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To: EMS Medical Directors
EMS System Coordinators

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Subject: Crisis Standards of Care for EMS

The efforts of State and local governments and EMS Systems throughout Illinois have enabled EMS to operate at the contingency level of care throughout the COVID-19 pandemic period. However, there is no way to accurately predict the future impacts of the virus on the Illinois healthcare system and/or the occurrence of concurrent mass casualty incidents. While the goal for EMS is to continue operating at the contingency level, EMS Systems must be prepared to move to crisis standards of care if resource limitations negatively impact the ability of EMS to maintain care at the current level. Being prepared to shift the focus of EMS care from individual-centric to population-centric requires thoughtful planning and collaborative discussions on how limited resources will be allocated.

IDPH recommends that EMS Systems begin or continue the process of developing crisis standards of care policies and/or procedures that address the unique COVID-19 pandemic situation. IDPH developed guidelines to support these efforts. The *Illinois COVID-19 Crisis Standards of Care Guidelines for EMS* and a shorter version of this document that highlights the indicators, triggers, and planning considerations are attached.

Please contact your IDPH Regional EMS Coordinator or me if there are questions.
Thank you for your unending efforts to ensure that the EMS system in Illinois can effectively respond to the challenges created by the COVID-19 pandemic.

Illinois COVID-19 Crisis Standards of Care Guidelines for EMS
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Introduction

The COVID-19 pandemic has the potential to stress the Illinois healthcare system in an unprecedented manner. As the number of patients impacted by COVID-19 increases, the demand for the spectrum of healthcare resources will also increase. Unique to a pandemic situation, the availability of additional human and material resources traditionally provided via the individual healthcare system, mutual aid agreements, and federal support will be severely limited since these resources will be required to address pandemic-related issues in other areas of the State and country. As healthcare resource limitations begin to impact the ability to provide health services to both COVID-19 and non-COVID-19 patients, the healthcare system must shift from an individual patient focus to a population-centric focus. Difficult decisions on the prioritization of limited resources that will impact the level of care provided to patients will be required. In order to continue to best meet the population's healthcare needs, the Illinois healthcare system will be required to transition from the current state of contingency level of care to a crisis care model. The Illinois Department of Public Health (IDPH) has created this document to provide EMS Systems and EMS agencies with guidelines for crisis standards of care in alignment with the State's clinical pathway for patient care during the COVID-19 pandemic.

Planning Assumptions

- The demand for public 911 EMS services unrelated to COVID-19 patients will continue to remain consistent with pre-pandemic trends.
- The demand for private non-911 EMS services unrelated to COVID-19 has decreased significantly over pre-pandemic levels.
- EMS agencies will experience staffing, medication, and equipment shortages.
- Mutual aid resources may not be available to assist with local response.
- Federal assistance in terms of human and material resources is insufficient to meet the current demand.
- Private industry cannot meet the demand for healthcare equipment and supplies.
- The high risk categories for developing severe COVID-19 related illness will remain unchanged.
- COVID-19 patients experiencing severe respiratory/high acuity illness will continue to follow the same clinical illness patterns as have been reported to date.
- There is no vaccine available for COVID-19.
- A specific pharmaceutical intervention to treat COVID-19 is not available.
- Ambulance out-of-service times for maintenance and repair will increase, further limiting resource availability.

COVID-19 Continuum of Care

The Institute of Medicine defines crisis standard of care as "a substantial change in usual health care operations and the level of care it is possible to deliver, which is made necessary by a pervasive (e.g., pandemic influenza) or catastrophic (e.g., earthquake, hurricane) disaster. This change in the level of care delivered is justified by specific circumstances and is formally declared by a state government in recognition that crisis operations will be in effect for a sustained period. The formal declaration that crisis standards of care are in operation enables specific legal/regulatory powers and protections for health care providers in the necessary tasks of allocating and using scarce medical resources and implementing alternate care facility operations[1]." Best practice dictates that changes to the standards of patient care should take place along a continuum. The levels of care are defined as:

- Conventional: normal level of healthcare resources available; patient care provided without any change in daily practices
- Contingency: demand for healthcare resources begins to exceed supply; resource conservation strategies are implemented and patient care may be provided in atypical locations (e.g. Intensive Care Unit (ICU) patients housed in the post-anesthesia care unit) but strategies implemented have little impact on patient care and level of outcomes achieved
- Crisis: resources are depleted; functionally equivalent care is no longer possible and will result in significant implications for patient outcomes

EMS Systems in Illinois are currently operating at the contingency level. EMS Systems have enacted policies to conserve resources such as PPE, decreased potential personnel exposure risks (e.g. limit the number of personnel who initially approach a patient), and modified patient care procedures without negatively impacting patient outcomes (e.g. perform aerosol-generating procedures in the most open environment possible- outside the ambulance; with the back doors of the ambulance open, treat at home/no transport). The changes made by EMS, coupled with the contingency level changes enacted by healthcare facilities, have enabled EMS agencies throughout the State to continue meeting the 911 call for service demand volume without negative consequence for patients and EMS providers.

Indicators and Triggers

The Illinois Department of Public Health ESF-8 Plan: Catastrophic Incident Response Annex (March 2018) defines the overarching indicators and triggers for enacting crisis standards of care as being when:

- The local, regional, and/or state health care system has exhausted its capacity to care for patients in such a manner that maintains conventional and/or contingency level care.
- Efforts to preserve available resources and balance the delivery of health care services across regions (such that no one region is overwhelmed or taxed to the point of not being able to deliver and sustain medical care at conventional and contingency levels) have become ineffective (e.g. geographic dispersion of patients across multiple regions).
- Efforts to implement tactics and strategies that are intended to benefit the largest number of patients have been implemented but are insufficient to maintain conventional and/or contingency care.

Indicators Specific to COVID-19 Pandemic

Indicators that the potential shift from EMS contingency level care to crisis level care is approaching include:

- The Governor of Illinois has declared a State Disaster Proclamation and many Executive Orders that allow the state to maximize public health and safety without limitation.
- Local emergency operations centers have been activated.
- Hospitals have executed surge capacity plans to the fullest limits within the healthcare system and EMS Region. There are a limited number of staffed beds available.
- The demand for ICU beds, ventilators, or respiratory care supplies is approaching critical levels.
- Hospital inventory of basic treatment supplies (e.g. IV kits, IV fluids, sterile equipment) is anticipated to be depleted within less than 5 days. No vendor or governmental commitment for re-supply within the required time frame has been secured. Equivalent substitutions are not available.
- The number of hospital personnel who are unavailable for duty is above baseline. Available personnel are consistently working overtime.
- The inventory of PPE and/or respiratory care supplies available to EMS providers is anticipated to be depleted within less than 5 days. No vendor or governmental commitment for re-supply within the required time frame has been secured. Re-use and conservation methods are already in place.

- The number of EMS personnel who are unavailable for duty is above baseline. Available personnel are consistently working overtime.
- A mass casualty incident occurs and the response threatens to deplete available EMS and hospital resources.

If ongoing monitoring reveals that one or more of the indicator levels are being approached and/or have been met within a Region or multiple Regions, organizational leadership (e.g. hospital Incident Commander, EMS Director, EMS Coordinator) from the Regional Hospital Coordinating Center(s) (RHCC) and EMS Resource Hospitals in the affected Region(s) will convene a call with local and State departments of public health and emergency management agencies to discuss strategies for maintaining resource availability at its current level or better and to develop a course of action to make this happen. The State Emergency Operations Center (SEOC) will monitor the effectiveness of the action plan and work through IDPH and local emergency management agencies to provide as much support as possible to the RHCC(s) and EMS Resource Hospitals in an effort to keep patient care at the contingency level.

Triggers Specific to COVID-19 Pandemic

Triggers for EMS agencies transitioning to crisis level care include:

- The number of staffed hospital beds available within a Region has reached critical capacity.
- The demand for ICU beds, ventilators, or respiratory care supplies has reached critical capacity within the Region.
- The inventory of basic medical treatment supplies is anticipated to be depleted within 1-2 days. Equivalent substitutions are not available.
- Hospitals no longer have the right complement of clinical and support staff to maintain the contingency level standard of care.
- The inventory of EMS PPE and/or respiratory care supplies is anticipated to be depleted within 1-2 days.
- The number of EMS personnel who are available for duty precludes the maintenance of contingency level staffing.
- The response to a mass casualty incident depletes the EMS resources available to respond to 911 calls for emergency services.

If one or more of the triggers are met, leadership from the RHCC(s) and EMS Resource Hospital(s) in the affected Region(s) will convene a call with local and State departments of public health and emergency management agencies to notify these entities that the EMS Medical Director(s) has determined that the EMS System must transition to crisis level care. The EMS System(s) will submit a System Plan Amendment for any policies or standing medical

orders for implementation of crisis standards of care to IDPH for approval. IDPH will inform the Governor's Office of the EMS Medical Director's decision to enact crisis standards of care.

