Indiana Regional Healthcare Surge Response Plan to the COVID-19 Outbreak of 2020

Medical surge is the ability to provide adequate medical evaluation and care during events that exceed the limits of the normal medical infrastructure of an affected community. It encompasses the ability of the healthcare system to survive a hazard impact and maintain or rapidly recover operations that were compromised.

The Regional Surge Response Plan provides guidance to predefined regions within the state in an attempt to provide a framework that may help healthcare systems handle large numbers of patients. This is contingent upon the systems working together collaboratively in a way that shares resources and works toward a common goal of keeping the system operational for patient care while managing the influx of patients from the given threat. While conceptual, this document provides a framework to outline and guide that response. This living document must be adapted locally to meet the existing infrastructure and needs of a given geographic area.

The goal of the Healthcare Regional Surge Response Plan is to keep the health care system operation. This includes our prehospital system of care provided by EMS provider agencies. The entire system is built upon the healthcare systems ability to receive, triage, stabilize, disposition, provide ongoing care (including intensive care) for prolonged periods of time. This creates a vital role for keeping emergency departments open and operational, while at the same time ensuring that hospitals can discharge patients from their facility in a timely manner so that new patients can be admitted. Equally important is the EMS systems ability to respond, care for, and transport emergency patients. This plan combines both of those priorities into an effort at maintain patient flow both into and out of the regional system.

Prehospital Planning: In an effort to keep EMS operational, while at the same time allocating resources to those patients needing care, and attempting to direct non-emergency or less critical patients away from the emergency departments, EMS provider and local communication/dispatch agencies should consider adopting the following guidance.

- Step 1 – Give dispatch the authority to screen patients and NOT send an ambulance for non-critical lower acuity patients. These are often referred to as alpha or omega calls but can be expanded to include other non-critical conditions. This can be accomplished through medical director defined criteria or expanded/modified caller queries. Likewise, retired clinicians to such as physicians, nurses, or other healthcare providers could be embed in dispatch agencies to assist in real time decision making.

- Step 2 – Give EMS providers the ability to screen patients and initiate refusals for noncritical patients. This is unique in most circumstances and is referred to as EMS provider-initiated refusals of care. This should be initiated once call volume and need for ambulances has overwhelmed the capacity of existing assets available in a given community or region.
• Step 3 – Expand the workforce by easing rules/regulations allowing for non-traditional crew configurations and staffing patterns. This should be done locally. IDHS has published more than fourteen blanket rule waivers in response to the Coronavirus response.

• Step 4 – Create a network of EMS providers via EMResource to assist with real-time communications and availability should mass patient movements be necessary. Via EMResource we will know not only contact info, but dispatch, ambulance status, PPE Status, Ventilator Capacity (more than 300 vents statewide on ambulances) and workforce.

• Step 5 – Alternate transport vehicles – Many patients that are ambulatory or non-critical could be moved in alternate vehicles including automobiles, SUVs, passenger vans, or other suitable, but non-state certified vehicle operated as part of an EMS provider agency.

Regional hospital facility planning will require the available facility resources in the given area to essentially function as one healthcare system with multiple locations. While each healthcare system can function independently on their internal response to patient surge, patient movement to and from those facilities will need to be coordinated from an outside source. This will require detailed communication, coordination, and cooperation amongst healthcare system leadership. Treating the region as a solitary system will allow for optimal resource utilization, real time patient navigation and asset allocation, to keep patients moving into and out of appropriate facilities.

It is anticipated that all hospitals will be operating at or above capacity during the peak of patient surge. As such a “relief-valve” of sorts will need to be created to give hospitals the ability to decompress. This is ideally created through the creation of a surge hospital. The surge hospital can be one of several types of facilities. It might be a local or regional hospital, a temporary facility, or other medical center with bed capacity that is made available through discharges of existing patients, or lateral transfers to more distant facilities that are less impacted by the surge. Example: Sydney and Lois Eskinazi Hospital will be the designated Surge facility for the central Indiana region. As other hospitals in the area reach and exceed their maximal capacity to care for critically ill patients, the surge hospital can become the intended receiving hospital for these patients. This reallocation of patients and resources would happen in real time as additional space and need occur. This will require real time patient movement.

This activity will be coordinated through the Regional Operation Center (ROC) under the guidance of the Indiana Regional Healthcare Surge Response Plan to the COVID-19 Outbreak of 2020.

For this response, this capability consists of the ability to perform the following functions:
• Function 1: Coordinate a regional hospital systems surge plans
Function 2: Support activation of medical surge including real time information monitoring utilizing capacity/capability of multiple assets from EMResource and other real time tracking tools

Function 3: Support jurisdictional medical surge operations for both 911 and interfacility movement of patients with just-in-time guidance for destination and transportation options

Function 4: Coordinate with local hospitals for surge overflow

In conjunction with jurisdictional partners, coordinate with the jurisdiction’s healthcare response through the collection and analysis of health data (e.g., from emergency medical services, fire service, law enforcement, public health, medical, public works, utilization of incident command system, mutual aid agreements, and activation of Emergency Management Assistance Compact agreements) to define the needs of the incident and the available EMS, healthcare staffing and resources. This will be done by real time monitoring of available sources which may include EMResource, IndyTrac, ImageTrend, or other operations monitoring software.

