Strategic Issues in Disaster Planning to Deploy Health Information Exchange

Walt Culbertson
Julie Meadows-Keefe, Esq.
Christopher Sullivan, Ph.D.

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Strategic Issues in Disaster Planning to Deploy Health Information Exchange

This presentation on HIE for disaster preparedness will address technical, governance and legal issues:

- Technical: How to include Health IT in disaster planning to ensure that medical records are available at the point of care following a natural disaster.
- Governance: Issues of Health IT governance necessary for ensuring that a patient's medical records are available following a natural disaster.
- Legal: The regulatory and legal constraints on health information exchange that must be addressed in disaster planning for the delivery of medical records to the point of care following a natural disaster.

Technical Issues in HIE Planning

This section of the presentation will address:

- "Pull" approaches to health information exchange such as the patient lookup model being deployed in most states.
- "Push" approaches to health information exchange such as Direct Secure Messaging.
- Patient-centered approaches to health information exchange such as Personal Health Records.
- The use of smart phones and mobile computing devices for accessing health records.

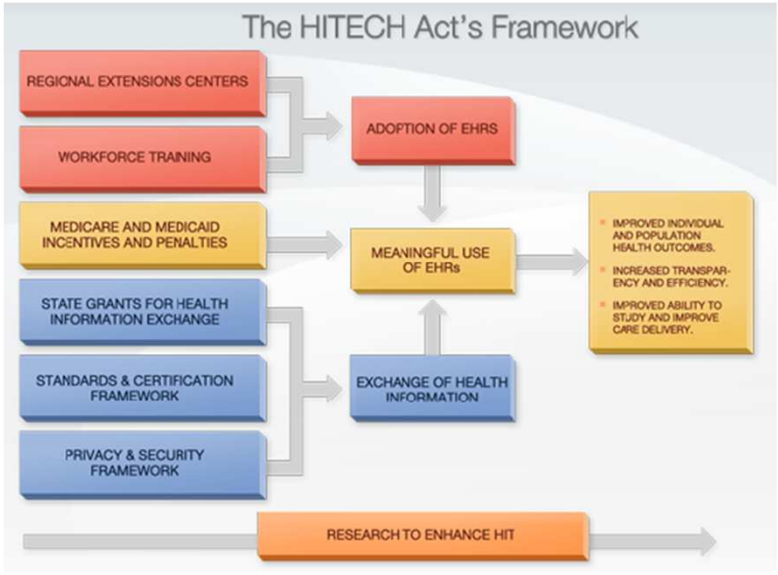
HIT/HIE is a Disaster Preparedness Foundation

- Health information technology (HIT) is the use of computer hardware and software to privately and securely store, retrieve, and share patient health and medical information.
- Health information exchange (HIE) is the movement of health information electronically across multiple organizations.
- Exchanging health information is important:
  - Make sure that health care providers have access to the most up-to-date information.
  - Make the most informed decisions about patient care that is possible.

HIT/HIE are Building Blocks That can be Leveraged in the Time of a Disaster

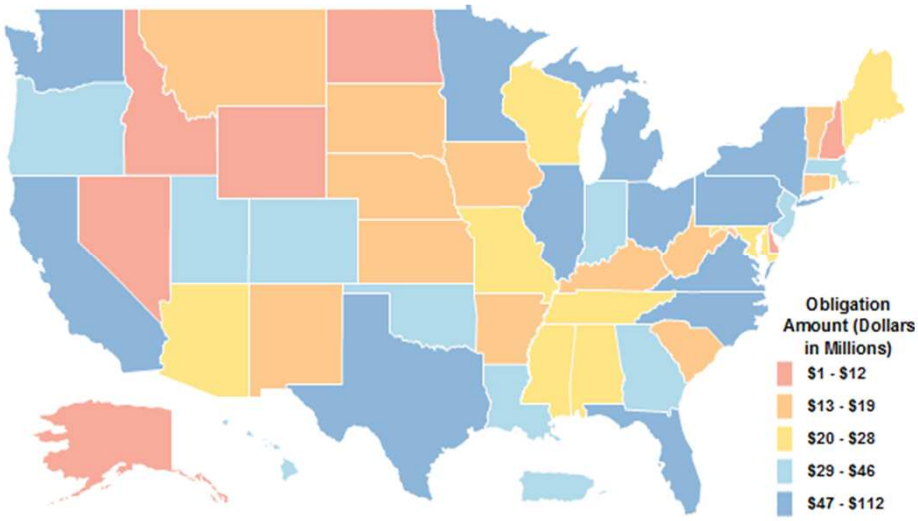
- Signed into law in February 2009, the Health Information Technology for Economic and Clinical Health Act (HITECH) is a component of the American Recovery and Reinvestment Act (P.L. 111-5, Recovery Act).
- This law provided legislation, statutory authorization, and $2 billion in stimulus funds to the Office of the National Coordinator for Health IT (ONC) to accelerate the development and diffusion of health information technology through a number of grant programs, policy activities, and strategic partnerships.

Health Information Technology for Economic and Clinical Health Act (HITECH) Framework



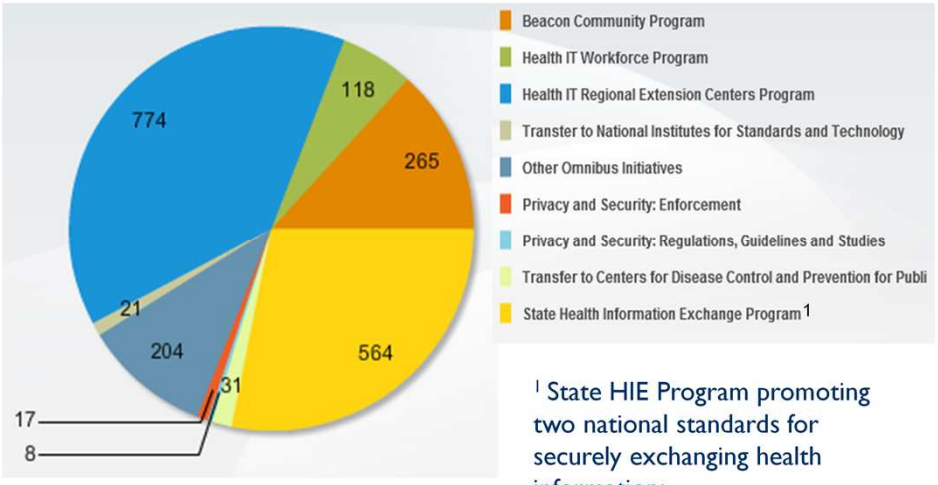
ONC as of 1/2013

HITECH Funding Distributed by Office of the National Coordinator for HIT (ONC)



ONC as of 1/2013

Components of the Planned HITECH Funding for 2009-2014



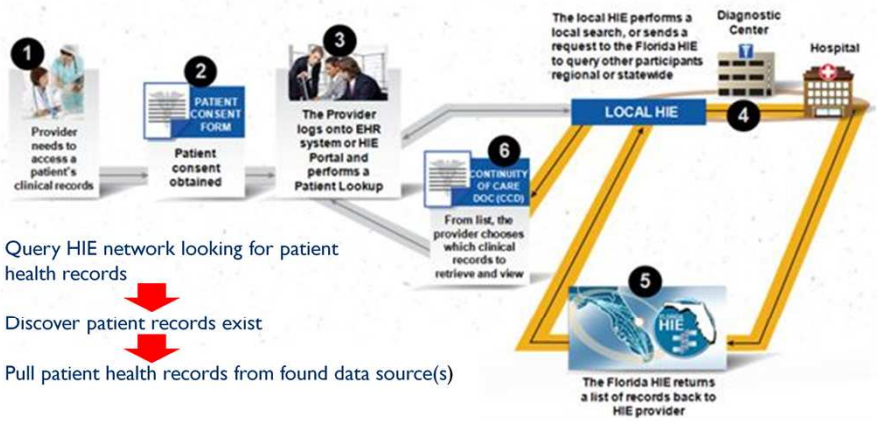
(Dollars in Millions)

ONC as of 1/2013

[1] State HIE Program promoting two national standards for securely exchanging health information:

CONNECT and DIRECT

Leveraging CONNECT(Query/Pull) in a Disaster



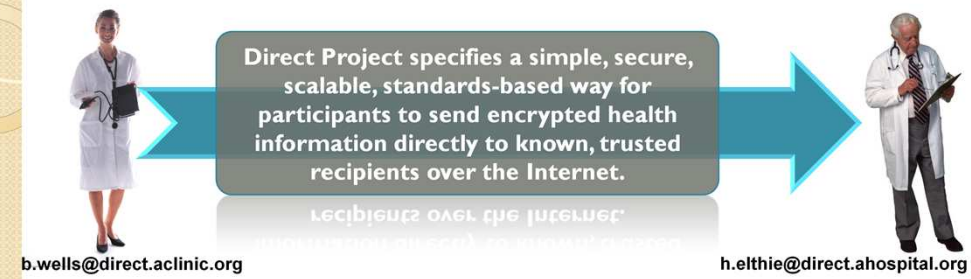
Query HIE network looking for patient health records

Discover patient records exist

Pull patient health records from found data source(s)

- **Standards-based**. Free, open-source software solution, developed by more than 20 federal agencies.
- **Not Simple.** Potentially expensive custom EHR interfaces are generally needed to support EHR/HIE integration with CONNECT.
- **Evolving.** Many State implementations just starting to come online.
- **Limited.** Defined document types

Leveraging DIRECT Messaging in a Disaster



b.wells@direct.aclinic.org

h.elthie@direct.ahospital.org

- **Standards-based**. Built on Internet standards for secure e-mail communication wrapped around special governance and policies.
- **Simple.** Connects healthcare stakeholders through universal addressing using simple push of information in any format.
- **Secure.** Users can easily verify messages are complete and not tampered with in travel.
- **Scalable.** Enables Internet scale with no central network authority.
- **Flexible.** Any message payload.

Value of DIRECT in a Disaster

Communication Pathways

Between People

Between Machines

Between People & Machines

Communication Content

I've attached the study of Mr. Author. Thanks for seeing him.