Legal

Within Illinois, the overall authority for direction and control of the response to an emergency medical incident rests with the Governor (Article V, Section 6, of the Illinois Constitution of 1970). The below declarations and waivers that have been made in response to the evolving COVID-19 pandemic situation have established the framework for EMS Systems to enact crisis standards of care, if warranted by healthcare resource limitations, in order to best meet the healthcare needs of the population during the COVID-19 pandemic. Execution of the crisis standards of care within each EMS System will be directed by the EMS System Medical Director with oversight from IDPH.

- The World Health Organization (WHO) declared COVID-19 a Public Health Emergency of International Concern on January 30, 2020. On March 11, 2020, WHO characterized the COVID-19 outbreak as a pandemic.
- On March 13, 2020, the President of the United States declared a nationwide emergency pursuant to Section 501(b) of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5121-5207 (Stafford Act) covering all states and territories, including Illinois. On March 26, the President declared a major disaster in Illinois pursuant to Section 401 of the Stafford Act.
- Under Section 4 of the Illinois Emergency Management Agency Act, the COVID-19 pandemic constitutes a continuing public health emergency.
- The Governor of Illinois declared all counties in the State of Illinois as a disaster area on March 9, 2020. This declaration was renewed on April 1, 2020 and remains in effect for 30 days. The disaster declaration provides the Governor with the authority to exercise all of the emergency powers provided in Section 7 of the Illinois Emergency Management Agency Act, 20, ILCS 3305/7.
- On April 1, 2020, the Governor of Illinois issued Executive Order 2020-19 which directed that the below listed orders remain in effect for the duration of the Gubernatorial Disaster Proclamations. The orders:
    - Expanded the definition of healthcare facilities to include any government-operated site providing healthcare services established for the purpose of responding to the COVID-19 outbreak.
    - Defined "healthcare professional" as all licensed or certified healthcare or emergency medical service workers who 1) are providing healthcare services at a

healthcare facility in response to the COVID-19 outbreak and are authorized to do so; or 2) are working under the direction of the Illinois Emergency Management Agency (IEMA) or IDPH in response to the Gubernatorial Disaster Proclamations.

- Defined "healthcare volunteer" as all volunteers or medical or nursing students who do not have licensure who 1) are providing services, assistance, or support at a healthcare facility in response to the COVID-19 outbreak and are authorized to do so; or 2) are working under the direction of IEMA or IDPH in response to the Gubernatorial Disaster Proclamations.
- Pursuant to Sections 15 and 21(b)-(c) of the IEMA Act, 20 ILCS 3305/15 and 21(b)-(c) and the Good Samaritan Act 745 ILCS 49, directed all healthcare facilities, healthcare professionals, and healthcare volunteers, to render assistance in support of the State's response to the disaster.
- Directed that healthcare facilities, healthcare professionals, and healthcare volunteers, shall be immune from civil liability for injury or death alleged to have been caused by any act or omission by the healthcare facility, healthcare professionals, or healthcare volunteers which injury or death occurred at a time when the health care facility, health care professionals, or health care volunteers were engaged in the course of rendering assistance to the State by providing healthcare services in response to the COVID-19 outbreak, unless it is established that such injury or death was caused by gross negligence or willful misconduct of such healthcare facility, healthcare professionals, or healthcare volunteers.

- The Centers for Medicare and Medicaid Services (CMS) issued a waiver for the enforcement of section 1867(a) of the Emergency Medical Treatment & Labor Act (EMTALA) that is retroactive to March 1, 2020. This waiver allows hospitals, psychiatric hospitals, and critical access hospitals (CAHs) to screen patients at a location offsite from the hospital's campus to prevent the spread of COVID-19, so long as it is not inconsistent with a state's emergency preparedness or pandemic plan.
- IDPH Division of EMS issued a waiver that allows for ambulance transports to any destination that is able to provide treatment to the patient in a manner consistent with state and local EMS protocols in use where the services are being furnished. These destinations may include, but are not limited to: any location that is an alternative site determined to be part of a hospital, CAH or skilled nursing facility (SNF), community mental health centers, federally qualified health centers (FQHCs), physician's offices, urgent care facilities, ambulatory surgery centers (ASCs), any other location furnishing dialysis services outside of the End Stage Renal Disease (ESRD) facility, and the beneficiary's home.

- On March 15, 2020, U.S. Department of Health and Human Services (HHS) issued a waiver for hospital compliance with provisions of the HIPAA Privacy Rule. The portions of the waiver that affect EMS are:
    - Requirements to obtain a patient's agreement to speak with family members or friends involved in the patient's care. See 45 CFR 164.510(b).
    - Requirement to distribute a notice of privacy practices. See 45 CFR 164.520.
    - Patient's right to request privacy restrictions. See 45 CFR 164.522(a).
    - Patient's right to request confidential communications. See 45 CFR 164.522(b).

Ethical

The State of Illinois' Ethics Subcommittee on the Crisis Standards of Care drafted a document titled *Ethical Guidance for Crisis Standards of Care in Illinois* that establishes an ethical framework to guide the process of creating crisis standards of care for the State of Illinois. The Subcommittee identified three overarching goals that must be recognized when developing crisis standards:

- Minimize morbidity and mortality;
- Delivery of care in a public health crisis must be fair; and
- Crisis standards of care should aim to maintain community resilience during and after a crisis.

The Subcommittee determined that the primary public health-centric ethical principles upon which crisis stands of care must be based are:

- *Solidarity*, the notion that any plan to intervene must benefit the community by reducing the aggregate morbidity and mortality of the population.
- *Efficacy*, the idea that an intervention must be scientifically sound and feasible.
- *Integrity*, the principle that interventions should preserve the nature and character of a community by choosing the least destructive alternative.
- *Dignity*, the notion that one should preserve human rights.

The strategies identified by the Subcommittee that should be utilized for making ethical allocation of resources are services are:

- Whenever possible, avoid making definitive decisions alone (such as who to treat/not treat or triaging to palliative care), instead rely on pre-defined processes and/or team-based decisions.
- **DO NOT** ration skills or resources unless based on the ethical principles. Except in cases of essential workers.

- Generally, de-prioritize persons unlikely to benefit from the resource. Access to palliative care resources and services should be provided to these persons in order to minimize pain and suffering.
- When necessary, prioritize essential or key workers to support critical infrastructures and the health of the population

Communications

The Governor's office and local elected leaders will lead the efforts to communicate the change to crisis level care to the public through a Joint Information Center (JIC). The messages delivered must be honest, transparent, and accountable and will be repeated routinely for the duration of time that EMS is operating under crisis level standards. The primary means of message delivery will be press conferences, press releases, SIREN alerts, and information posted on State websites.

EMS System leadership and EMS agency administrators shall work together to ensure that EMS providers are educated on the change to crisis level care and the specific details on implementing the crisis standards of care protocols and SOPs being enacted. Emphasis on the need to apply the crisis standards to all patients equally should be included. The education provided should include information on gubernatorial declarations and orders and Federal waivers that have been issued to provide legal protections for EMS Systems, hospitals, EMS providers, and hospital personnel operating under the crisis level of care model. Hard copy resources of crisis standard of care SOPs should be provided. EMS System leadership (Resource Hospital and EMS agency supervisory personnel) should remain available 24 hours a day to address questions on the crisis standard SOPs until the level of care has returned to contingency care.

Call Taking and Dispatch Guidelines

Implementation of EMS crisis standards of care begins at the Call Center. Dispatch of EMS resources must be reserved for the patients who will benefit most from EMS intervention and emergency transport to a higher level of care. EMS Medical Directors must modify call taking protocols to provide increased triage of patient symptoms. Clinically trained resources (e.g. MD, RN) must be available to the Call Center to assist with triage decisions and the provision of instructions for care at home. Clinical resources can be assigned to staff the Call Center or available remotely for immediate consultation. Consider incorporating procedures for transferring callers to an existing nurse triage line if they require information on managing mild to moderate symptoms of a COVID-19-like illness at home.

Identify call types to which alternate resources (e.g. first responder companies, law enforcement, Mobile Integrated Healthcare Teams- if available) can be initially dispatched to assess the need for EMS. Call types to consider include: motor vehicle accidents, assaults, intoxications, suicidal ideation, persons down from unknown cause, falls without a priority one complaint, assist the citizen, and other calls that the dispatcher deems as non-emergent. Opportunities to reduce multi-unit response, unless specifically requested by on-scene personnel, should also be considered.

If ambulance staffing patterns are changed, EMS Systems must evaluate whether there are any call types that may require additional EMS resources to be dispatched in order to have an appropriate number of sufficiently trained personnel to perform required triage and treatment functions (e.g. mass casualty incident may require additional units if ambulances only have one licensed EMS provider assigned; mayday).

Consider the use of a pre-recorded message prior to caller being connected to a call-taker/dispatcher to instruct callers with non-life threatening illnesses or injuries to contact their primary care provider.

