



Microgames: Engaging Healthcare Leaders in Crisis Management

James Fenush, Jr., MS, RN, NEA-BC

Vice President, Nursing Emergency Services & Clinical Support Services

Penn State Health

Milton S. Hershey Medical Center

Disclosure of Financial Relationships

Vizient, Inc., Jointly Accredited for Interprofessional Continuing Education, defines companies to be ineligible as those whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients.

An individual is considered to have a relevant financial relationship if the educational content an individual can control is related to the business lines or products of the ineligible company.

No one in a position to control the content of this educational activity has relevant financial relationships with ineligible companies.

Learning Objectives

- Create a culture of interprofessional collaboration to strengthen crisis leadership.
- Develop scenarios and outreach activities to build core incident management competencies and enhance daily operations.
- Assess and advocate for opportunities to build resilience and maintain an organizational mission.



Microgames: Engaging Healthcare Leaders in Crisis Management

James Fenush, Jr., MS, RN, NEA-BC

Vice President, Nursing Emergency Services & Clinical Support Services

Penn State Health

Milton S. Hershey Medical Center



PennState Health



5 hospitals



1,395 licensed beds



225 outpatient practices



2,450+ physicians and advanced practice providers



200+ pediatric specialists and subspecialists



2M outpatient visits annually



42,240 inpatient acute admissions annually



133,000 emergency department visits annually



18,000 employees



Penn State Health Milton S. Hershey Medical Center







632-bed Academic/Quaternary Care Medical Center in Central Pennsylvania

The Medical Center campus includes:

- Penn State Health Milton S. Hershey Medical Center
- Penn State College of Medicine
- Penn State Hershey Cancer Institute
- Penn State Hershey Children's Hospital
- Hospital Admissions (adult and pediatric): 28,472
- Surgical Procedures: 32,204
- Emergency Room Visits: 74,945
- ➤ Outpatient Visits: 1,097,432

Magnet Hospital Designations: 2007, 2012, 2017, 2022

A Sampling of Penn State Health's Recognition























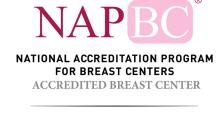












A QUALITY PROGRAM of the AMERICAN COLLEGE OF SURGEONS



The Sweetest Place on Earth



Photos by Frances Civello

Critical Infrastructure In and Around Hershey

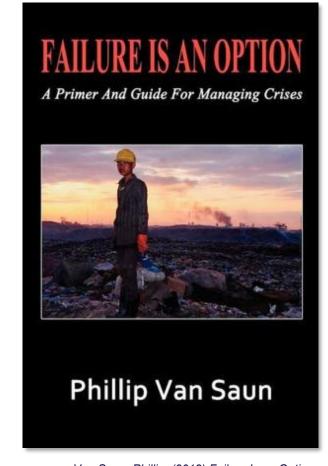


Photos courtesy of LebTown and Frances Civello

Microgames: Innovative Strategy to Engage Leaders in Crisis Management

Failure is an Option: A Primer and Guide for Managing Crises
Phillip Van Saun, 2012

- Van Saun identified the construct of microgames
- "Provide examples and encourage the use of active crisis sensing, mitigation, response and recovery methodologies."
- "Facilitate the open exchange of better practices regarding vulnerability reduction, response to and recovery from specific crises."
- "Practice the use of crisis management techniques in response to an evolving, organizational specific event scenarios."
- Strategy used in Fortune 500 C-suites, healthcare, higher education, and training CEOs in major US business schools



Van Saun, Phillip, (2012) <u>Failure Is an Option:</u> <u>A Primer and Guide for Managing Crises</u>. Phillip Van Saun)

Van Saun, Philip, "Crisis Gaming as an Element of Risk Mitigation and Organizational Resilience: A Case Study of The University of California, San Diego"
(2013). DRU Workshop 2013 Presentations – Disaster Resistant University Workshop: Linking Mitigation and Resilience. Paper 48.

Implementation at Penn State Health Milton S. Hershey Medical Center

- Identified key individual(s) to facilitate initiative:
 - At MSHMC—Emergency Management & Business Continuity Director
- Developed a monthly cadence for executives and key department leaders
- Chose topics based on Hazard Vulnerability Analysis or recent healthcare related events
- Created a framework to allow for brainstorming and "no-fault" environment:
 - Everyone brings something to the table / What are the different lenses through which we perceive risk and impact?



