

ESSENTIALS FOR HEALTH REFORM: Using Networks to Implement and Improve EHRs and other HIT



NATIONAL COUNCIL
FOR COMMUNITY BEHAVIORAL HEALTHCARE

Behavioral Health providers are being challenged to adopt health information technology with very limited resources. There is a need to prepare for increased numbers of patients receiving health insurance benefits, requirements for electronic billing, data exchange among treating providers and an ever increasing need to collect and use health information to improve care.

These intense one day seminars will provide attendees with the necessary information to move forward in adopting, acquiring and implementing electronic health records and other health information technology. Presenters will review the various stages of implementation from initial planning and assessment through advanced topics such as data warehousing. There will be a focus on utilizing networks of care to build on economies of scale. Participants will leave with a thorough understanding of where they are in the process, and a plan for next steps in their health information technology implementation efforts.

These seminars are a collaborative work of NIATx, SAAS and The National Council supported by SAMHSA.

Topics include:

- **Overview of the CMS Rule on Medicare and Medicaid Incentive Payments**
- **Practice Management Systems vs EHRs**
- **Benefits & Economies of Scale when working with a Network**
- **HIT Planning and Assessment Process**
- **HIT Workflow Redesign**
- **Due Diligence and Vendor Negotiations**
- **EHR Selection and Implementation**
- **Disaster Recovery and Business Continuity Planning**
- **Data Warehousing**
- **Use of Telemedicine**
- **Health Information Exchange and Behavioral Health**

Disaster Recovery & Business Continuity Planning

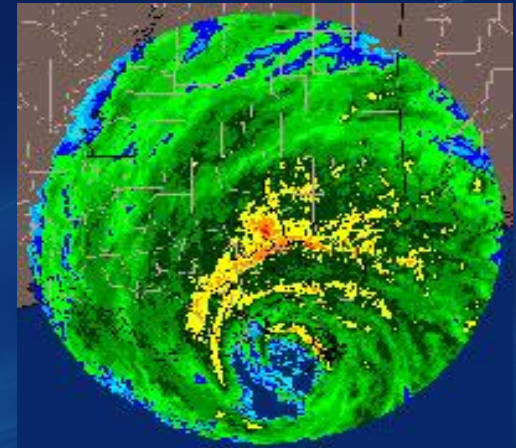
Session Description



This presentation will cover the basics of Disaster Recovery / Business Continuity Planning, and builds upon the experience of Health Center Controlled Networks who have been developing, implementing, hosting, and supporting safety net providers on advanced Health Information Technology systems for more than a decade. A primer on Change Management for Health IT is included.

WHY DEVELOP A BUSINESS CONTINUITY PLAN (BCP)?

“Because Bad Things Happen to Good People”



A problem has been detected and windows has been shut down to prevent damage to your computer.

The problem seems to be caused by the following file: SPMDCON.SYS

PAGE_FAULT_IN_NONPAGED_AREA

If this is the first time you've seen this stop error screen, restart your computer. If this screen appears again, follow these steps:

Check to make sure any new hardware or software is properly installed. If this is a new installation, ask your hardware or software manufacturer for any windows updates you might need.

If problems continue, disable or remove any newly installed hardware or software. Disable BIOS memory options such as caching or shadowing. If you need to use safe mode to remove or disable components, restart your computer, press F8 to select Advanced Startup options, and then select safe Mode.

Technical information:

