

An Eye on COVID: Hurricane Preparedness at a COVID-19 Alternative Care Site

Meghan Maslanka, MD; Jacob A. Hurwitz, BSPH, BA, NREMT

ABSTRACT

Background: In March 2020, the Louisiana Department of Health activated the Medical Monitoring Station (MMS) in downtown New Orleans. This alternative care site is designed to decompress hospitals and nursing homes overwhelmed by the coronavirus disease 2019 (COVID-19) pandemic. Given the city's historic vulnerability to hurricanes, planning for possible tropical weather events has been a priority for MMS leadership.

Method: The planning process incorporated input from all sectors/agencies working at the facility, to ensure consistency and cohesion. The MMS Shelter-in-Place Plan (MSIPP) was created, and a comprehensive tabletop exercise was conducted.

Results: Six planning topics emerged as a result of the planning process and were used to create a comprehensive plan for sheltering-in-place. These topics address hurricane preparedness for patient care, interfacility coordination, wrap-around services, medical logistics, essential staffing, and incident command during a shelter-in-place scenario.

Conclusion: The MSIPP created by the MMS helped to maximize patient safety and continuity of operations during a real-world event. Select pieces of the plan were activated to meet the needs and threat level of Tropical Storm Cristobal. This experience reinforced the need for originality, scalability, and flexibility in building emergency operations plans in the midst of an unprecedented pandemic.

Keywords: alternative care site, COVID-19, hurricane

When New Orleans emerged as a coronavirus disease 2019 (COVID-19) hotspot in April 2020, the state opened multiple alternative care sites to decompress health-care facilities overwhelmed with COVID-19 patients. The largest of these sites is the Medical Monitoring Station (MMS), located at the Ernest N. Morial Convention Center (MCCNO). The MMS is a facility for COVID-19 positive patients who require medical monitoring and/or a facility in which to isolate. The MMS requires a referral from a health-care provider and accepts patients for transfer from other health-care settings. Acute-care hospitals, emergency departments, urgent cares, clinics, behavioral health facilities, and nursing homes are able to refer patients to the facility, which is equipped to provide basic medical care, similar to that of a medical-surgical unit of a hospital. Critical care staff, ventilators, laboratory services, and imaging

nursing homes have rescinded these agreements given their impacts during the COVID-19 emergency, leaving flood-prone facilities scrambling for alternatives as hurricane season begins.

The MMS will likely assist with sheltering COVID-19 positive individuals during a hurricane, as COVID-19 positive individuals who cannot be safely isolated at receiving nursing homes or shelters can be well accommodated at the MMS. This will reduce the stress placed on hospitals that may otherwise be asked to shelter these patients through a storm. The MMS will remain focused on its mission as a medical facility during a hurricane and does not plan to

the entire MMS team and encouraged identification of short-falls or duplicative efforts. Following the exercise, a revised sector-specific plan was requested from each contributor and incorporated into a new version of the MSIPP.

PLANNING OUTCOMES

The MSIPP serves as a consensus on how MMS operations

an Acute Treatment Area is activated within the MMS in the event of a hurricane. This area encompasses a cache of emergency/critical care equipment, supplies, and medications needed to resuscitate, stabilize, and maintain patients who become critical, until they can be safely evacuated. Items not typically stocked in the MMS, such as rapid sequence intubation medications, ventilators, IV pumps, and cardiac/anticoagulant/insulin infusions are available in this area. However, the use of these medications and equipment is dependent on the ability to staff the area with clinicians qualified to provide emergency/critical care. As emergency/critical care is not the focus of the MMS, this requires the procurement of additional qualified staff in the event of a hurricane.

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In line with hospital norms across coastal Louisiana, the MSIPP is intended for use in up to a Category 3 hurricane. However, other alternative care sites and nursing homes across the state are more prone to wind damage and flooding and must evacuate for smaller storms.

The MMS is an excellent evacuation option for many COVID-19 positive patients from other alternative care sites in the state. These sites have fewer resources and stricter acceptance criteria, so most patients are expected to easily meet safe acceptance criteria for the MMS. Likewise, the MMS is a more appropriate use of resources for COVID-19 positive nursing home patients than an acute-care hospital. While the Louisiana Department of Health is assisting nursing homes in solidifying jeopardized facility evacuation plans, the MMS stands ready to accept COVID-19 positive residents that cannot be safely accommodated by a receiving facility. This will help to prevent a large

classically located outside of hurricane-prone areas. Hospitals are fully equipped to manage most medical emergencies onsite. A unique plan was needed to bridge this divide.

The MMS had the unexpected opportunity to activate the MSIPP during the first week of the 2020 hurricane season. Because Tropical Storm Cristobal was a low impact event, it was not necessary or appropriate to activate all aspects of the plan. Without the opportunity to fully implement the MSIPP, the ability to wholly analyze the plan and its potential shortcomings are limited. However, this emphasized the importance of scalability and flexibility for building and implementing such plans.

Patient care planners did not rush the acquisition of critical care staff, equipment, and medications to open an Acute Treatment Area as it was not needed based on predicted wind speeds and flood impacts. This prevented an unnecessary rush to obtain assets that require careful attention to assemble and use.