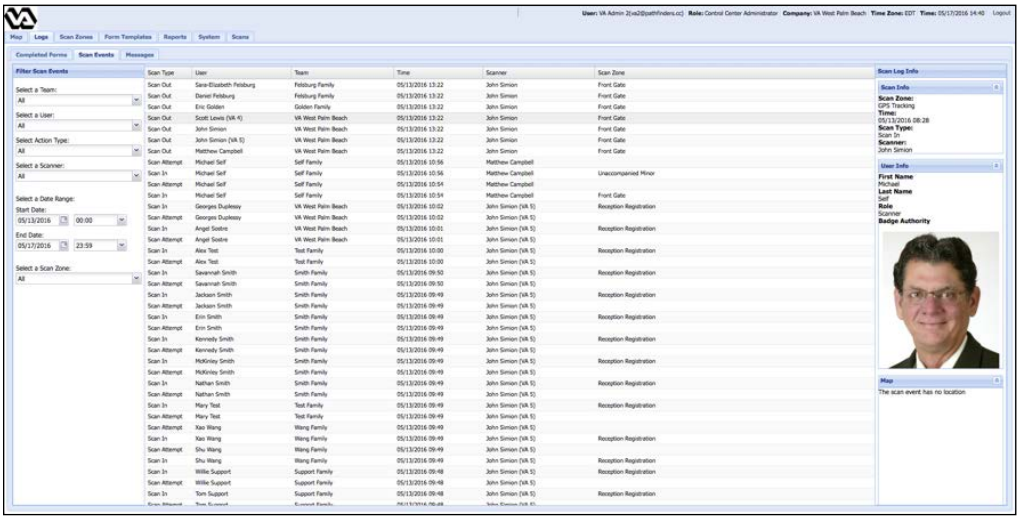
Capability 1: Access Control and Identity Verification

Capability Summary: Apply and support necessary physical, technological, and cyber measures to control admittance to critical locations and systems

Activity 1.1: Manage access control for personnel at the medical center using an electronic system to improve efficiency and accountability.

Observation 1.1: During the Functional Exercise, Virtual Badge was selected as the electronic system to manage the identities of VAMC personnel. Fictitious users were created in the system to simulate management of VAMC personnel while protecting privacy requirements.

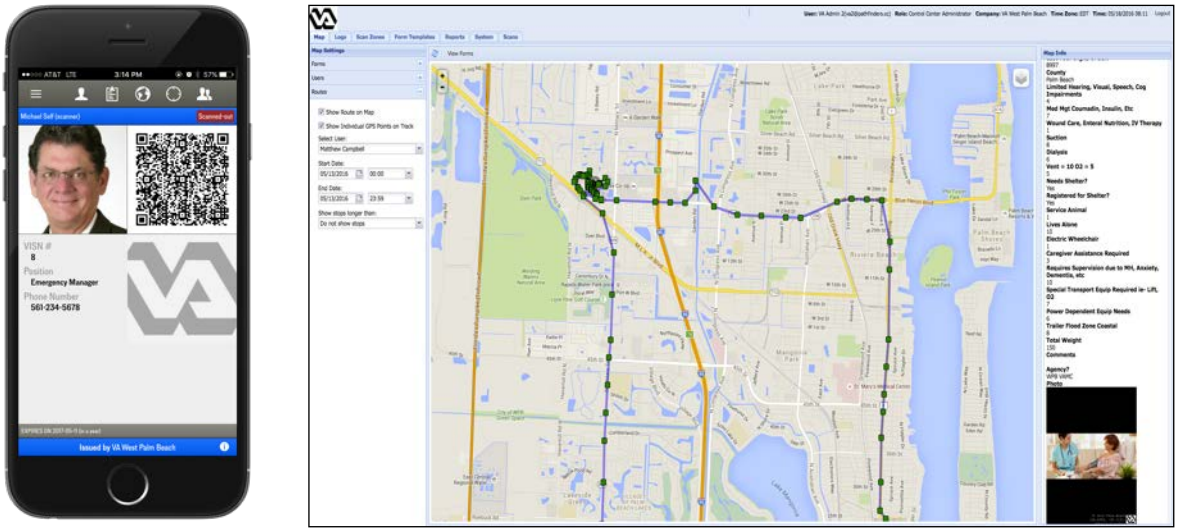
A list of approved users was generated and used to simulate more than 100 personnel entering the WPB VAMC facility. These users were grouped together based on their designation as either VAMC employees and VAMC employee family members. The pre-approved list follows the current policies already in place wherein a cadre of VAMC employees plus their families are prepared to move into the VAMC for a three-day period in the event of a hurricane.