*** STOP: 0x00000050 (0xF03094C2, 0x00000001, 0xFBFE7617, 0x00000000)

*** SPMDCON.SYS - Address FBFE7617 base at FBFE5000, DateStamp 3d6dd67c



KATRINA

Housing Losses \$67 Billion

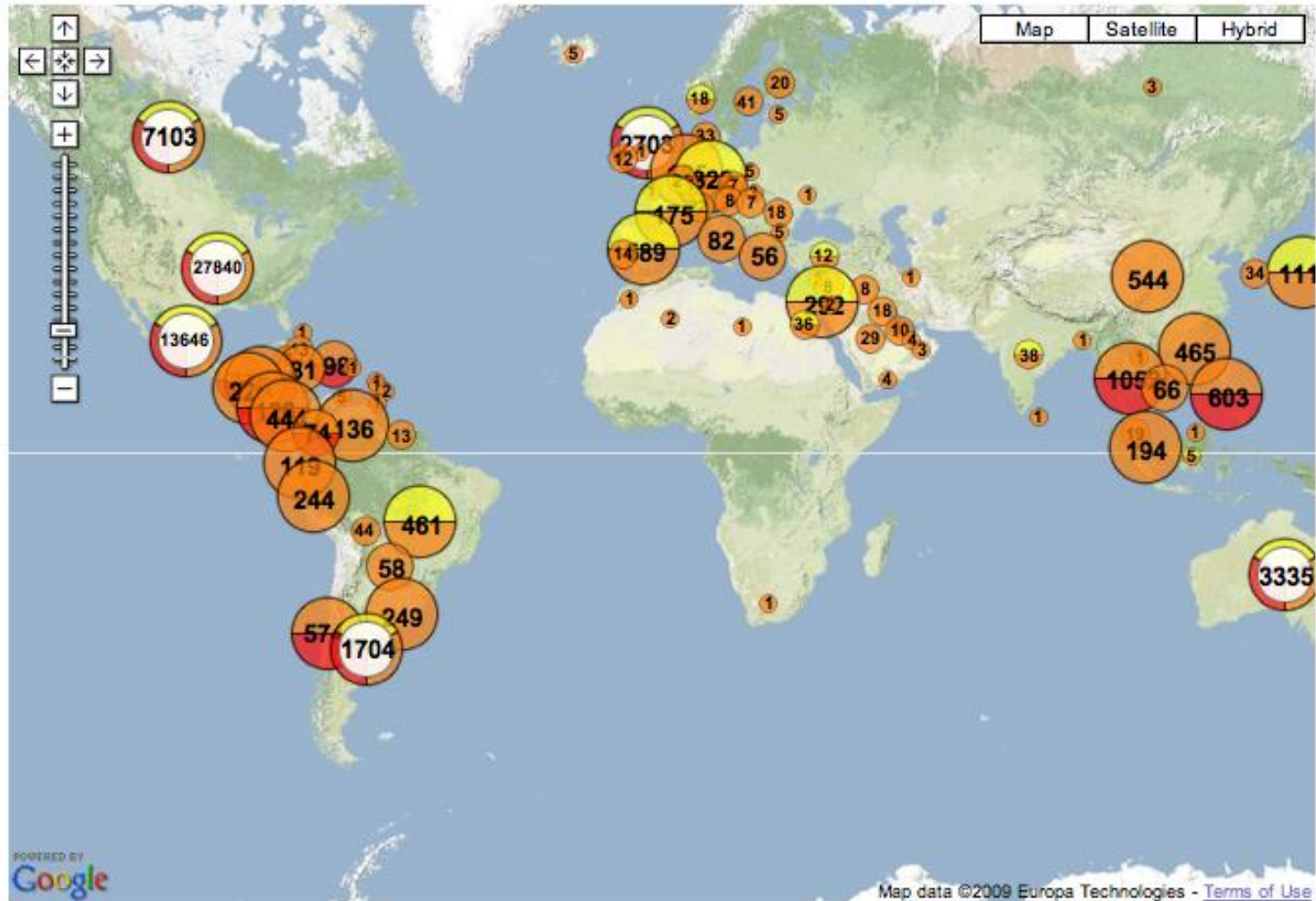
**Business Property Losses
\$20 Billion**

**Total Property Losses
\$96 Billion**

HURRICANE KATRINA
2:45PM CDT SUNDAY
28 AUGUST 2005
LATEST SFC PRES PER RECON:
902MB
(LOWEST SFC PRES EVER
RECORDED THIS PART OF THE GULF!)

H1N1 OUTBREAK

Map data current as of 22:36 EDT 25 June



- Suspected Cases (6542)
 - Confirmed Cases (64527)
 - Fatal Cases (450)
 - Suspected & Confirmed Cases
 - Suspected & Fatal Cases
 - Confirmed & Fatal Cases
 - Suspected, Confirmed & Fatal Cases
- Circle size relative to number of cases. Zoom for more detail.



The Incident Data On This Free Version Of The Map Is Time-Delayed 24 to 48 Hours - For Current Information Please Consider Subscribing

www.globalincidentmap.com

Subscription Required; accessed 03/05/2011

DISASTERS BIG AND SMALL IMPACT PRACTICES DAILY WITHOUT A NATIONAL HEADLINE

- ▶ Fires
- ▶ Floods
- ▶ Wind/Rain/Snowstorms
- ▶ Earthquakes/
Hurricanes/Tornadoes
- ▶ Structural/Roof collapse
- ▶ Power failures
- ▶ Hazardous/Toxic chemical and
vapor release
- ▶ Elevator breakdown
- ▶ HVAC failure
- ▶ Telephone/ Telecommunications
failure
- ▶ Crime/ Bomb threats / Terrorism
- ▶ Transportation accidents, including
air, rail and road
- ▶ Data and information storage and
retrieval collapse
- ▶ Medical / Health emergencies

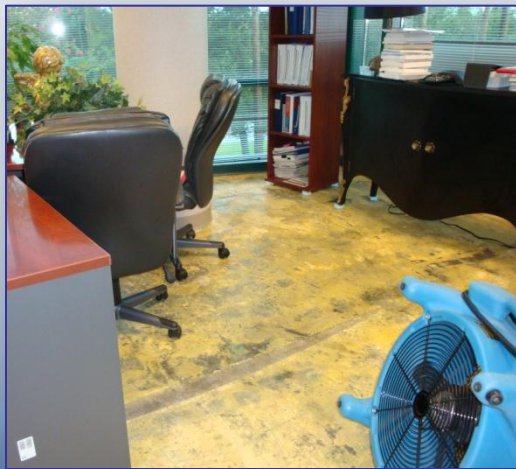


4:30 AM WAKE UP CALL

August 21, 2010



THE DAMAGE



THE CULPRIT: PLASTIC VERSUS COPPER



WHAT IS THE DISASTER EFFECT?