Patient Triage and Resources Dispatch Based on Symptoms Reported by Caller

Triage Designation	Triage Definition	Injury and Illness Classifications to Consider When Developing Crisis Care Dispatch Procedures (list of conditions is not all inclusive)	Resources Dispatched in Order of Preference	SOP Changes to Consider
RED	Cannot survive without immediate treatment but has a chance of survival	• Severe difficulty breathing • Altered level of consciousness, new focal neurological signs, seizures, severe headache with sudden onset and/or neck pain stiffness	1-Closest available transport asset staffed with an ALS provider.	• Discontinuation of CPR started by lay rescuers

Triage Designation	Triage Definition	Injury and Illness Classifications to Consider When Developing Crisis Care Dispatch Procedures (list of conditions is not all inclusive)	Resources Dispatched in Order of Preference	SOP Changes to Consider
		• Head injury with loss of consciousness or continued neck pain. • Ongoing seizure • Acute chest pain or other signs/symptoms consistent with known cardiac ischemia or pulmonary embolism • Signs or symptoms of shock, severe/uncontrolled bleeding • Significant trauma with chest, spinal, abdominal, or neurological injury deemed unstable • Significant burns • Pregnancy with severe pain, bleeding, or contractions <5 minutes apart	2- If no ALS transport available, send ALS non-transport resource. 3- If no ALS resources available, send BLS resource until ALS resource become available	
YELLOW	Not in immediate danger of death, but condition requires urgent transport for treatment in order to stabilize.	• Asthma – not in severe respiratory distress • Suspect fractures or dislocations that cannot be safely transported via personal resources or patient requires pain medication • Loss of peripheral pulses • Mental status changes not suspected of being stroke related • Nausea, vomiting, constipation with acute abdominal pain • Allergic reactions – emergency medications administered and/or available • Diabetic reactions unresolved with home treatment* • Suspected cardiac ischemia • Acute congestive heart failure	1- Closest transport asset staffed with a minimum of a BLS provider (ALS asset preferred). 2- BLS resource until transport resource becomes available	• Expanded scope of practice for BLS providers to include administration of injectable pain medications • Batched transport options • Inclusion of private EMS resources for dispatch • Use of call-back system if resource arrival will be delayed

Triage Designation	Triage Definition	Injury and Illness Classifications to Consider When Developing Crisis Care Dispatch Procedures (list of conditions is not all inclusive)	Resources Dispatched in Order of Preference	SOP Changes to Consider
		• Substance abuse with decreased level of consciousness • Non-penetrating eye injuries* • Second degree burns- pain medication required • Acute exacerbation of a chronic medical condition* *No self-transport resources available		
GREEN	Stable, can transport self for medical care or minor injuries or illness that can be self-treated	• Bleeding that stops with the application of pressure • Lacerations that require simple repair • Suspect fractures that are stable • Overdose – conscious • Rashes • Vision changes/eye pain – no trauma • Fevers • Mental/behavioral health conditions without report of threat for self-harm • Mild to moderate COVID-19-like/ILI-like illnesses • Dehydration without mental status changes or dizziness • Urination difficulties	1-No EMS resources dispatched 2-BLS or EMR resource dispatched if on-scene urgent treatment only required (non-transport resource preferred) 3-BLS transport resource if requested by on-scene personnel	• Requirements for consultation with a clinician • Transferring callers to established nurse triage lines for home care instructions • Dispatch of first responder company to assess patient condition • Refer for self-transport to non-ED care
BLACK	Deceased. Injuries so extensive that they will not be able to survive. Currently receiving hospice or palliative care services.	• Unresponsive and no signs of spontaneous respiration • Patient currently receiving Hospice or palliative care • Active DNR order	1-No resources dispatched.	• Suspend CPR instructions • Requirements for consultation with a clinician • Referral to palliative care for symptom management

Response and Operations

Resource availability is the primary driver behind the decision to move to crisis level care. EMS Systems may move back and forth between contingency and crisis levels of care multiple times during the COVID-19 pandemic. Since the decision to enact crisis level care is contingent on the availability of a variety of EMS and hospital human and material resources, it is possible that pre-hospital crisis level plans may be activated for one or more elements of pre-hospital care – EMS scope of practice, EMS response models, and/or ambulance staffing. Situation dependent, it is possible that crisis care SOPs may be activated for only specified conditions (e.g. patients requiring intubation) and not SOPs for all patient conditions that may be encountered in the pre-hospital environment. EMS Systems and providers must maintain the flexibility to adapt to the changing pandemic situation and fluctuations in resource availability.

The overall goal for the provision of EMS services during the COVID-19 pandemic is to remain at the contingency level of care for the pandemic duration. When the situation requires that care be moved from the contingency level to the crisis level, two of the primary objectives for State government become securing the resources required and executing emergency plans necessary for the affected EMS Systems/Regions to return to the contingency care level in the shortest amount of time possible.

Guidelines for Changes to Response Capabilities

EMS response capabilities are based on personnel resources, ambulance availability, and access to required equipment and supplies.

The potential exists for a mass casualty incident unrelated to the COVID-19 pandemic to occur during the pandemic period when healthcare system resources are already stressed. EMS Systems must account for this potential when developing crisis standards of care SOPs.

Staffing

Staffing resource limitations will require EMS Systems to work with EMS providers to change the staffing configuration for ambulance companies and submit a System Plan Amendment to the IDPH Division of EMS for approval. Systems should determine whether crisis care staffing should always follow the same formula (e.g. one ALS provider and one BLS provider for ALS ambulances) or whether it can be adjusted based on the extent of the crisis care standards activated for each EMS element (e.g. no field intubations permitted = one ALS provider and one EMR for ALS ambulance). When developing the crisis standards of care for a System Plan Amendment, EMS Systems should consider:

- Whether ALS and BLS designation will still be used or if the closest available staffed ambulance will be sent for each call.
- The role of EMRs and other first responders without EMS licensure (e.g. law enforcement) and minimum training requirements for these personnel (e.g. donning PPE, proper way to lift a cot, CPR).

- The role of private EMS providers in the provision of emergency care.
- Policies for sharing licensed personnel in good standing among EMS agencies within the Region and surrounding Regions.
- Whether personnel with EMS licensure who work in a non-EMS capacity for the governmental bodies served by the EMS System can be incorporated into the crisis care staffing matrix (e.g. law enforcement officers who are licensed EMTs).
- Reconfiguration of staffing for ALS and BLS companies, if these designations will still be used, to allow for ambulance staffing to consist of one licensed provider at the level of care required by the patient consistent with the drugs and supplies available on the vehicle (ALS, BLS) and one EMR or unlicensed first responder to drive the ambulance.
- Continuing to reinstate retired or expired EMS practitioners to attain temporary EMS privileges to work in the System. Continue to identify any restrictions that will be placed on an individual provider's scope of practice.
- The use of personnel with provisional licenses. Persons with provisional licensure must be directly supervised (e.g. work side by side) by an EMS provider with licensure at the same or greater level.
- Whether clinicians and/or licensed EMS personnel must staff the Call Center to provide oversight for Call Center triage and no-resources assigned decisions.
- Identification of any scope of practice restrictions that will be modified or waived for each level of licensure in order to permit the delivery of certain treatments by lower levels of care. Identify field training required in order to facilitate the expanded scope of practice.

Potential Scope of Practice Modifications

Scope of Practice Modification	Provider Level	Equipment/Medications Required	Training Considerations
Administration of nebulizer treatment	EMR, BLS (if not already being done)	• Nebulizer set-ups • Bronchodilators	• Respiratory system assessment • Indicators for bronchodilator need • Medication-specific pharmacology • Use of nebulizer equipment
Blood glucose monitoring	EMR, BLS	• Glucometer • Test strips • Lancets	• Signs and symptoms of hypoglycemia and hyperglycemia • Target blood glucose range • Use of glucose monitoring equipment and supplies
Hypoglycemia correction	EMR	• Glucose tabs • Glucagon	• Physiology of fast acting carbohydrates on blood glucose levels • Oral glucose tablet dosing • Glucagon administration • Post-administration blood glucose monitoring

Scope of Practice Modification	Provider Level	Equipment/Medications Required	Training Considerations
Hyperglycemia correction	BLS	• Fast acting insulin • Insulin syringes • Sharps container	• Insulin pharmacology • Insulin dosing and administration • Post-administration blood glucose monitoring
Assist patient with administration of own nitroglycerin	BLS	• Nitroglycerin tablets	• Indications for use • Nitroglycerin pharmacology • Nitroglycerin dosing and administration • Post-administration monitoring
Administration of injectable pain medications	BLS	• Pre-filled syringe narcotic and non-narcotic analgesics • Sharps container	• Indications for injectable pain medications • Pharmacology for selected medications • Injectable medication administration • Post-administration monitoring
Assist patient with administration of own medication	EMR, BLS	• None	• Five rights of medication administration: right patient, right drug, right dose, right route, right time • Medication information resources (e.g. prescription information sheet from pharmacy; websites)

- Whether PPE availability will determine the types of patients EMS providers will be expected to care for and scope of procedures to perform or if the System will vary from standard PPE recommendations for certain procedures. Situations to consider include:
    - Hospital ventilator beds are available, but N-95 masks are not. Will EMS providers be expected to intubate a patient with COVID-19 in the pre-hospital setting? What about patients who are at low risk of having COVID-19?
    - N-95 masks are available, but protective gowns are not. Will EMS providers continue to perform aerosol-generating procedures?
    - Some EMS personnel have documented immunity to COVID-19 via antibody testing. Will these providers be allowed to perform aerosol-generating procedures on confirmed or possible COVID-19 patients using only droplet precautions?