Sample of Identity Management during the 2016 VAMC WPB Hurricane Kimo SWS, HBPC, Code Amber and Field Employee Safety Hurricane Kimo Functional Exercise

With that list uploaded into the mobile system, security personnel at the main front entrance gate, which will be closed in a real incident, could pull up each VA employee's Virtual Badge on the security person's phone, and with a simple swipe, log that person onto the site. Each employee's family, also pre-registered, was displayed on the phone as a part of the employee's "team," a function already built into the system. Once swiped in, the employee's badge on that phone plus throughout the network turned from yellow to a green outline – symbolizing a visual and simple mobile, audit log for analysis.

Once on-site, these simulated users were tracked from their entrance at the front gate, to a registration table at the employee entrance to the main facility itself, where VAMC personnel were standing-by for a secondary check-in. Because the front gate check-in was conducted in real time and transmitted to this registration desk, the time lag between the outer gate check in and the employee registration allowed for social services personnel to prepare a custom wrist band with a ID photo and bar code. As soon as the VAMC employee and his/her family approached the registration table, personnel handed the wrist bands over and performed another secondary check in on the Virtual Badge system to log the employee into the medical facility. This system provided a comprehensive list of approved users and accommodated the creation of new, unexpected users like vendors or ambulance personnel coming to the front gate. This process provided the VAMC with a comprehensive, electronic list of what personnel were currently on site with time/date stamped and geocoded records.



Sample of Identity Management during the 2016 VAMC WPB Hurricane Kimo SWS, HBPC, Code Amber and Field Employee Safety Hurricane Kimo Functional Exercise

Once enrolled in the Virtual Badge platform, users were GPS tracked and their locations were monitored by VAMC personnel. This system greatly improved the efficiency for managing accountability for on-scene personnel and provided the medical center with an unprecedented level of situational awareness for mobile operations.

Reports were periodically generated that summarized identity management operations, including information such as which personnel actually were on-scene, what time vendors arrived, and what goods they were delivering, plus other relevant information.

Analysis: Compared to using spreadsheets for Identity Management, use of the Virtual Badge software greatly improved the efficiency of identity management operations for the medical center. By having the pre-approved list at the outer gates in an easy to use format on cell phones, the required mobile operations needed for VAMC Police personnel in the field was achieved. Not needing a fixed table site plus electricity and Internet connections for the normal laptop way of performing check ins out in the field significantly improved operations. The outer entrance electronic check in transmission to the social service check in at the employee entrance also helped speed up operations as the registration personnel knew ahead of time who was coming next out of the 100 employees coming in for the shift.