- ▶ Personnel Shortages (H1N1 Flu)
- ▶ Some sites may be closed (Tornados, Floods, Hurricanes, Blizzards)
- ▶ Sites open but computer room / data center destroyed (localized fire; water-based fire suppression)
- ▶ Failed applications (IT systems upgrade)
- ▶ Data connections down (wild hogs!)

EHRs – THE SOLUTION, NOT THE PROBLEM

Paper World:

- ▶ Charts destroyed or strewn throughout the area
- ▶ No audit trails for improper access
- ▶ Critical loss of patient information
- ▶ Lost revenue
- ▶ Patients lose confidence in the practice

EHRs – THE SOLUTION, NOT THE PROBLEM

EHR World:

**“I just picked up my tapes
and left town.”**

-- Anonymous Physician posting after Katrina

EHRs – STEP ONE: PRACTICAL BACKUPS FOR A HEALTH CENTER

Remember: It's not a matter of IF; It's a matter of WHEN

- ▶ **Minimally Acceptable:**
 - ▶ Verified tape backups kept in separate location than primary servers
 - ▶ Restore processes tested quarterly

EHRs – STEP ONE:

PRACTICAL BACKUPS FOR A HEALTH CENTER

- ▶ **Good:**
 - ▶ Verified encrypted tape backups off-sited via service to secure location (i.e., Iron Mountain)
 - ▶ Tape recall and restoration tested quarterly

EHRs – STEP ONE:

PRACTICAL BACKUPS FOR A HEALTH CENTER

- ▶ **Better:**
 - ▶ **Disk to Disk backups (faster recovery)**
 - ▶ **Secondary encrypted storage secured offsite**
 - ▶ **Tested quarterly**

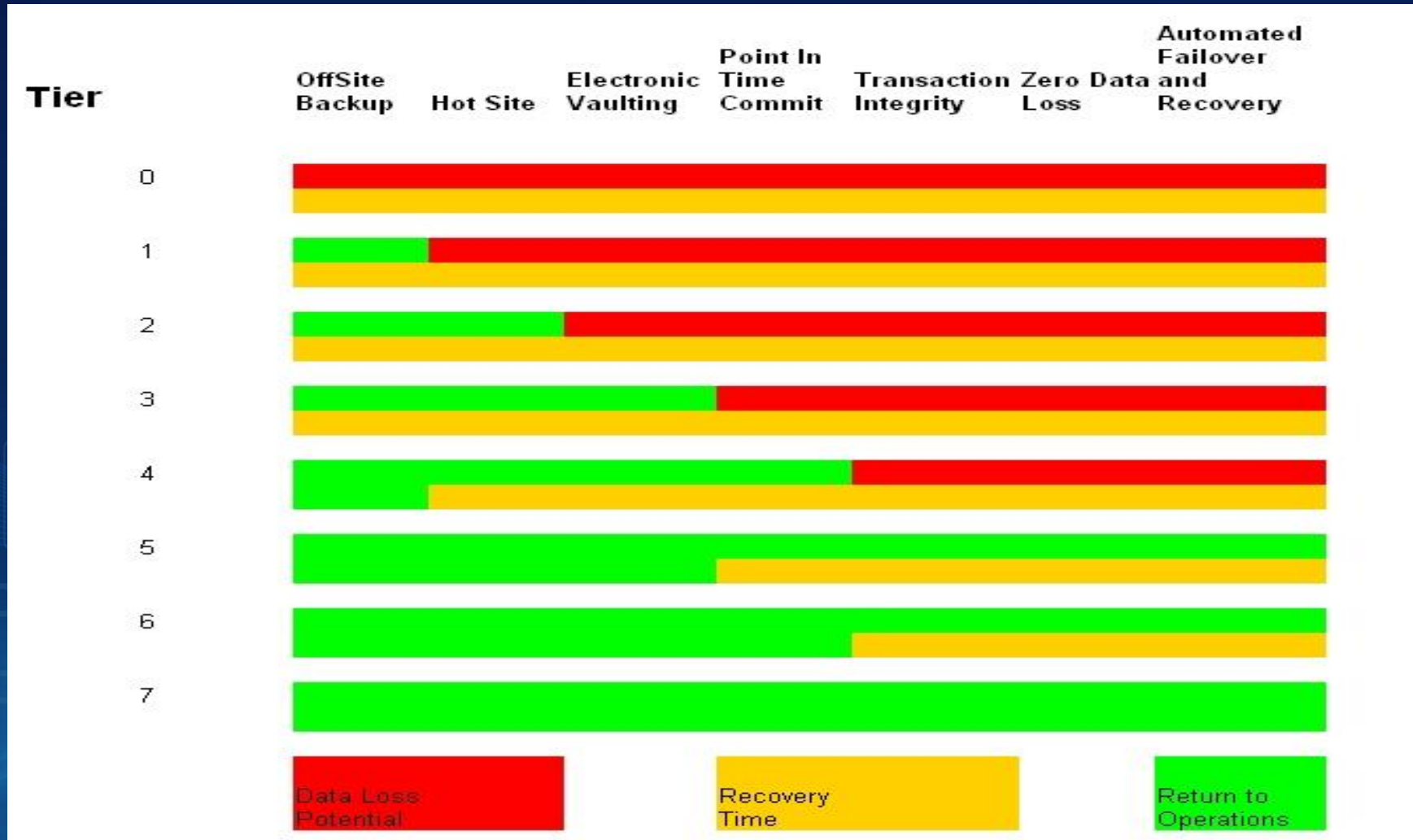
EHRs – STEP ONE: *PRACTICAL BACKUPS FOR A HEALTH CENTER*