Ambulances

Ambulances are the primary patient transport resource. When developing crisis care standards, EMS Systems must consider the ongoing availability of the traditional resources used and alternate resources that can be used to safely transport a sub-set of patients (e.g. patients with non-critical, but urgent medical needs). Factors that should be considered include:

- A request for a waiver from IDPH to operate BLS ambulances at a level that exceeds current licensure for a period of greater than 10 days.
- Ability to increase the number of ambulances available to respond to 911 calls. Consideration should be given to capabilities for utilizing spare ambulances and modifications to the conventional level equipment and supply requirements on ALS and BLS designated ambulances.
- Modified protocols for the types of calls to which EMS resources will automatically be dispatched and the level of care that will be sent (ALS, BLS, EMR).
- Alternate transport resources (e.g. municipal vehicles, buses for batched transport) and minimum staffing and equipment requirements for use.
- Strategies to minimize the time apparatus are out of service for maintenance and repair.
- A request for a waiver to decrease the minimum amount of certain supplies carried on an ambulance (e.g. required to have X amount of gauze, but will only stock Y amount).

Triage

Effective triage is a critical component of being able to save as many lives as possible when operating at the crisis level. Triage decisions must be based not only on patient condition, but also the human and material resources available to effectively treat each patient. EMS Systems will be challenged to make difficult decisions about how to best allocate limited resources in order to save as many lives as possible. Patients with critical or resource intense injuries or illnesses should not be prioritized for treatment if more people with less severe injuries and illnesses have a better anticipated clinical outcome if they receive treatment instead. Crisis level staffing models as well as ambulance and hospital level of care capabilities are factors that must be considered when establishing crisis level triage standards. For example, if there are no longer ventilator beds available within a Region, the decision to perform pre-hospital intubation must be carefully considered since the equipment required in order to sustain the patient throughout their recovery period is not available.

The availability of resources that impact triage and treatment decisions will fluctuate throughout the time that EMS Systems are operating at the crisis level. EMS Systems must ensure that there are methods in place for providers to maintain real-time situational awareness of resource availability and establish protocols for ensuring that pre-hospital providers are knowledgeable of the status of resources that impact triage and treatment decisions prior to performing and intervention that cannot be sustained once the patient arrives at the hospital. The decision to discontinue a treatment that is providing benefit to the patient can be more difficult than not initiating the treatment while the patient is decompensating.

Staffing and respiratory care equipment and supplies are the two resources categories that are anticipated to trigger crisis level care during the COVID-19 pandemic. However, EMS Systems must also consider the possibility that manufacturing and supply chain challenges caused by the pandemic may negatively impact the inventory of other critical equipment and supplies.

When developing crisis care triage standards, EMS Systems should consider:

- Whether the time to treatment will influence patient outcomes. If time is not a factor in clinical outcome, patient should be de-prioritized for continued EMS resources.
- Illness or injury presentations which appear stable but could deteriorate quickly.
- Whether the delivery of a single, time efficient treatment (e.g. pain management) could move the patient into a lower triage category/priority that will no longer require EMS resources.
- Whether alternate treatment methods can provide benefit if the primary treatment option is no longer available. If suitable alternatives are not available or are too resource intense, patients with such conditions may need to be de-prioritized for care.
- Specific injuries, illnesses, and/or underlying health factors whose combinations are known to cause poorer health outcomes in patients.
- Palliative care resources available to provide comfort measures to de-prioritized patients.
- Mechanisms for follow-up with de-prioritized patients should the status of resource availability change within a time frame that may still be beneficial to the patient.
- Immediate access to Online Medical Control for triage decision support.

Patient De-Prioritization

De-prioritizing any living patient for treatment and/or transport is in direct opposition to the prioritization of resources when operating at the conventional level of care. When crisis standards of care are enacted, the focus of the provision of services must shift from the individual to the population. Anticipated patient outcomes and the resources required to achieve that outcome- both positive and negative outcomes- must be consider. Resource investment with a high likelihood of negative patient outcome may need to be severely restricted so that the limited resources available can be allocated to patients with a high probability of successful outcomes. While not an easy process to undertake, it is necessary in order to save the most lives as possible.

Evaluation of patient outcomes for individuals infected with COVID-19 has consistently shown that individuals who fall within certain defined categories and experience severe respiratory illness have poor outcomes. The April 17, 2020 report from the Centers for Disease Control and Prevention National Center for Health Statistics *Provisional Death Counts for Coronavirus Disease (COVID-19)* reported the total number of deaths in the United States from COVID-19 from February 01, 2020 through April 11, 2020 as being 13,130. Of the total COVID-19 deaths, 5902 or 45% of deaths were in patients who develop pneumonia. Ninety-two percent (92%) of the COVID-19 deaths in people with pneumonia occurred in people over the age of 55 years. The COVID-19

death rate in people with pneumonia who are between 55-74 years old was 34%, while the percentage increased to 59% for people who were 75 years and older. These numbers reflect the number of deaths *reported* to the National Center for Health Statistics that were coded as deaths with confirmed or presumed COVID-19 during the defined time period. There is typically a 1-8 week lag period from when a death occurs to when the information is received and processed by the National Center for Health Statistics.

The April 3, 2020 Morbidity and Mortality Weekly Report: *Preliminary Estimates of the Prevalence of Selected Underlying Health Conditions Among Patients with Coronavirus Disease 2019 – United States, February 12 – March 28, 2020* reports the findings from a study to determine the impact of underlying medical conditions on illness severity of COVID-19 patients. Prior to this report, U.S.-specific data was not available. A limitation of this study is that the data on underlying conditions was only report for 5.8% (or 7162) of the total laboratory confirmed cases (122,653) reported to CDC.

When compared with patients who did not report an underlying medical condition, the study determined that 78% of all ICU COVID-19 ICU admissions were in patients who had at least one underlying health condition or risk factor. Of all COVID-19 related non-ICU hospital admissions, 71% were patients who reported at least one underlying health condition or risk factor. Of the total non-hospitalized COVID-19 patients, only 27% reported having an underlying medical condition. The most commonly reported conditions were diabetes mellitus, chronic lung disease, and cardiovascular disease. Among all COVID-19 related deaths that occurred in the study population, 94% in the study population were reported to have at least one underlying conditions. The CDC results are consistent with findings from the COVID-19 cases in China and Italy.

If respiratory care resources are severely limited and trigger enactment of crisis of care standards, the following groups of COVID-19 patients may be considered for de-prioritization in the order listed:

1. Patients who are 75 years of age or older who have diabetes mellitus, chronic lung disease, or cardiovascular disease and are experiencing severe respiratory illness.
2. Patients who are between the ages of 55 and 74 years who have diabetes mellitus, chronic lung disease, or cardiovascular disease and are experiencing severe respiratory illness.
3. Patients who are 75 years of age without an underlying medical condition and are experiencing severe respiratory illness.
4. Patients who are between the ages of 55 and 74 years who do not have an underlying medical condition and are experiencing severe respiratory illness.
5. Patients of age 54 years and younger who have an underlying medical condition and are experiencing severe respiratory illness.

Other types of patients who have conditions unrelated to COVID-19 may also need to be de-prioritized for care. The decision to de-prioritize should be based an anticipated poor patient outcome in spite of investment in respiratory care resources and numerous human resources. The de-prioritization decision may be situation dependent. To the extent possible, EMS providers should not be expected to make individual patient de-

prioritization decisions in isolation. Increased access to Online Medical Control consultation with a physician is required.

Categories of the types of patients who may need to be considered for de-prioritization regardless of their COVID-19 status include:

- Patients with cardiac or respiratory arrest that is unwitnessed by EMS
- Patients currently receiving hospice or palliative care who require respiratory intervention
- Critically injured trauma patients who are unresponsive to painful stimuli after non-invasive manipulation of the airway
- Patients with suspect stroke who are unresponsive to painful stimuli
- Trauma victims with suspect traumatic brain injuries[2] who have unequal or fixed pupils
- Patients with severe traumatic injury to two or more vital systems

Both COVID-19 and non-COVID-19 patients who are deprioritized for crisis standard care and/or transport may still receive on-scene treatment to alleviate suffering or manage symptoms. A mechanism to refer patients for timely palliative care must be established.

Treatment

Crisis level treatment standards are a direct reflection of resource availability. EMS Systems must consider how different resource scenarios impact treatment protocols (e.g. EMS staffing limitations have resulted in EMS operating at the crisis level, but hospitals are still operating at the contingency level). Systems are encouraged to develop contingencies that account for different scenarios.

Healthcare workers are in the highest risk category for COVID-19 exposures. Such exposures and resultant infections present a significant health risk to individual EMS providers and risk to an EMS System's ability to sustain capabilities. Personnel who have an unprotected exposure may need to be excluded from work for a period of 14 days from the last exposure and/or suffer the health consequences of a clinical, and sometimes critical, illness. If a significant number of EMS providers are not able to work, EMS Systems will be challenged to continue providing EMS care at the contingency level. The availability of PPE to protect EMS providers from exposure and strategies to reduce potential COVID-19 exposures should be a primary consideration when developing crisis treatment standards.