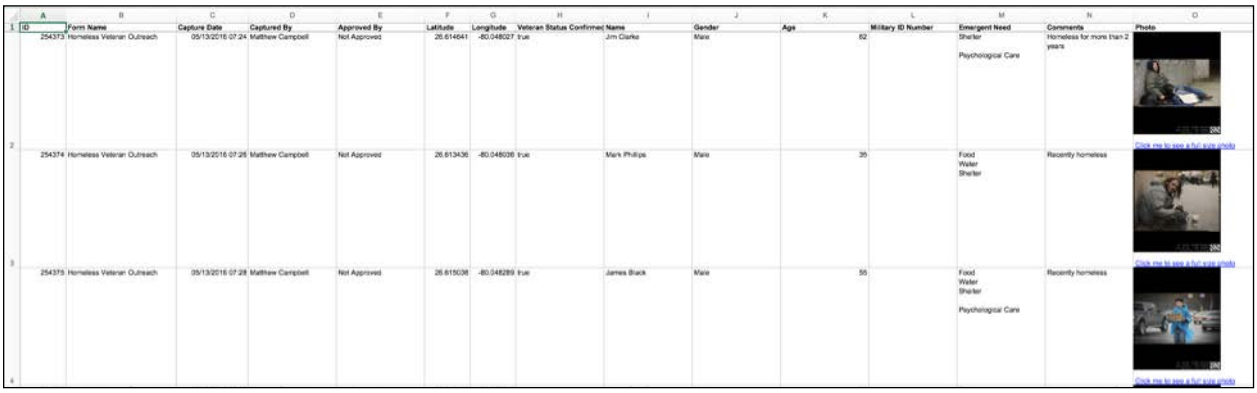
Recommendations: The WPB VAMC should consider replacing their spreadsheet process with an electronic, mobile information management system to improve personnel safety and accountability for access control operations.

Capability 2: Situational Assessment

Capability Summary: Provide decision makers with decision-relevant information regarding the nature and extent of the hazard, any cascading effects, and the status of the response.

Activity 2.1: The VA offers short-term health care services that can be provided to Veterans if they are homebound or live far away from the VA. This exercise will implement an electronic data management tool to replace paper documentation for Home Healthcare operations and evaluate the improvements in documentation and situational awareness.

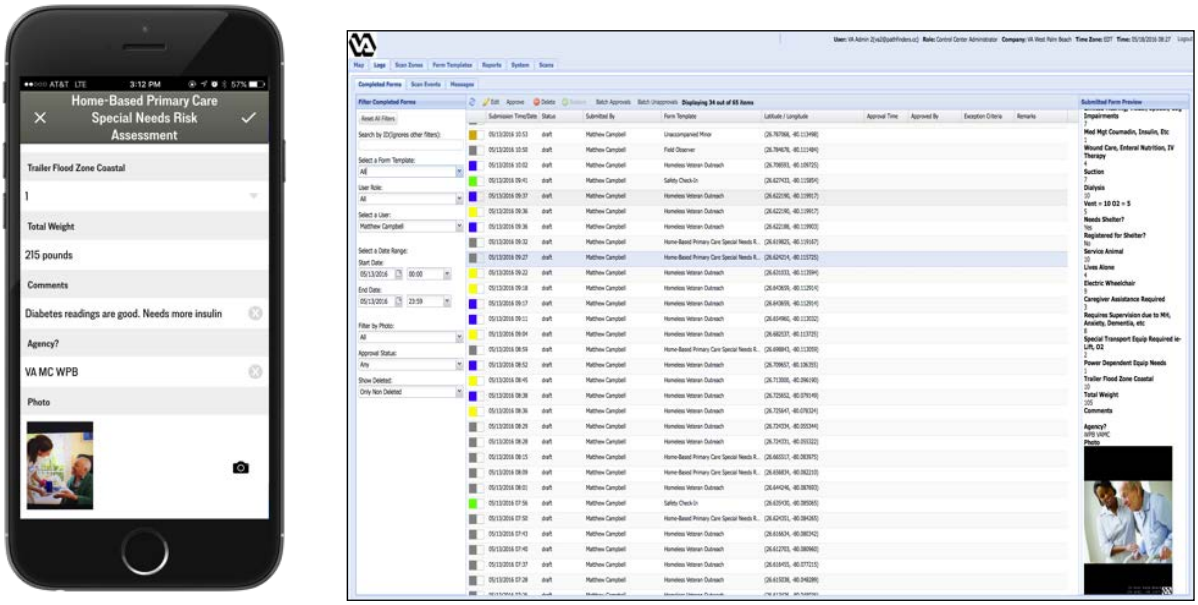
Observation 2.1: The Pathfinder VA software was to document Home Healthcare operations for the 2016 VAMC WPB Hurricane Kimo SWS, HBPC, Code Amber and Field Employee Safety Hurricane Kimo Functional Exercise. Compared to paper documentation, Pathfinder VA provided the VAMC with more comprehensive decision-support information for mobile operations. Detailed forms were created to simulate a documentation of a homebound visit with a photo also included to capture whatever information the field user felt was relevant to the visit. Each form had color codes attached to the answers from the field workers, and all of the data was exportable through sortable Excel forms with the field photos embedded within the Excel rows for ease of use.