- ▶ Best (*but not always practical*):
 - ▶ Disk to Disk backup to offsite secondary server farm
 - ▶ Tested quarterly

EHRs – STEP ONE: *PRACTICAL BACKUPS FOR A HEALTH CENTER*

- ▶ Excellent (*but rarely practical for a stand-alone health center or private practice*):
 - ▶ Continual Disk to Disk data feed to secondary site
 - ▶ Possible workload sharing
 - ▶ Tested quarterly

SEVEN TIERS OF DISASTER RECOVERY



BUSINESS: THE DRIVER FOR IT

- ▶ **Recovery Point Objective (RPO):** *How much data are you willing to risk?*
- ▶ **Recovery Time Objective (RTO):** *How quickly do you want to recover your systems and be back online?*

COSTS OF DOWNTIME

- ▶ Major workflow impacts
- ▶ Patient Dissatisfaction
- ▶ Patient Safety
- ▶ Post-recovery data entry and data QA
- ▶ Community confidence

MINIMIZING DOWNTIME POTENTIAL AND IMPACT

- ▶ Change Control policies and procedures
- ▶ Business Continuity & Disaster Recovery plans
- ▶ Communication, Communication, and Communication

CLINICAL OPERATIONS DURING DOWNTIME

- ▶ What forms do providers have available for quick documentation?
- ▶ Who authorizes or initiates downtime alternate procedures?
- ▶ Who are the primary point persons for communications and feedback?
- ▶ How are prescriptions handled?
- ▶ Availability of offsite reporting of critical information (meds, allergies, problems)

CLINICAL OPERATIONS DURING DOWNTIME

- ▶ Who enters and signs off on data from downtime?
- ▶ What is the required turnaround time for data entry?
- ▶ How are paper documents filed, scanned, or destroyed after entry into EHR?
- ▶ How will you track all paper documents to ensure they are accounted for?

THE OTHER THREATS TO EHRS



PEOPLE THREATS

Ponemon Institute Study:

Employees routinely engage in activities that put sensitive data at risk

- ▶ 61% download data on unsecured mobile devices
- ▶ 47% share passwords
- ▶ 43% lose data-bearing devices
- ▶ 21% turn off mobile device security tools

PEOPLE THREATS

Ponemon Institute Study:

Employees routinely engage in activities that put sensitive data at risk

- ▶ They blur the line between personal and professional lives:
 - ▶ 52% use web-based personal email in the office
 - ▶ 53% download Internet software onto employers' devices
 - ▶ 31% engage in online social networking while in the workplace

PEOPLE THREATS

Ponemon Institute Study:

Interestingly, of those surveyed -

- ▶ 58% said their employer failed to provide adequate data security awareness and training
- ▶ 57% said their employer's data protection policies were ineffective
- ▶ 43% said there was poor communication and enforcement of data security policies

PEOPLE THREATS

LAPTOPS

- ▶ The FBI reports that 47% of data breaches are due to stolen laptops
- ▶ *Ponemon Institute reports:*
 - ▶ 12,000 laptops are lost in airports annually
 - ▶ Cost: \$202 per lost customer record

LAPTOP SECURITY SUGGESTIONS

- ▶ Hard Drive Password on boot-up
- ▶ Encrypted disk drives, flash memory access control and encryption
- ▶ Biometric access control, screen saver password
- ▶ Don't leave unattended in public place
- ▶ Airport security – hand over at last moment
- ▶ Never pack the laptop in luggage
- ▶ Lock in trunk – a few blocks away
- ▶ Security cables/Safe when traveling
- ▶ Avoid Peer-to-Peer Networks

SAFEGUARDING YOUR EHRs

- ▶ Backups: Chain of Custody
- ▶ Passwords:
 - ▶ Standards (Length, Combinations, Symbols)
 - ▶ Timeout Features
- ▶ File Attachments: Limitations
- ▶ Audit Trails: Optional Levels
- ▶ Wireless Network Risks: Encryption Keys
- ▶ Key Capture Software: Scanning Software

ZERO TOLERANCE POLICY

- ▶ Educate & Communicate:
 - ▶ Clear Expectations
 - ▶ How to Report Suspicious Activity
 - ▶ Give Passwords to NO ONE
 - ▶ Discipline Policy
 - ▶ Know the PHI Breach Reporting Requirements (*Federal and State levels*)
- ▶ Suspicious Activity Will Be Reported To the FBI

GOAL:

**IDENTIFY AND
MITIGATE RISKS TO A
REASONABLE LEVEL**

PROCRASTINATION = DEATH IN BUSINESS CONTINUITY PLANNING



**“You’ll notice the backlog
is becoming slightly steeper
as we approach the Cliffs of
Procrastination.”**



CH-CH-CHANGES: **CHANGE MANAGEMENT FOR HIT**

WHAT IS CHANGE MANAGEMENT?

