

The Office of the National Coordinator for
Health Information Technology



Using a Disaster Event as a Use Case for Health Information Exchange

APHA Presentation

November 3, 2015



Putting the **I** in Health **IT** 
www.HealthIT.gov

Disclosure

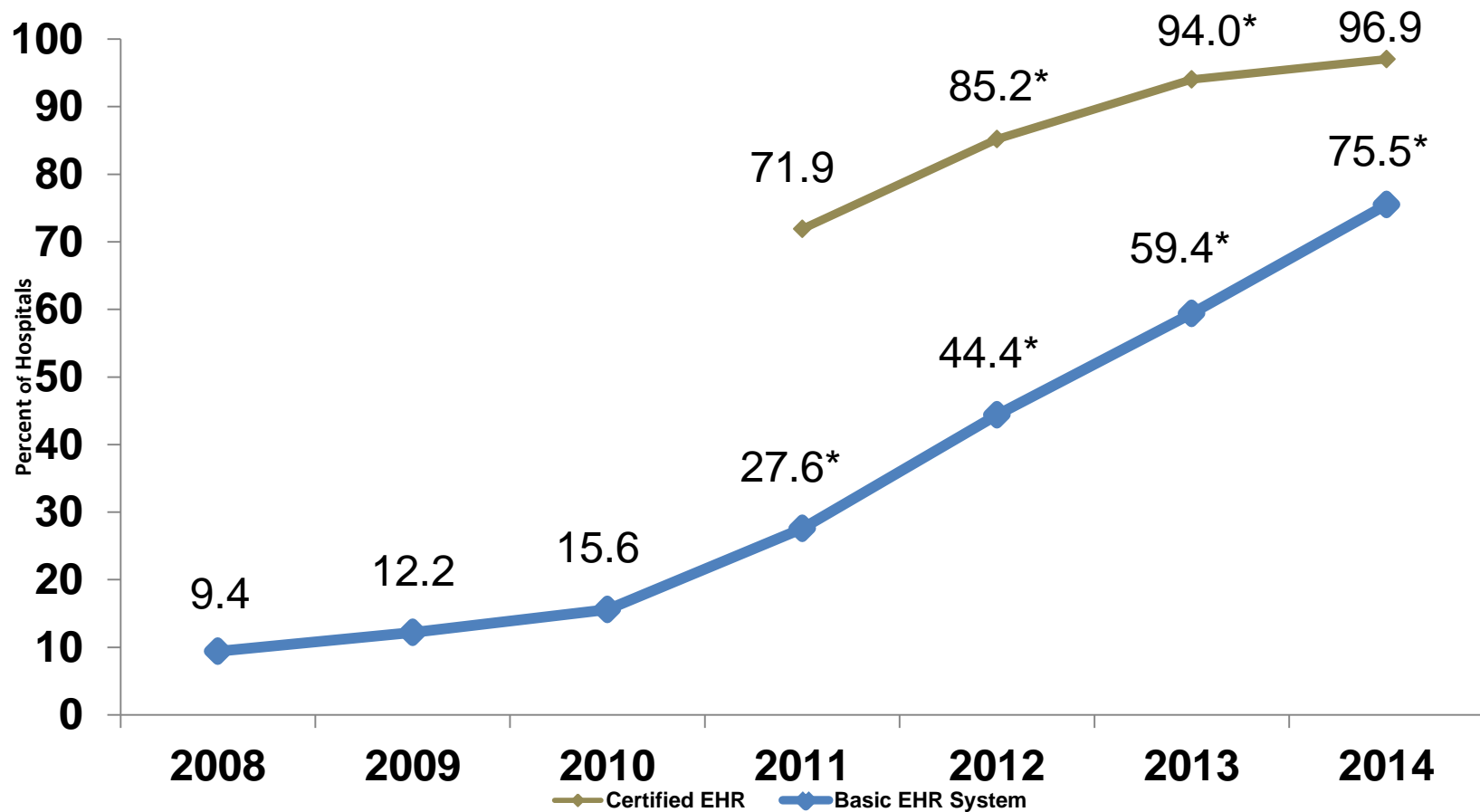
- The views expressed in this presentation are the presenters and do not necessarily reflect the position or policy of the US Department of Health and Human Services
- No Relationships to Disclose

