

TWO VITAL INDUSTRY EVENTS CO-LOCATED MAY 18-20, 2016 | GEORGE R. BROWN CONVENTION CENTER | HOUSTON, TEXAS

Finding Solutions when Unexpected Operational Disruptions Compromise Patient Safety

An ACHE Qualified Education (Category II) Session – 1.0 Hour CEU

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Learning Objectives

- How to assess your organizational risk and potential impacts on patients, finance, research, etc.
- Determining the critical applications necessary to keep your patients safe and minimizing operational breakdowns
- What are the top 10 threats to your organization
- How to communicate with your entire organization when disasters or unplanned events occur
- Defining a plan to improve patient safety and overall operational effectiveness



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Introduction

There are numerous challenges to operating a patient-centered healthcare organization in a caring and safe manner. While there are many standards, regulations and guidelines to help provide the best care possible for our patients, we must start to think more proactively about the unplanned events that disrupt our normal operational environment.

The failure to identify the most critical functions and resources can put patients' safety at risk. When any operational disruption occurs, one of the most important elements to a safe and timely recovery is a well-defined communication plan.

The solution to unexpected operational disruptions is advance planning, which focuses on maintaining an adequate level of service while keeping patients and their families safe.



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What is happening...

"4-Alarm fire burns warehouse in Spring Branch"

Houston Chronicle. May 2016

"Ransomware scare: Will hospitals pay for protection?"

Modern Healthcare, April 2016

"Wrong-patient surgery at Pennsylvania hospital nets \$6M judgement"

Delaware County Daily Times, May 2016

"US should expect Zika outbreaks this summer"

Anthony Fauci, MD, Director of the U.S. National Institute of Allergy and Infectious Diseases, Fox News Sunday, April 2016

"Anthem Inc. to purchase Cigna Corp and Aetna Inc. to buy Humana Inc."

Washington Business Journal, July 2015



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What type of planning is needed...

- Sometimes an incident begins as an emergency, then it becomes an unexpected operational challenge to keep your most important functions going at acceptable levels.
- **Business Continuity (BC)** is defined as the capability of the organization to continue delivery of products or services at acceptable, predefined levels following a disruptive incident. (*Source: ISO 22301:2012*)
- Business Continuity is often described as “just common sense.” It is about taking responsibility for your business and enabling it to stay on course, whatever storms it is forced to weather.



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Areas of Preparedness...

- **Emergency/Incident Management – Life Safety and Facility Preservation**
 - All aspects of emergency response, crisis management, and any other activities involved in command, control, and communications during a disastrous event
- **Business Continuity – Maintaining and Recovering Essential Operations**
 - Ensuring that critical business functions and resources are recoverable within defined recovery time objectives
- **Technology Recovery/IS Disaster Recovery – Infrastructure, Network and Applications**
 - Ensuring that all critical assets including information systems hardware, software, networks and applications are recoverable within defined recovery time objectives
- **Security Management – Protection of Information, People and Facility**
 - Physical security, information security, and any other activities associated with protecting the integrity of targeted information and resources



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What is at risk...

Materiality Risk Grid				
Type of Impact	Degree of Impact			
	Low	Moderate	Important	Critical
Patient Care/Medical	No impact on patient care/medical	Possible patient care impact but not important	Important but not life threatening	Important will lead to loss of life
Research	Management decision	Affects most Research activities and management decision/judgment	Delay in clinical trial or meeting grant deadline of greater than 3 months	Delay in clinical trial or meeting grant deadline of greater than 6 months
Financial	Losses less than \$1M	Losses between \$2M and \$10M	Losses between \$10M and \$20 M	Losses greater than \$20 M Approx 2% of Net Revenue
Legal, Regulatory Compliance & Quality	Likely justifiable, may require consultation with compliance body	Likely not justifiable, requires consultation with compliance body	Not justifiable, with short term compliance exposure	Not justifiable, with long-term compliance exposure
Other Key Impacts: *Patient Satisfaction *Public Image/Reputation *Physicians Satisfaction *Loss of Public Confidence *Legal Liabilities *Loss of Personnel *Damaged Employee Morale *Others defined by Executive or Team	Management decision	Management decision	Management decision	Management decision
Recovery Time Objective (RTO): How quickly does each impact rise to its highest level?				
1 - 24 Hrs	1 - 7 Days	1 - 4 Weeks	> 4 Weeks	



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What about critical applications...