- ▶ It's a noun: ***"Change management is key to the project."***
- ▶ It's a verb: ***"We really need to change manage that process."***
- ▶ It's an adjective: ***"My change management skills are improving."***
- ▶ It's an expletive: ***"Change management!"***

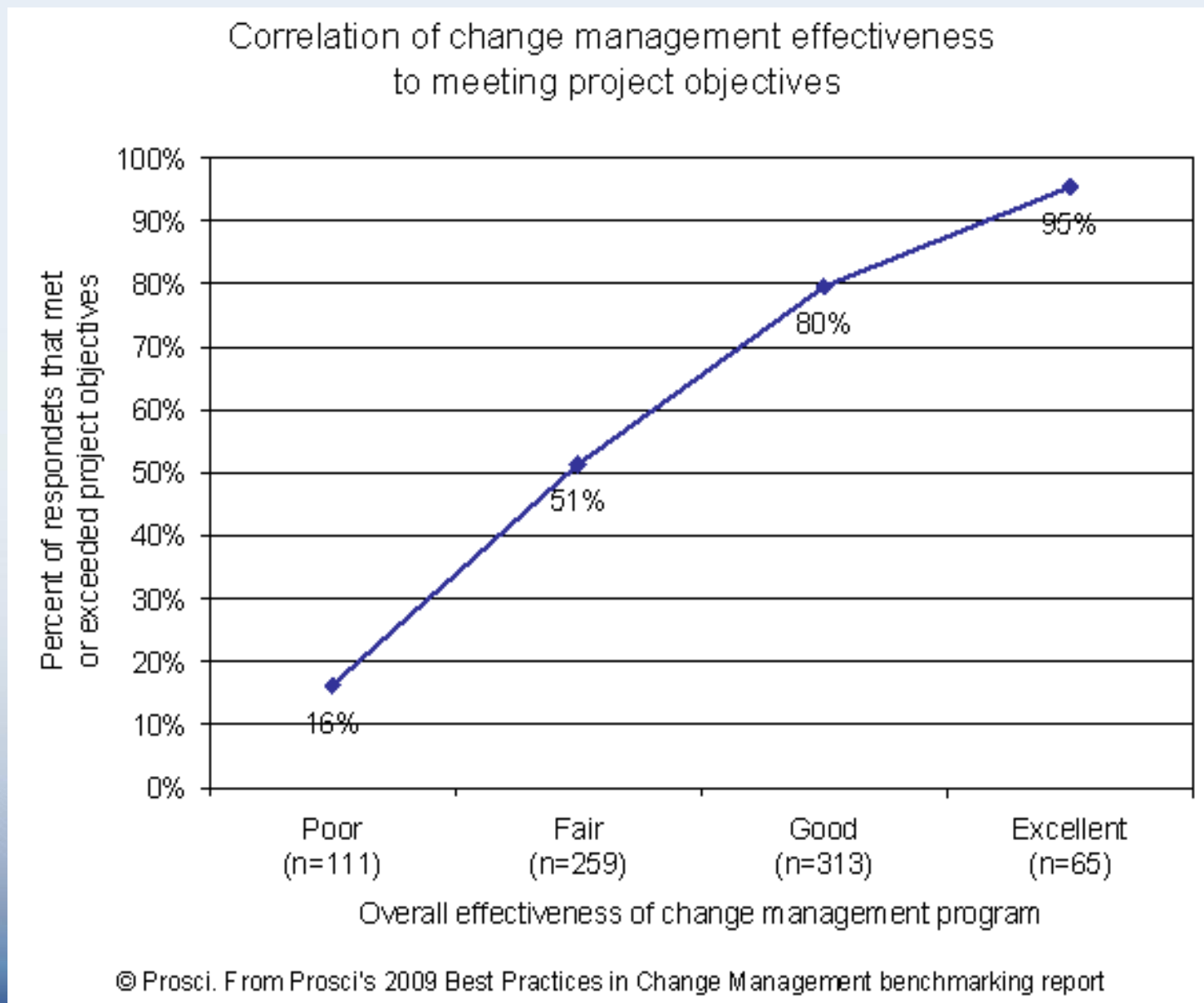
THE REAL DEFINITIONS...

- ▶ Change management is a structured approach for ensuring that changes are thoroughly and smoothly implemented, and that the lasting benefits of change are achieved. (*Mind Tools*)
- ▶ The goal of the Change Management process is to ensure that standardized methods and procedures are used for efficient and prompt handling of all changes, in order to minimize the impact of change-related incidents upon service quality, and consequently improve the day-to-day operations of the organization. (*IT Infrastructure Library*)
- ▶ To ensure all changes are assessed, approved, implemented and reviewed in a controlled manner. (*ISO20000*)

BENEFITS TO THE HIT ENVIRONMENT

- ▶ Reduction of unplanned downtime
- ▶ Improved service quality and end-user satisfaction
- ▶ Reduces risks created by changes
- ▶ Reduction of planned downtime
- ▶ Systematic approach leads to greater ability to proactively respond to change requests
- ▶ Favorable long term adoption of health IT systems (EHR)
- ▶ Increases probability of meeting long term objectives