Factors that should be taken into account when developing crisis standard treatment protocols for the COVID-19 pandemic include:

- Whether treatments should be initiated in the pre-hospital setting if they cannot be sustained in the hospital environment.
- Modified treatment protocols for situations when the primary treatment option is no longer available or presents an increased risk to the EMS provider. Lack of treatment availability includes both

equipment/supply limitations and/or access to an EMS provider who is appropriately trained to administer the treatment.

- COVID-19-specific clinical recommendations and treatment protocols/information from appropriate public health authorities and EMS medical direction.
- Treatment restrictions based on lack of appropriate PPE for EMS providers (e.g. N-95 or greater protection is not available). EMS Systems must balance acceptable risk for exposure against the benefits certain treatments provide to individual patients. EMS providers are a critical healthcare system resource that is required to provide the greatest number of people in the population with the highest level of care possible. The protection of this resource should be prioritized over treatment benefits to individual patients.
- If operating with altered staffing patterns (ALS= 1 ALS provider with an EMR driving the ambulance), additional ambulance companies may be required for certain types of mass casualty situations in order to have adequate trained personnel to perform the triage function. Evaluate how mass casualty incident response protocols must be modified in terms of other crisis standards put in place in response to the COVID-19 pandemic.
- Implications for limiting or performing aerosolizing procedures and additional protective actions that can be taken to minimize risk.
- Modifications to resuscitation procedures. See American Heart Association's Interim Guidance for Basic and Advanced Life Support in Adults, Children, and Neonates With Suspected or Confirmed COVID-1 https://www.ahajournals.org/doi/pdf/10.1161/CIRCULATIONAHA.120.047463
- Field termination of care.
- Treatment without EMS transport or treatment with self-transport.
- The process for making the decision to de-prioritize a patient for care and/or some treatments. Some treatment decisions may be a grey area. EMS providers must have immediate access to Online Medical Control for help in making the proper determination.
- Palliative care referrals for patients who are de-prioritized for treatment. On-scene treatments for symptoms management that are allowable.
- Requirements for consultation with Online Medical Control regarding treatment/no treatment decisions.

Transport

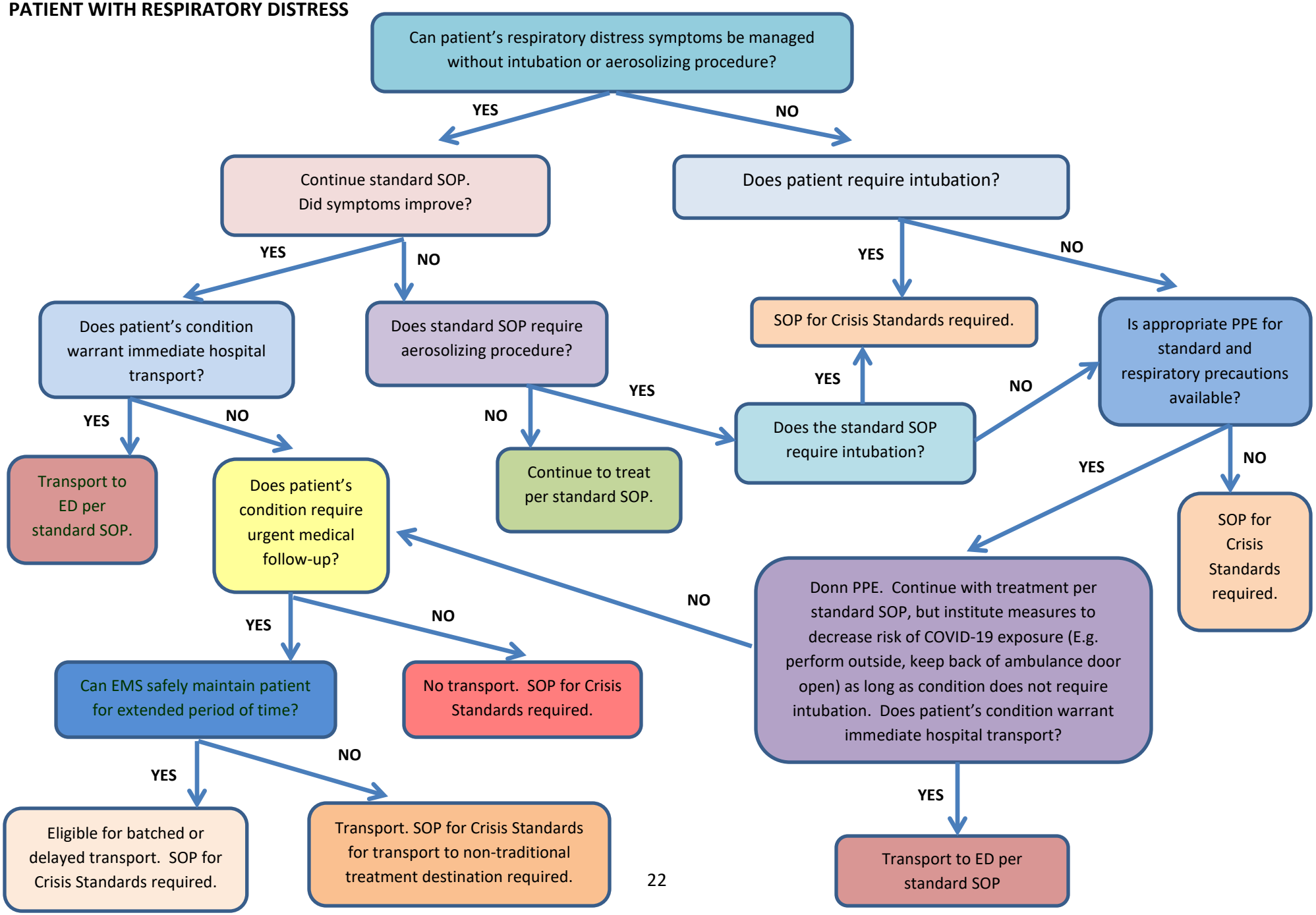
During the COVID-19 pandemic, healthcare facilities may become overwhelmed with patients, making it necessary to consider alternative options for patients who would be transported to the hospital under normal circumstances. Crisis level care requires that some patients be transported to non-ED treatment destinations, using non-ambulance transport vehicles, or in groups, and that other patients be not transported at all. EMS Systems are encouraged to develop crisis level transport SOPs that maximize the use of alternative

transportation options and destinations and that help to conserve PPE and other supplies with limited inventory. Factors that EMS Systems must consider include:

