MedMap 2.0
Visualizing & Coordinating Health Assets from HQ to “boots on the ground”

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Prior method of getting information to senior leaders and to staff
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- Creation of web enabled viewer called “MedMap”
History

- Rapid Development & Deployment January through June of 2009
- Goals
  - Generic Mapping
    - Secure log-in page to the MedMap web-based application
    - Google Maps functionality
    - Create driving directions with ability to avoid hazards
- Data
  - Access the GIS database at HHS HQ which includes LandScan, Billian’s Health Data, ADAMS, and all DHS provided (HSIP) data layers
  - Data downloaded and used based on events (SLOSH, Hurricanes, shelter status, forest fires, etc.)
  - HHS data kept behind firewall and not shared/accessed by Google or any outside data provider
  - Data layers loaded based on user assigned group, user can turn layers and user created shapes on/off as needed
  - View events of interest generated by SOC GIS staff
- **Queries**
  - Identify items based on distance from a selected feature
  - Perform spatial query intersections between visible layers and user-defined shapes with optional buffer distance
  - Run queries based on playbook values

- **Collaboration**
  - Create personalized views of maps and share with other users
  - Share data layers and query results with other group members
  - Group and user permissions control access to sensitive data
- Prior method of getting information to senior leaders and to staff
- Creation of web enabled viewer called “MedMap”
- Current statistics, integration & limitations
Statistics

- From prototype to implementation in less than 6 months
- 325+ user accounts from multiple Federal and coordinating agencies (growing daily)
- 950+ data layers in 110+ layer groups
- Streaming and daily downloads (inc. NOAA, USGS)
- Used for recent responses and has become COP for ASPR and CDC
- Working on data sharing projects with other federal departments and ESF#8 partners
HHS Integration

- Used in daily operation of the Secretary’s Operation Center of HHS as well as during deployments
- Has become an integral part of the HHS response and reporting mechanism
- Has empowered staff to do minor spatial requests
Current Data Paths

Federal Agencies

State

Local

Other systems
(i.e. HA\vBED, BARTS, Others)
Current Limitations (v1.0)

• Concurrent Users limited
  — Limit 200 max

• Navigation difficult
  — Tough to navigate 500+ data layers in 90+ layer groups

• Streaming and daily downloads limited
  — Currently only NOAA & USGS
  — Multiple other areas available

• Limited automatic processing
  — Manual processing & loading of data

• No legends
  — Interpretation challenging

• Addition of data can only be done by SOC staff
• Only runs on a few web browsers (IE7 & Firefox)
- Prior method of getting information to senior leaders and to staff
- Creation of web enabled viewer called “MedMap”
- Current statistics, integration & limitations
- Testimonials
MedMap Mission / Purpose

- Med Map's mission is to create a seamless COP with the ability to display a user-defined operational picture where data from various organizations can be used to enhance situational awareness and be used as a decision making tool.
  - “I have found MedMap very useful in conducting our New Madrid Earthquake planning. The layers and functions make locating our at risk facilities much easier. I have also used MedMap during flood planning in Nebraska and Iowa.”
    - REC – HHS
  - “US Northern Command was requested to support US Southern Command in their efforts to assist Haiti after the 2010 earthquake. MedMap provided rapid situation awareness of the environment in Haiti. This information was invaluable to inform our leadership and understand the requirements for response.”
    - US Northern Command

- The purpose of MedMap is to enable HHS and it’s ESF#8 partners to visualize spatial data with a common tool that enables users to share information and be able to make more informed decisions.
  - “MedMap has helped me understand and coordinate my HHS/ASPR mission regarding developing a Region V earthquake response plan for FEMA’s Emergency Support Function #8 (public health and medical systems). The amount of data that would have been mapped, and aggregated, had we not had the multi-layer MedMap approach would have been crushing. Being trained on the subtleties of MedMap use has helped me and my Earthquake Work Group immeasurably.”
    - REC – HHS
  - “I have used the MedMap to plot out locations of Medical Facilities during events when management wanted to know what CIKR was located in an impacted area. The MedMap application will be heavily used if this hurricane season follows the forecasts from Colorado. We will be plotting all medical CIKR that falls within the storm cone.”
    - ICAO (International Civil Aviation Organization) Sector Specialist – DHS
MedMap Aids in Decision Making

- **MedMap aids decision making at the State, Local, Tribal & Territorial level**
  - “MedMap mapped significant geographical data points as well as provided a visual reference for the HHS RECs and the **North Dakota DOH**. This ability added to building appropriate situational awareness needed in the flood response.”
    - REC – HHS
  - “The **Secretary of Dept Veterans Affairs** and AS for (OSP) use MedMap for ESF#8 situational awareness and critical infrastructure assessment. VA intends to add VA infrastructure and assets to give VA a more complete ESF 8 picture using a common data between VA and HHS.”
    - GIS Coordinator – VA

- **MedMap aids decision making at the Assistant Secretary for Preparedness and Response level**
  - “Helped quickly ID resources and locations of resources for planning and situational awareness. Linked to other helpful information.”
    - REC – HHS
  - “You guys have done a truly sensation job with what has already been accomplished and with your formulating a way forward. When we talked about this years back you not only listened to what we said we needed but your vision exceeded expectations.“
    - Planner – HHS
- Prior method of getting information to senior leaders and to staff
- Creation of web enabled viewer called “MedMap”
- Current statistics and integration
- Testimonials
- HHS MedMap (Beta)
Prior method of getting information to senior leaders and to staff

- Creation of web enabled viewer called “MedMap”
- Current statistics and integration
- Testimonials
- Demo

- Enhancements
Current & Potential Data Paths

Federal Agencies

State

Local

Other systems
Data access

Users & Roles

Public Feeds
- Area Impacted for events
- Other publicly available data (NOAA, USGS, etc.)

All Federal Government
- HSIP data
- Other layers

Unique Fed/State/Local Gov’t
- HSIP data
- Unique layer Layers

Specific group/project sharing only
- Asset locations
- Other layers (As Needed)

Secure (NOT Classified)
- CI/KR
- Other layers as needed

MedMap 2.0
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Data & feeds
Based on user role

Secure Log-in
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