Agenda

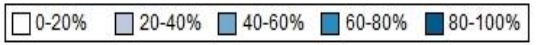
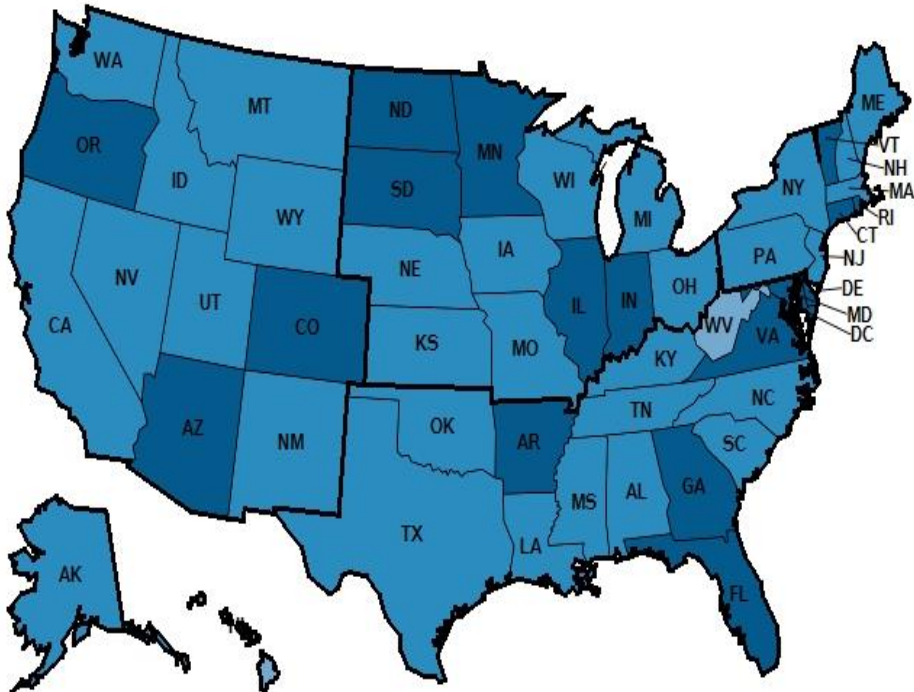
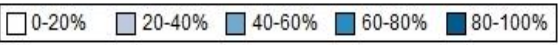
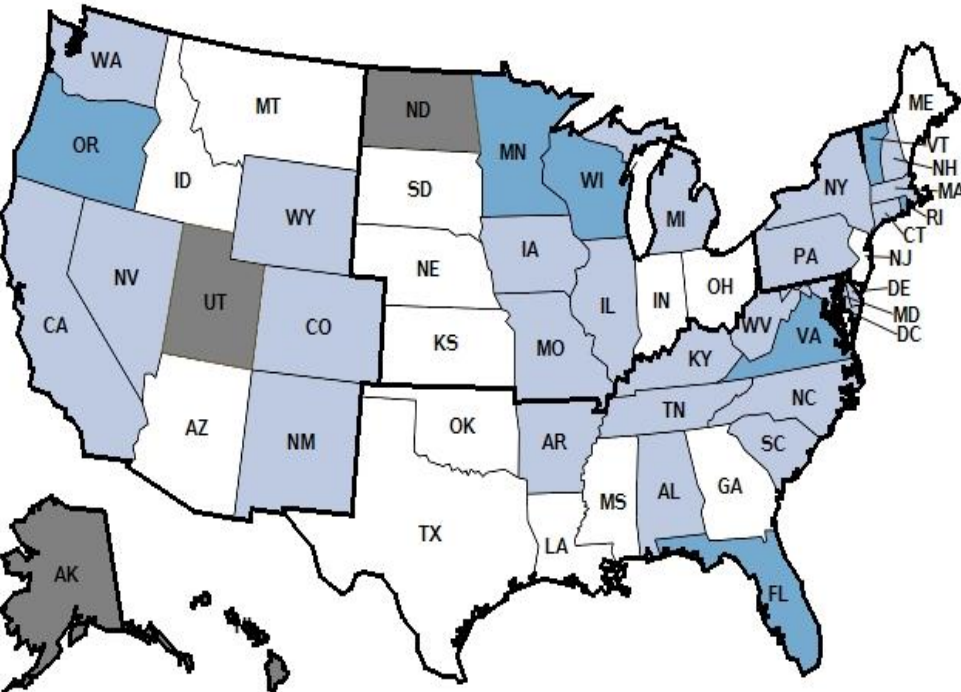
- HIE Overall Landscape
- Emergency Medical Services
- Connecting EMS and HIE

- Foster exchange networks
 - Build capacity of local and affinity models
 - Reduce cost and complexity, including through shared services
 - Policies that encourage exchange
- Ensure exchange across networks + EMS
 - Every provider has at least one option for exchange
 - Governance and trust
 - Common standards to connect the nodes
 - Expand connectivity for EMS providers to connect to hospital electronic health records systems, local and regional health information exchange networks.