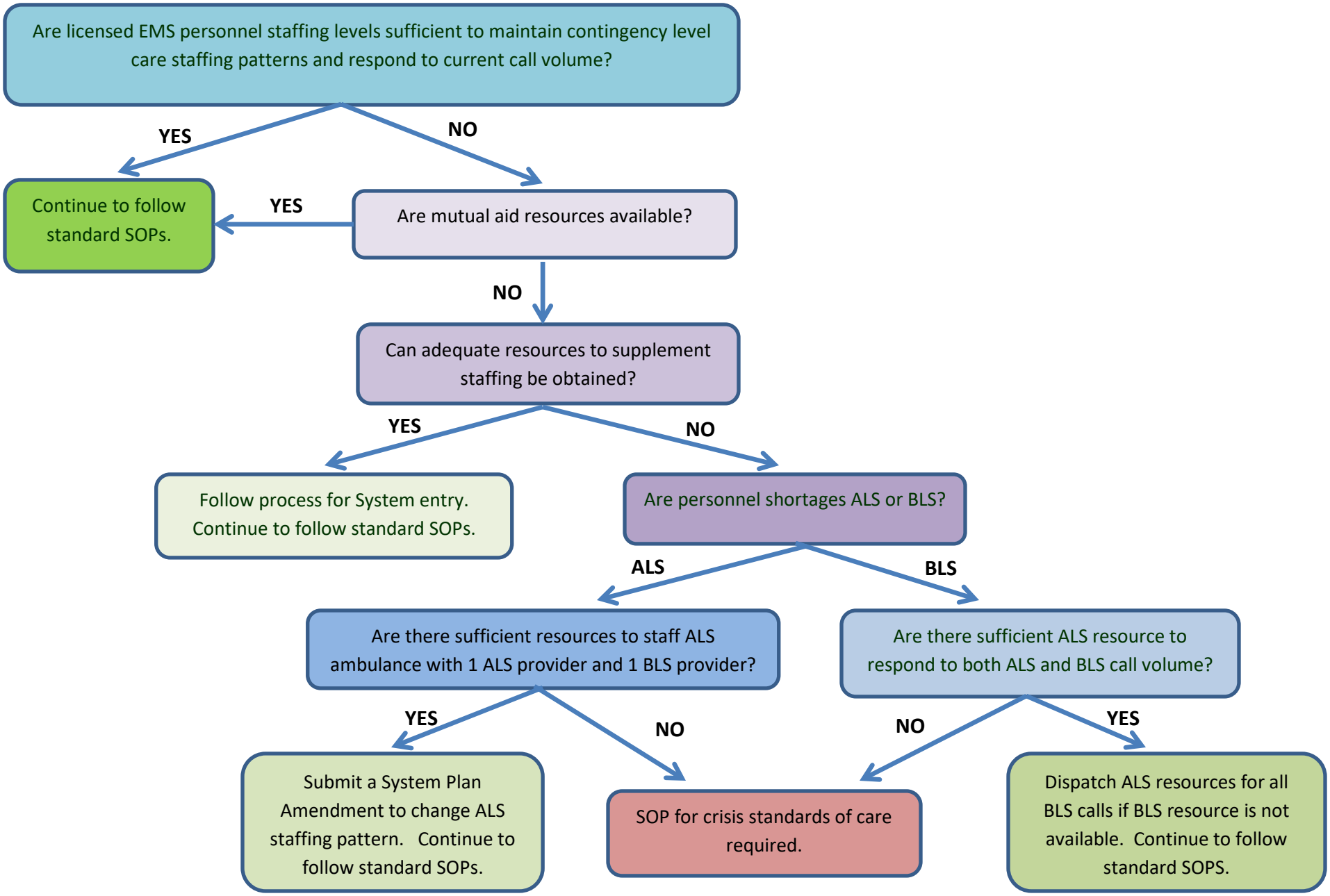
- The Centers for Medicare & Medicaid Services (CMS) has temporarily expanded the list of allowable destinations for ambulance transports for the duration of the COVID-19 public health emergency. More information can be found in the CMS Fact Sheet on Ambulances: CMS Flexibilities to Fight COVID-19.
- Bed availability monitoring thru EMResource by EMS providers must be instituted when SOPs permit transport to non-ED destinations to ensure that patients are being distributed appropriately across all treatment locations within the expanded universe of potential transport destinations and that no one location is being overwhelmed with EMS patients and walk-ins.
- The status of hospitals, transportation to a hospital outside the service area, and alternative treatment destinations should be communicated and updated continuously, in order to inform transport destination decisions.
- Patients with low to medium acuity injuries or illnesses who do not require on-going EMS intervention and whose clinical outcome will not be impacted by delayed treatment should not be transported by EMS. Situation dependent, patients should be provided with instructions for managing their condition at home or instructed to self-transport to an alternate treatment facility (e.g. urgent care centers, primary care, hospital locations external to the traditional ED). See IDPH memo *EMS Alternate Transport Guidelines* dated 04-09-2020.
- Only patients who have a return of spontaneous circulation (ROSC) after an out-of-hospital cardiac arrest (OHCA) should be transported.
- Patients for whom self-transport is appropriate but do not have access to transport resources should be referred to social service agencies for transport. Local emergency management agencies should be able to assist with identifying appropriate referral sources (e.g. Medicar services; human service agencies)
- Non-critical patients for whom EMS transport is appropriate but can be safely managed by EMS for an extended duration should be considered for delayed or batched transport. SOPs should address:
    - How the current patient(s) will be maintained while the licensed EMS provider leaves the ambulance to assess a new patient.
    - The number of patients that can be safely transported at one time in an ambulance based on number of seat belts available.
    - Use of mass casualty transport vehicles.
    - Comingling of pediatric and adult patients.
- Requirements for consultation with Online Medical Control regarding transport/no transport decisions.

REQUIRED SOP CHANGES TO REFLECT CRISIS STANDARDS: REGIONAL HOSPITALS AT ICU AND/OR VENTILATOR BED CAPACITY

PATIENT WITH RESPIRATORY DISTRESS



REQUIRED SOP CHANGES TO REFLECT CRISIS STANDARDS: EMS STAFFING RESOURCE LIMITATIONS



Mental Health

EMS providers are not immune from the potential mental health consequences caused by a pandemic. Enacting crisis standards of care has the potential to cause short and long term mental health consequences for the dispatchers, EMS providers, and the healthcare providers who work at transport destinations who are charged with implementing these standards. The demands of their jobs place these healthcare providers at increased risk for experiencing direct traumatic stress and secondary traumatic stress. Stresses for EMS providers during the pandemic can include: worry about personal and family member health status, worry about inadvertently exposing family members to COVID-19, long work hours, and the inability to provide patient care at the conventional level. Stress may manifest itself in many ways and vary greatly from person to person. Some signs of stress include: changes in sleep or eating patterns, difficulty sleeping or concentrating, worsening of chronic health problems, worsening of mental health conditions, lack of enjoyment in things that previously brought joy, relationship troubles, and increased substance abuse. EMS Systems and agencies must remain cognizant of the impact that stress can have and ensure that there are mechanisms in place to monitor personnel and provide support as needed. Considerations include:

- Monitoring for physical, mental (e.g. decision-making capacity), and emotional fatigue and the use of negative coping strategies (e.g. substance abuse, internalization) to address the resulting stress.
- Identifying strategies to help EMS providers cope with stress in a positive manner. Strategies can include formal initiatives such as post-shift debriefing sessions, comfort dogs, and referrals to mental health providers/support groups or informal initiatives such as increased recognition for on-going efforts during challenging times.

Acronym List

ACS= Alternate Care Sites
ALS= Advanced Life Support
ASC= Ambulatory Surgery Centers
BLS= Basic Life Support
CAH= Critical Access Hospitals
CMS= Centers for Medicare and Medicaid Services
CPR= Cardio Pulmonary Resuscitation
EMR= Emergency Medical Responder
EMS= Emergency Medical Services
ESF= Emergency Support Function
ESRD= End Stage Renal Disease
FQHC= Federally Qualified Health Center
HHS= U.S. Department of Health and Human Services
ICU= Intensive Care Unit
IDPH= Illinois Department of Public Health
IEMA= Illinois Emergency Management Agency
JIC= Joint Information Center
MD= Medical Doctor
OHCA= Out of Hospital Cardiac Arrest
PHE= Public Health Emergency
PPE= Personal Protective Equipment
RHCC= Regional Hospital Coordinating Center
RN= Registered Nurse
ROSC= Return of Spontaneous Circulation
SEOC= State Emergency Operations Center
SNF= Skilled Nursing Facility
SOP= Standard Operating Procedure
WHO= World Health Organization

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Illinois EMS COVID-19 Crisis Standards of Care Guidelines
Triggers, Indicators, and Planning Considerations
(04-18-2020)

Indicators and Triggers for Crisis Standards of Care

The overarching indicators and triggers for enacting crisis standards of care as being when:

- The local, regional, and/or state health care system has exhausted its capacity to care for patients in such a manner that maintains conventional and/or contingency level care.
- Efforts to preserve available resources and balance the delivery of health care services across regions (such that no one region is overwhelmed or taxed to the point of not being able to deliver and sustain medical care at conventional and contingency levels) have become ineffective (e.g. geographic dispersion of patients across multiple regions).
- Efforts to implement tactics and strategies that are intended to benefit the largest number of patients have been implemented but are insufficient to maintain conventional and/or contingency care.

Indicators Specific to COVID-19 Pandemic	**Triggers Specific to COVID-19 Pandemic**
The Governor of Illinois has declared a State Disaster Proclamation and many Executive Orders to maximize public health and safety without limitation.	
Local emergency operations centers have been activated.	
Regional hospitals have executed surge capacity plans to the fullest limits. There are a ***limited number*** of staffed beds available.	The number of hospital staffed beds available within a Region has ***reached critical capacity.***
The demand for ICU beds, ventilators, or respiratory care supplies is ***approaching critical levels***.	The demand for ICU beds, ventilators, or respiratory care supplies has ***reached critical capacity*** within the Region.
Hospital inventory of basic treatment supplies (e.g. IV kits, IV fluids, sterile equipment) is anticipated to be depleted within ***less than 5 days***. No commitment for re-supply has been secured. Equivalent substitutions are not available.	The inventory of basic medical treatment supplies is anticipated to be depleted ***within 1-2 days***. Equivalent substitutions are not available.
The number of hospital personnel who are unavailable for duty is ***above baseline***. Available personnel are consistently working overtime.	Hospitals ***no longer have*** the right complement of clinical and support staff to maintain the contingency level standard of care.
EMS inventory of PPE and/or respiratory care supplies is anticipated to be depleted ***within less than 5 days***. No commitment for re-supply has been secured. Re-use and conservation methods already in place.	The inventory of EMS PPE and/or respiratory care supplies is anticipated to be depleted ***within 1-2 days***.
The number of EMS personnel who are unavailable for duty is ***above baseline***. Available personnel are consistently working overtime.	The number of EMS personnel who are available for duty ***precludes the maintenance*** of contingency level staffing.
The response to a mass casualty incident ***threatens to deplete*** available EMS and hospital resources.	The response to a mass casualty incident ***depletes*** the EMS resources available to respond to 911 calls for emergency services.

Call Taking and Dispatch Guidelines

EMS crisis standards of care begin at the Call Center. EMS resources must be reserved for the patients who will benefit most from EMS intervention and emergency transport to a higher level of care. Call taking protocols must be modified to provide increased triage of patient symptoms. Clinician resources must be available to the Call Center to assist with triage decisions and the provision of instructions for care at home.

