

INTRODUCTION

In healthcare, where operations are complex and intertwined, adaptability to unforeseen challenges is essential. High Reliability Organizations (HROs), with their commitment to resilience and preoccupation with failure, offer a valuable model.¹ The Emergency Management and Enterprise Resilience (EM+ER) department at NYU Langone Health employs innovative strategies like Crisis Management Drills (CMDs) to empower frontline staff and bolster resilience. Drawing from the theories of micro-learning and simulation based learning, these drills nurture crisis decision-making and enhance preparedness, acknowledging the direct impact of emergencies on patient care.

OBJECTIVES

- Empower front-line staff to take effective action
- Build muscle-memory around crisis decision-making
- Reinforce processes and available resources during emergencies

METHODS

- Two-page CMD administered to inpatient clinical staff monthly by unit leader as 5-10 minute drill² during weekly HRO Huddle.
- Scenarios based off annual enterprise hazard vulnerability analysis, real-world incidents, and topics requested by employees.
- Facilitator immerses staff in scenario, then leads with questions, not content.³ Facilitator reviews unit-specific information as needed.
- Voluntary survey provided to staff after drill. Four questions Likert scaled, with one question reverse scored. Two open ended questions seeking suggestions for future drills and program feedback.
- EM+ER team spot-evaluates drills in-person to gauge effectiveness. Team conducts post-drill interviews with facilitators when possible.
- Particular CMDs are modified to fill gaps identified through surveys or observation. CMD program modified on a rolling basis to incorporate research regarding best practices for training and development.

NYU Langone Health **EM+ER**
Emergency Management
Enterprise Resilience

Crisis Management Drill

Scenario: Patient Evacuation Using Med Sleds

Facilitator Instructions

- ✓ Follow the step-by-step instructions below to facilitate the drill.
- ✓ Yellow boxes contain facilitation tips, please read before the unit huddle.
- ✓ Gray boxes contain scripted language for you to read.
- ✓ Send a copy of this document to staff after the unit huddle for review.

Step 1: Read drill instructions out loud to participants

Facilitator: Today we are going to walk through a brief drill. Our objective with this drill is to reinforce the following crisis management workflow that we would use in an emergency or crisis situation:

- **First**, we should always be alert for a crisis situation that could impact us.
- **Second**, we should always tell our colleagues on the unit and alert nursing administration of a crisis situation. Also, we should report internal emergencies by calling 33-911 (44800 for LICH) and life-threatening situations by calling 911.
- **Third**, we should collectively assess the risks to patients, visitors, and staff, plotting a course of action.
- **Finally**, we should act without delay.

Step 2: Read scenario

Facilitator: Our focus today is on patient evacuation, specifically on evacuation of non-ambulatory patients with the aid of Med Sled devices. As I read the following scenario, imagine yourself in this difficult situation; what you would be thinking and doing? Any questions before we start? Okay, here we go: You're halfway through your shift when the unit leader calls for a staff huddle.

"Good afternoon everyone. I need your attention for an important update. As you know, our area has been under an excessive heat wave for three weeks now. With the surges in power demand, [Con Edison (NYC) / PSE&G (Long Island)] has had no choice but to implement brownouts across the region, including right here where we are.

I know temperatures have been rising on the unit and we've been receiving complaints from patients. I just spoke with Nursing Administration, who let me know that the air conditioning and elevators are impacted, and the emergency generators aren't fixing the problem. Due to patient safety concerns we are going to evacuate the building.

We're going to move patients to a staging area downstairs until their final destination is determined. As the elevators are currently down, we will need to use the stairs or use Med Sleds for the non-ambulatory patients."

As the meeting ends, you slowly walk away, thinking, "My patients are bedridden." You think back to last year's Med Sled training and try to remember the first steps.

Reminder to edit last line

PAST SCENARIOS

Prolonged EPIC Downtime	Active Shooter
Med Sled Assisted Patient Evacuation	Hurricane Response/Stay Teams
Extreme Heat	Power Failure
Hurricane Season: Personal Preparedness	Heating Failure/Patient Evacuation
Water Intrusion	Cyber Attack
Patient Elopement	Fire on Unit
Disruptive Behavior	Violent Visitor
Winter Weather	No Bed Availability
Concealed Carry	Tornado

RESULTS

- Approximately 660 inpatient staff reached per CMD ~ estimated total of 11,880
- Program initiated 2021, survey created 2022
- Program expanded to ambulatory sites 2023
- Response rate ~ 4.6% over last 12 CMDs
- In interviews, facilitators indicate preference for shorter scenarios/drills
- Observation of CMDs suggests that time constraints limit ability to complete full script

TABLE 1. Self-reported increase in emergency preparedness among inpatient and ambulatory day shift clinicians following administration of CMD, n=364. (5 = Strongly Agree).

