The Hospital Preparedness Program (HPP) Healthcare Preparedness Capability Review National Call
Capability 6: Information Sharing

Monday, August 12, 2013

I. Welcome and Introduction

– Scott Dugas, Branch Chief, HPP (Robert.Dugas@hhs.gov)

Scott Dugas welcomed participants to the Capability 6, Information Sharing call, noting that this call will follow the same format as recent calls on Capabilities 1 and 3. HPP is aware of how important this Capability is and this call is intended to be a deeper dive on information sharing. The call will begin with National Healthcare Preparedness Program (NHPP) staff providing information on the capability, followed by real world examples from Awardees. This call featured Awardee presentations from Oklahoma, New Mexico, Kentucky, District of Columbia, Maryland, and Michigan.

Scott Dugas introduced Paul Link and Shayne Brannman to provide an overview of HPP Capability 6.

II. Overview of Capability 6: Information Sharing

– Paul Link, Field Project Officer, HHS Region IV, HPP (Paul.Link@hhs.gov)

– Pamela "Shayne" Brannman, Acting Chief, HPP Healthcare Systems Evaluation Branch (Pamela.Brannman@hhs.gov)

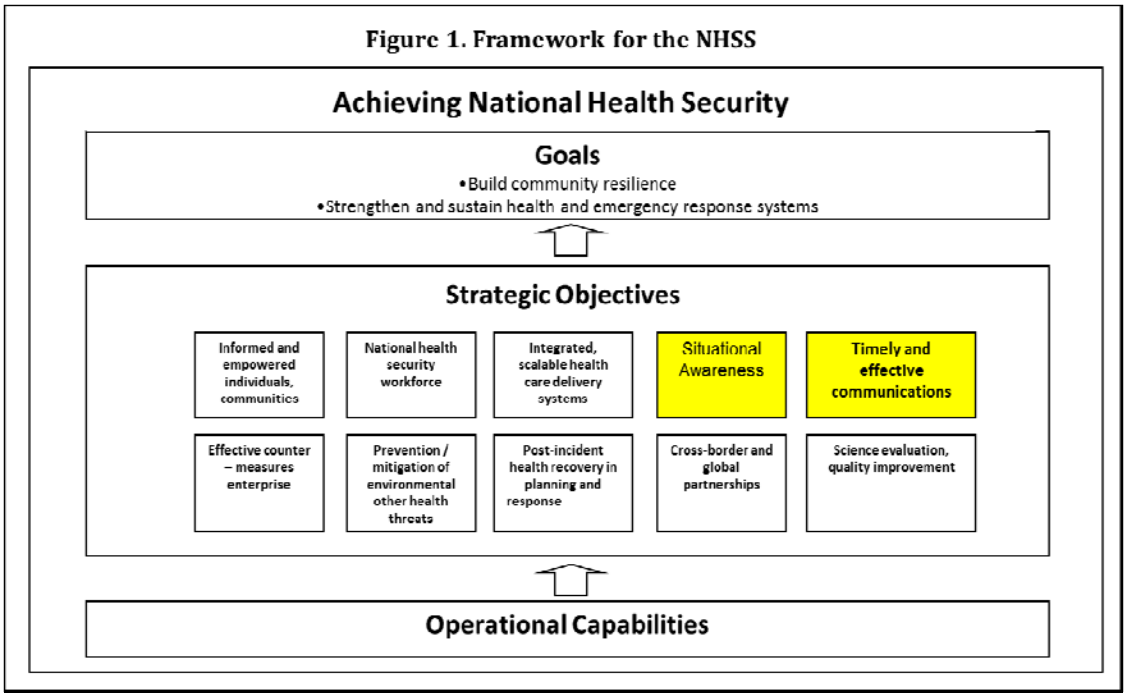
- The HPP Capability background was reviewed:
  - The HPP Capabilities, *National Guidance for Healthcare System Preparedness*, was released in January 2012
  - Capability 6: Information Sharing
    - Information sharing is the ability to conduct multi-jurisdictional, multi-disciplinary exchange of public health and medical-related information and situational awareness between the healthcare system and Federal, state, local, tribal, and territorial levels of government and the private sector
    - This includes the sharing of healthcare information through routine coordination with the Joint Information System for dissemination to the local, state, and Federal levels of government and the community in preparation for and in response to events or incidents of public health and medical significance

- The capability framework closely matches with the DHS Core Capabilities and is based on developing systems, plans and training around:
  - Situational Assessment
    - **Mission Area**: Response

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

o Operational Communications
- **Mission Area:** Response
- **Description:** Ensure the capacity for timely communications in support of security, situational awareness, and operations by any and all means available, among and between affected communities in the impact area and all response forces.

