INSTITUTE FOR HOMELAND SECURITY

Sam Houston State University

The Level of Preparedness in Non-acute Healthcare Providers

Can Impend Your Healthcare System Infrastructure in Disasters

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Abstract

Developing and sustaining a healthcare emergency preparedness education and training program that integrates with a healthcare coalition and offices of emergency management will improve the healthcare infrastructure system to maintain operations during the effects of a disaster. Preparing and responding to disasters or a large-scale emergency within the healthcare system is a multi-layered approach. Non-acute healthcare providers pose a challenge for responding agencies. Most of these types of providers do not emphasis the importance of preparing for a disaster. Which in turn causes a trickle effect for responding agencies juggling multiple events simultaneously to meet the need of these providers. The project will demonstrate how a healthcare coalition collaborating with local offices of emergency management improves the overall response when preparedness initiatives are at the forefront of daily activities as compared to other areas without the resources to conduct preparedness activities. Examples of real-world emergencies will show the disparities of a prepared healthcare system vs. those that are minimally prepared that result on a cascading effect on the healthcare system and responding agencies. Information collected by (the SouthEast Texas Regional Advisory Council) SETRAC's Special Populations daily activities and real-world disasters will be used to demonstrate the effectiveness of preparedness and response as it improved over the past 5 years. Historical response efforts after action reports will also be utilized to delineate the differences between utilization of dedicated personnel to reduce the implication of a cascading effect negatively impacting the healthcare system infrastructure.

Intro/Overview

Maintaining the healthcare infrastructure in your area is a daily operational process that is ongoing on a 24-hour basis. The healthcare infrastructure refers to the network of your hospitals, outpatient services, long term care facilities, assisted living facilities, dialysis centers, home health and hospice care, free standing emergency rooms, to your local 911 EMS providers (ground and flight), EMS transportation providers and durable medical equipment providers. There are numerous of additional healthcare types that are also part of your healthcare infrastructure. These are on the top of the list that come to the forefront during a disaster response. Throughout the country different types of disasters occur, which will dictate the type of healthcare agencies that will be involved in a response.

Hospital Emergency Departments anywhere in the U.S. day to day are operating with a full capacity of patients in their ED bay and some places beyond what they hold in their emergency department. Let's throw a disaster in the mix. Hospitals receive an influx of patients walking in their emergency department from the general public seeking treatment to long term care facility needing a place for refuge. As the disaster event prolongs and depending on the type of the disaster, hospital emergency rooms can begin to see patients needing oxygen support and patients in need of dialysis treatment in addition to their normal patient load. Heart attacks, strokes, and injuries do not stop happening because of a disaster is going on. In every disaster event there will be different types of patients that will be coming to the hospital emergency room for care.

Although we cannot prevent the general public from coming into the hospital emergency departments, with training and education to our long-term care, assisted living facilities, dialysis centers, and home health providers we can limit the influx of patients from these types of

healthcare providers. In September 2016, the Center for Medicare and Medicaid Services released the Emergency Preparedness Requirements for Medicare and Medicaid Participating Providers and Suppliers Final Rule. All 17 Medicare and Medicaid Providers were given until November 15, 2017, to meet the new tule requirements. With the new rule in effect, and the minimal knowledge these facility types had in emergency preparedness, it posed a challenge in meeting the requirements. During the initial roll out of the new rules, minimal education and trainings was being offered to assist these facilities to be in compliant.

The SouthEast Texas Regional Advisory Council (SETRAC), a sub-recipient of the Texas Department of State Health Services for the Administration for Strategic Preparedness and Response (ASPR) grant program, utilizes a portion of the funding to have dedicated staff to assist non-acute healthcare facilities and agencies to educate, train, provide guidance and collaborate with the regional healthcare preparedness coalition. The Regional Healthcare Preparedness Coalition (RHPC) is comprised of hospitals, local offices of emergency management, EMS providers, dialysis centers, long term care facilities, and local public health agencies to name a few. The Regional Healthcare Preparedness Coalition's mission to provide collaborative planning and response to emergencies in a multi-disciplinary approach, and to preserve the medical infrastructure of the region. Having dedicated personnel enhances the overall approach in preparing the non-acute type facilities for small to large scale disasters, which results with a smoother process during a disaster response with a medical operations center and local jurisdictions.