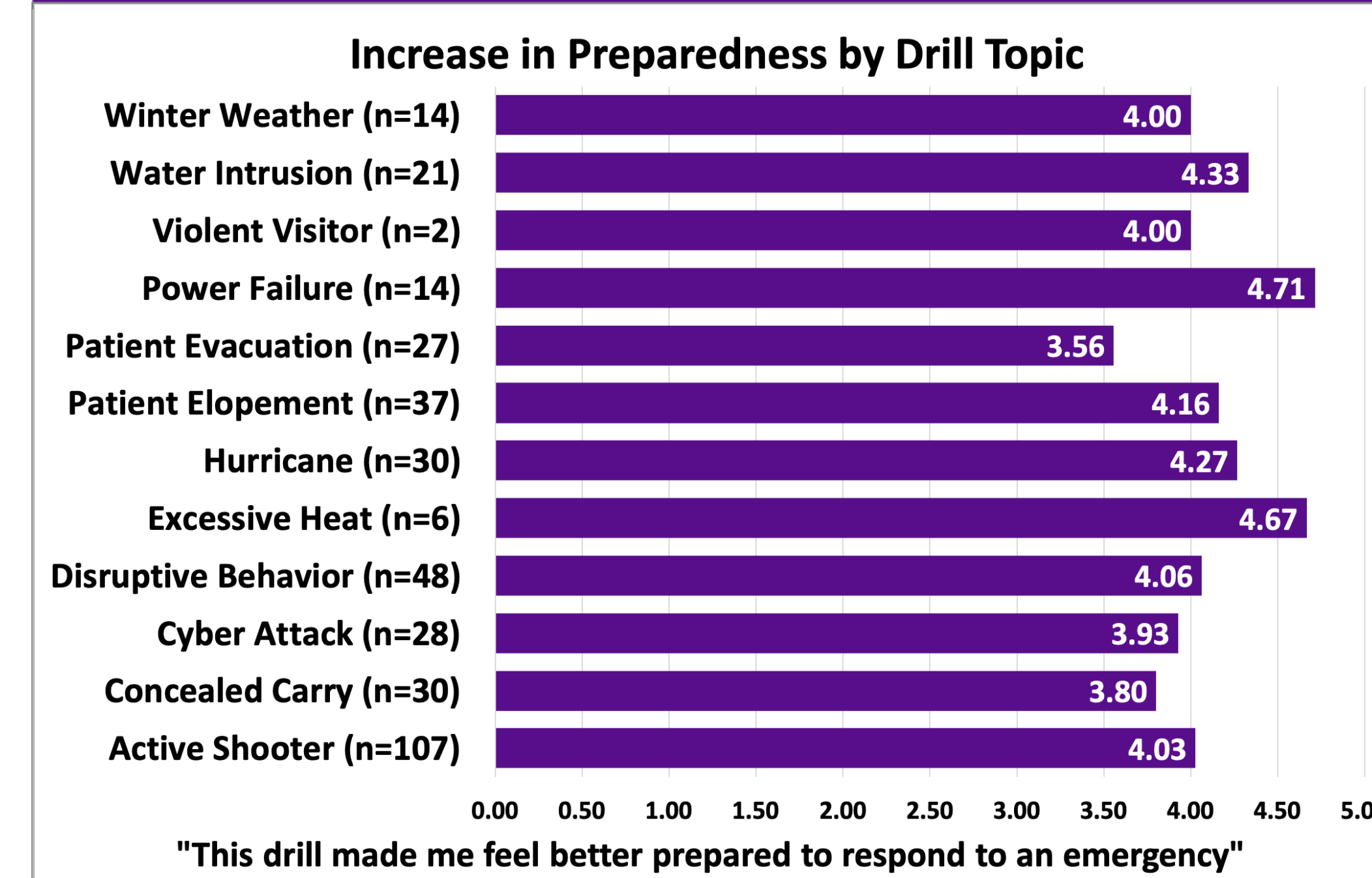
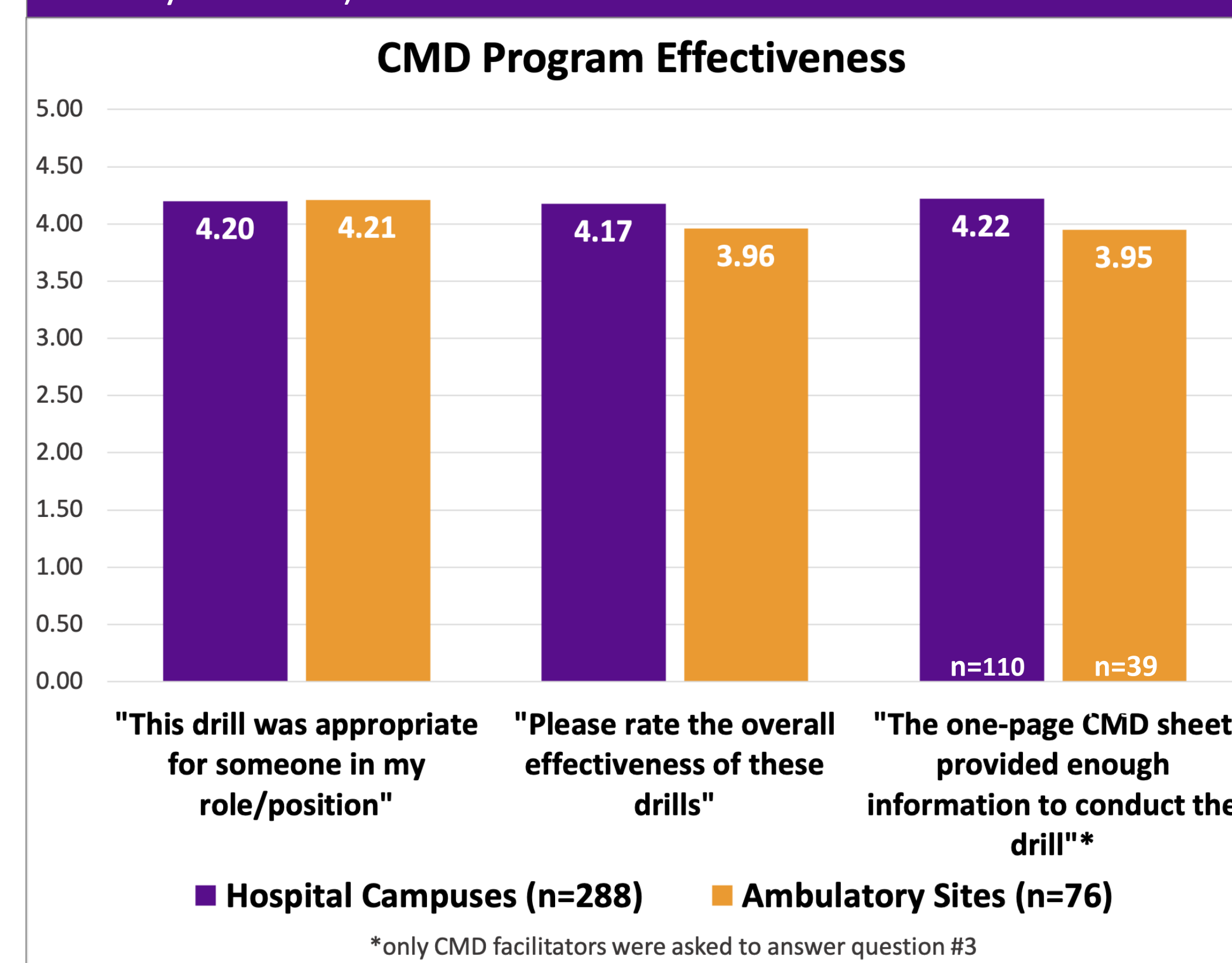