HPP has integrated the National Healthcare Security Strategy into the budget period 2 (BP2) program measures for HPP. The figure below indicates how Capability 6: Information Sharing is aligned with the National Health Security Strategy (NHSS) framework goals and objectives of "Situational Awareness" and "Timely and effective communication."



Situational awareness involves an active, continuous, and timely data-oriented loop that informs decision making. Operational situational awareness captures information related to health risks and health system and response resources and thus informs and improves prevention, protection, response and recovery operations and, ultimately, health outcomes. A cornerstone for healthcare coalitions is the ability to assimilate and share information.

Healthcare coalitions also need to have appropriate and interoperable information technology and consistent messages to effectively meet the Information Sharing Capability. Situational awareness must be communicated, not only to responders, but also to management and the public. There is both a horizontal and vertical pattern to all effective communications.

- The framework for the HPP goals includes:
  1. Community resilience is enhanced through the continued delivery of essential healthcare services to the community post-disaster (Continuity of Healthcare Operations)
  2. There is a strong emergency response system to provide for effective management for surges of patients, deaths, and concerned citizens (Medical Surge)

  The BP2 program measures are consistent with the Capability document and the NHSS. The two primary program measures, including those for information sharing, have been collapsed under Medical Surge and Continuity of Operations.

- Expectations for meeting the Information Sharing Capability include:
  - Expected deliverables that have to be integrated throughout the healthcare coalition (HCC) include:
    1. Information management plan
    2. Communications plan
    3. Information and communication systems
  - These items do not need to be developed by the HCC, but the roles and responsibilities for the HCC must be described.

  - Expected activities include:
    1. Exercises
    2. Evaluations of these plans
       a. System demonstration testing
    3. Evaluation of real incidents

  - The deliverables and activity are components of the NHPP Program Measures
    - Continuity of Healthcare Operations: Data Indicators 3 and 4 apply to Capability 6:
      - Data Indicator 3: The HCC has a process to enhance its member's situational awareness to support activation of immediate bed availability through continuous monitoring. You need good situational awareness to do good surge planning.
      - Data Indicator 4: The HCC has demonstrated the capability of a redundant means of communication for achieving and sustaining situational

awareness.

- Healthcare Coalition Developmental Areas (HCCDA) Response Factors 12, 13, and 15 apply to Capability 6: Information Sharing:
  - #12: The HCC demonstrates an ability to enhance situational awareness for its members during an event.
  - #13: The HCC demonstrates an ability to identify the needs of at-risk individuals (e.g., electrically dependent home-bound patients, chronically ill) during response. For example, during Hurricane Sandy, many at-risk population groups were identifies (e.g., elderly, methadone patients, children)
  - #15: The HCC members demonstrate an evacuation capability with functional patient tracking mechanisms.
- In addition to having program measures, HPP is required to define and track over time the developmental assessment factors.

- Capability 6: Information Sharing is a component of Capability 3: Emergency Operations Coordination. Information Sharing is the implementation guide to information management systems and planning. Information needs to be shared:
  - Up: To management, indicating the needs of the healthcare system
  - Down: To healthcare systems across the coalition so they can make appropriate decisions about the incident
  - Out: To the community in one voice

  Key aspects of information management include:

  - Healthcare organization resource needs assessment: Implementation of a coordinated plan that can be used by incident management to quickly assess the status and needs of healthcare organizations within the community during an incident response.
  - Incident information sharing:
    - Implementation of a coordinated plan to provide healthcare organizations with relevant and timely incident information.
    - Continuity Indicator #4**:** The HCC has demonstrated the capability of a redundant means of communication for achieving and sustaining situational awareness.
  - Community notification of healthcare delivery status: Implementation of a coordinated plan for communication that provides a unified message about the status of healthcare delivery through a Joint Information System (JIS) for dissemination to the community