Readable by People

EVN|A28|20060501140008|||000338475^Author^Arthur^^^^^
^Regional
MPI&2.16.840.1.113883.19.201&ISO^L|20060501140008<cr>
PID|||000197245^^^NationalPN&2.16.840.1.113883.19.3&ISO^PN
~4532^^^

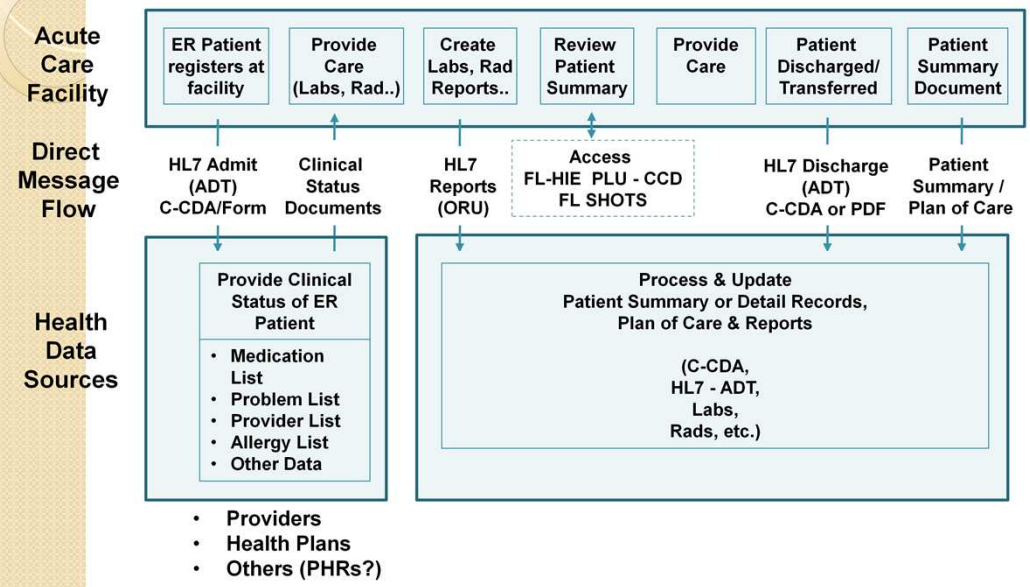
Readable by Machines

I've attached an x-ray and electronic record for Mr. Author

EVN|A28|20060501140008|||00
0338475^Author^Arthur^^^^^
^RegionalMPI&2.16.840.1.1138
83.19.201&ISO^L|2006050114
0008<cr>

Readable by People and/or Machines

Direct Use Case: Acute Care Emergency Treatment



- Providers
- Health Plans
- Others (PHRs?)

Acute Care Emergency Via DIRECT

Workflow	Data Flow
1. A previously healthy 64 year old Florida panhandle resident presents to a Georgia Acute Care Emergency Facility (ER) after having evacuated his home in a hurricane and suffering a laceration to his arm and face.	HL7 Admit (ADT) or C-CDA **Direct Message** Pushed to: A. Rendering Georgia Physician if not on ER/EHR B. Patient's Florida Primary Care Physician (others) C. Patient's Health Plan and/or other data sources) **OR** Simple email (or form) containing patient demographic information and situation Pushed to B or C
2. Provider, Payer or other Data Source submits current clinical status of patient including: - Medication List - Problem List - Provider List - Allergy List - Other data as available	Health Plan or other data source (Patient's Florida Primary Care Physician) Clinical Status of Member/Patient (PDF/C-CDA/Other attachment) **Direct Message** Pushed to: A. Georgia Acute Care Emergency Facility B. Rendering Georgia Physician if not on ER EHR C. Patient's Florida Primary Care Physician (and others) NOTE: Remember to inquire about a Patient Personal Health Record (PHR)

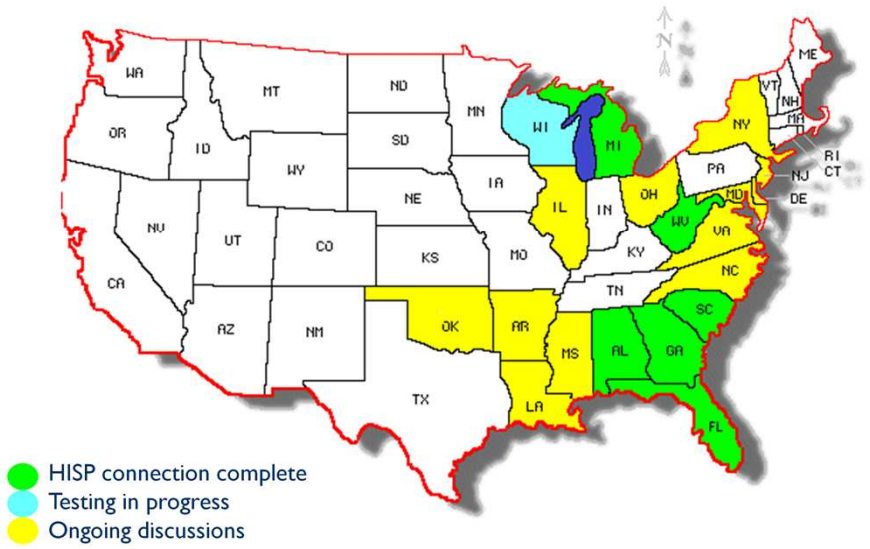
Acute Care Emergency Via DIRECT

Workflow	Data Flow
3. Patient blood pressure is mildly elevated, labs and radiology results are normal.	Information is collected and entered into the ER EHR
4. Notification of HL7 events and reports are forwarded	HL7 Reports (ORU) **Direct Message** Pushed to: A. Rendering Georgia Physician if not on ER EHR B. Patient's Florida Primary Care Physician (and others) C. Patient's Health Plan (where applicable)
5. The patient can't recall when his last tetanus shot was given.	Information is collected and entered into the ER EHR
6. The Georiga ER queries the FL-HIE via the Nationwide Health Information Exchange for the patient's summary record document to review the patient's immunization and other clinical history **or** licensed Florida providers could access the Florida State Immunization Registry (FL-SHOTS) online.	Acute Care Emergency Facility could use A. Leverage the National eHealth Exchange to connect to the Florida HIE – Patient Look-Up Service (estimated Q1 2014) B. Current capability such as licensed Florida providers accessing Florida Shots Registry online

Acute Care Emergency Via DIRECT

Workflow	Data Flow
7. After review of the document, it is determined there is no record the patient had a tetanus booster. Patient receives stitches and is given a tetanus booster	Information is collected and entered into the ER EHR
8. The patient is discharged and the Emergency department systems generates a HL7 ADT Message	HL7 Discharge (ADT) or C-CDA **Direct Message** Pushed to: A. Rendering Georgia Physician if not on ER EHR B. Patient's Florida Primary Care Physician (and others) C. Patient's Health Plan (where applicable)
8. The Emergency Facility system generates an ORU summary of studies and a patient summary health record document, and a discharge summary document.	HL7 ORU Summary Studies and/or Patient Care Summary (C-CCD) and/or PDF Plan of Care or other Reports **Direct Message** Pushed to: A. Rendering Georgia Physician if not on ER EHR B. Patient's Florida Primary Care Physician (and others) C. Patient's Health Plan (were applicable)

Florida HIE - Direct Secure Messaging State-to-State Connection Map (as of 4/15/13)



- HISP connection complete
- Testing in progress
- Ongoing discussions

Call to Action

- Find out where your State is in its HIE implementation and Direct Messaging service.
  - What other states is your state connected too?
- Establish outreach campaign to encourage obtaining a Direct Secure Messaging account in your state.
  - Providers, hospitals, health plans, first responders, ESF8 and other state disaster preparedness resources who need to securely obtain and share patient health information.
- Identify and sign-up health data sources such as hospitals, health plans, pharmacies, labs and others.
- Encourage patient PHR adoption and use.
  - Health plans and others provide these to members.

Governance Issues in HIE Planning

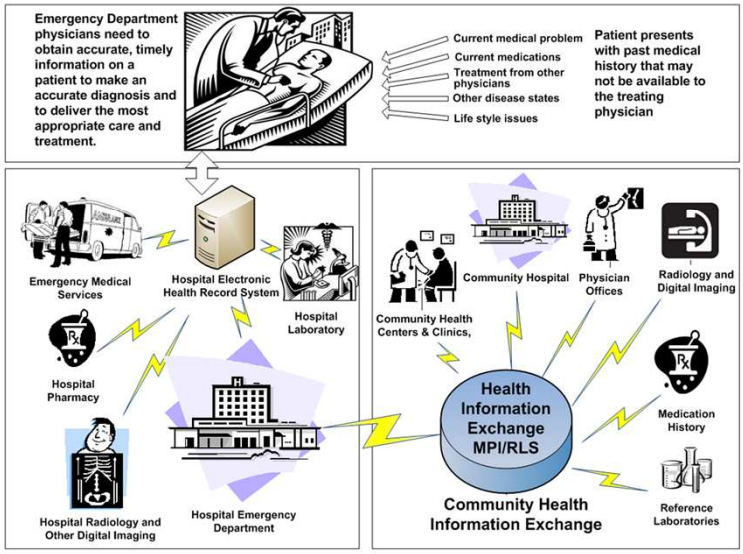
This section of the presentation will address:

- The integration of health information exchange into emergency planning, response, and recovery following a disaster.
- Organizing the relevant stakeholders needed to plan the emergency medical response before a disaster.
- Overseeing the mechanisms of data exchange that will ensure the delivery of medical records to the point of care following a disaster.

HIE for Patient Care

The perfect medical record world of HIE.

Health Information Exchange Emergency Room Use Case



The Challenge of Natural Disasters

When natural disasters strike, vital medical services can be disrupted and crippled.

St. John's Mercy Hospital in Joplin, Missouri

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http://i2.cdn.turner.com/cnn/dam/assets/120127063141-joplin-03-horizontal-gallery.jpg

8 months after devastating tornado, Missouri hospital to be demolished

http://www.cnn.com/2012/01/28/us/missouri-hospital-tornado

(CNN) -- When the roaring stopped, when the debris stopped whirling and the glass stopped breaking, the 4-foot wooden cross remained on the wall.

It was a fixture in the emergency department waiting room of St. John's Mercy Hospital in Joplin, Missouri, a symbol of the hospital's Catholic roots and, perhaps, a comfort to the sick and injured who sought help there.

And after St. John's took a direct hit from a catastrophic tornado May 22, it became a symbol of something else: Joplin's resilience, the strength and compassion of its people and their determination to rebuild.

On Sunday, the cross will be loaded onto a truck bed and will lead the way from the old hospital to the site of a new facility during a dual demolition-groundbreaking ceremony. Demolition of the old hospital building -- a reminder of the tragedy -- will begin, and

ground will be broken for a new building as Joplin moves forward.

"It's hard to say goodbye to the building that has been St. John's since 1968," said Gary Pulsipher, president of St. John's Mercy, in a statement. The hospital has occupied three different sites in Joplin since 1896.

"But like the rest of the city, we are glad to be moving ahead and looking to the future. While we will never forget what happened here, taking down the hospital is another step in the process of removing the visible signs of the tornado's devastation from the landscape," Pulsipher said.

"As I drive by it, like everyone else, it reminds me of that horrible night that lives were changed in our community," said Gary Shaw, a Joplin city councilman. But, he said, the building is also "a testimony" to the past eight months "and how strong people have been, and how they've pulled together."

"A lot of cleanup has been done, a lot of rebuilding is going on," Shaw said. But "people are still somewhat confused, and they're going through, I think, a time of 'This happened. What do I do now?' I think that's kind of where we are now. We're trying to get over the shock of all of it."

The final death toll from the tornado was 161 -- including five patients and one visitor at St. John's. More than 1,000 people were injured. The Joplin twister was the deadliest on U.S. soil since the National Weather Service began keeping records in 1950. It was classified as an EF-5, the highest ranking on the scale used to measure tornado intensity, with winds of more than 200 mph.

Inside St. John's, on the corner of 26th and McClelland Boulevard in the southwestern part of the city, patients were watching television, resting, eating dinner or receiving visitors that Sunday evening when the twister slammed into the nine-story building about 5:40 p.m.