TABLE 2. Feedback regarding CMD program effectiveness and relevance to participants, n=364. (Q1 & Q3, 5 = Strongly Agree; Q2, 5 = Very Effective).



DISCUSSION

- Participants feel better prepared to respond to target scenario following CMD, with degree of preparedness varied by scenario (T1).
- Respondents feel CMDs relevant to roles (T2).
- At ambulatory sites, lower perceived effectiveness of program/satisfaction with content may reflect scenarios originally tailored to inpatient locations (T2). Site- and location-specific needs can be addressed by focus on facilitator prompts, not scripted Q&A.
- Pilot trained 660 staff monthly, and expansion only requires facilitator involvement and training – suggests straightforward scalability.
- Discussion with facilitators and availability of clinicians suggest shorter drills more effective.

CONCLUSION

CMDs are effective as a scalable model to increase enterprise resilience without overextending emergency managers.

- Short document trains 660+ staff monthly
- Quickly created and modified, flexible
- No fault-learning environment
- Draw on proven learning models to maximize retention while minimizing time spent

Pilot program and initial expansion to ambulatory locations overall successful; next steps include creation of CMDs for non-clinical departments to expand reach.

In-person observation, facilitator interviews, and survey responses serve as the basis for adjustments to the CMD program.

- In line with the concept of microlearning, CMDs should be as brief as possible without losing meaningful content.⁴
- To foster discussion and account for site specific needs, drill design should prioritize facilitator guidance over scripted language.
- To facilitate simulation based learning, participants should be encouraged to take an active role.⁵ Additional facilitator training should be offered.
- To assess the effectiveness of the CMD program, gather drill- and program-specific feedback.

LITERATURE CITED

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ACKNOWLEDGEMENTS

Thank you to Alex Resnick, Caitlin Flynn, Kelly McKinney, the rest of the EM+ER Team, and Dr. Fritz François.