

FQHC Emergency Preparedness and Importance of Planning for Recovery of Patient Electronic Health Records

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Learning Objectives

- **Understanding the role health centers play in a disaster**
- **Identifying ongoing opportunities and challenges HIT brings to emergency preparedness**
- **Illustrating the steps one FQHC took to adopt HIT and their impact on securing continuity of care after a natural disaster**

Understanding FQHC Role

- **Mitigation (lessen impact of disaster)**
 - Identifying risks (HVA, facility enhancements)
- **Preparedness**
 - Developing plans, training, equipping, evaluating
- **Response**
 - Implementing, activating, evaluating
- **Recovery**
 - Assessing damage, restoring functions and access
 - Evaluating and generating new/enhance action plan
- **HRSA:**
 - Coordination, Collaboration, Integration, Communication

See also: <http://www.nachc.com/hc-emergency-management.cfm> and <http://www.hrsa.gov/emergency/>.

Emergency Management

- **FQHC participation in and contribution to state and local emergencies is significant but spotty**
 - Reporting emerging diseases
 - Providing mental health assistance
 - Providing clinical support/alternative care sites
 - Serving as point of distribution (medicine, vaccines)
 - Promoting patient awareness

Emergency Management

- **Common Challenges for FQHCs**

- “Community” resources and special populations
- Budget
 - Preparing for every contingency is costly
 - Prioritizing absolute vs. relative risk (probability vs. magnitude)
 - Biological, Chemical, Radiological, Natural
- Training and technical assistance lacking or inconsistent
- Unclear definition of role, especially in working with other community health care providers

Emergency Management

- **Getting better**

- Strategic planning and partnerships
 - Integrating with city, state, regional & federal planning (securing MOUs with diverse community stakeholders)
 - More training opportunities and technical assistance
 - HIE/RHIOs
- Program evaluation
 - Capacity vs. capabilities
 - Staffing, continuity of operations, Rx and other supplies, evacuation and communication, decontamination and isolation
- Budget and program planning
 - Joint purchases with other stakeholders
 - Data recovery should be an essential and necessary cost
- HIT/Medical Records

Some Key Lessons Learned

- **Effective disaster plan is developed in collaboration with comprehensive group of community partners**
- **Emergency management and preparedness is a process, and should be regularly evaluated**
- **FQHCs may not play a core role in every community but are essential partners (training, staffing, services and supplies)**
- **Given need to triage and transport patients (as well as displacement of residents) accessing and tracking records is a critical activity**
- **Off-site storage of data should be part of FQHC's disaster planning**

HRSA's Emergency Management Program Expectations

Preserving vital operational records and documents is critical to a quick resumption of operations. Health centers should have **backup information technology** systems to ensure that electronic financial and medical records are available during and after an emergency.

Consideration should be given to the feasibility of obtaining **off-site storage for these electronic records with emphasis on electronic access and retrieval during or after an emergency.**

In advance of an anticipated event, health centers are encouraged to secure facilities to the extent possible, and may want to consider off-site or safe storage for their equipment and data.

<http://bphc.hrsa.gov/policiesregulations/policies/pin200715expectations.html>

Ongoing Challenges

- **Rural or isolated communities lack resources/partners, funding, and staffing**
- **Increased adoption of HIT focused largely on improving continuity of care for patients**
- **Not part of the disaster equation**
 - Leadership
 - Cost
 - Vendor
 - Entry and storage
 - Backup internet connection
 - Testing (procedures, software/hardware)

Joplin, MO Case Study

- **Category EF-5 tornado hit Sunday, May 22, 2011 resulting in**
 - 62 deaths
 - hundreds of non-fatal injuries
- **Resulting devastation**
 - largest physician complex, regional community hospital, many physician and dental offices destroyed
 - operations compromised for all local providers

Access Family Care (AFC)

- **Federally Qualified Community Health Center**

- Center started mid 1990s as Ozark Tri-County Health Care
- Initially an FQHC look-alike
- Now, four locations with 2 sites in Joplin
- serves ~ 15,000 patients annually
- 98 percent of AFC's patients are low-income

Tornado Impact on AFC

- **Smallest site - primary care and behavioral health satellite - destroyed**
- **Center still able to:**
 - provide continuity of care for registered patients across all sites
 - support community emergency relief efforts
 - Assist with emergency Rx refills

AFC's HIT Planning

- **Planned early for the transition from paper to electronic medical records (EMRs). Criteria:**
 - mobile and accessible system
 - minimal disruption
 - secure operational platform
 - solution to permit provider from remote locations
 - flexibility for fixed and mobile devices, including iPads and PCs

Partnership with NeoTech

- **NEOTECH - experienced local IT consulting firm based in Joplin, MO**
 - hosted solutions including a “virtual desktop” environment
 - Support for HIT implementation process
- **NeoTech hosts and maintains core applications in a secure off-site data center**
 - GE Centricity EMR
 - Dentrix electronic dental

Real Life Testing

- **March 2010 Fire**
 - Neotech relocated data center to a temporary location and was back in operation in only 48 hours
- **May 2011 tornado**
 - NeoTech's building largely destroyed. Reinforced north section withstood the storm.
 - Relocated to temporary quarters to ensure minimal disruption of client service
 - Resumed operations in just 12 hours
 - helped the health center establish on-site intranet connectivity
 - loss of internet in the local area lasted a week; prevented connecting to external resources.
 - **NO DATA WAS LOST**

Return on Investment

- ROI on E H R adoption and secure offsite hosting proved invaluable
- What did it cost?
 - one-time EMR acquisition and installation ~4 % of center's operating budget;
 - additional 1% allocated for initial implementation and support of EMR adoption;
 - proportion of the center's operating budget dedicated to annual EMR licensing and support remains at 1%.
- Provided for:
 - Effective care management across multiple sites
 - improved efficiency
 - Operational capacity in a real-life disaster scenario
 - Community benefit

Conclusions: Operational Perspective

- **Operational capacity depends on**
 - internal capacity and infrastructure
 - key partners
- **Costs are manageable and recoverable**
 - Days lost
 - Clear and detailed guidance needed from Bureau of Primary Health Care to help CHCs plan for and overcome disaster situations. Should include: alternatives and recommendations, based on industry standards, for physical security, data back-up, redundancy planning, staff training, and examples of effective strategies used by CHCs.

Conclusions: Public health perspective

- **While CHCs are major providers of primary health care to individuals, they also provide a critical link that connects lower income and vulnerable communities with initiatives aimed at promoting community-wide health improvement and reducing the incidence of disease and disability**

- **Peter Shin and Feygele Jacobs, An HIT solution for clinical care AND disaster planning: How one health center in Joplin, MO survived a tornado and avoided a Health Information disaster. Online Journal of Public Health Informatics, April/May 2012, 4(1): 1-7.**
- **<http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/ojphi/article/viewFile/3818/3214>**

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