At the time of an incident, the ROC will provide health-related data to healthcare organizations or healthcare coalitions that will assist the healthcare organizations or healthcare coalitions in activating their pre-existing plans to maximize scarce resources and prepare for any necessary shifts into and out of conventional, contingency, and crisis standards of care. Support activation of medical surge including real time information monitoring utilizing capacity/capability of multiple assets from EMResource and other real time tracking tools.

The 911 system will continue to function as built, but as hospitals start hitting capacity, the ROC will need a mechanism to direct patients to open facilities in real time. This will be a moving target and will require real time monitoring and real time destination information to go to EMS provider agencies in route to hospitals. This task will utilize a transport officer to monitor all traffic and provide real time guidance in the EOC/ROC.

IndyTrac will be our source for real time hospital availability. This is a city wide view, but likely NOT something that can be replicated in other parts of the state. We will need to adapt EMResource for this in other areas.

In 24-48 hours after the surge plan is activated an initial allotment of patients will need to be mobilized and moved away from the surge hospital. This will be done by private services. Most hospitals already have preferred provider call lists to reach private services. This process will continue as to not disrupt daily operations or create an additional layer to access transporting EMS provider agencies. The goal is to keep patients moving OUT of hospitals using the private EMS provider agencies. This allows 911 EMS provider agencies to keep bringing patients into the facilities. Once those hospital call lists are exhausted and no private local EMS providers are available, whether it’s for a discharge or a transfer, the EMS Resource Center can be contacted for additional assistance (insert number here.) This function will be answered/served by a combination of ESF4, ESF9, and ESF1 in the State EOC. The EMS Resource Center will attempt to find any other available private or municipal EMS provider agency in any specific region of the state. When all possible providers are exhausted, the call will be roled to the ING (the national guard) to get the patient movement completed as quickly as possible. This process will be
implemented in an attempt to reduce delays and bottlenecks at the hospitals by moving patients out as quickly as possible. The EMS Resource Center will also be available to coordinate other requests for EMS assistance anywhere in the state, whether it be locating an available EMS provider agency for, or asking them to go out somewhere and collect a sample on a patient in some areas. While not intended for dispatching, the State EOC EMS Resource Center will be a one stop shop for EMS assistance.

The ROC operations director will also be monitoring hospital bed availability, ICU availability, and resources at the hospitals through EMResource. In this capacity the ROC will also be operating as sort of a big picture central intelligence agency to help anticipate when to pull the trigger and start directing patients to the surge facility. The ROC and EOC should be located in the same facility to enhance communication and situational awareness.

PPE will still be managed through ISDH, but we will definitely want to keep an eye on this, especially for central Indy EMS provider agencies.

Organizational Leadership and Responsibilities of Health Care Facilities

Hospitals may be individual facilities, part of a corporate chain, or part of a federal system (such as Department of Veterans Affairs [VA] medical centers or military hospitals). It is recognized that it may be very difficult to create policy across institutions located in disparate geographic areas or across different healthcare systems that is consistent with any given medical surge plan. As such, healthcare system facilities, should be expected to provide care and resources commensurate with what is being provided in the community in which they are located. Thus, if the hospital system has resources in excess of those available in the community, it should allow patients into the system or commit resources to the community to allow equilibration of resource availability. This will require an unprecedented amount of collaboration and cooperation amongst hospital CEOs, CMOs and other leadership individuals. Likewise, information sharing and resource planning such as ICU bed availability, ventilator availability and other often times proprietary information will need to be freely shared with the Regional Operation Center. It is incumbent on the healthcare system leadership to convey this to ground level operations.

Surge Capacity and Outflow Tract Considerations

Each hospital should have concrete goals for expansion during a disaster, including outpatient, inpatient, and specialty unit capacity. However, the extent to which a hospital can surge will vary. Recommendations are not standardized, but the focus should be on expanding all acute care resources for the most critically ill while shifting step down or less critical patients to facilities with fewer resources. The role of the institution in the community and its size contribute to this calculus. For example, it may be easier for a smaller hospital such as a neighborhood hospital or critical access hospital to surge to 200 percent for non-critical care beds, than attempting to create ICU capacity (in a less resource rich facility) by a much smaller factor. Less critical patients should be moved as rapidly as
possible to less acute care type facilities once stability is achieved. The goal is to achieve an equilibration between stable discharges and critical admissions as to maintain patient movement. Only when the balance tips and all capacity for expansion has been exhausted should surge facility overflow occur. This tremendous effort will require near constant communication with facility and regional operations center. Additional surge facilities may be necessary depending on the ability for mitigation procedures to adequately spread the surge over a longer time period. The more broad the surge Healthcare systems, localities and regions will need to creatively search for non-traditional care sites for both acutely sick and convalescing patients alike through the entirety of this surge response.