- Capability 6 functional components include:
    - Function 1: Provide healthcare situational awareness that contributes to the incident common operating picture (plans, training and equipment that deal with situational awareness)
    - Function 2: Develop, refine, and sustain redundant, interoperable communication systems (plans, training and equipment that deal with interoperable communication systems)

- Information Planning: There are coordinated and integrated information sharing plans that:
    - Identify protocols for HCC Members to provide multiagency coordination of information to and from the ESF-8 liaison & incident management – within the framework of the structure of the jurisdiction
    - Establish the protocols for HCC Members to provide and receive timely, relevant, and actionable information for response

- Essential Elements of Information (EEI): Information management planning should determine EEI to be used. Questions that are not meaningful or relevant should not be asked.
    - EEI should be able to be reasonably shared during an incident
    - EEI is timely, relevant and actionable information during response
    - Informs decisions to assist HCOs with immediate resource needs
    - Coordinated and agreed upon by HCC members and local, state and Federal response partners

- Validation of information is an extremely important step in the process to validate EEI accuracy
    - There is a process to validate healthcare incident information according to requested response needs
    - Plans should identify an active validation process to confirm HCO status and requests during an incident
    - Validation procedures should occur when inconsistencies with established reporting mechanisms have been identified (no report when expected, rumor of distress)

- Information Management Systems
    - Awardees must ensure responders have access to information sharing system(s) that assist with the creation of an incident common operation picture.
    - Information management systems should include:
        - Bed Tracking
        - Patient Tracking
        - Electronic Medical Records Tracking
        - Credentialing

        - Volunteer Management

    Information Management is a critical component of Immediate Bed Availability (IBA) and COOP.

- Bed Tracking Requirements: HPP is an advocate for HAvBED, and most Awardees have bed tracking systems in place. Awardees are required to provide a Bed-Tracking System that has the ability to:
    - Provide information on the bed status of the healthcare system
    - Provide insight into the ability of the HCO to accept a surge of patients. (number of available beds, contingency plans for surge)
    - Provide bed-tracking processes (electronic with redundant manual reporting)
    - Integrate info into the incident common operating picture
    - Assist incident management and healthcare with decisions regarding resource allocation, anticipated requests for assistance, and transportation decisions
    - Update bed status based on the situation and availability
    - Report aggregate bed tracking data
    - Report on pre-identified bed categories

- Patient Tracking: Patient Tracking System: Patient tracking an important priority for HPP and it is essential that Awardees have a process to track patients and/or have access to an electronic patient tracking system during an incident.
    - Access relevant patient movement data from EMS and HCOs (e.g., number of patients requiring receiving facilities, requiring transfer services)
    - Integrate the aggregate patient tracking data into the local and State incident operating picture
    - Track patients from entry into the healthcare system through discharge
    - Integrate with the Federal patient tracking system record (JPATS). There are many efforts underway within ASPR/HPP regarding JPATS and the ability to provide the system to Awardees.
    - Goals:
        - Know what transport resources are available vs. those in use
        - Keep track of patient flow during surge distribution
        - Know patients evacuation movement and final destination
        - Enables the provision of healthcare services to patients by ensuring there is a mechanism to track their location (know the patient got to where you sent them)
        - Enables repatriation
        - May assist with reimbursement processes

- Electronic Medical Records: Patient Record Tracking System: There needs to be a process to access an information infrastructure and exchange system that provides electronic medical healthcare information during response, if available and authorized.