Identify call types to which alternate resources be initially dispatched to assess the need for EMS. Call types to consider include: motor vehicle accidents, assaults, intoxications, suicidal ideation, persons down from unknown cause, falls without a priority one complaint, assist the citizen, and other calls that the dispatcher deems as non-emergent. Opportunities to reduce multi-unit response, unless specifically requested by on-scene personnel, should also be considered.

If ambulance staffing patterns are changed, EMS Systems should evaluate whether there are any call types that may require additional EMS resources to be dispatched in order to have an appropriate number of sufficiently trained personnel to perform required triage and treatment functions (e.g. mass casualty incident may require additional units since all ambulances only have one licensed EMS provider assigned; mayday).

Consider the use of a pre-recorded message prior to caller being connected to a call-taker/dispatcher to instruct callers with non-life threatening illnesses or injuries to contact their primary care provider.

Guidelines for Changes to Response Capabilities

The overall goal for the provision of EMS services during the COVID-19 pandemic is to remain at the contingency level of care.

<u>Staffing Considerations</u>

- Whether ALS/BLS designations will be used or will the closest available ambulance be sent for each call.
- The role of EMRs and other first responders without EMS licensure (e.g. law enforcement) and minimum training requirements for these personnel (e.g. donning PPE, proper way to lift a cot, CPR).
- The role of private EMS providers in the provision of emergency care.
- Policies for EMS agencies to share licensed personnel in good standing.
- Whether personnel with EMS licensure who work in a non-EMS capacity for the governmental bodies served can be incorporated into the crisis care staffing matrix.
- Reconfiguring staffing for ALS and BLS companies to allow for ambulance staffing to consist of one licensed provider at the level of care required by the patient consistent with the drugs and supplies available on the vehicle (ALS, BLS) and one EMR or unlicensed first responder to drive the ambulance.
- Reinstatement of retired or expired EMS practitioners to attain temporary EMS privileges to work in the System. Identification of any scope of practice restrictions that will be in place.

- The use of personnel with provisional licenses who must be directly supervised (e.g. work side by side) by an EMS provider with a license at the same or greater level of licensure.
- Whether clinicians and/or licensed EMS personnel can staff the Call Center to provide oversight for triage and no-resources assigned decisions.
- Identify scope of practice restrictions that will be modified or waived in order to permit the delivery of certain treatments by lower levels of care and associated field training requirements.

Potential Scope of Practice Modifications

Scope of Practice Modification	Provider Level	Equipment/Medications Required	Training Considerations
Administration of nebulizer treatment	EMR, BLS (if not already being done)	• Nebulizer set-ups • Bronchodilators	• Respiratory system assessment • Indicators for bronchodilator need • Medication-specific pharmacology • Use of nebulizer equipment
Blood glucose monitoring	EMR, BLS	• Glucometer • Test strips • Lancets	• Signs and symptoms of hypoglycemia and hyperglycemia • Target blood glucose range • Use of glucose monitoring equipment and supplies
Hypoglycemia correction	EMR	• Glucose tabs • Glucagon	• Physiology of fast acting carbohydrates on blood glucose levels • Oral glucose tablet dosing • Glucagon administration • Post-administration blood glucose monitoring
Hyperglycemia correction	BLS	• Fast acting insulin • Insulin syringes • Sharps container	• Insulin pharmacology • Insulin dosing and administration • Post-administration blood glucose monitoring
Assist patient with administration of own nitroglycerin	BLS	• Nitroglycerin tablets	• Indications for use • Nitroglycerin pharmacology • Nitroglycerin dosing and administration • Post-administration monitoring
Administration of injectable pain medications	BLS	• Pre-filled syringe narcotic and non-narcotic analgesics • Sharps container	• Indications for injectable pain medications • Pharmacology for selected medications • Injectable medication administration • Post-administration monitoring
Assist patient with administration of own medication	EMR, BLS	• None	• Five rights of medication administration: right patient, right drug, right dose, right route, right time • Medication information resources (e.g. prescription information sheet from pharmacy; websites)

- Whether PPE availability will be used to determine the types of patients that EMS providers will be expected to care for, the scope of procedures that can be performed, and if the System will vary from standard PPE recommendations for certain procedures. Situations to consider include:
    - Hospital ventilator beds are available, but N-95 masks are not. Does this impact the pre-hospital intubation standard for COVID-19 patients? Low risk of COVID-19 patients?
    - N-95 masks are available, but protective gowns are not. Does this impact the standard of care?
    - Will EMS providers with documented immunity to COVID-19 be permitted to perform aerosol-generating procedures on confirmed or possible COVID-19 patients using droplet precautions?

Ambulance Considerations

- Request a waiver from IDPH to operate BLS ambulances at a level that exceeds current licensure for a period of greater than 10 days.
- Ability to increase the number of ambulances available to respond to 911 calls through use of spare ambulances and/or modifying the equipment and supply requirements.
- Modifications to EMS dispatch protocols and the level of care that will be sent (ALS, BLS, EMR).
- Alternate transportation resources and minimum staffing and equipment requirements for use.
- Strategies to minimize the amount of time that ambulances are out of service for maintenance and repair.
- Request a waiver to decrease the minimum amount of certain supplies carried on an ambulance.

Triage Considerations

- Whether time is a factor in clinical outcome. If time is not a factor, the patient should be de-prioritized for continued EMS resources.
- Illness or injury presentations that appear stable but could deteriorate quickly.
- Whether the delivery of a single, time efficient treatment (e.g. pain management) could move the patient into a lower triage category/priority that will no longer require EMS resources.
- Whether alternate treatment methods are available if the primary treatment option is no longer available and how this availability influences patient prioritization.
- Specific injuries, illnesses, and/or underlying health factors whose combinations are known to cause poorer health outcomes in patients.
- Palliative care resources available to provide comfort measures to de-prioritized patients.
- Mechanisms for follow-up with de-prioritized patients if additional resources become available.
- Immediate access to Online Medical Control for triage decision support.

Patient De-Prioritization

If respiratory care resources are severely limited and trigger enactment of crisis of care standards, the following groups of COVID-19 patients may be considered for de-prioritization in the order listed:

1. Patients who are 75 years of age or older who have diabetes mellitus, chronic lung disease, or cardiovascular disease and are experiencing severe respiratory illness.
2. Patients who are between the ages of 55 and 74 years who have diabetes mellitus, chronic lung disease, or cardiovascular disease and are experiencing severe respiratory illness.
3. Patients who are 75 years of age without an underlying medical condition and are experiencing severe respiratory illness.
4. Patients who are between the ages of 55 and 74 years who do not have an underlying medical condition and are experiencing severe respiratory illness.
5. Patients of age 54 years and younger who have an underlying medical condition and are experiencing severe respiratory illness.

Categories of the types of patients who may need to be considered for de-prioritization regardless of their COVID-19 status include:

- Patients with cardiac or respiratory arrest that is unwitnessed by EMS
- Patients currently receiving hospice or palliative care who require respiratory intervention
- Critically injured trauma patients who are unresponsive to painful stimuli after non-invasive manipulation of the airway
- Patients with suspect stroke who are unresponsive to painful stimuli
- Trauma victims with suspect traumatic brain injuries[2] who have unequal or fixed pupils
- Patients with severe traumatic injury to two or more vital systems

All patients who are deprioritized for crisis standard care and/or transport may still receive on-scene treatment to alleviate suffering or manage symptoms. Establish a palliative care referral process.

<u>Treatment Considerations</u>

- Whether treatments should be initiated in the pre-hospital setting if they cannot be sustained in the hospital environment.
- Modified treatment protocols for situations when the primary treatment option is no longer available or presents an increased risk to the EMS provider. Lack of treatment availability includes both equipment/supply limitations and/or access to an appropriately trained EMS provider.
- COVID-19-specific clinical recommendations and treatment protocols/information from appropriate public health authorities and EMS medical direction.
- Treatment restrictions based on lack of appropriate PPE availability. Acceptable risk for exposure must be weighed against the benefits certain treatments provide to individual patients. EMS providers are a critical healthcare system resource and protection of this resource should be prioritized.
- If operating with altered staffing patterns, additional ambulances may be required for mass casualty situations in order to have adequate trained personnel to perform the triage and treatment functions.
- Implications for limiting or performing aerosolizing procedures and additional protective actions that can be taken to minimize risk.

- Modifications to resuscitation procedures. See American Heart Association's Interim Guidance at https://www.ahajournals.org/doi/pdf/10.1161/CIRCULATIONAHA.120.047463
- Field termination of care.
- Treatment without EMS transport or treatment with self-transport.
- The process for de-prioritizing a patient for care or treatment. EMS providers must have immediate access to Online Medical Control for help in making the proper determination.
- Palliative care referrals for patients who are de-prioritized for treatment. On-scene treatments for symptoms management that are allowable.
- Online Medical Control consultation requirements for treatment/no treatment decisions.