All healthcare organizations depend on:

- Timely and historical data to treat patients
- High-reliability networks for connectivity
- Contingency options when systems and applications become unavailable

An assessment to determine which applications are critical from a patient care, finance, research, health plan perspective, is essential.

What to do when needed data is in the EMR, but the EMR is down.



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End User Downtime Form

Downtime Procedures for Key IS Clinical Systems

The following IS downtime procedure(s) is intended to give guidance on how to obtain the clinical data needed to maintain the care and safety of our patients , when an IS application or system becomes unavailable.

Department	Pharmacy
Application(s)	Omnicell
Clinical Data	Automated Dispensing Cabinets for floor stocked medications
End-users Actions	<ol style="list-style-type: none"> 1) Omnicell cabinets will run independently with power. 2) Override pulls will be allowed during downtime. 3) Temp Users can be created by charge nurses 4) Temp Patients can be added by nursing staff. 5) In case of complete failure each Omnicell can be opened up and a paper tracking log will be implemented. All narcotics will be dispensed from the Pharmacy only.
Contact Information:	
Pharmacy Computer Support	Xxx-xxx-xxxx
Pharmacy Medication Resource Center	Xxx-xxx-xxxx



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What are the threats facing your organization...

Rank	Industry	Texas Medical Center Area	West Houston Area
1	Cyber attack	Hurricane	Epidemic
2	Unplanned IT/Telecom Outages	Flooding – External	Hurricane
3	Data Breach	Flooding – Internal	HAZMAT Incident – External
4	Interruption to Utility Supply	Communications Failure	Site Inaccessibility
5	Supply Chain Disruption	Mass Casualty Incident	Fire - Internal
6	Security Incident	Supply Shortage	Information Systems Failure
7	Adverse Weather	Information Systems Failure	HAZMAT Incident – Internal
8	Human Illness	Tornado	Mass Casualty Incident
9	Fire	Active Shooter	Electrical Failure
10	Act of Terrorism	Bomb Threat	Supply Shortage

The Business Continuity Institute (BCI) – Horizon Scan 2015 Survey <http://www.thebci.org/>

British Standards Institution (BSI) – Horizon Scan 2015 Survey <http://www.bsigroup.com>



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Top 10 Patient Safety Concerns...

1. Health IT Configurations and Organizational Workflow That Do Not Support Each Other
2. Patient Identification Errors
3. Inadequate Management of Behavioral Health Issues in Non-Behavioral Health Settings
4. Inadequate Cleaning and Disinfection of Flexible Endoscopes
5. Inadequate Test-Result Reporting and Follow-up
6. Inadequate Monitoring for Respiratory Depression in Patients Prescribed Opioids
7. Medication Errors Related to Pounds and Kilograms
8. Unintentionally Retained Objects despite Correct Count
9. Inadequate Antimicrobial Stewardship
10. Failure to Embrace a Culture of Safety

Source: ECRI Institute 2016, www.ecri.org



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Communications is key...

When a disaster or disruption occurs it is critical to have a coordinated response with a strong communication strategy leading the way.

It is important to understand what communication options will be available under what conditions.

Determine if your primary communication methods are redundant or stand alone.

If you have a mass notification/communication system it should be structured to give maximum coverage to reach staff, physicians and patients, if needed.



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Key Features of a Mass Notification System

- Two-way Communication
- Scalability
- Sending Methods – web interface, e-mail, land line phone, pager, mobile phone, SMS, fax
- Ease of Use
- Functionality
- Automatic Audit Trail
- Integration with other Applications (e.g. PeopleSoft)
- Contact Targeted Groups & Locations
- Hosted or On-premise options
- System Redundancy
- Outbound Communications
- Reliability of Network
- Geographic distribution of Vendor's Data Centers



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How to plan..

Focus of Business Continuity (BC) is:

Risk reduction; contingency planning and practicing to deal with any adverse operational impacts; prepare to respond effectively at short notice.