ID	Form Name	Capture Date	Captured By	Approved By	Latitude	Longitude	Veteran Status Confirmed	Name	Gender	Age	Military ID Number	Emergent Need	Comments	Photo
254373	Homeless Veteran Outreach	05/13/2016 07:24	Matthew Campbell	Not Approved	26.614641	-80.048027	true	Jim Clarke	Male	62		Shelter Psychological Care	Homeless for more than 2 years	
254374	Homeless Veteran Outreach	05/13/2016 07:26	Matthew Campbell	Not Approved	26.613436	-80.048036	true	Mark Phillips	Male	35		Food Water Shelter	Recently homeless	
254375	Homeless Veteran Outreach	05/13/2016 07:28	Matthew Campbell	Not Approved	26.615036	-80.046289	true	James Black	Male	55		Food Water Shelter Psychological Care	Recently homeless	

Sample of Exported Data During the 2016 West Palm Beach VA Medical Center Functional Exercise

Paper forms were electronically reproduced in the Pathfinder VA software to ensure compatibility with existing datasets. The surveys were conducted at a variety of locations spread across Palm Beach County, and the survey data was simulated to protect confidential medical records. Mobile assessment teams selected locations at random and simulated the documentation of Home Healthcare operations to demonstrate the capabilities of an electronic data management system in comparison to traditional documentation systems.



Sample of Situational Assessment Operations during the 2016 WPB VAMC Functional Exercise

All electronic forms were automatically time/date stamped and geocoded in the field, and included a picture for work verification purposes. Medical center personnel, enabling a visualization of mobile operations, overlie these electronic forms on an interactive map for analysis. All data was collated into Executive Summary reports that provided an at-a-glance overview of mobile operations. These reports were beneficial for summarizing the actions completed during a given operational period, and were helpful in disseminating this information to relevant personnel.

Analysis: By replacing paper documentation for Home Healthcare operations, the medical center can improve the efficiency for data collection and analysis.

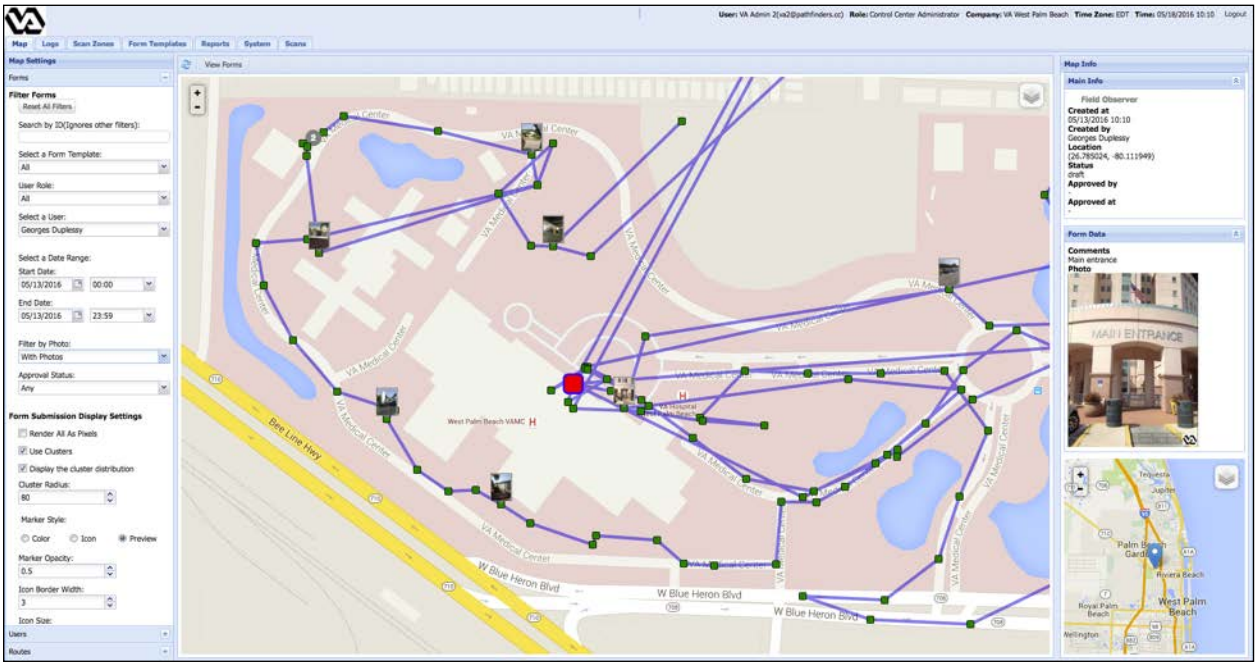
Recommendations: Continue research on how an electronic management system can improve the mobile operations for the medical center and how this data can be tied into existing databases such as the VA Electronic Health Record System to improve information management. The live time situational awareness of home health care operations on a Common Operating Picture is a vast improvement over current systems. The duplication of work efforts where home health care workers need to convert paper reports into electronic reports on laptops wastes time and offers a cost savings merger. If the new iPads are used in conjunction with this system, the VA also would save money for dual cell service of the current system which relies on both a cell phone and a WiFi device – two services which could be merged into one process – saving hardware and cell service at the same time.