- Interoperable Communications planning provides:
    - Communication protocols between
        - HCC members
        - HCC members and incident management
        - HCC members and other relevant stakeholders
    - Communication systems specifics (e.g., frequencies)
    - Process for redundant communication
    - Procedures to restore emergency communications
    - Contact protocols when electronic systems are inoperable to incident management
    - Protocols for alternate forms of communication (social media: e.g., Twitter, Facebook)

  HCOs emergency communication should be coordinated with statewide interoperability coordination, regional emergency communication and SAFECOM protocols

- Interoperable Communication equipment and systems: Provide access to redundant, interoperable communication systems that are capable of communicating vertically with incident management and horizontally with critical healthcare response partners

III. Information Sharing Implementation

A. Essential Elements of Information (EEI): May 2013 Oklahoma Tornadoes

– Mike Murphy, Region 6/8 MMRS Director, Oklahoma (murphym@emsa.net)

The May 2013 Oklahoma Tornadoes were both mass casualty and mass fatality incidents, and ensuring EEI were identified and collected was critical to decision making during the response.

The Oklahoma response/information components include:

1. Oklahoma Regional Medical Response System (RMRS): Statewide expansion of the MMRS concept of medical system preparedness and response. There are seven regional areas for medical coordination.
2. Medical Emergency Response Center (MERC): On-call medical system operations center staffed to coordinate information flow, resources, and situational awareness. There are five centers in state that feed into the ODSH Situation Room and ESF-8 in State EOC.
3. Memorandum of Understanding: Hospitals will provide information to the MERC and utilize the MERC for response coordination.

EEI software systems in use in Oklahoma include:

- EMResource: This has been in place for many years, used for alert, messaging, and gathering some EEI such as patient capacity and injury numbers.
- Web EOC: Use of Web EOC is relatively new, with some hospital difficulties. It is used for situational awareness, resource requests, contact information.
- EMTrack: This is brand new and is still in the implementation phase in Oklahoma City.

The Region 6/8 medical system serves a population 1.2 million and is made up of:

- 42 Licensed Hospitals
    - 24 EMS Destination Facilities
    - 18 Focus Facilities
- 13 EMS Agencies
- 63 Long Term Care Facilities
- 28 Dialysis Units
- 9,623 Beds
    - 6, 253 Long Term Care
    - 3,370 Staffed Hospital

Oklahoma's EEI approach includes the following components:

- Define EEI: Let medical facilities know what information will be collected ahead of time and the specific definitions of each element
- Value for Reporters: Provide reports, situational assessments, dashboards, etc.
- Centralized Collection and Management: MERC, RMRS, and the state collect, validate, and manage data
- Historical Context: Develop trends, norms, and deviation levels
- Scale and Relevance: Ask only relevant information for the incident/situation
- Human Validation and Review: MERC and RMRS personnel check outliers and reach out for missing information
- Capability and Capacity Assessment: Know the "norm" in order to identify deviations from the "norm"
- Update EEI Contact Information: Be able to reach out quickly for new necessary EEI

The table below provides a summary of EEI collected in the May 2013 Oklahoma Tornadoes and the method by which the EEI was collected. Multiple methods of collection were utilized.

Table 1: Summary of EEI during the May 2013 Oklahoma Tornadoes

EEI	Method
Advisory on weather potential for 5/18-20	E-mail, EMResource
Warning—hospitals in tornado path	Phone, EMResource, E-mail (MERC e-mail)
Immediate hospital capacity to receive patients	EMResource
Immediate post-impact hospital system status	WebEOC, EMResource, Phone, E-mail
Available EMS Resources	EMResource, Phone, E-mail to REMSS
Hospital and EMS system status	WebEOC, Phone, E-mail
Injury Numbers--general	EMResource
Patient Tracking	EMTrack, Fax (MERC Fax)
Situational Awareness	WebEOC, E-mail, EMResource
Water Issues	WebEOC, Phone, E-mail
Long-Term Care Assessment	Phone, some E-mail
Dialysis Assessment	Phone, some E-mail
Spontaneous Information Requests	WebEOC, EMResource, Phone, E-mail, Fax
Resource requests	WebEOC, Phone, E-mail
Clinic patient counts	Meetings, E-mail
HHS/NDMS	Phone, face-to-face

Following the tornadoes, EEI challenges were identified including:

- Radio System and Cell System Failure
- E-Mail overload: Command Personnel received a significant influx of emails after the tornadoes. It took time for individuals to sift through the emails to find the important EEI
- Set up an IT Helpdesk: Many individuals who had not logged in for a significant amount of time wanted access to various systems and had difficulty accessing the system
- Electronic systems were not 100% utilized and there were some confusing data elements (i.e., capacity versus number of patients)
- Electronic systems were not used as designed. Part of the WebEOC became a "blog" with various types of information for users to access.
- Executives/Physicians "solving" issues outside of the response structure
- EOC, MAC moved to a church near Moore causing significant access issues, as this was a difficult location for individuals to travel to.