Transport Considerations

- The Centers for Medicare & Medicaid Services (CMS) has temporarily expanded the list of allowable destinations for ambulance transports for the duration of the COVID-19 public health emergency.
- Bed availability monitoring thru EMResource by EMS providers must be instituted when SOPs permit transport to non-ED destinations. EMS providers must have timely access to this information in order to ensure that patients are being distributed appropriately across all treatment locations.
- Patients with low to medium acuity injuries or illnesses who do not require on-going EMS intervention and whose clinical outcome will not be impacted by delayed treatment should not be transported by EMS. See IDPH memo *EMS Alternate Transport Guidelines* dated 04-09-2020.
- Only patients who have a return of spontaneous circulation (ROSC) after an out-of-hospital cardiac arrest (OHCA) should be transported.
- Patients for whom self-transport is appropriate but do not have access to transport resources should be referred to social service agencies for transport.
- Non-critical patients who require EMS transport but can be safely managed by EMS for an extended duration should be considered for delayed or batched transport. SOPs should address:
    - Patient maintenance while the licensed EMS provider cares for a new patient.
    - The number of patients that can be safely transported in an ambulance at one time.
    - Use of mass casualty transport vehicles
    - Comingling of pediatric and adult patients
- Requirements for consultation with Online Medical Control regarding transport/no transport decisions.

Mental Health Considerations

- Monitoring for physical, mental (e.g. decision-making capacity), and emotional fatigue and the use of negative coping strategies (e.g. substance abuse, internalization) to address the resulting stress.
- Identifying strategies to help EMS providers cope with stress in a positive manner. Strategies can include formal initiatives such as post-shift debriefing sessions, comfort dogs, and referrals to mental health providers/support groups or informal initiatives such as increased recognition for on-going efforts during challenging times.

Patient Triage and Resources Dispatch Based on Symptoms Reported by Caller

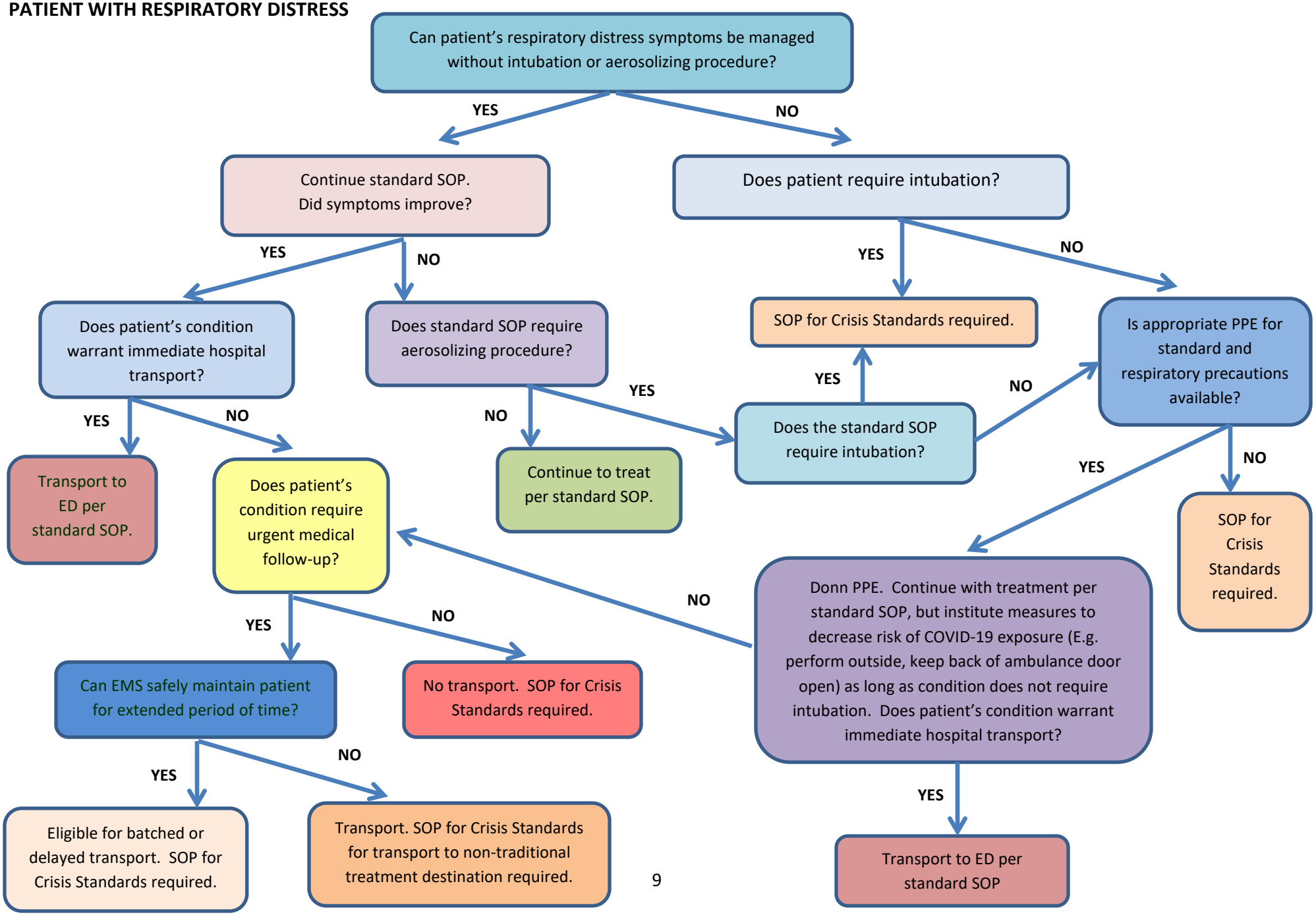
Triage Designation	Triage Definition	Injury and Illness Classifications to Consider When Developing Crisis Care Dispatch Procedures (list of conditions is not all inclusive)	Resources Dispatched in Order of Preference	SOP Changes to Consider
RED	Cannot survive without immediate treatment but has a chance of survival	• Severe difficulty breathing • Altered level of consciousness, new focal neurological signs, seizures, severe headache with sudden onset and/or neck pain stiffness • Head injury with loss of consciousness or continued neck pain. • Ongoing seizure • Acute chest pain or other signs/symptoms consistent with known cardiac ischemia, or pulmonary embolism • Signs or symptoms of shock, severe/uncontrolled bleeding • Significant trauma with chest, spinal, abdominal, or neurological injury deemed unstable • Significant burns • Pregnancy with severe pain, bleeding, or contractions <5 minutes apart	1-Closest available transport asset staffed with an ALS provider. 2- If no ALS transport available, send ALS non-transport resource. 3- If no ALS resources available, send BLS resource until ALS resource become available	• Discontinuation of CPR started by lay rescuers •
YELLOW	Not in immediate danger of death, but condition requires urgent transport for treatment in order to stabilize.	• Asthma – not in severe respiratory distress • Suspect fractures or dislocations that cannot be safely transported via personal resources or patient requires pain medication • Loss of peripheral pulses • Mental status changes not suspected of being stroke related • Nausea, vomiting, constipation with acute abdominal pain • Allergic reactions – emergency medications administered and/or available • Diabetic reactions unresolved with home treatment* • Suspected cardiac ischemia • Acute congestive heart failure	1- Closest transport asset staffed with a minimum of a BLS provider (ALS asset preferred). 2- BLS resource until transport resource becomes available	• Expanded scope of practice for BLS providers to include administration of injectable pain medications • Batched transport options • Inclusion of private EMS resources for dispatch • Use of call-back system if resource arrival will be delayed

Patient Triage and Resources Dispatch Based on Symptoms Reported by Caller

Triage Designation	Triage Definition	Injury and Illness Classifications to Consider When Developing Crisis Care Dispatch Procedures (list of conditions is not all inclusive)	Resources Dispatched in Order of Preference	SOP Changes to Consider
		• Substance abuse with decreased level of consciousness • Non-penetrating eye injuries* • Second degree burns- pain medication required • Acute exacerbation of a chronic medical condition* *No self-transport resources available		
GREEN	Stable, can transport self for medical care or minor injuries or illness that can be self-treated	• Bleeding that stops with the application of pressure • Lacerations that require simple repair • Suspect fractures that are stable • Overdose – conscious • Rashes • Vision changes/eye pain – no trauma • Fevers • Mental/behavioral health conditions without report of threat for self-harm • Mild to moderate COVID-19-like/ILI-like illnesses • Dehydration without mental status changes or dizziness • Urination difficulties	1-No EMS resources dispatched 2-BLS or EMR resource dispatched if on-scene urgent treatment only required (non-transport resource preferred) 3-BLS transport resource if requested by on-scene personnel	• Requirements for consultation with a clinician • Transferring caller to established nurse triage lines for home care instructions • Dispatch of first responder company to assess patient condition • Refer for self-transport to non-ED care
BLACK	Deceased. Injuries so extensive that they will not be able to survive. Currently receiving hospice or palliative care services.	• Unresponsive and no signs of spontaneous respiration • Patient currently receiving Hospice or palliative care • Active DNR order	1-No resources dispatched.	• Suspend CPR instructions • Requirements for consultation with a clinician • Referral to palliative care for symptom management

REQUIRED SOP CHANGES TO REFLECT CRISIS STANDARDS: REGIONAL HOSPITALS AT ICU AND/OR VENTILATOR BED CAPACITY

PATIENT WITH RESPIRATORY DISTRESS



REQUIRED SOP CHANGES TO REFLECT CRISIS STANDARDS: EMS STAFFING RESOURCE LIMITATIONS