Capability 3: On-Scene Security, Protection, and Law Enforcement

Capability Summary: Ensure a safe and secure environment through law enforcement and related security and protection operations for people and communities located within affected areas and also for response personnel engaged in lifesaving and life-sustaining operations.

Activity 3.1: The VA Police is the Service responsible for locating an unaccompanied minor in the event of their being declared missing. The WPB VA Police conducted an activation of mobile units to respond to a simulated lost child on the WPB VAMC facility. It was presumed for this exercise that the minor would have a Virtual Badge installed on their phone to have gained access to the medical center.

Observation 3.1: The Virtual Badge software was selected by the medical center to assist in locating a lost, unaccompanied minor. For the purposes of this exercise, the WPB Emergency Manager played the role of the lost minor to avoid data privacy complications. Using the GIS features of the Virtual Badge software to find the last known location of an unaccompanied minor greatly improved the efficiency for locating a minor declared missing.



Sample of GPS Location Monitoring for the 2016 WPB VAMC Functional Exercise

Once alerted, VA Police mobilized units to respond to the simulated missing unaccompanied minor incident. VA Police units were in contact with medical center personnel who were monitoring the real-time location of VA Police units in relation to the missing unaccompanied minor, and relaying that information to the responding unit. VA Police were also able to view this GIS information from a smartphone that accompanied officers. This process greatly reduced the search-area for responding units and improved the timeliness for locating the missing person.

Once the unaccompanied minor was located, this information was documented using the Virtual Badge software with a form and photo submitted, both geotagged and time/date stamped as well. This provided medical center personnel with real-time decision-support information that greatly improved situational awareness for the operation. It also helped reduce radio traffic for updating the status of mobile units responding to the incident.

This exercise was then re-created a second time to simulate the minor being lost, after miss placing his/her cell phone. In this Sim Cell, the phone's last known location was displayed to Command personnel, who then were able to direct field police officers to the general area where the minor last had his cell phone. With a photo of the minor from his Virtual Badge, field officers then were able to quickly secure the minor within several hundred feet of his last known location.

Sample of Documentation for Locating a Simulated Unaccompanied Minor During the 2016 VAMC WPB Hurricane Kimo SWS, HBPC, Code Amber and Field Employee Safety Hurricane Kimo Functional Exercise

Analysis: Leveraging the power of modern smartphones greatly improves the capability for law enforcement to locate unaccompanied minors using their last known location. Using Virtual Badge gave VA Police and other participating personnel the ability to visualize their current location compared to the last-known location. Radio traffic was reduced to very accurate directions to field staff, as Command was able to point specific guidance for the responding units to locate and secure the minor.