EFFECTIVENESS OF CHANGE MANAGEMENT



THE WORLD *WITHOUT* CHANGE MANAGEMENT

Situation:

- ▶ EHR is in place.
- ▶ Great product
- ▶ Vendor releases software update
- ▶ IT applies the release
- ▶ IT reboots the servers
- ▶ IT staff believe all is well in the world

THE WORLD *WITHOUT* CHANGE MANAGEMENT

Results the next morning:

- ▶ Several visit documentation screens have changed substantially
- ▶ Providers cannot document necessary information
- ▶ IT scrambles; eventually calls vendor
- ▶ Installation of templates was optional
- ▶ Vendor recommends restoring templates from backup
- ▶ Practice has continued documenting (which complicates the backup restore processes)

THE WORLD *WITHOUT* CHANGE MANAGEMENT

Impact:

- ▶ Disgruntled clinicians
- ▶ Employee morale declines
- ▶ Loss of IT credibility
- ▶ Loss of respect for management.
- ▶ Wasted resources

IMAGINE... *WHAT IF THIS HAD BEEN A FULL-BLOWN UPGRADE?*

- ▶ New features/functionality for users, but they didn't know
 - ▶ Chaos in workflows
 - ▶ Errors in use due to no communication or training
- ▶ Some functionality doesn't work
 - ▶ Required upgrade to other system components to continue functionality
 - ▶ Users receive system errors throughout the day impeding usability

IMAGINE... *WHAT IF THIS HAD BEEN A FULL-BLOWN UPGRADE?*

- ▶ Custom reports are problematic
 - ▶ Slight changes to data dictionary
 - ▶ Database is sluggish
- ▶ Security concerns
 - ▶ Upload of files from any computer into patient record
 - ▶ No controls on file types or sizes



FIRES, FIRES, AND MORE FIRES!

FIREFIGHTERS BEWARE!

Commonly Overheard Statement:

**“We don’t have the time or resources for
Change Management/Control....
We’re too busy putting out fires.”**

FIREFIGHTERS BEWARE!

Bryce's Law:

“Beware of your firefighters;
they are probably your chief
arsonists.”

– Tim (Milt) Bryce
Management Consultant

CHANGE MANAGEMENT IN HIT: FIVE STEPS IN GETTING STARTED

① Executive Management Sponsorship

- a) Leadership is key to success
- b) The Executive and Medical Directors should be sponsors
- c) Investment of time now reduces firefighting later

CHANGE MANAGEMENT IN HIT: FIVE STEPS IN GETTING STARTED

② Form a Change Control Board

Membership Should Include:

- a) System user representation (must be user advocate)
- b) Report writer
- c) Technical staff
- d) Training support
- e) Management
- f) Template developer/programmer
- g) Clinical analyst
- h) Interface developer/manager

CHANGE MANAGEMENT IN HIT: FIVE STEPS IN GETTING STARTED

③ Establish and document norms and parameters

- a) What comes before the CCB?
 - 1) Vendor updates
 - 2) Template change requests
 - 3) Report development changes
 - 4) Operating system upgrades
 - 5) New servers
 - 6) Other?

CHANGE MANAGEMENT IN HIT: FIVE STEPS IN GETTING STARTED

Establish and document norms and parameters, Continued:

- b) Frequency of meetings
- c) How often are changes to production allowed?
- d) What are minimal requirements for CCB approval?
 - 1) Unanimous vote, management approval, etc?
 - 2) What level of testing is required?
 - 3) What level of documentation is required?
 - 4) Who participates in and signs off on each component?
- e) How are requests, approval process, and implementation of changes managed?
- f) How are changes communicated to end-users and in what time frame?

CHANGE MANAGEMENT IN HIT: FIVE STEPS IN GETTING STARTED

④ **Communication, Communication, Communication**

Hold educational sessions for ALL staff:

- a) Understand Change Management importance
- b) How it will affect them
- c) What they can expect from the process
- d) How changes will be communicated.

CHANGE MANAGEMENT IN HIT: FIVE STEPS IN GETTING STARTED

⑤ Implement Change Management:

- a) Don't expect Change Management perfection Day 1
- b) Adapt processes to needs of organization but stay true to constraints
- c) Out of every CHANGE comes EXPERIENCE and WISDOM
- d) Monitor – *Inspect what you Expect*

THE WORLD *WITH* CHANGE MANAGEMENT

- ▶ Release Notes reviewed; documentation complete
- ▶ Software update applied to testing environment
- ▶ Full testing team sign off

THE WORLD *WITH* CHANGE MANAGEMENT

- ▶ The CCB has spent several weeks (*months maybe for a full upgrade*) in review.

★ *It rarely pays to be an early adopter of upgrades*

- ▶ Full communication and education to end-users

THE WORLD *WITH* CHANGE MANAGEMENT

- ▶ The update occurs after business hours with further testing
- ▶ Follow up with end-users
- ▶ The CCB reviews all post go-live notes, documents lessons learned
- ▶ Full report to Executive Management



HARMONY

(Florida Style)

RESOURCES FOR FURTHER INFORMATION

The IT Infrastructure Library

www.itil.org

The Prosci Change Management Learning Center

www.change-management.com

The Healthcare Information and Management Systems Society (HIMSS)

www.himss.org

Questions?