Windows were blown out. Cars were hurled in the parking lot like toys, piled near the emergency room entrance. Gurneys were thrown blocks away. In parts of the hospital parking lot and in a parking lot just to the west, 200- to 300-pound concrete parking stops, fastened into the asphalt with rebar, were lifted and tossed up to 180 feet, the weather service said.

The hospital's helicopter lay crumpled, some distance away from its pad. X-rays from St. John's were found in driveways in Dade County, Missouri, about 70 miles away. The building looked as if it had been bombed.

"The houses are all gone," Sara Ferguson, who was near the hospital when the storm struck, told The Joplin Globe newspaper at the time. "The medical buildings are gone. (The hospital) windows have all been blown out. It was horrible. I couldn't even take pictures on my phone. I was crying."

The hospital was very nearly the only structure in the immediate area left standing, albeit severely damaged.

Hospital officials swung into action almost immediately. About 183 patients and 200 staffers were evacuated from the building. Triage centers were set up outside. Other hospitals in the area opened their doors for St. John's patients and others who had been injured. Doctors and nurses rushed to the scene.

"Within a matter of hours, we had almost more help than we could put to use," Dr. Jim

Roscoe told CNN at the time. "I just can't begin to tell you, we've had people coming from several hundreds of miles away, grabbing their stethoscope and anything they could get, and threw it in the car and came."

Across Joplin, people were also pulling together. The injured were transported to hospitals on doors in the back of pickup trucks. Businesses loaded trucks with donations. Restaurants helped provide food to those in need.

"You have shown the world what it means to love thy neighbor," President Barack Obama told the people of Joplin at a memorial service for the victims a week after the tornado. "You've banded together ... you've demonstrated a simple truth: that amid heartbreak and tragedy, no one is a stranger."

That same day, St. John's was beginning to see patients in a tent facility set up across the parking lot. Built to withstand 100-mph winds, the facility had an emergency department, surgical suites, MRI and CT scan capabilities, a pharmacy and 60 inpatient beds, the hospital said.

"The building is not St. John's," Dr. Bob Dodson, who worked to set up the temporary facility, said at the time. "St. John's is the people who worked in that building. And they're going to be the people in this building."

A modular hospital has since taken the place of the tent, said St. John's spokeswoman Miranda Lewis, and a more permanent structure was built nearby. The structure can be moved, and can be used to upgrade other facilities after St. John's moves into its new home, she said.

In the days after the tornado, Mercy was "a blessing," Shaw said. They continued paying their employees, he said, and set up the temporary facilities. "You have to admire that they didn't let it defeat them."

In all, five buildings across 47 acres at the hospital site will be demolished and cleared, according to a statement from Mercy, St. John's parent company. Its facility is by far the largest, at about 750,000 square feet. Three medical offices and a rehabilitation facility will also be torn down.

Typically, a building so large would be imploded. But underground lead mines made that an impossibility for St. John's.

"Joplin traces its roots back to the early miners who settled here in the late 1800s," said Dan O'Connor, the demolition project manager, in the statement. "As is the case in many places throughout the city, those mines were filled in to make way for growth. While they can be made safe to build on, we don't want to take any chances that demolition charges and crashing debris could create an uplift pressure that might cause damage to surrounding properties."

Instead, a wrecking ball will demolish the hospital's west tower, and grappling equipment will be used to take down the east tower. The demolition process should take about six weeks, officials said.

But before it began, crews searched the hospital for anything in good condition -- Bibles, artwork, memorial plaques, stained glass and marble. Teams began cleaning out and salvaging in December, the hospital said.

Three time capsules were recovered -- one buried when the current hospital was built in 1968, one when the east tower was completed in the 1980s and a third that marked St.

John's 100th anniversary in Joplin in 1996.

And, of course, the cross.

"The cross certainly has some scars on it," said Terry Wachter, vice president of mission for St. John's, in the statement. "But they just add character." Many of the items recovered will either be relocated to the new hospital or placed in a tornado memorial museum, she said.

Other pieces -- plastic piping from the sprinkler system, windows -- will be studied and tested to see how they weathered the storm.

Meanwhile, officials are making efforts to limit the amount of debris that winds up in landfills from the demolition. Steel, aluminum and copper from the buildings is being salvaged and recycled, hospital officials said. Concrete and asphalt will be crushed into small pieces and used as backfill to ready the site for redevelopment.

"The devastation from the tornado was bad enough," said John Farnen, executive director of planning, design and construction for Mercy. "We really want to take all the measures possible to care for this site throughout the demolition process."

Before the hospital comes down on Sunday, a demolition ceremony will be held on the hospital campus, part of several events designed to help Joplin "say goodbye to the past and celebrate the future," Mercy said.

The Missouri Highway Patrol will transport the cross to the new hospital site, located about 2 1/2 miles away at Interstate 44 and Main Street. A groundbreaking ceremony will be held there, "a celebration of Mercy's future and the rebuilding of Joplin," according to Mercy.

Mercy has invested nearly $1 billion to help rebuild Joplin's health care complex, according to its website. "Though the tornado took our hospital, it did not destroy our spirit," the site says. "Mercy is rising again in Joplin."

After the buildings are torn down, the land will be readied for development by Mercy. Twelve acres have been donated to the Joplin school district for a new elementary school that will replace two schools destroyed by the tornado; construction is set to begin in May.

Options for the other acreage are being considered, Mercy said. Ideas under consideration include a memorial museum, a courtyard and a memorial garden.

"The future is just so bright," Shaw said, as Joplin's new hospital will be "one of the most up-to-date facilities in the country."

Asked what the ceremonies might mean to Joplin residents, he said, "Maybe the word is 'hope.'"

"To me, you can dwell on all the debris, or you can think about what's going to rise up out of the debris," Shaw said. "I kind of have a tendency to want to concentrate on the future."

The Challenge at the Point of Care

After a natural disaster, people flee their homes. Their medical problems remain but their medical records don't.

Katrina evacuees in the Houston Astrodome, Texas

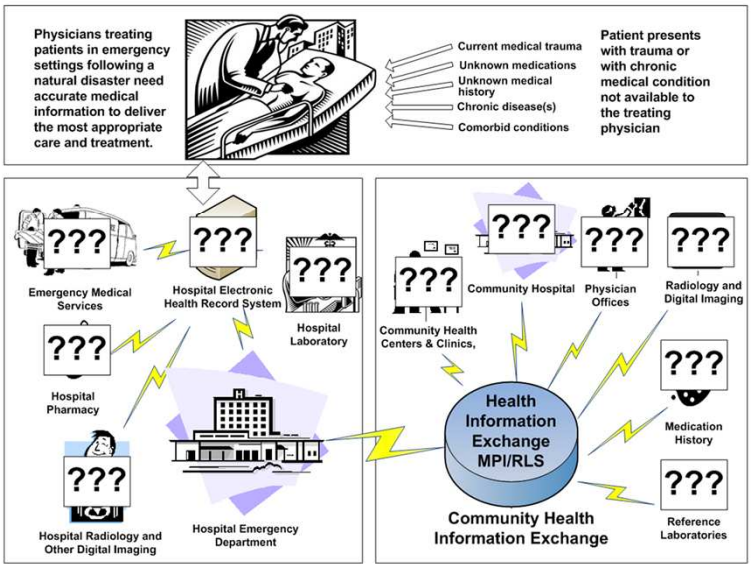
Aftermath of Hurricane Katrina

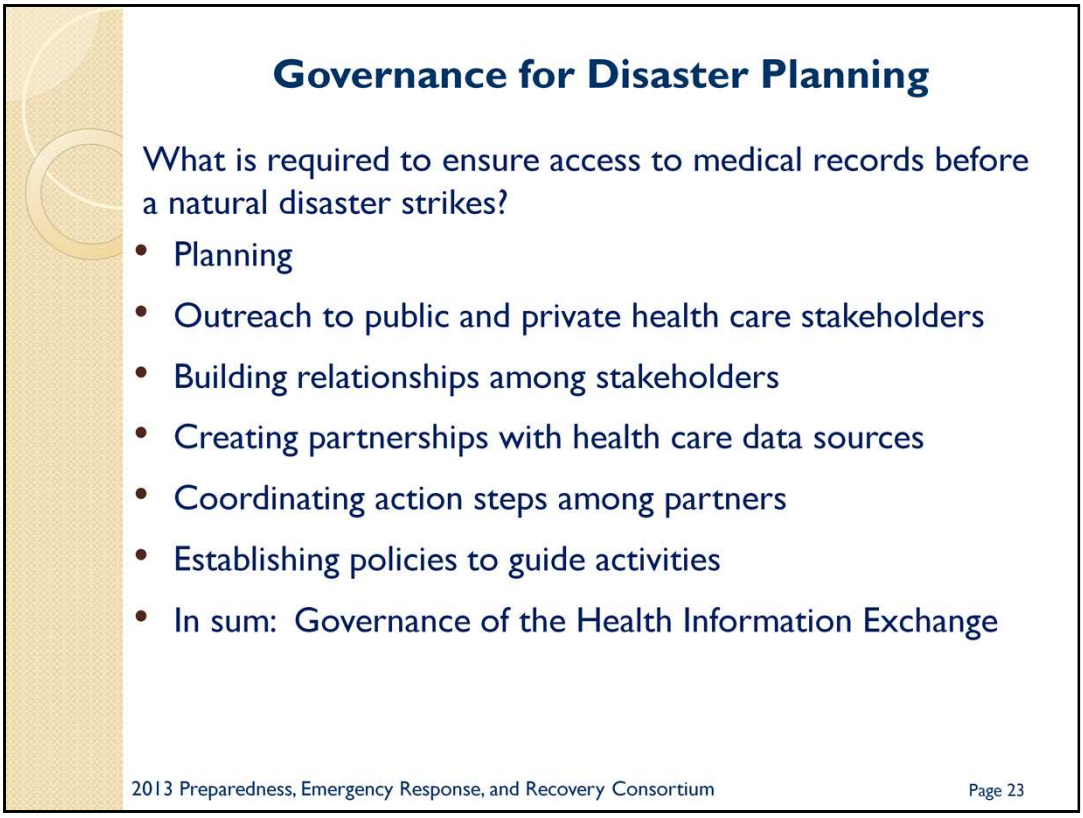
http://alisonwright.com/#/documentary-galleries/hurricane-katrina/Hurricane_Katrina-15

HIE Following a Natural Disaster

The real medical record world after a natural disaster.