EEI lessons learned included:

- Accurate and timely assessments via EEI are essential for decision-making
- Local/State cooperation is essential and synergistic
- Automated systems are a great time/manpower saver, but a human is still needed for vetting and follow-up and the systems are only as good as the users on both ends of the data entry

- MERC proved critical to success, but there were many lessons learned
- Redundant communication is an absolute necessity—user familiarity is also an must
- Messages have to be short and readable on a smart phone
- Command personnel need aides to help vet e-mail and voicemail
- Personal e-mail and phones will receive information instead of MERC e-mail/phones
- Social media plays a significant role and provides both accurate, helpful information and untrue information that needs to be vetted
- Accurate assessments are critical for decision making—HHS/Urgent Care/Shelter. For example, two DMAT teams were available, but accurate information helped with the decision not to deploy them
- Transitioning from local/regional collection to statewide collection needs to be done with caution
- New EEI requirements will show up based upon the incident (discharges/water pressure)
- Systems tend to focus on a system in deterioration—but the system actually was augmented with attending physicians and staff showing up at hospitals—how does that relate to EEI?
- Water status became EEI when a large water plant went off-line. Information regarding water access became critical as facilities were implementing drastic measures for water conservation.
- Governor Mary Fallin needed specific information when she greeted President Obama. This information became EEI.

B. Information Management and Interoperable Communications

1. New Mexico NICU Surge & Radio System Initiative

– Wynn Brannin, Interoperable Communications Coordinator, New Mexico (Wynn.Brannin@state.nm.us)

a. NICU Surge

New Mexico conducts a radio and HAvBED check on a weekly basis for facilities. This activity meets deliverables associated with Program Measure 5 and provides a good baseline of facility capacity moving forward. The familiarity of the users with this system is essential during these tests and during real events. It is essential for facility staff to practice on these systems.

Last year, the hospitals in Albuquerque, New Mexico reported that they were running out of neonatal intensive care unit (NICU) beds. Because there is not a lot of neonatal surge capability in New Mexico, the New Mexico HPP program staff

contacted colleagues in Colorado, Arizona, and Texas. All the states agreed to participate in an initiative linking NICU surge capability.

New Mexico contacted the vendor and used EMresource and EMtrack to develop a dashboard linking all these states together to give a status of NICU capacity in the region. An unexpected finding was the discovery of previously unknown NICU air and ground transportation capabilities. Overall, this initiative was a tremendous success. The HAvBED checks provide a baseline for medical surge and the NICU initiative provides specific data on neonatal capacity in the region. The NICU status is updated on a weekly basis.

b. Radio System Initiative

New Mexico currently uses a state-wide UHF radio-medical system. All of the hospitals and medical providers (air and ground) have this capability. In conjunction with the weekly HAvBED checks, New Mexico also conducts weekly radio tests of all medical facilities, EMS, and clinics. New Mexico has a robust system that allows communication across the whole state, between HCCs, across the jurisdiction, and among state/local emergency operations.

New Mexico has also been developing hospital HAM radio functionality. New partners would like to become involved in this initiative and New Mexico will provide HIPAA training and basic communication training over the next year. All of these partners/individuals will be baselined through the ESAR-VHP system in the state of New Mexico.

2. Kentucky Interoperable Communication System

– Drew Chandler, IT/Communications Manager, Kentucky Department for Public Health (Drew.Chandler@KY.gov)

In 2005, the Kentucky Department of Public Health (KDPH) embarked on a project to arm hospitals, public health, and key emergency management officials with a communication system that would allow horizontal and vertical communications. The challenges faced were Kentucky's terrain and a lack of funds. The money available would barely scratch the surface of a traditional, terrestrial-based land mobile radio system, such as the one used by state police. The system selected is a satellite-based radio and telephone system on the LightSquared network (formerly SkyTerra and MSV). The radio operates similar to the old Nextel cellular telephone. It is capable of point-to-point communications using a unique device number or multiple device talk groups, like a traditional radio system where anyone on the channel can hear what others are saying. The device is also a telephone which can call any other satellite, cellular, or landline telephone. The device enables facilities to communicate with each other and up the

organizational chart to the State Health Operations Center or State Emergency Operations Center. This system meets the need for interoperable and redundant communications.