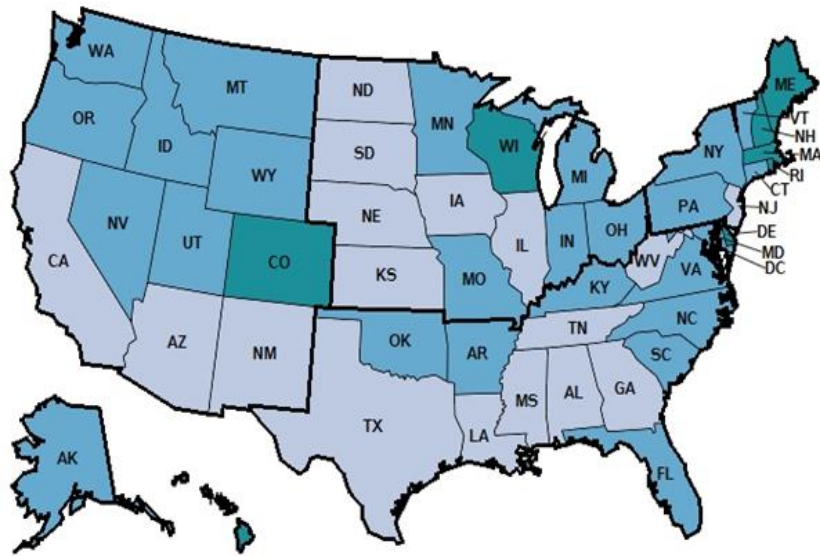
EHR Adoption 2008 - 2014



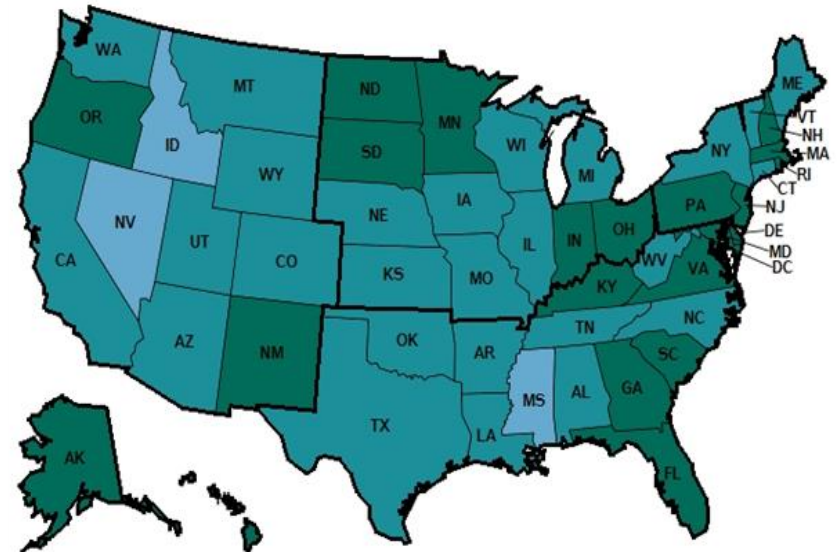
State Adoption Rates 2011 - 2014



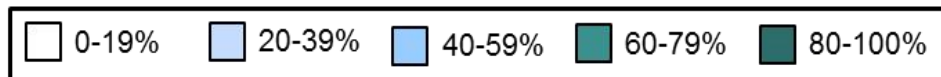
HIE Between Disparate Hospitals



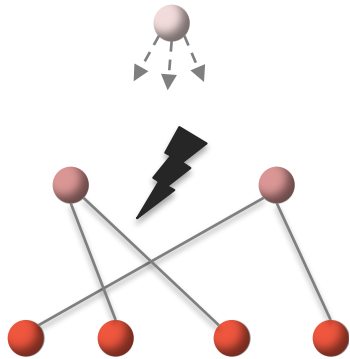
2010



2014



Elevator

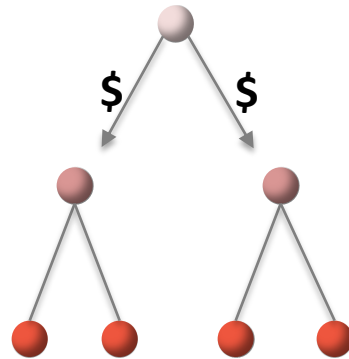


Rapid facilitation of directed exchange capabilities to support Stage 1 meaningful use

Preconditions:

- ✓ Little to no exchange activity
- ✓ Many providers and data trading partners that have limited HIT capabilities
- ✓ If HIE activity exists, no cross entity exchange

Capacity-builder

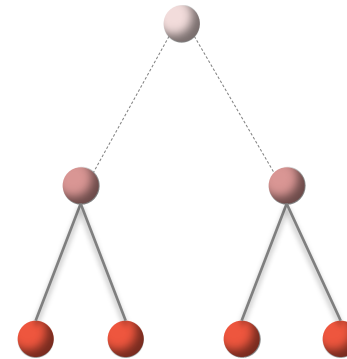


Bolstering of sub-state exchanges through financial and technical support, tied to performance goals

Preconditions:

- ✓ Sub-state nodes exist, but capacity needs to be built to meet Stage 1 MU
- ✓ Nodes are not connected
- ✓ No existing statewide exchange entity

Orchestrator

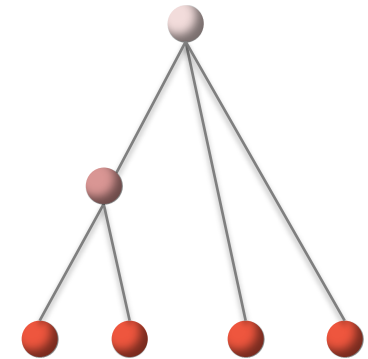


Thin-layer state-level network to connect existing sub-state exchanges. (2015 - Supports statewide EMS connectivity, query function, patient location.)

Preconditions:

- ✓ Operational sub-state nodes
- ✓ Nodes are not connected
- ✓ No existing statewide exchange entity
- ✓ Diverse local HIE approaches

Public Utility



Statewide HIE activities providing a wide spectrum of HIE services directly to end-users and to sub-state exchanges where they exist

Preconditions:

- ✓ Operational state-level entity
- ✓ Strong stakeholder buy-in
- ✓ State government authority/financial support
- ✓ Existing staff capacity



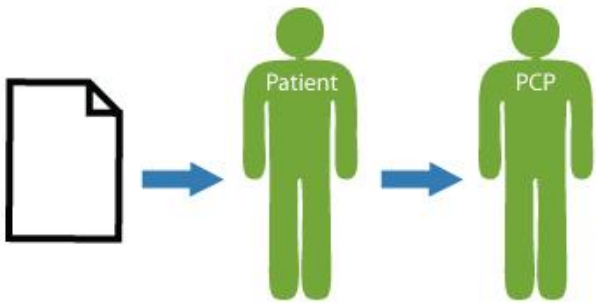
Find patient information to support unplanned care