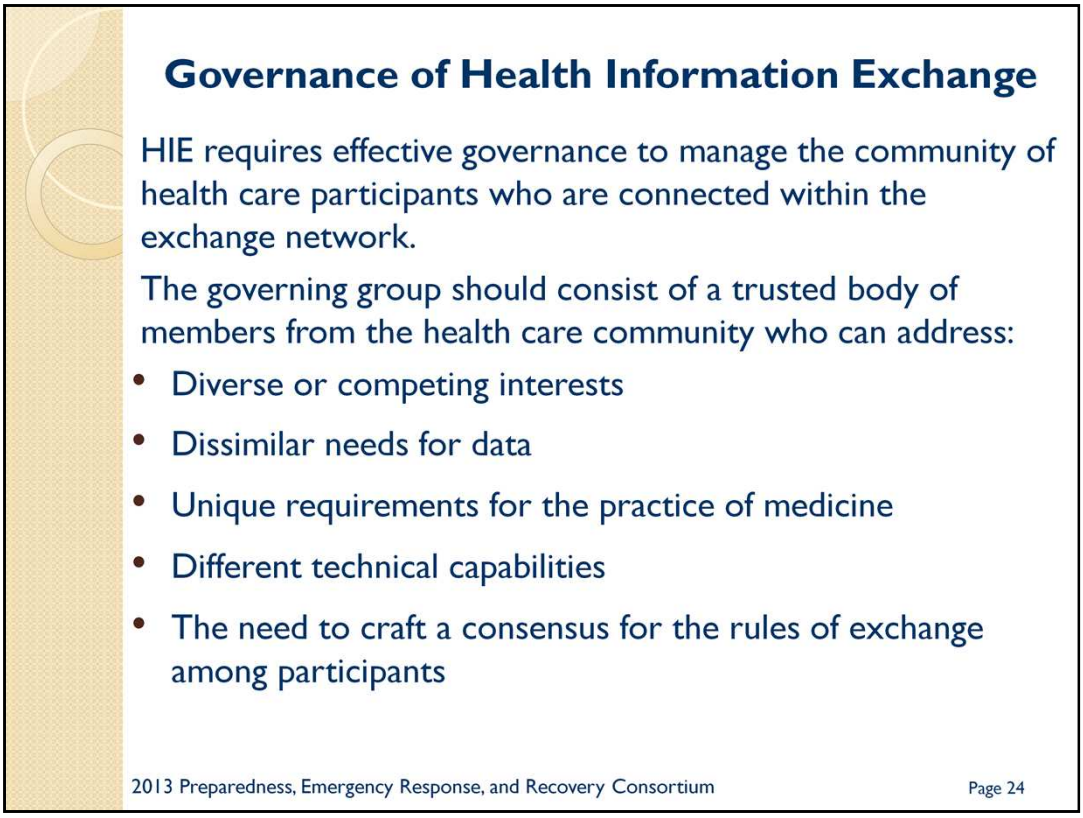
Natural Disaster Emergency Use Case





Prior to a natural disaster or emergency both public and private entities need to be contacted, relationships must be built, plans must be coordinated and agreements as to the roles and responsibilities of each organization need to be established. The organization taking the lead in pulling both public and private interests together and coordinating their respective activities should be a neutral, trusted entity that can maintain consistency of purpose through time and across organizations. The trusted entity should also take the lead in pulling together the governing body of the emergency preparedness planning, which should be made up of both publics and private stakeholders in the health care, government and emergency management areas.

Planning for disasters requires the creation of working relationships among agencies and organizations, both inside and outside State government. Relationships need to be developed among the relevant stakeholders to ensure medical records are delivered to the point of care during and following a large disaster



The development of the health information exchange brings with it the need to create an effective form of governance to manage the community of health care participants who are connected within the exchange network.

These participants may have diverse or competing interests, dissimilar needs for data, unique requirements for the practice of medicine and different technical capabilities.

To make this all work at a community level, a governance group needs to be created, preferably a trusted body of members from the health care community who can address competing interests and craft a consensus for the rules of exchange among participants in the health information exchange. The consensus-building and leadership values that a trusted, neutral group of people can bring to the governance of health information exchange are essential for its success.

eHealth Initiative's HIE Toolkit presents the basic value proposition that "Governance is the foundation of a health information exchange initiative (HIE). It is the first step, and the most important, in the process of forming and implementing an HIE" (eHealth Initiative, 2011a).

eHealth Initiative. 2011a. Report On Health Information Exchange: The Changing Landscape. Based on Results from eHealth Initiative's Eighth Annual Survey of Health Information Exchange.

eHealth Initiative. 2011b. Setting Up a Governance Structure. http://www.ehealthinitiative.org/setting-up-a-governance-structure.html.

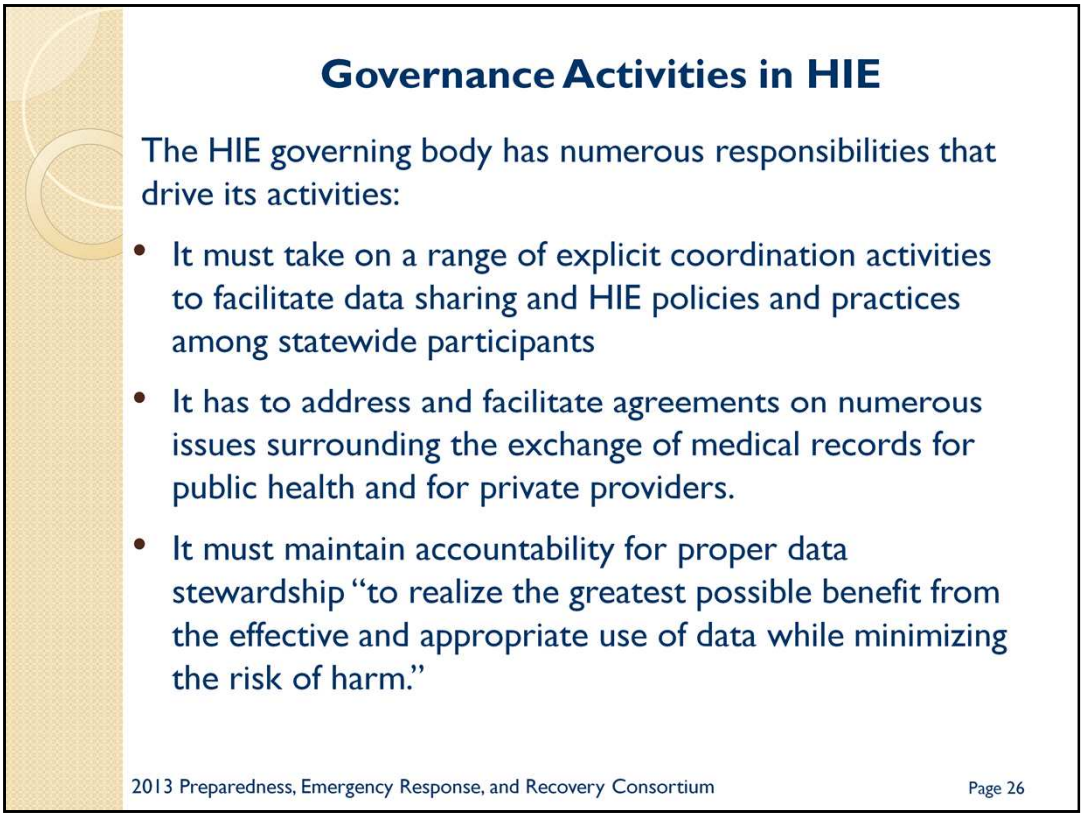
The HIE governance organization plays a unique and valuable role as the mediator between state interests and the private health care sector. It "serves as a neutral and skilled resource for convening diverse statewide stakeholders and leading and coordinating consensus-based efforts to develop and implement a statewide road map for interoperability" (Dierker, 2008). To succeed in this role, the HIE governing organization has to address and facilitate agreement on numerous issues surrounding the exchange of medical records both for public health and for private providers. It has to represent the interests of both the state government and private enterprise. Finally, the HIE governing organization has to become the vehicle by which competing public and private interests are coordinated and combined.

The State Level HIE Consensus Project, sponsored by the Foundation of Research and Education of the American Health Information Management Association (AHIMA), proposed that the governance role "consists of neutral convening and a range of explicit coordination activities that facilitate data sharing and HIE policies and practices among statewide participants (State Level Health Information Exchange Consensus Project, 2008). This simple sentence is fraught with implications about what it means to be neutral and which body has the authority to convene stakeholders, let alone undertake coordinating the level of activity that will result in policy creation and health information exchange.

State Level Health Information Exchange Consensus Project. 2008. State Level Health Information Exchange: Roles in Ensuring Governance and Advancing Interoperability, Final Report, Part I. March 10, 2008. Foundation of Research and Education of the

American Health Information Management Association. 2008. http://library.ahima.org/xpedio/groups/public/documents/ahima/bok1_040348.pdf.

Dierker, Lynn 2008. State-level Efforts in Health Information Exchange. Working Paper, American Health Information Management Association. http://library.ahima.org/xpedio/groups/public/documents/ahima/bok1_038086.hcsp?dDocName=bok1_038086.



The National Committee on Vital and Health Statistics (NCVHS) argued that maintaining accountability for proper data stewardship was an important value of governance of HIE (National Committee on Vital and Health Statistics, 2010). Health data stewardship refers to an organization's ability to guarantee that personal health information is used appropriately. "The purpose of stewardship is to realize the greatest possible benefit from the effective and appropriate use of data while minimizing the risk of harm" (Kanaan, et. al., 2009, p.2). Responsible data stewardship strengthens trust that an organization will be held accountable for the proper use of an individual's health information.

National Committee on Vital and Health Statistics. 2010. Toward Enhanced Information Capacities for Health - An NCVHS Concept Paper. NCVHS, June 2010. p. 9. http://www.ncvhs.hhs.gov/100526concept.pdf.

Kanaan, Susan Baird and Justine M. Carr. 2009. Health Data Stewardship: What, Why, Who, How - An NCVHS Primer. U.S. Department of Health and Human Services, NCVHS. September 2009. p. 2. http://www.ncvhs.hhs.gov/090930lt.pdf.

The agencies currently responsible for health care disaster planning and response in all SERCH States are also responsible for Emergency Support Function #8 (ESF #8), Public Health and Medical Services, as defined by the National Response Framework. These agencies are given statutory authority within the State for disaster planning and response and should logically lead any disaster planning for HIE, in close coordination with the State HIE and other agencies or organizations that lead disaster planning, response, and recovery.

The designated ESF #8 lead agency may vary by State, but typically the State public health agency or a specialized division within the agency serves in this role. For example, in Florida the ESF #8 agency is the Florida Department of Health, which coordinates support from the Agency for Health Care Administration, the American Red Cross, Agriculture and Consumer Services, Business and Professional Regulation, Elder Affairs, Environmental Protection, Military Affairs, and the Florida Funeral Directors Association, while the State HIE itself is run directly by the Agency for Health Care Administration.

Once the ESF #8 lead agency and partner resources are exhausted and the State needs additional assistance, the Governor's office will typically initiate a disaster declaration. At this time ESF #8 assets are released at the Federal level and additional support is provided to the State. Together the State, with Federal support, will work within the National Response Framework, which enables a single, all-discipline, all-hazards framework for Federal and State response to disasters. The National Response Framework links all levels of government, private sector, and nongovernmental

organizations to coordinate a unified emergency response following a disaster. The framework is built on five principles, which cover the levels of coordination and action needed following a disaster (see Figure 5-1):

- Engaged partnerships;
- Tiered response;
- Scalable, flexible, and adaptable operational capabilities;
- Unity of effort through unified command; and
- Readiness to act.