Key "Players"

- Senior Executives (President, SVPs, CNO/COO/CMO, CFO)
- Operational / Nursing / Support VPs
- Administrators-on-Call (AOCs)
- House Managers (Nursing Supervisors)
- College of Medicine Senior Leaders







- Life Lion (EMS)
- Facilities
- Marketing and Communications
- Emergency Medicine
- Patient Logistics



Pre-Intervention Baseline Prep for Leaders

- Deployed leaders to Center for Domestic Preparedness week-long classes in Anniston, Alabama
- Completed online FEMA Incident Management classes
- Created infrequent emergency management training
- Provided a baseline overview of leadership roles in crisis by emergency management leader
- Received feedback from senior leaders—supplemental training to ensure comfort and success

COVID pandemic led to loss of focus for crisis exercises

Setting Up the Game

- Thought-provoking questions to stimulate crisis management solutions:
 - O What keeps you up at night?
 - OWhat process do you use to evaluate organizational risk?
 - O How do you prioritize and mitigate these risks?



- Logistics of Microgames:
 - Virtual via Microsoft Teams
 - oTwice monthly-same scenario to allow for greater participation

Joint Commission Preparedness Emergency Management Hazard Vulnerability Analysis



Kaiser Permanente HVA Model adopted by Penn State Health

- Assess the relative risk for your institution:
 - Probability
 - Severity
 - Magnitude (Human, Property, Business Impacts)
 - Mitigation (Preparedness, Internal Response Capabilities, External Response Capabilities)

Kaiser Permanente, Hazard Vulnerability Analysis Model (2016)

HVA—Patient Surge

HVA				7.						
Emergency Management										
Hazards - Penn State Milton S. Hershey Medical Center Hazard and Vulnerability Assessment Tool - 2022 Naturally Occurring Events										
Event	SEVERITY = (MAGNITUDE - MITGATION)									
	PROBABILITY	ALERTS	ACTIVATIONS	HUMAN IMPACT	NEW TOTAL PROPERTY OF THE PARTY.		PREPARED- NESS	INTERNAL RESPONSE	EXTERNAL RESPONSE	RISK
SCORE	0 = N/A 1 = Low 2 = Moderate 3 = High		Number of Activations	0 = N/A 1 = Low 2 = Moderate 3 = High	1 = Low 2 = Moderate	1 = Low 2 = Moderate	1 = High 2 = Moderate	0 = N/A 1 = High 2 = Moderate 3 = Low	0 = N/A 1 =High 2 = Moderate 3 = Low	0 - 100%
	Likelihood this will occur			Possibility of	Physical losses		Preplanning	Time, effectiveness, resources	Community/Mut ual Aid staff and supplies	* Relative threat
Patient Surge	3		2	3	1	2	1	2	3	48%

Definition: A situation that results in a large influx of patients seeking medical evaluation or care.

This may occur over a short time or for a protracted duration and exceeds the capabilities of the existing medical infrastructure resulting in an impaired ability to maintain normal operations. It encompasses the ability of HCOs to survive a hazard impact and maintain or rapidly recover operations that were compromised (a concept known as medical system resiliency).

Kaiser Permanente, Hazard Vulnerability Analysis Model (2016)

Microgames: Process to Engage Leaders in Crisis Management

- 1. Present the basic details of the risks and impacts to be addressed.
- 2. Brainstorm possible solutions and discuss inherent challenges.
- 3. Identify potential moves (actions) given the culture and resource constraints.
- 4. Determine and implement moves to respond to the problem and mitigate the identified risks.



Photo by Christopher Paul High on Unsplash

Microgames: Facilitation Keys to Engage Leaders in Crisis Management

Sessions led by Director of Emergency Preparedness

- Leverage problem-based learning to present the scenario
- Facilitate the game
- Encourage brainstorming
- Identify and adjust for bias in the decision cycle
- Guide the process to expedite decisive decision-making
- +/Δ Plus-Delta provides a quick way to gather feedback at the end of the exercise
 - Identify positive takeaways
 - Define future opportunities to mitigate risk



Photo by Christopher Paul High on Unsplash

Playing the Game

- Record notes and recommendations
- Review current plans and protocols relevant to the type of crisis being discussed
- Discuss who would be notified, when, by what mechanism, and with what information
- Focus on impacts and actions to be taken/resources needed to achieve objectives
- Email out session summaries and associated materials to all players



FY 23 Strategic Roadmap for Microgames

- January 23 Power Disruption (#4)
- February 23 IT Disruption (#1/4)
- March 23 Hazardous Materials Spill
- April 23 Bioterrorism Attack
- May 23 Public Figure Admission
- June 23 Internal Flood
- July 22 Patient Surge Train Crash / MCI (#2/3)
- August 22 Tornado
- September 22 Active Assailant
- October 22 Internal Fire



- November 22 Student Threat
- December 22 Ebola "Person Under Investigation"

Example: Internal Fire

FRIDAY, 10:00 a.m.