Recommendations: Implementing an electronic system for identity management at the VAMC would greatly improve personnel safety and accountability and enable medical center personnel to monitor the real-time and historic location of approved users.

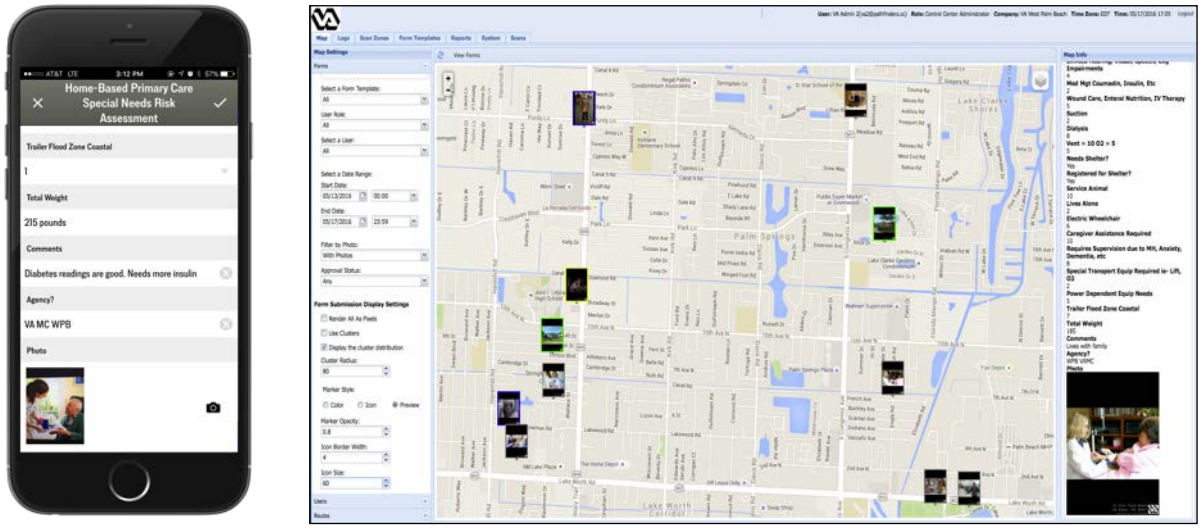
Capability 4: Health and Social Services

Capability Summary: Restore and improve health and social services capabilities and networks to promote the resilience, independence, health (including behavioral health), and well-being of the whole community.

Activity 4.1: Use an electronic system to manage data collection and analysis for Homeless Veteran Outreach

Observation 4.1: The VA conducts coordinated outreach to proactively seek out veterans in need of assistance. The VA connects homeless and at-risk veterans with housing solutions, health care, community employment services, and other required supports.

Pathfinder VA was selected by the VAMC to manage Homeless Veteran Outreach operations during the 2016 VAMC WPB Hurricane Kimo SWS, HBPC, Code Amber and Field Employee Safety Hurricane Kimo Functional Exercise. Exercise operations involved using simulated data to avoid managing confidential medical records for homeless or at-risk veterans. Using Virtual Badge improved the accuracy for reporting the location and status of homeless or at-risk veterans, and provided the medical center staff with an interactive map to visualize what communities were at greatest risk.



Sample of the Documentation Process for Health and Social Services Operations during the 2016 WPB VAMC Functional Exercise

Using Pathfinder VA improved the documentation process for mobile operations and provided medical center personnel with the ability to perform periodic safety check-ins that documented their status and location in the field. This information improved the timeliness for receiving safety check-ins from personnel in the field and provided medical center personnel with a system for managing this information.

A Push notification system within the Pathfinder VA software fit squarely into the gap needed to assist with this safety function. A select group of field users received a message on their phones requesting periodic safety check ins using the system. This feature drew a series of inquiries from participating exercise observers representing the American Federation of Government Employees (VA Union). The President of this union, who also is a registered nurse, added a series of real world observations for ensuing uses specifically exposed as a result of the exercise. A number of valid suggestions were noted from the Q & A session.