U.S. Department of Homeland Security. (2008, January). *National Response Framework*. Available at http://www.fema.gov/pdf/emergency/nrf/nrf-core.pdf.

The Markle Foundation proposes three main value components of governance for health information sharing: 1) clear goals and objectives; 2) processes for the development, coordination, oversight and enforcement of policies, standards and services; 3) a clear set of policies, standards and services. The HIE governing body must ensure participation, representation, accountability, transparency and effectiveness at each stage of HIE development to enable the secure and trusted exchange of health care information (Markle, 2012). The state-designated entities or the HIE governing organizations must be able to engage their communities of interest, coordinate policies and standards, engage in business development and hold participants accountable for their use of health data.

Markle Foundation. 2012. Connecting for Health Common Framework for Private and Secure Health Information. Exchange Policies in Practice. Governance of Health Information Sharing Efforts: Achieving Trust and Interoperability with Meaningful Consumer Participation. http://www.markle.org/sites/default/files/Governance%20softlaunch.pdf.

ESF #8 – PUBLIC HEALTH AND MEDICAL SERVICES January 2008 *National Response Framework: Overview* Page 27 PURPOSE

Emergency Support Function (ESF) #8 – Public Health and Medical Services provides the mechanism for coordinated Federal assistance to supplement State, tribal, and local resources in response to a public health and medical disaster, potential or actual incidents requiring a coordinated Federal response, and/or during a developing potential health and medical emergency. Public Health and Medical Services include responding to medical needs associated with mental health, behavioral health, and substance abuse considerations of incident victims and response workers. Services also cover the medical needs of members of the "at risk" or "special needs" population described in the Pandemic and All-Hazards Preparedness Act and in the *National Response Framework (NRF)* Glossary, respectively. It includes a population whose members may have medical and other functional needs before, during, and after an incident.

CAPABILITIES

Public Health and Medical Services includes behavioral health needs consisting of both mental health and substance abuse considerations for incident victims and response workers and, as appropriate, medical needs groups defined in the core document as individuals in need of additional medical response assistance, and veterinary and/or animal health issues.

ESF #8 provides supplemental assistance to State, tribal, and local governments in the following core functional areas:

Assessment of public health/medical needs

Health surveillance

Medical care personnel

Health/medical/veterinary equipment and supplies

Patient evacuation

Patient care

Safety and security of drugs, biologics, and medical devices

Blood and blood products

Food safety and security

Agriculture safety and security

All-hazard public health and medical consultation, technical assistance, and support

Behavioral health care

Public health and medical information

Vector control

Potable water/wastewater and solid waste disposal

Mass fatality management, victim identification, and decontaminating remains

Veterinary medical support

ESF #8 – PUBLIC HEALTH AND MEDICAL SERVICES Page 28 *National Response Framework: Overview* January 2008

MEMBERS

ESF Coordinator: Department of Health and Human Services (HHS)

Primary Agency: Department of Health and Human Services (HHS)

Support Agencies:

Department of Agriculture

Department of Defense

Department of Energy

Department of Homeland Security

Department of the Interior

Department of Justice

Department of Labor

Department of State

Department of Transportation

Department of Veterans Affairs

Environmental Protection Agency

General Services Administration

U.S. Agency for International Development

U.S. Postal Service

American Red Cross

CONCEPT OF OPERATIONS OVERVIEW

The Secretary of HHS leads the ESF #8 response. ESF #8, when activated, is coordinated by the Assistant Secretary for Preparedness and Response (ASPR). Once activated, ESF #8 functions are coordinated by the Emergency Management Group (EMG) through the Secretary's Operations Center. During the initial activation, HHS coordinates audio and video conference calls with the ESF #8 supporting departments and agencies, and public health and medical representatives from State, tribal, and local officials, to discuss the situation and determine the appropriate initial response actions.

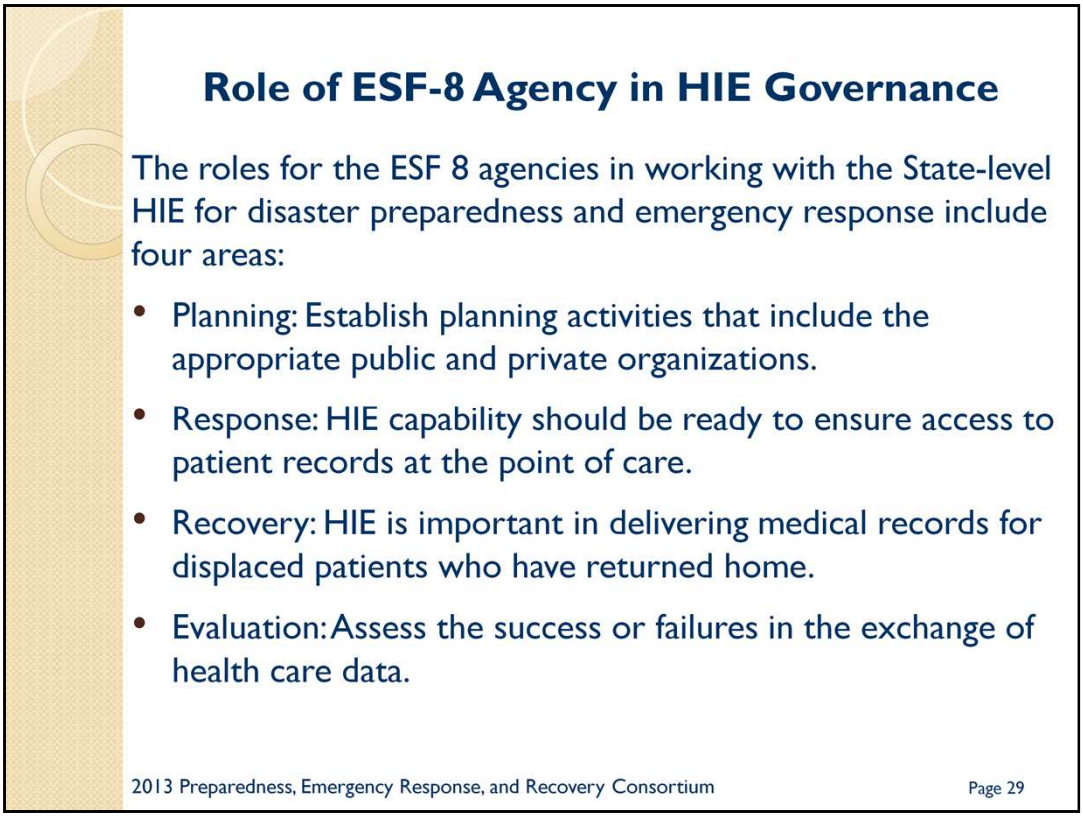
HHS alerts and requests supporting organizations to provide a representative to the EMG to provide liaison support.

HHS may designate a Senior Health Official to serve as the senior Federal health official in the Joint Field Office (JFO).

Regional ESF #8 staff are ready to rapidly deploy, as the Incident Response Coordination Team – Advance (IRCT-A), to provide initial ESF #8 support to the affected location. As the situation matures, the IRCT-A will receive augmentation from HHS and partner agencies transitioning into a full IRCT capable of providing the full range of ESF #8 support to include medical command and control.

The regional ESF #8 staff includes representatives to staff the Regional Response Coordination Center and/or JFO, as required, on a 24-hour basis for the duration of the incident

To see the complete annex, as well as other pertinent information, refer to the NRF Resource Center at www.fema.gov/NRF.



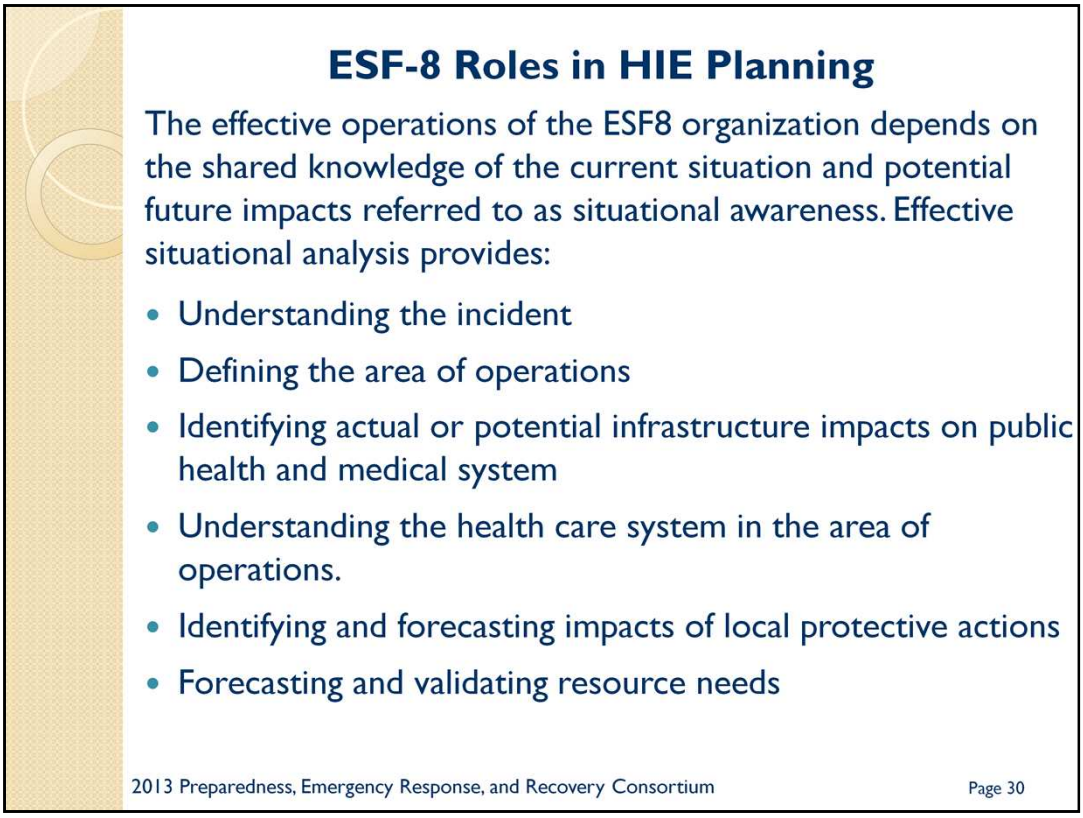
Effective preparedness is a critical precondition for successful response. As described above, the ESF #8 agencies must bring government and private sector capabilities together into an organizational structure that provides support, resources, and services. Their primary operational responsibility is to assist Federal, State, and local governments by enabling first responders from different jurisdictions and disciplines to work together. For HIE, similar relationships must be forged so the capabilities can be properly and quickly leveraged during a disaster. Public and private entities must be contacted, relationships built, plans coordinated, and agreements about roles and responsibilities of each organization established. We propose that in each State, a single organization must be designated to pull together both public and private interests and coordinate their activities related to HIE and to leverage its capabilities. This entity will take the lead as a governing body to integrate HIE into emergency preparedness planning, and align public and private stakeholders in government, health care, and emergency management. Additionally, the lead organization should be responsible for communicating regionally with other States likely to provide relief or mutual aid in a major disaster.