- The Building Operations Center (BOC) receives an alarm from a smoke detector in the first floor south addition of the hospital.
- Subsequent alarms are received from a duct detector in the same area.
- Audible and visual fire alarms are alerting throughout the hospital building.
- What would be your initial actions?



Example: Internal Fire

FRIDAY, 10:03 a.m.

- Facilities and Security arrive on the unit and see significant smoke in the area, including smoke coming out of a unit entry door that had been propped open by a supply cart. Smoke is entering the main corridor.
- Both team members radio back that they need additional assistance.
- The BOC calls the 911 center and provides the report of smoke in the corridor.
- What are your additional actions?



Example: Internal Fire FRIDAY, 10:04 a.m.

- Nursing staff are moving patients from the unit out into the main corridor and into the adjacent courtyards.
- Many of these patients have critical care needs.
- Facilities closes the corridor door to prevent additional smoke leaving the unit.
- Security uses a fire extinguisher to attempt to put out the remainder of the fire in the room.
- The patient involved is badly burned and the nursing staff rushes him to the Emergency Department.
- What are your additional actions?



Example: Internal Fire

DISCUSSION POINTS

- Time of day: staffing, census, location of incident
- Notification: When do we start the response?
- Crisis communication
- Incident Management Team activation
- Short-term versus long-term response
 - Immediate life safety
 - Assessment of impact
 - Mission continuity

Complexity

- Impacts to buildings and infrastructure/utilities
- Impact of propping doors
- Safety of personnel/patients
- Evacuation locations and maintaining care
- Psychological impacts/concern for safety
- Challenges with communication and situational awareness/information versus speculation

The Next Iteration

- More actively engaging incident management role
- Refine incident action plans
 - Incorporate into tabletop, functional and full-scale exercise
- Conduct survey with microgames participants
 - Use feedback to enhance the next round of learning



Lessons Learned

- Predictable surprises
- It's important to evaluate the threat landscape
- Creating a judgement-free learning environment facilitates participants' ability to brainstorm and creates learning opportunities
- Even well-established communication pathways need to be reevaluated to ensure messaging travels both horizontally and vertically
- Opportunities exist to pre-script messages
- There is value in building incident management teams
- Review of crisis scenarios with multiple leaders provides intel into how to expedite decisive decision-making
- Collaboration amongst professional teams was enhanced



Photo by Rita Morais on Unsplash

Key Takeaways

- Microgames allow for quick and effective learning and crisis decision-making competency building.
- 2. Executives see and evaluate risk through many lenses.
- 3. Perspective is key.
- 4. Communication is the largest failure in crisis situations.
- 5. Immediate and long-term impacts can look vastly different.
- 6. Preparedness of leaders mitigates risk that brand, reputation and market share could be negatively impacted.



Photo by Claudio Schwarz on Unsplash





SPECIAL ACKNOWLEDGEMENT

Heather Brooks, MBA-HCM, BSN, RN

Vice President, Health System Command Centers Penn State Health Hershey Medical Center William Dunne, MA, MS

Director, Emergency Management and Business Continuity

Penn State Health Hershey Medical Center





Questions?





Heather Brooks, MBA-HCM, BSN, RN

Vice President, Health System Command Centers

Penn State Health Hershey Medical Center

500 University Drive

PO Box 850

Hershey, PA 17033

(717) 531-4547

hbrooks@pennstatehealth.psu.edu

William Dunne, MA, MS

Director, Emergency Management and Business Continuity

Penn State Health Hershey Medical Center

500 University Drive

PO Box 850

Hershey, PA 17033

(717) 531-0003, ext 285932

wdunne@pennstatehealth.psu.edu

James Fenush, Jr., MS, RN, NEA-BC

Vice President, Nursing Emergency Services & Clinical Support Services

Penn State Health Hershey Medical Center

500 University Drive

PO Box 850

Hershey, PA 17033

(717) 531-3965

jfenush@pennstatehealth.psu.edu

This educational session is enabled through the generous support of the Vizient Member Networks program.





Appendix

Kaiser Hazard Vulnerability Analysis Model
https://www.calhospitalprepare.org/post/updated-hva-tool-kaiser-permanente

Examples of Microgames

https://pennstatehealth.sharepoint.com/:f:/s/PennStateHealth-

<u>EmergencyManagementExercisesandTraining/EvwUGLDgCvRDtj-F9FFVqYwB663incNQtR5iumeUOV-nkg?e=hHEp1P</u>