There are 358 satellite devices under the purview of Kentucky's Healthcare Preparedness Program and a number of agencies have independently acquired equipment and participate in the quarterly system test. KDPH consistently records participation in the 90% range and it has been as high as 95%. This is one of the few initiatives that have received sustained funding since the inception of the program. One of Kentucky's largest challenges, other than covering the recurring cost of service, is maintenance of equipment. There are many dishes attached to the roofs of facilities around the state which are referred to as "sails" because the wind poses a significant threat to the system. Both drill participation and repair orders (tickets) to the radio shop contractor are tracked using WebEOC, which is a great transition to other situational awareness initiatives.

WebEOC is a web-based, critical incident management system that Kentucky has been using since 2007. Initially, KDPH partnered with state emergency management officials to ensure the most basic information sharing occurred in the same manner in which incident business was conducted at the state emergency operations center. Several presidentially declared disasters later, emergency management acquired its own WebEOC and allowed KDPH to focus its WebEOC efforts on the ESF-8 community.

Early on, the information sharing within the coalitions was limited to message board-like functionality, but, as use of the system grew, KDPH explored additional processes which could be added to the system. Simultaneously, lessons learned from the 2009 H1N1 made Kentucky look for ways to save money by reducing the number of services and contracts. One process identified was the hospital status and the collection of HAvBED data.

Late in the fall of 2009, Kentucky contracted with WebEOC's custom development team to build a dashboard to designated specifications. The concept of the dashboard is that all of the essential elements of information (indicators) about the facility and department status are in one place. The hospitals dashboard has indicators for diversion, decontamination, command center activation, water, facility, generator, communications, and security. Additionally there are 20 department status indicators the facilities can report on to include imaging, lab, and cafeteria.

The benefit of the dashboard is that it paints a picture using red-yellow-green color coding which requires little explanation and is easy to process visually. All green = good day. All red = not so much. The facility is responsible for updating the dashboard and that can be done from multiple physical locations, if necessary. The key is everyone is viewing the same information simultaneously in as real time as the Internet will allow. The regional dashboard allows coalition partners and neighboring facilities to view the

status of others in the region in order to lean forward to anticipate needs. This is driven by the facility dashboard so there is only one place to update information.

Also collected, and a critical piece of situation awareness, is the HAvBED dataset. Facilities make updates to bed availability on the dashboard, similarly to how they update status indicators. There is a custom software interface to "push" data from WebEOC to HHS's HAvBED service, which has met the Version 3 requirements. Kentucky conducts quarterly instate HAvBED drills and consistently scores in the 80%'s response rate. Some of our coalitions test monthly or even weekly. Those coalitions testing more frequently score the highest during the quarterly drills.

In the population centers of Louisville and Lexington, facilities use the dashboard daily. Since WebEOC is a database, information can be displayed in a number of ways. For example the Louisville Dispatch Center has a special display they use 24/7 with some of the facility and department indicators to route ambulances to hospitals. Kentucky also worked with partners at the VA to crosswalk HAvBED types to NDMS bed types. The result is that facilities can update bed availability in one location and it also meets the purpose of the NDMS program because of a custom screen displaying the information as needed at the VA.

In 2012 Kentucky began development of a very similar dashboard process for the long term care community and has spent much of 2013 training approximately 1/3 of the state's facilities. Kentucky is also working with the state Board of Emergency Medical Services to make a dashboard product for ambulance providers and is identifying stakeholders for a similar local public health product.

WebEOC provides access to both message-board type information and specific facility information for coalition partners. The WebEOC product is used to meet Capability 6 Function 1 and also for meeting interoperable communications for Function 2.