The State HIE and the ESF #8 agencies in each State seem to have a natural alliance. The ESF #8 agencies are responsible for the following health care activities, to which HIE is a logical addition:

- Assessing public health and medical needs following a disaster;
- Public health surveillance and coordinating with State health agencies;
- Coordinating medical care personnel, medical equipment, and supplies;
- Patient evacuation; and

▪ Ensuring the safety and security of drugs, biologics, medical devices, blood supply, and food.

By bringing together the State HIE and the ESF #8 agencies in each State, disaster planning can leverage the capability of both State and local HIEs in disaster response, in the State, and across State borders. After a disaster, HIE services can be used to identify people fleeing from the disaster—using a Master Patient Index (MPI)—and validate them as patients. HIE services can also locate physicians using a provider directory and ensure that health care data are moving appropriately and securely. These operational functions align with the responsibilities of the ESF #8 agencies and the Emergency Assistance Compacts of each State. The lead organization responsible for integrating HIE could be an existing entity, such as the ESF #8 agency or the State HIE, or a new body created to achieve the objectives and functions outlined below to coordinate and integrate HIE services into disaster planning and response activities.



EMERGENCY SUPPORT FUNCTION 8 PUBLIC HEALTH AND MEDICAL STANDARD OPERATING PROCEDURE

Florida Department of Health, Bureau of Preparedness and Response

Version 2.0

May 9, 2011

APPROVED VERSION

A. Situational Awareness

The Situation Unit is the focal point for information collection, analysis, and dissemination. The effective operations of the ESF8 organization depends on the shared knowledge of the current situation and potential future impacts referred to as situational awareness. Situational awareness is the compilation and analysis of information on the impact or potential impact of a specific hazard, the vulnerabilities within the area of impact, the availability of resources within the area of impact and surrounding areas of support, the description of actions taken to date, and prediction of future needs.

The Situation Unit harvests information from the entire organization, validates the

accuracy of the information, and widely shares the compilation of this information in a way that supports incident decision making. (See Attachment S Situation Unit Standard Operating Guidelines).

Understanding the incident.

o Define the specific elements and sets a framework for the type, scope, severity, and duration of the impacts that are likely to occur.

o Provide for the identification of specific health and medical infrastructure systems and facilities that may be evacuated, severely damaged, or otherwise incapacitated by the incident.

Healthcare System Contingency Planning

Impact of Event or Scenario

People

Population at-risk for poor
health outcome by
demographic variables and/or
health condition

Situational Awareness

Systems

Healthcare System
Infrastructure Systems
Transportation System
Communications System

Service Providers

Providers of healthcare and
support services

ESF8 Standard Operating Procedure V 2 .0, May 2011 Page 20 of 42

o Identify of the continuum of care issues that could affect the defined vulnerable populations.

o Provide a historical footprint as a model to provide a historical record of the public health
and medical impact.

o Identify demographic of impacted populations and any aberrations.

 Defining the area of operations.

o Describe the specific land areas impacted by the incident.

o Allow forecasting of potential impact of injuries, treatment, and system demands that may result from the incident.

o Provide a view of the entire healthcare system capacity in the area of operations, including specific medical facilities that have been or may be affected.

o Portray the infrastructure support capacity, equipment and supply capabilities, road and transport availability, and potential contingency resources.

o Identify unique environmental conditions (i.e. flood plain).

Identifying actual or potential infrastructure impacts on public health and medical system.

o Identifies the key infrastructure and support infrastructure to understand where potential problems may occur for the public health and medical system.

Understanding the health care system in the area of operations.

o Describe the healthcare systems infrastructure and its current and projected need to meet the healthcare demands of the incident.

o Provide a detailed look at the current census, status, and patient demographic of the healthcare system capacity within the project area of operations.

o Yield specific details on the healthcare system continuum of care capacity that may have evacuated and/or otherwise not available.

o Identify locations where augmented or alternate care systems could be established.

Identifying and forecasting impacts of local protective actions.

o Identify what type and where protective actions are occurring.

o Identify numbers and locations where populations are sheltered and any vulnerabilities contained within the sheltered group.

Forecasting and validating resource needs.

o Projects what type of resources and facilities are necessary to complete carry-out operational objectives.

ESF8 Standard Operating Procedure V 2 .0, May 2011 Page 21 of 42

o Identifies potential shortfalls in resources.

o Identifies potential recovery actions.

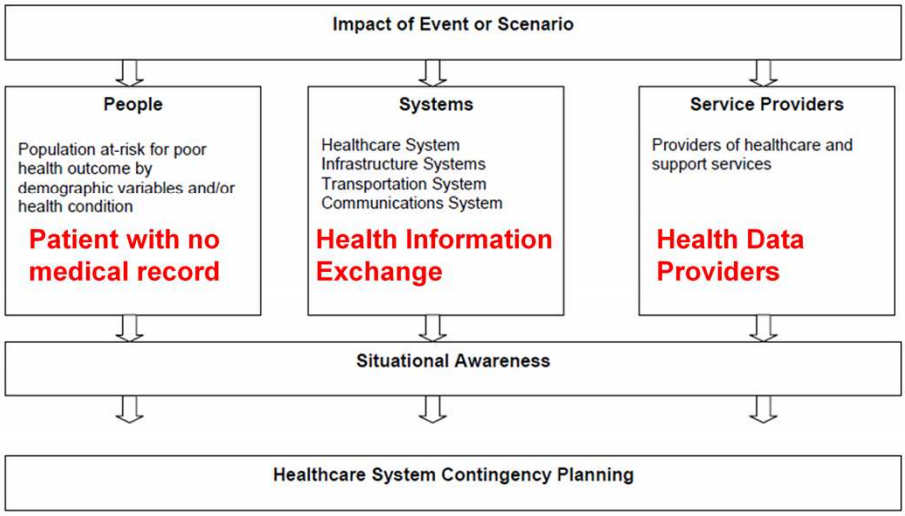
To assist with information gathering, the Situation Unit identified basic essential elements of information and sources for the information for specific incidents. Seven event categories have been established:

Storms (Hurricanes and Tropical), Tornado and Severe Weather, Wildfires, Mass Trauma/Terrorism, Biological Outbreaks/Bioterrorism, Chemical Releases/Chemical Terrorism, and Radiological Releases/Radiological Dispersal Devices. See Attachment F: ESF8 Essential Elements of

Information.

Governance Issues in HIE Planning

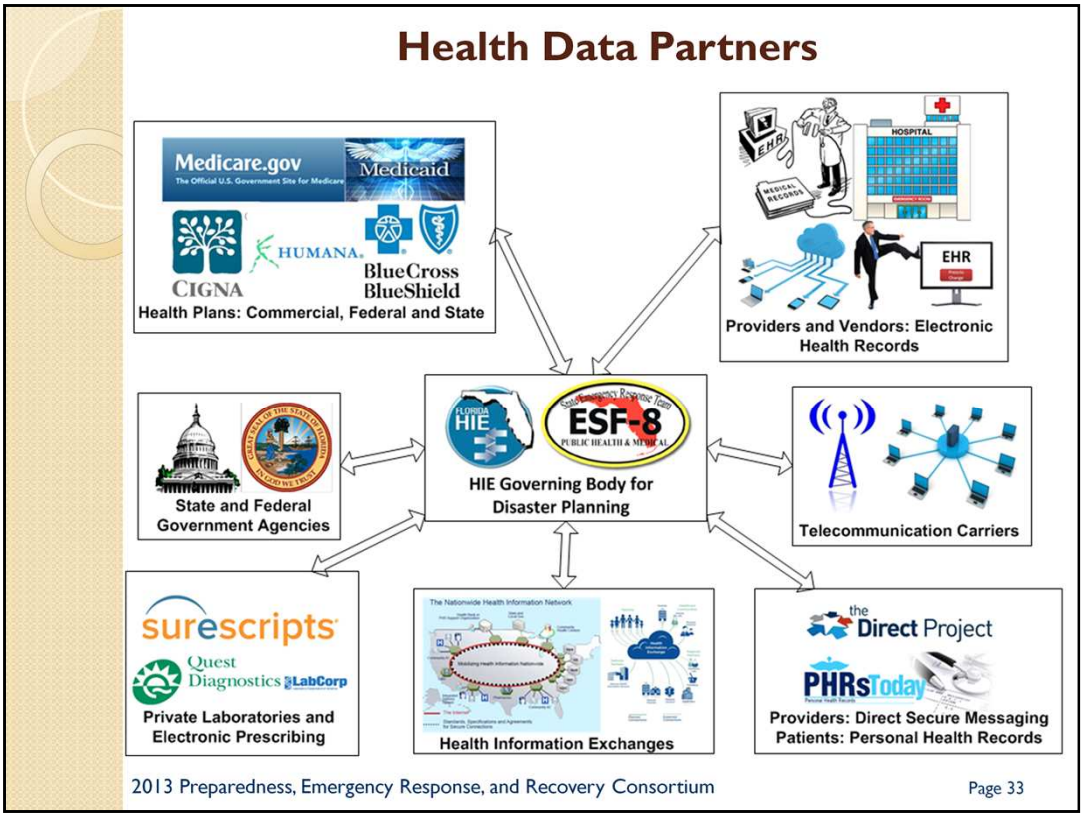
In this model ESF-8 Situational Awareness, introducing HIE is straightforward and logical:



A significant feature of the American Recovery and Reinvestment Act created state-designated entities that would become the recipients of federal funding for health information exchange and would act as the de facto governing boards of the new state-level infrastructure. With the passage of this Act, all 50 states and seven territories of the United States were pulled into facing the realities of constructing a health information exchange infrastructure and dealing with the issues of the governing health information exchanges. Placing governance responsibilities on the state-designated entities made them responsible for convening stakeholders statewide, crafting consensus among them and developing statewide policies for data-sharing. Their challenge was to implement the lessons learned from a decade of health information exchange governance attempts at the local level.

One of the key actions of ARRA for building this nationwide network was to require each state government to establish a "state-designated entity." These organizations would be responsible for managing the funding for state-level HIE provided in the Act and for engaging resources within the state to actually construct the HIE infrastructure. With this action, the federal government passed the role of HIE governance to the states. Following ARRA, ONC launched the HIE Cooperative Agreement program for state-level HIEs and governance of HIEs by the state-designated entities became an important state issue. Governance of local HIEs is manageable, since many of the health care stakeholders are familiar with each other; at the state level governance takes on greater complexity in part because the diversity of stakeholders can increase substantially, especially in large states, and the effort to foster collaboration and data-sharing increases exponentially.

Office of the National Coordinator for Health Information Technology. 2009. American Recovery and Reinvestment Act of 2009, Title XIII - Health Information Technology, Subtitle B—Incentives for the Use of Health Information Technology, Section 3013, State Grants to Promote Health Information Technology. http://healthit.hhs.gov/portal/server.pt?open=512&objID=1336&mode=2&cached=true.



The HIE governing organization thus plays a critical role in maintaining rules of stewardship while developing the data sharing agreements that contractually bind participants in the exchange of health information and set the foundation for health care stakeholders to work together. It is also responsible for holding participants accountable to the rules and to their roles in the data exchange. (State Level HIE Consensus Project, 2008). How the HIE governance organization is created, who is brought to the table and how it functions to create consensus around sharing clinical records is critical to the development of a state level HIE (Alfreds, 2008).