Methodology includes:

- Evaluation of organizational readiness
- Risk Assessment and Business Impact Analysis (**BIA**)
- Identifying Critical Functions/Processes
- Recovery Strategies
- Plan Development
- Testing and Maintenance



Business Continuity Program

Phase I

Business Continuity (BC) Project Initiation
EVPs/Sr. VP: BCP Project Sponsorship
Engage BC Consultants

Phase II

Conduct enterprise business impact analysis (BIA)/risk assessment
Identify critical applications
Framework for Enterprise BC Plan
Recovery Strategies/Continuity Solutions

Phase III

Enterprise BC Plan validation: Plan Accessibility and Maintenance schedule
Conduct BC education and awareness sessions
Multidisciplinary drills/exercises involving emergency preparedness, business continuity and IS disaster recovery

Phase IV

Integrate business continuity in preparedness environment
Identify essential functions, succession planning, space planning, vital records, personnel planning
Select departmental business continuity planning tool
Develop departmental BC plans
Integrate departmental BC plans into enterprise BC plan
BC education and training for staff along with additional drills/exercises

Phase V

Business Continuity Program
Program development and maturity
Advance preparedness testing and drills



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Why is Business Continuity Important...

- Patient Care and Satisfaction
- Patient Safety
- Research Data and Materials
- Organizational Reputation
- Protection from Financial Losses
- Legal Liability
- Reduce Staffing Interruption and/or Equipment Loss or Damage
- Employee Morale



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Summary

- It is essential to determine in advance what operational functions must be maintained and what can wait awhile. The time to make these determinations is not in the midst of a disruption or disaster.
- Defining the critical functions, key supporting resources (especially IT applications) and risk tolerance, are essential to maintaining a stable and safe environment for your patients.
- To address any threat you must have a proven communication strategy.
- The time to plan is now so you can be ready when unexpected events occur.



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Words to Remember...

“If you fail to plan, you are planning to fail!”

Benjamin Franklin

“A good plan today is better than a perfect plan tomorrow.”

General George S. Patton Jr.



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Questions?



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Final words...

Remember to plan, because

“Winter is coming”

by

Game of Thrones



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Biography



John Henderson is the Assistant Vice President of Information Services at Texas Children's Hospital. He is responsible for IT Operations including Business and Clinical Application Delivery, Business Intelligence & Analytics, and Infrastructure Technology for the healthcare organization.

He provide top-down executive leadership to top-flight business and IT teams of up to 280 spanning multiple disciplines. Liaise with patient safety and quality executives to formulate and implement data management governance strategy and infrastructure. Plan, manage and allocate capital expenditure (CAPEX) and operating expenditure (OPEX) budgets. Forge ongoing partnerships with physicians, clinicians and executives across all departments. Cultivate relationships and negotiate win-win contracts with strategic enterprise vendors.

Contact Information

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Biography



With over twenty seven years in the information technology field, **Myra Davis** is the Sr. Vice President/Chief Information Officer at Texas Children's Hospital. Currently, as the Sr.VP/CIO of Information Services, Myra has the responsibility to enhance the operation and services of the IS department by maintaining on-going emphasis on partnerships, customer values, project management, teamwork and implementation of successful operational practices.

Myra is on the Board of Directors – GenesysWorks and CHIME Board of Directors - College of Healthcare Information Management Executives

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Biography



Terry J. Cooper, FACHE, MBA, MT (ASCP) is the President/Managing Partner of Perchance Consulting, a division of Perchance Enterprises, LLC in Sugar Land, Texas. In his role, he provides strategic planning and consultation in the areas of business continuity planning, risk assessments/business impact analysis, project planning, program development, process improvement and compliance. Terry has over 25 years of healthcare experience in management and healthcare operations.

Prior to joining Perchance Consulting, Terry was the Director of Business Continuity Planning at the University of Texas, MD Anderson Cancer Center in Houston, TX. He provided leadership in the development of the enterprise business continuity program, which better positioned the organization to handle unexpected disruptions to daily operations, improved patient safety and reduced the organization's risk profile.

Terry is a Fellow of the American College of Healthcare Executives (FACHE). He earned his Master's Degree in Business Administration from LeTourneau University and Bachelor's Degree in Laboratory Medicine/Pathology from Columbus State University. He is a Certified Medical Technologist (MT) through the American Society of Clinical Pathology (ASCP).

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