Original Content Developed for SAMHSA by



HCN*network.org*[®]

Health Choice Network

INNOVATIVE HEALTH TECHNOLOGY SOLUTIONS

www.hcnetwork.org



SFREC

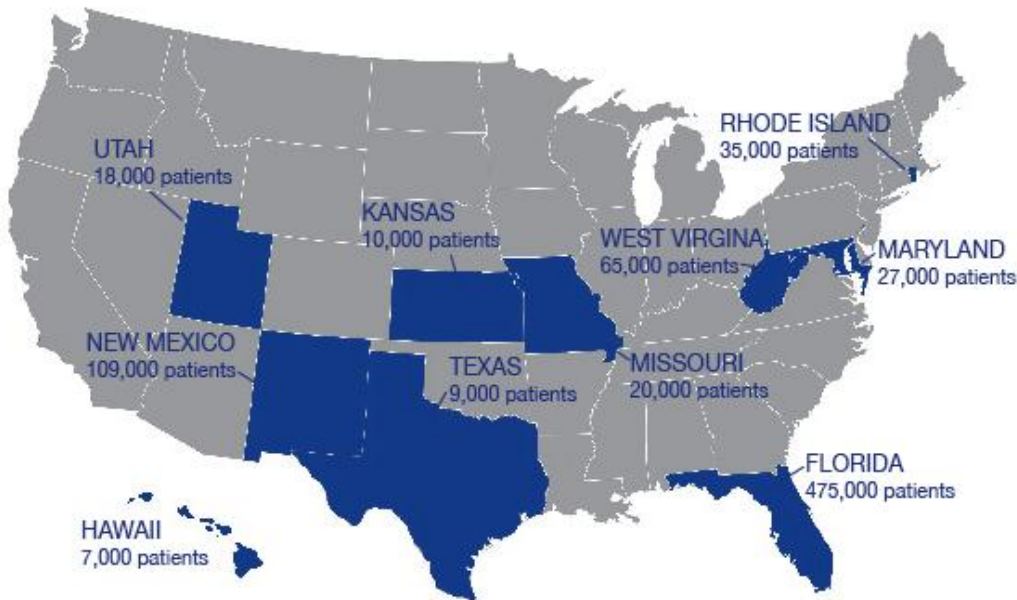
Connecting for Care

SOUTH FLORIDA REGIONAL EXTENSION CENTER[®]

www.southfloridarec.org

Our Footprint

- HCCN - Member Center CEOs serve as Board of Directors
- 41 member centers in 10 states (FL, HI, KS, MD, MO, NM, RI, TX, UT, WV)
- Approximately 800,000 patients
- Covering Priority Primary Care Providers (PPCP) in Miami-Dade, Broward, Monroe, Martin, Palm Beach, Indian River, Okeechobee, and St. Lucie Counties
- Provider Goal = 2,500



HCN Health Information Technology Services

- **Electronic Health Record**
 - Medical / Dental / Behavioral
 - Custom Provider Templates
 - School Based Dental
 - School Based Medical
 - Document Imaging
 - Voice Recognition
 - CCD
- **Network Administration**
 - Hosting Services
 - Back office / Email Support
 - Disaster Preparedness
 - Infrastructure Design (LAN/WAN)
 - Web Design/Mgmt
- **Implementations and Training**
 - Project/Change Management
 - Training and Staff Development
 - Best Practices Matrix
 - Reimbursement Coordination
- **Support Services**
 - 24hr Service Desk (Hardware/Software)
 - Project Management
 - Vendor Escalation
 - BETA Testing
- **Business Intelligence**
 - Meaningful Use Reporting
 - Clinical Reporting
 - Fiscal Reports (Black Book)
 - Web based Reporting Tools
 - Practice Management Support





O-health information

TECHNOLOGY EXTENSION CENTER

Oregon's Regional Extension Center



Headquartered in Portland, Oregon, OCHIN is a national non-profit collaborative, currently comprised of 42 organizations across seven states representing over 400 clinics and over 2,000 providers. With the ultimate goal of transforming health care in the United States, OCHIN provides integrated HIT software products and a wide variety of services, training and education to community health clinics, mental health services and small practices serving the medically underserved.

www.ochin.org



Who We Are

- 501c(3) Collaborative Health Center Controlled Network
- 51% of Board Members are Community Health Center Executives
- 42 member organizations, over 400 individual clinics & 2000 providers
- 1M patients, 2.140M Practice Management & 1.712M Electronic Health Record annual visits