Conclusions and Recommendations

Planning for natural disasters is critical, and the technological infrastructure in health care is now capable of ensuring that disaster victims can be given appropriate care because medical personnel have the information then need at the point of care. This requires:

- ESF-8 Agencies and State-Designated Entities join forces to create a state-level governing board to oversee HIE for disaster-preparedness.
- The joint governing board reaches out to all health care stakeholders in the state and beyond to participate in post disaster data sharing.
- The joint governing board establishes data sharing agreements that enable technical solutions to work.

Legal Issues in HIE Planning

This section of the presentation will address:

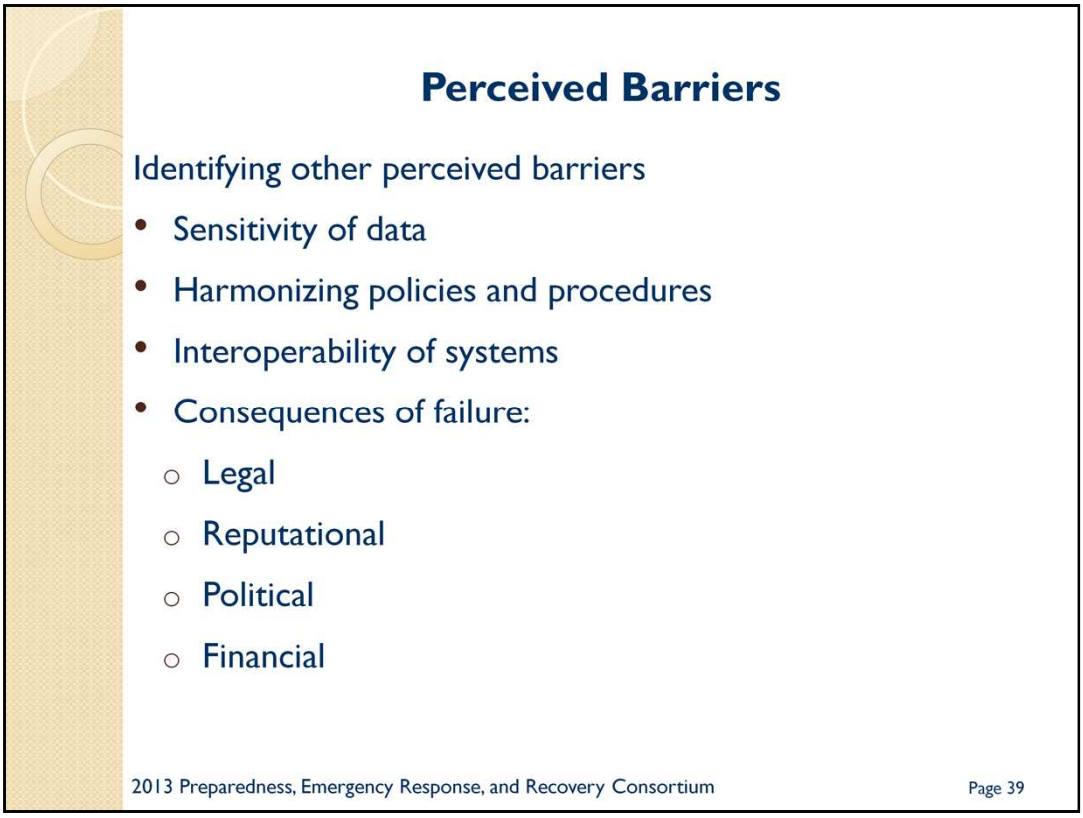
- Types of privacy provisions incorporated into the data use agreements between health information exchange service vendors (personal health records, electronic health records, claims and other data sources) will provide the protections necessary for safe transmissions.
- How the regulatory requirements of HIPAA and business associate contractual provisions will apply to protect the transmission of ePHI.
- How to protect against data disclosures using business associate agreements (BAAs) for secure health information exchange.

We often perceive the legal issues as insurmountable or at least prickly and uncomfortable barriers. What is your perception of how we overcome such perceived barriers?

The Obligatory Cat Slide

Do we just snarl at the problem, the lawyers and the reams of seemingly contradictory or at least confusing state and federal laws and rules? Regulations are widely derided as an impediment to progress, growth, communication, economic development and the ability to respond to problems?

In terms of Health Information Exchange, this has been acknowledged. Since HIE is a relatively new concept, there is a bit of trepidation and fear. Yet, HIE is a key component of our evolving patient-centered health care system. We want people to start communicating, especially in disaster. Last year, ONC issued a request for information that included suggestions on a governance structure for the NwHIN Exchange. After being rebuffed by industry stakeholders, ONC backed off and decided that rather than creating a new governance structure, it would allow the industry to continue working out its own approaches to HIE governance. Bleeds into Christophers, he'll elaborate.



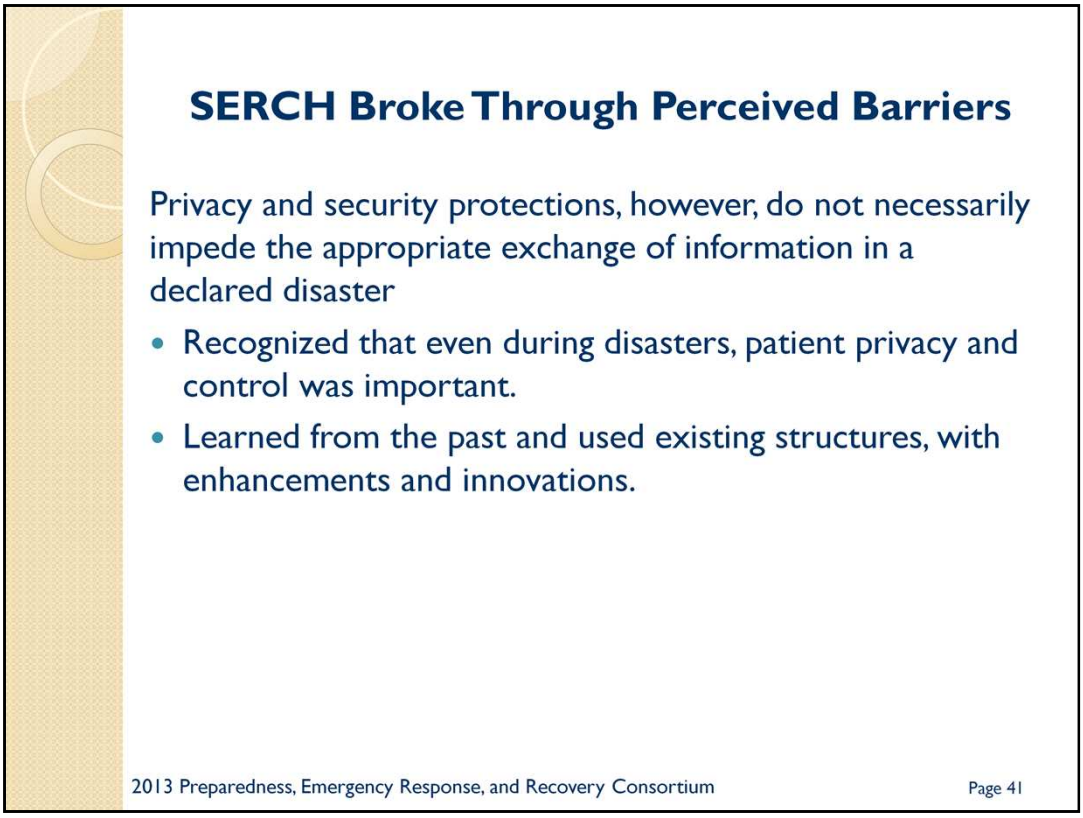
Funneling sensitive data through an HIE can be complicated from a policy and legal standpoint. It's difficult to come up with umbrella policies for communicating data from areas such as substance abuse treatment or pulling HIV consent from a statewide master patient index and record locator service.

Privacy and security of protected health information (PHI) are covered by Federal and State laws and each must be considered in disaster-related

exchange of PHI. Variations in State approaches to authorization, permitted uses of health data, and consent to disclose information may also impact access to records.

"Trust Issues"

Build trust among participants and process.

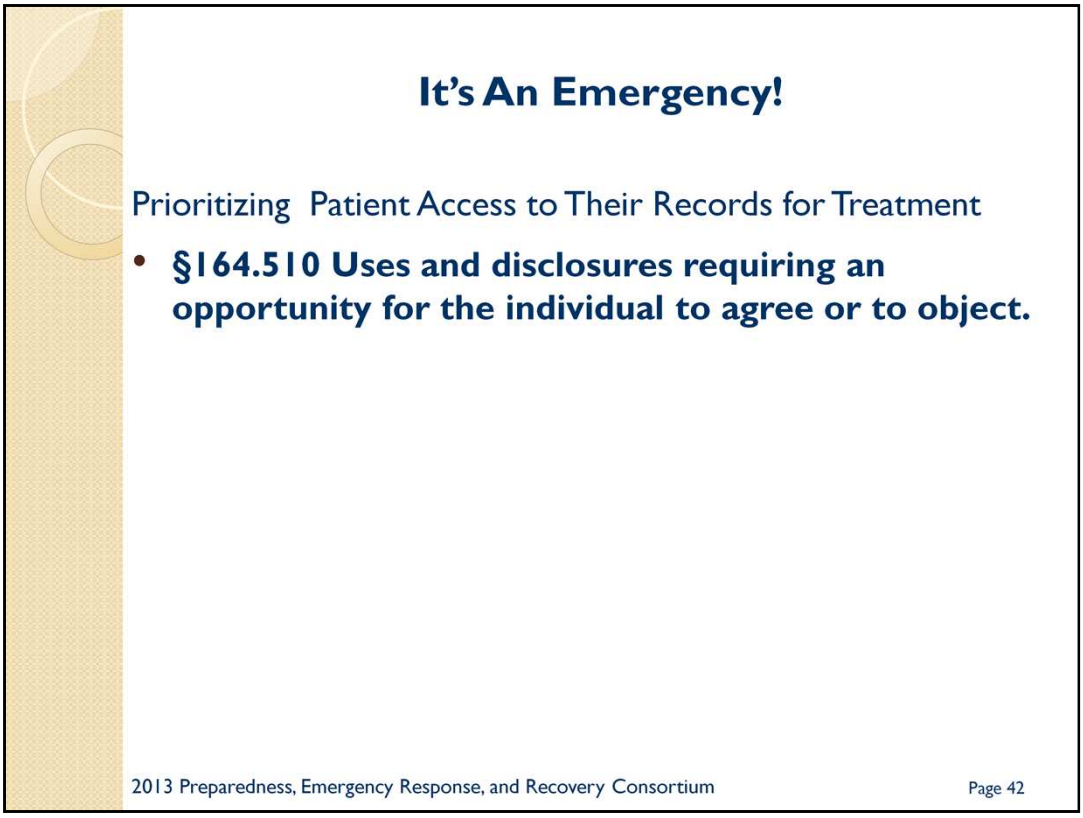


Report proposed a memorandum of understanding (MOU) that offers a limitation of liability for wrongful release