C. Patient Tracking

1. District of Columbia Situational Awareness & Patient Tracking During the 57th Presidential Inauguration

– Wesley McDermott, MSPH, Public Health Advisor, Centers for Disease Control (wesley.mcdermott@dc.gov)

The District of Columbia (DC) Department of Health (DOH) Command Vehicle was positioned on the Mall in the pre-dawn hours of Sunday, January 21 before spectators were allowed entry. The forward deployed team had the same access to situational awareness tools as the Departmental Operations Center.

DC DOH was responsible for aggregating the health and medical "Common Operating Picture" data and sharing it with partners throughout the inauguration. DC

DOH employed a web-based platform to track multiple data streams including patient encounters at MAS and patient transports during the following events:

- Pre-inauguration NSSE events
- Inauguration parade
- Inaugural balls

Information sharing occurs on a daily basis in DC. Situational Awareness during the event was dependent on various disparate data streams converging within common platform:

- DC Emergency Healthcare Coalition
    - Healthcare Information Systems (HIS)
- ESSENCE
    - Aggregate emergency department (ED) data across the National Capital Region (NCR)
- District of Columbia Unified Communications
    - CAD ambulance tracking
- Global Emergency Resources "HC Standard" System
    - Patient tracking
    - Resources, staffing & assets
- District of Columbia Emergency Healthcare Coalition

A lot of information came in from a variety of data sources. It was important to sift through it to determine what was EEI and what was not.

The Healthcare Information System (HIS) provides:

- Healthcare facility status
- Resource needs
- Alerts/Notifications
- Web-based communications

Inauguration field assets were mapped for visibility and included the following stations:

- Medical Aid Stations:
    - 8 on mall
    - 4 on Capital grounds
    - 7 on parade route
    - 1 at end of parade route
    - 4 along walking route from buses to mall
- 18 warming centers
- 8 family reunification centers

Patient Tracking Device features included:

- Handheld electronic device registers patient data
- Uploads information – wirelessly - continuous signal
- Real time & custom reports (# of patients at MAS by hour)
- Use for family reunification
- Can interface w/ JPATS

Motorola devices have robust functionality including:

- Photo
- Video
- Bar Code Scanner
- Generation of a unique "Patient Tracking Number" that links to subsequent updates

Information that was collected through handheld devices was aggregated into various formats so that the number of patients in certain geographical areas was easily represented.

National Capital Region States (DC, MD, VA) and the Department of Defense (DoD) (Joint Task Force – CapMed) share a common COP platform (HC Standard). Each agency has developed their own protocols for use, but they are linked to share certain data elements.

Inter-jurisdictional Epidemiology Fusion Cell was staffed at the DC DOH Operations Center (Planning Section) to monitor acute and chronic disease/illness indicators. Critical elements included:

- DC DOH HEPRA
    - Epidemiology
    - HEPRA
- DoD
- Food & Drug Administration
- HHS-ASPR
- DC Fire & EMS
- Red Cross
- Data Streams:
    - ESSENCE
    - DoD patient records
    - NDMS Emergency Medical Records
    - DC FEMS "Electronic Patient Care Reports"
    - Patient data from MAS & Transports
    - Environmental Health (Food Service)

Tying It All Together

- It is important to have one dashboard that ties it all together
- Situational awareness provides information to planners and decision makers
- GER "HC Standard System" allows multiple data feeds to be combined into a single platform
- Aggregated data and screens or "Dashboards" can be exported selectively to third parties

System Reports

- Various pre-programmed reports are available as well as custom defined "on-the-fly" reports that allow for:
  - Timeline displaying the number and severity of complaints
  - Real-Time patient tracking
  - Transport coordination
- Event Summary Report

A SharePoint-based data board was utilized to track the status of nursing homes, hospitals and other critical infrastructure elements in the ESF-8 mission space during the inauguration. There were many systems to provide information on the situational awareness during the event. The hospital matrix provided the resource status of various facilities in the region. Another dashboard provided a summary of EMS calls that were occurring in real time.