The OCHIN Collaborative

CALIFORNIA • OREGON • WASHINGTON • OHIO • ALASKA • NORTH CAROLINA • WISCONSIN





OCHIN PRODUCTS AND SERVICES

- **Practice Management**
 - ✓ Scanning solutions
 - ✓ FQHC customizations
 - ✓ Special and community Library Reports
 - ✓ Flexible build and configuration
 - ✓ Automated patient notifications
 - ✓ Revenue cycle management
- **Electronic Health Record**
 - ✓ Integrated community health record-medical, dental, behavioral health, school-based clinics
 - ✓ E-prescribing
 - ✓ Decision support tools
 - ✓ Case/care management tools
 - ✓ Integrated lab interfaces
 - ✓ Advanced role based security
 - ✓ Voice recognition
 - ✓ Reporting and benchmarking tools
 - ✓ Document management
 - ✓ Continuity of Care Record (CCR)
 - ✓ Patient Personal Health Record (PHR)
- **Implementation, Training and Products**
 - ✓ Project management
 - ✓ Information systems implementation
 - ✓ Network design
 - ✓ HIT integration & interoperability
 - ✓ Billing and revenue cycle management
 - ✓ Staff PM/EHR training
 - ✓ Web-based training modules
- **Support**
 - ✓ Project Management
 - ✓ 24/7 service desk
 - ✓ Advisory and consulting services
 - ✓ Meaningful Use reporting tools
 - ✓ Clinical reporting tools
 - ✓ Specialty build for grant
 - ✓ Vendor escalation
- **Practice Based Research Network**
 - ✓ Safety Net clinical research & clinical collaboration opportunities

Community Health Centers

ALLIANCE

www.CHCAlliance.org

Health Center Controlled Network

Est. 1999



www.AdvanceHealthIT.org

Regional Extension Center

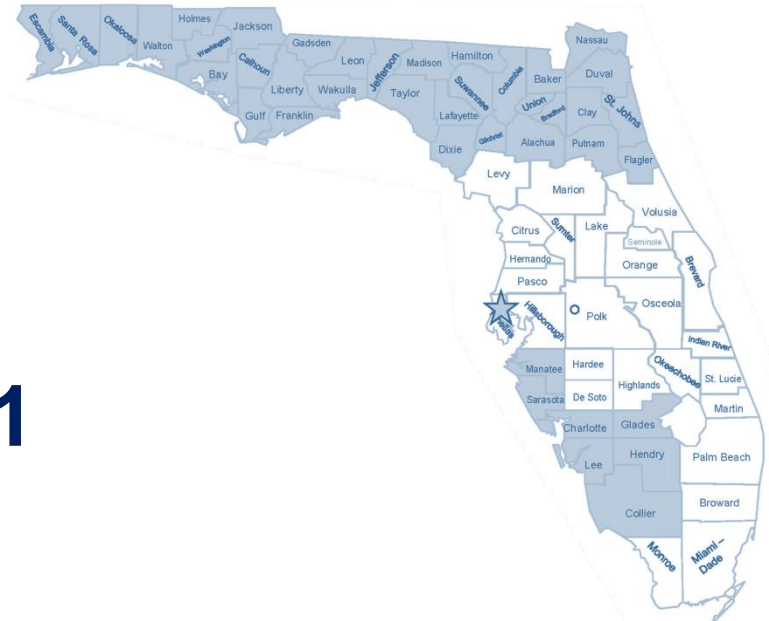
Est. 2010

Core Health Information Technology Offerings

- ▶ **Practice Management System** *(including Practice Analytics)*
- ▶ **Electronic Health Records**
(240,000+ Patient Records)
 - ▶ ePrescribe
 - ▶ Lab Orders / Results
 - ▶ Specialty Provider Referrals
 - ▶ Quality Reporting
- ▶ **Electronic Oral Health Records**
(including Digital Imaging)

Professional Services

- ▶ **Project Management / Implementation Support**
 - ▶ Leadership and task level monitoring
 - ▶ End to end project / system design
 - ▶ Workflow / Process Consideration
 - ▶ On-site Go-Live Choreography
- ▶ **Training**
 - ▶ Modalities matched to provider / end user needs, including classroom, coaching, and web-based tools
 - ▶ Competency exams
- ▶ **Report Writing / Administration**
 - ▶ Custom QA/QI, Peer Review, and Operations reporting
 - ▶ Meaningful Use – Workflows, Provider-level detail, and gap analysis
- ▶ **EHR Development / Enhancement**
 - ▶ Clinical Committee directed
 - ▶ Interface management to support HIE and other functionality to the provider desktop
- ▶ **Technical Assistance & Support**
 - ▶ Help Desk processes more than 7,000 requests annually; fewer than 5% escalated to vendors
 - ▶ 24x7 System Availability
- ▶ **Tier 1 Data Center Partner**
 - ▶ Server Redundancy
 - ▶ Privacy / Security Monitoring & Management
 - ▶ 24x7 Server Monitoring / Network Administration



Service Area Counties: 41

Provider Goal: 2,026

- Education and Trusted Resource for Latest Information
- Best Practices Dissemination
- System selection assistance
- System implementation support
- Technical assistance
- Privacy and security best practices
- Workflow redesign
- Clinical outcomes reporting / data integrity
- Federal regulations navigation
- “Meaningful Use” education, application, and attainment
- Education and assistance in achieving eligibility for CMS EHR Adoption Incentive Program funding (*Designed to help overcome the financial barrier to EHR adoption*)