Analysis: By replacing paper documentation with an electronic data management system for Homeless Veteran Outreach, VAMC WPB will improve the documentation process and provide mobile users with a system for safety check-ins during operations. The color coding of the field forms as part of this check in gave a simple red, yellow, green display which helped managers ascertain at a glance how field operations were progressing in terms of the safety of the VA field employees. The private Push notices built into the system provided a way to communicate seamlessly with the remote teams and personnel, with custom notes made in seconds and transmitted just as rapidly at varying time alternatives to simulate the situation.

Recommendations: Continue research on how an electronic data management system can be implemented for both the Homeless Veteran Outreach for the WPB VAMC and especially in terms of VAMC employee safety in these taskings which can require employees to approach areas of questionable safety as part of their normal operations.

SECTION 4: CONCLUSION

The 2016 VAMC WPB Hurricane Kimo SWS, HBPC, Code Amber and Field Employee Safety Hurricane Kimo Functional Exercise provided VA staff with an opportunity to test the implementation of an electronic data management system in a low-risk environment. The efficiencies of replacing traditional documentation methods with mobile technology were made evident during exercise operations and more research is needed on ways that this system can be implemented for the West Palm Beach Veteran's Affairs Medical Center. With the general agreement of the various participating personnel and staff present, the Virtual Badge software would rate a Best Practice in terms of serving the needs of the VAMC WPB Emergency Management office. Combined with senior Social Services' staff, Command and field officers from the VA police force, and union personnel, the Virtual Badge and Pathfinder VA applications present an excellent opportunity for cost efficiencies, quicker and better allocation of resources, far improved situational awareness on a common operating system, and a robust method for securing the safety of employees and their families.

Merging all the tests seamlessly on to a Common Operating Picture for complete Situational Awareness via Virtual Badge and Pathfinder VA also was invaluable. Lastly, having a small, Pathfinders Task Force team on site for immediate support of a real hurricane operation was proven as an invaluable resource for a real incident. Both the Virtual Badge and the Pathfinder VA software systems exceeded our expectations, as well as the Pathfinders Task Force team. Further implementation of the software for daily operations and the team as a standby support asset is a high recommendation given the feedback observed during and after this exercise.

APPENDIX A: IMPROVEMENT PLAN

This IP has been developed specifically for the West Palm Beach Veteran's Affairs Medical Center a result of the 2016 West Palm Beach Veteran's Affairs Medical Center Functional Exercise conducted on May 13th, 2016.

Capability	Observation Title	Recommendation	Corrective Action Description	Capability Element	Primary Responsible Agency	Agency POC	Start Date	Completion Date
Access Control and Identity Verification	1.1 Identity Management for the WPB VAMC	Consider replacing spreadsheet process with mobile software for access control and identity management for the WPB VAMC.	Improve access control for the WPB VAMC by implementing smartphone technology	Planning	WPB VAMC	WPB VAMC Emergency Manager	June 1st, 2016	June 1st, 2017
Situational Assessment	2.1 Electronic Documentation for Home Healthcare Operations	Research how an electronic data management system can improve the efficiency for Home Healthcare operations	Research documentation requirements and implementation procedure for replacing paper documentation	Planning	WPB VAMC	WPB VAMC Emergency Manager	June 1st, 2016	January 1st, 2017
On-Scene Security, Protection, and Law Enforcement	3.1 Using Mobile GIS to Locate an Unaccompanied Minor	Leverage smartphone technology for access control, enabling situational awareness for on-scene personnel	Research legal requirements for managing real-time location information for on-scene personnel	Planning	WPB VAMC	WPB VAMC Emergency Manager	June 1st, 2016	April 1st, 2017
Health and Social Services	4.1 Electronic Documentation for Homeless Veteran Outreach and Safety Check-In	Improve personnel safety and accountability for mobile operations by using mobile technology	Improve safety check-ins for mobile operations with mobile technology	Planning	WPB VAMC	WPB VAMC Emergency Manager	June 1st, 2016	December 1st, 2017