QUERY-BASED EXCHANGE



Send and receive patient information to support care coordination

DIRECTED



Patients aggregate use and share their own information

CONSUMER-MEDIATED EXCHANGE

Multiple Models

+
EMS



Emergency Medical Services



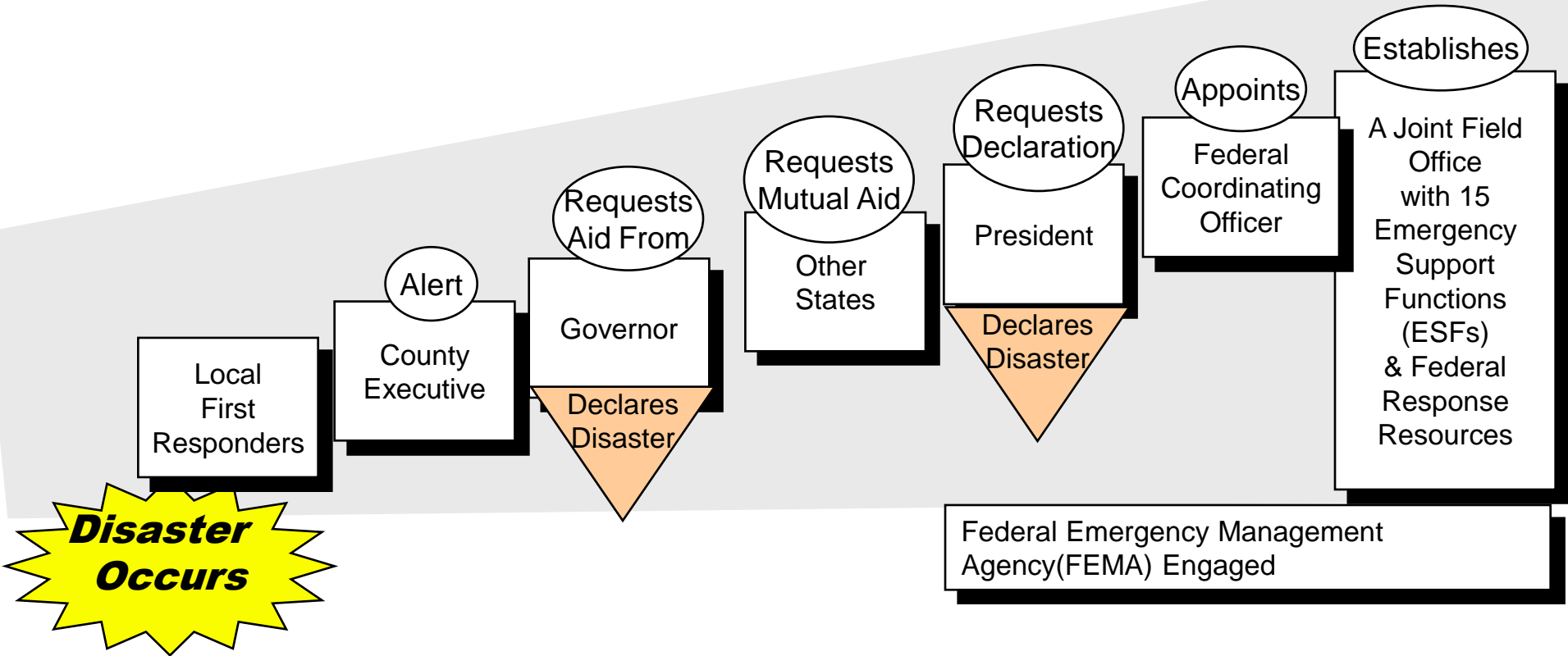
Preparedness and Response Shared Responsibility

The successful delivery of daily emergency care is key to our nation's healthcare system emergency preparedness efforts





“All Disasters are Local”



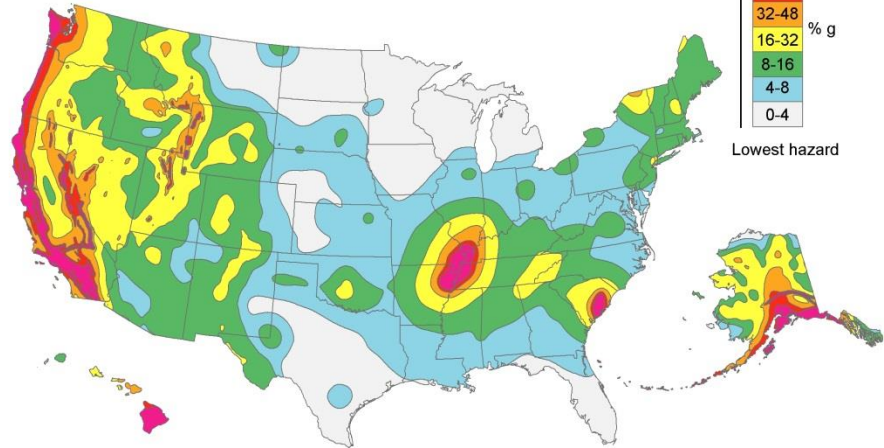
Connect HIEs (40+) so that providers and emergency responders have a way to access health information across systems.

- Improve patient health;
- Respond to disasters;
- Measure outcomes; and
- Save lives.



Interoperability and national scalability

- 7+ magnitude earthquake in California
 - San Francisco Bay Area
 - Estimated 6 million people affected
 - 1.6 million displaced
 - Southern California
 - Estimated 5 million affected
 - 1.5 million displaced
 - The closer to Los Angeles up to 17.5 million could be affected



- A final report on the Patient Unified Lookup System for Emergencies (PULSE) technical requirements, use case, policy considerations, and next steps
- Letters of Intent to participate from more than 30 EMS and HIOs organizations in California
- Federal, state and local partners committed to driving PULSE forward

- California EMS Authority has secured an Advanced HIE and Interoperability grant from ONC (through 2017)
 - Implement PULSE (connecting four HIOs)
 - +EMS to enable EMS providers on scene to exchange patient health information with local hospitals
- ONC, ASPR and NHTSA continue to provide technical assistance

Resources

- [IDEA Lab Project](#)
- Healthit.gov
 - Blog: [Disaster Preparedness and HIE](#)
 - Blog: [HIE Supports Disaster Preparedness and EMS](#)
 - Blog: [Expecting the Unexpected](#)
- [EMS Use Case Document](#)
- California Project
 - [Website](#)
 - [Blog](#)

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