2. **District of Columbia Emergency Healthcare Coalition**
   – Craig DeAtley, Emergency Manager, Medstar Washington Hospital Center and Administrator, DC Emergency Healthcare Coalition (Craig.DeAtley@medstar.net)

   Between 2006-2011 the DC Emergency HCC (DCEHCC) used a real-time interoperable communications system, however, grant funding was lost last year. DCEHCC now uses a manual system for data entry, which includes a template for patient tracking. Some hospitals and skilled nursing facilities (SNFs) have their own reporting templates. DCEHCC now utilizes a free Microsoft Shareware platform.

   Whenever a bed check is performed it is announced over the HIS. When patient information is entered into the template, it can be seen by the facility, the DC Department of Human Services and the DC Department of Health (DOH). Hospitals, clinics and SNFs have access to this information, which is very beneficial when fielding questions from family members.

3. **Michigan Patient Tracking Model**
– Tim Bulson, Regional Coordinator, Region 6, Muskegon County Medical Control Authority (TBulson@mcmca.org)

Michigan utilizes a patient tracking EEI form. Michigan's patient tracking methodology stemmed from the eight HCCs and their members/partners. Various HCCs had different platforms and mechanisms they used for patient tracking. Three to four systems were being used and, through exercises, drills, and after action reports, it was discovered that these systems worked with varying degrees of success. Michigan decided that they needed a single dashboard to showcase both the horizontal and vertical common operating picture.

The algorithm provided by Michigan is very straight forward, and applies to daily patient tracking as well. The algorithm includes various partners (e.g., EMS and LTCFs), and includes a "trigger point." A common operating system helps HCC partners with decision making and ensures that all patients are accounted for. These steps enhance record keeping and provide proper documentation for reimbursement. The common operating picture is essential for healthcare systems consisting of multiple facilities.

An important lesson learned by Michigan is that if on-line systems go down during a disaster, it is important to capture essential information on paper and incorporate it into the electronic record later to ensure there is a comprehensive record available.

EEI
Michigan discovered that, in addition to tracking patient data, it is also important to capture some key elements of information to create a robust dashboard regarding situational awareness. Michigan developed a second form to capture these data elements.

It is important for HCCs to practice and test these systems and platforms so they are comfortable with them. At the local level, facilities are doing self-testing. HCCs are promoting a monthly tracking system. Hospitals are now getting accustomed to having access to this patient tracking data. It is critical for EMS to tag patients and enter the patient information in the system and for ED Registration staff to get essential information about the patient into the system when the patient is admitted. The earlier the information is entered into the system, the greater the benefits of providing a dashboard and EEI.

IV. Questions and Answers

- **Question:** Can we receive more information regarding the free program, Microsoft Shareware that Craig DeAtley referred to?

- **Answer:** Yes, please email Craig DeAtley (Craig.DeAtley@medstar.net) for more information.

- **Question:** Will the slides be archived for others to access after the call?
  - **Answer:** HPP will distribute all meeting materials and meeting notes to participants.

- **Question:** It has been challenging for the Pennsylvania Hospital Association to engage long term care facilities (LTCFs) in preparedness initiatives. What are some suggestions for encouraging LTCFs to participate in disaster planning efforts?
  - **Answer:** New Mexico partnered with the hospital associations and various LTCF associations. Kentucky has a partnership with the University of Louisville and the University of Kentucky's geriatric education centers and state long term care office.

- **Question:** Is there any documentation that demonstrates linkages between the Department of Homeland Security and the PHEP and HPP capabilities?
  - **Answer:** HPP is aware that Awardees would like to see a cross-walk between PHEP and HPP capabilities and that is a priority of HPP moving forward. HPP is currently developing a program monitoring tool that will track exercises and EEGs and will link those components to both the HPP and PHEP objectives.

- **Comment:** This was an excellent call with useful from the state and local levels.

V. Concluding Remarks

Paul thanked everyone for calling in. Additional questions can be directed to each of the featured speakers. Their emails are listed in this summary. Additional resources identified will be sent through the HPP Awardee listserv.

Scott reiterated his appreciation all who participated in this call. He also thanked the speakers for their efforts. The *Capability 14: Responder Safety and Health* call is planned for September 9. Scott reiterated the importance of tracking technical assistance (TA) and encouraged participants to email their FPOs examples of TA resulting from these National Calls (e.g., sharing of materials, peer-to-peer discussions, etc.).