Past Disaster Events (floods, winter storm, hurricane, wildfires, tornados)

There have been hundreds of disasters effecting areas all over the country. Some parts of the country are hindered with annual flooding events, tornadoes, wildfires, and hurricanes. In most of these events, there is a healthcare component involved, from a hospital to long term care facilities and even home bound patients. Home bound patients can be categorized by patients receiving care from home health, hospice care agencies and/or a dialysis center.

Every disaster brings a different set of challenges to non-acute healthcare facilities. No-notice disasters such as a tornado, wildfires, and even flooding have similar types of response objectives for both the non-acute healthcare facilities and the local responding jurisdictions. With a few hours' notice or less, an evacuation or a shelter in place decision will have to be made in a timely manner by the non-acute healthcare facility if there is no mandatory evacuation order issued for an impending wildfire or rising flood waters. A long-term care facility that has sustained infrastructure damage from a tornado event will most likely need to be evacuated to another facility or a safe temporary location until another facility is identified to house their residents. No-notice or short-notice disasters (compared to an approaching hurricane or winter weather event days away) allow the non-acute healthcare facilities a longer time for the ability to plan and prepare for what will possibly be threatening their facility. The evacuation of a long-term care facility utilizes numerous and different types of transportation resources such as ambulances, wheelchair accessible transportation, and commercial buses. These types of resources are the most commonly used during an evacuation.

Offices of Emergency Management and the medical operations component of a disaster response play a major role in working with non-acute healthcare providers. As mentioned earlier in the different types of disasters, these facilities rely heavily on transportation resources for the

evacuation of their facility, in addition to other resources needed to support facilities that will be sheltering in place. Collaborating and establishing a partnership with the local office of emergency management and healthcare coalition provides additional support to non-acute healthcare providers when not enough resources are available to accomplish a safe evacuation of the facility or shelter in place operations.

The SouthEast Texas Regional Advisory Council – Regional Healthcare Preparedness Coalition has responded to several disaster affecting the SouthEast Texas region. The winter storm of February 2021, hurricanes such as hurricane Harvey with catastrophic flooding extending west from the City of Houston to Orange, Texas and the most recent hurricane Beryl causing power outages to over 2.2 million for an extended period of time. With the high occurrence of disasters in the Region, it was of high importance to establish a preparedness program that focuses on the non-acute healthcare providers as these facilities were new to the emergency preparedness activities. During after action discussions for smaller disaster events, it was identified that long-term care facilities utilized the most transportation resources and if not properly prepared will negatively impact the response efforts supporting the healthcare coordination of resources.

Areas Identified Needing Improvement

In July 2017, SETRAC with the funding from the ASPR grant, dedicated staff to incorporate the non-acute healthcare providers such as the long-term care facilities, assisted living facilities, dialysis centers, home health and hospice into the Regional Healthcare Preparedness Coalition. From after action discussion from previous disaster activations, these new types of providers were not well versed in emergency preparedness and not familiar how to integrate with local emergency management. The new CMS Rule helped these facilities come to

the table. Many organizations had struggled before the rule was in effect to have these facilities be part of their planning meetings.

With working with these specific type of healthcare providers, several areas were identified to improve collaboration and maintain overall preparedness. The new CMS Rule mandated activities these providers had to have in place with minimal guidance on how to accomplish them. Exercises and drills had to be conducted and the vast majority of the non-acute healthcare providers were not familiar with developing and conducting an exercise at their facility or agency. Having an ineffective exercise and training program will not prepare your facility or agency for a small to a large disaster. The majority of administrators needed to become familiar with emergency management as a whole community approach, the roles of the different agencies involved in emergency management, and the importance of staying involved. The importance of conducting a risk assessment and utilizing the proper risk assessment tool for their facility and agency was identified as an area of improvement. One of the areas that was initially identified in improving with healthcare providers, was educating them in establishing secondary and tertiary vendor contracts for their resources such as fuel, generator, transportation, and supplies. Most had only one vendor contracted. This is crucial as, during a disaster, it has been demonstrated that facilities with secondary and tertiary contracts have a better outcome to continue their operations compared to those facilities that only have one vendor contracted for a resource. Communications is always an area identified as an improvement. Making sure the healthcare providers know who to contact when experiencing short falls in obtaining resources, providing facility status updates, and knowing where they can continue to receive pertinent information during a disaster. Having the right contact can save you time in obtaining information or providing you with the needed resources in a timely manner.