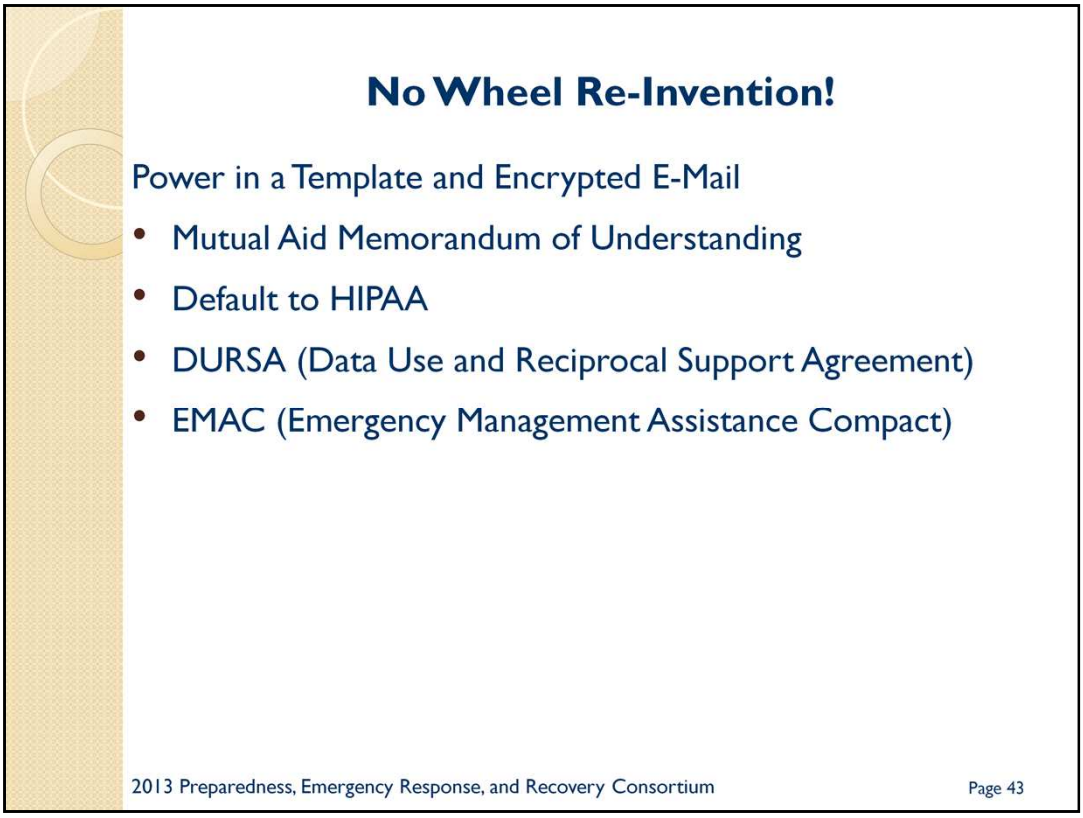
of records in a disaster. The privacy and security of health record data is one of the major legal issues in health

information exchange. The recent HITECH amendments to the HIPAA regulations and penalties aimed at enhancing protection of the privacy and security of patients' health information has increased health care providers' and patients' sensitivity to this issue. Even during a disaster, when health information is exchanged, the privacy and security of that information must be maintained. Privacy includes a patient's rights to control who has

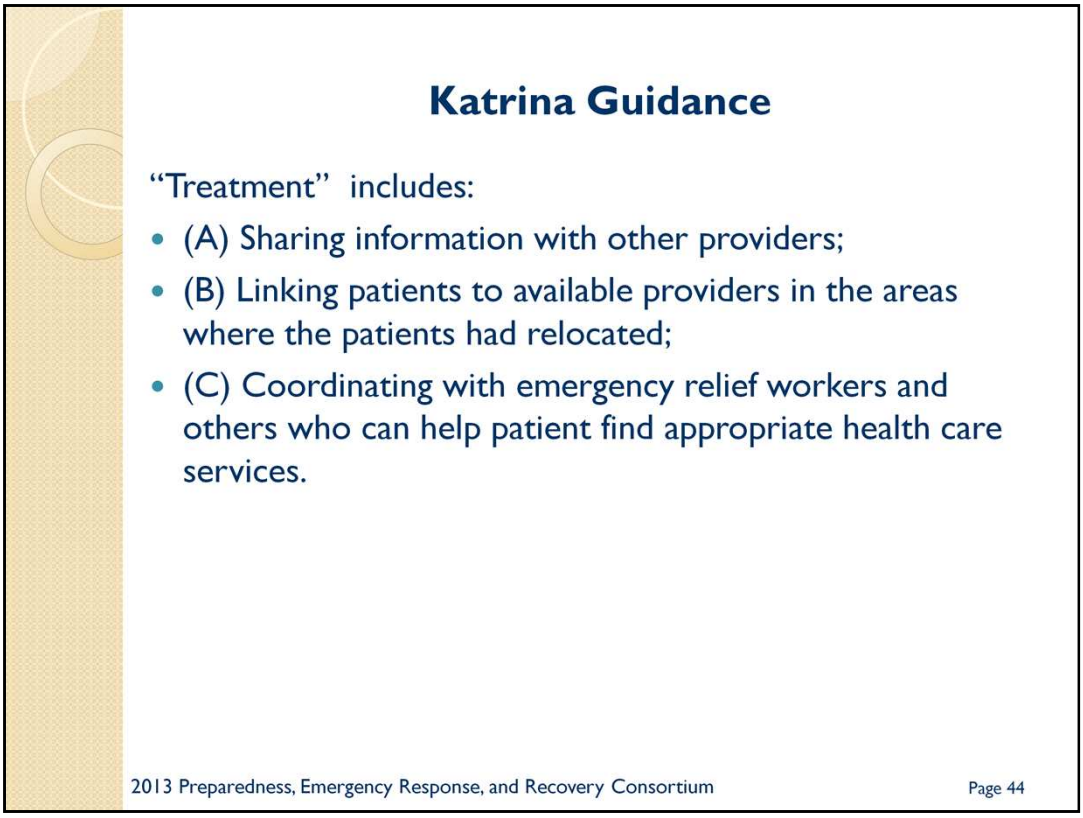
access to his or her health information and the purposes for which that access is obtained



Within HIPAA, it states that a covered entity may use or disclose protected health information to a public or private entity authorized by law or by its charter to assist in disaster relief efforts, for the purpose of coordinating with other entities. such entities the uses or disclosures permitted by exercise of professional judgment, determines that the requirements do not interfere with the ability to respond to the emergency circumstances. **§164.510 Uses and disclosures requiring an opportunity for the individual to agree or to object.**

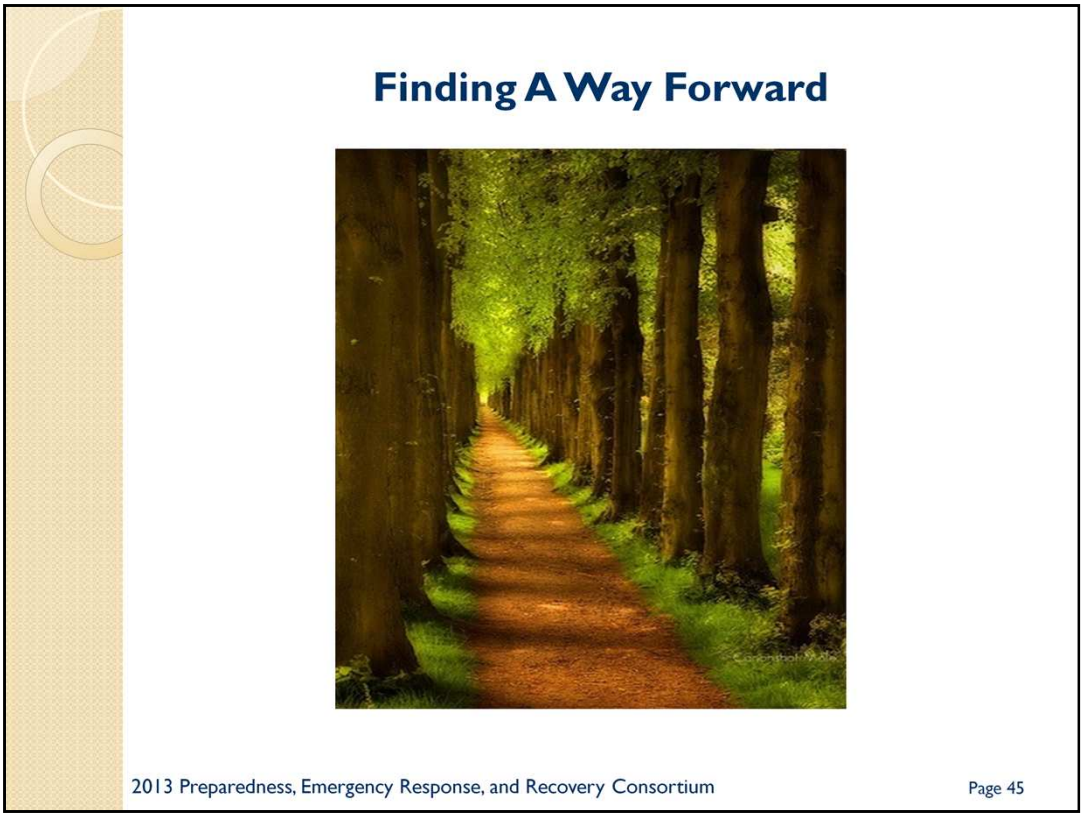


Mutual Aid Memorandum of Understanding to establish waiver of liability for release of records when emergency declared & default state privacy & security laws to existing Health Insurance Portability and Accountability Act. States consider using Data Use and Reciprocal Support Agreement to address &/or expedite patient privacy, security, & health data-sharing concerns. DURSA builds on various legal requirements that Participants are already subject to and describes the mutual responsibilities, obligations/expectations of all Participants under the Agreement. All of these responsibilities, obligations and expectations created a framework for safe,secure HIE, & are designed to promote trust among Participants & protect the privacy, confidentiality & security of shared data. Historically, States have maximized resources during disasters thru EMAC a mutual aid agreement between States to share resources during disasters, including terrorism.



Post Katrina, HHS released guidance clarifying that treatment includes: (a) sharing information with other providers; (b) linking patients to available providers in the areas where the patients had relocated; and (c) coordinating patient care with emergency relief

workers and others who can help patients find appropriate health care services.



Taken together, these recommendations offer a path forward for other States that wish to

integrate disaster planning and HIE efforts. Combining these two important health care functions will help ensure that when a disaster strikes, patients and providers will have better access to information and be better able to provide appropriate care.

Questions?

Walt Culbertson
Health Transactions
WaltCulbertson@HealthTransactions.com

Julie Meadows-Keefe, Esq
Grossman, Furlow & Bayo, LLC
juliemkeefe@gmail.com

Christopher B. Sullivan, PhD
Image Research, LLC
cbsullivan@imageresearch.com

Copies of this presentation and related documents can be found at: www.imageresearch.com/PERRC2013