Preparedness Initiatives

In order to improve the overall response to a disaster with non-acute healthcare providers, an assessment of your healthcare providers should be conducted to identify areas needing improvement. In addition, reviewing your after action reports you conduct after a disaster or small emergency event can also assist in developing your goals.

As the Regional Healthcare Preparedness Coalition, it is important to continue an ongoing educational program targeting our non-acute healthcare providers. There is a large turnover rate in these types of facilities, with new administrators changing a few times within a twelve-month period at one facility. Providing exercises helps to keep these facilities engaged in emergency preparedness. Utilizing the risk assessment can assist in identifying which type of exercises you will need in your area. SETRAC exercise for these types of facilities is a hurricane event. In return, you get prepared facilities for any disaster to maintain continuity of care and will alleviate patients from going to the hospital emergency rooms. Having a communications plan to provide up to date information, guidance, and resources pertinent to your non-healthcare providers, is an additional tool to keep them informed. This also will allow them to contact you for assistance during a disaster response.

Strategies

With the high turnover rate in non-acute healthcare providers and the need to maintain engagement, SETRAC established educational workshops throughout the year. Each year, based on facility feedback and an annual assessment our agency develops the curriculum for the workshops. These workshops “Emergency Preparedness Boot Camps” are in collaboration with the local offices of emergency management from local to state agencies that also includes our public health partners. These workshops provide an opportunity for new facilities and

administrators to become familiar with our organization and meet our emergency management partners. SETRAC provides an overview of our emergency preparedness initiatives and how we operate during a disaster response and activation. Our local and State partners also provide them an overview of how they support the community in response and how each facility and agency should continue to stay involved. Additional information and training are also provided on our regional communication platforms. The workshops also provide training on how to develop and conduct an exercise, develop a business continuity plan, and an education overview of emergency preparedness. The 2024 workshops included a hurricane tabletop, which helped prepare facilities for hurricane Beryl's response. In addition to our annual workshops, SETRAC also conducts an annual hurricane regional community exercise with our non-acute healthcare providers. Our target objectives for the exercise are for planning an evacuation of your facility or sheltering in place.

These activities began in 2017 and continue annually. As our region is prone to different type of disasters, hurricanes are on the top of our list. These trainings and ongoing strategies to maintain engagement with these types of facilities have been beneficial to our healthcare community and maintaining our healthcare infrastructure in place. Our recent responses to natural disasters have improved throughout the years with these healthcare providers. There are always new lessons learned from every disaster response and not all are the same. Hurricane Harvey brought our region catastrophic flooding with minimal infrastructure damage. Hurricane Beryl caused significant damage and long duration of power outages with minimal flooding. Each response was different, however, our healthcare facilities remained engaged and coordinated with our SETRAC Catastrophic Medical Operations Center.

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Author Biography

Fidel J Calvillo is the Emergency Management Operations Coordinator – Special Populations for the SouthEast Texas Regional Advisory Council.

Mr. Calvillo currently holds a position as the Emergency Management Operations Coordinator – Special Populations for the SouthEast Texas Regional Advisory Council (SETRAC). As the Emergency Management Coordinator, he is part of team responsible for the implementation of the Hospital Preparedness Program for 25 counties with a combined population of over 8 million people, 180 hospitals, over 1,000 nursing homes/assisted living facilities and numerous EMS agencies.

With over nineteen (19) years of experience in working in disaster preparedness and response in emergency management, public health preparedness, and healthcare preparedness has developed a wealth of knowledge with over dozens of response activations. Mr. Calvillo's largest disaster response was hurricane Harvey assigned at the Catastrophic Medical Operations Center with the responsibility of overseeing information management, brokering requests for assistance and supplies, coordinating patient movement, and providing situational awareness across emergency response disciplines within a 25 County Region. Last regional activation to support the SETRAC Region was for Hurricane Beryl.

Questions

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