



Louisiana Department of Health & Hospitals

ESF-8 Health & Medical Section State Hospital Crisis Standard of Care Guidelines in Disasters

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This is a living document and updated versions will be developed as needed.

Louisiana Crisis Standards of Care Guidelines in Disasters

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Introduction

This document may serve as a guide for hospital policymakers. All information contained is to be considered a draft and subject to change. The adoption of consistent procedures and recommendations statewide would represent best practices during times of disaster and would assist in gaining public confidence. It is suggested that each hospital evaluate and apply this document in consideration of its unique needs including staffing, bed capacity, and community resources available to the hospital. Individual hospitals may then develop facility-specific policies and procedures. Furthermore, since community resources will be needed and shared by all hospitals in each region of the state, it is imperative that representatives from facilities in local areas come together to address standards of care guidelines across the region. This will help minimize public confusion and “shopping” for care and maximize the limited resources that will be needed.

Background

The following section is taken directly from the Institute of Medicine's *Guidance for Establishing Crisis Standards of Care for Use in Disaster Situations: A Letter Report*, pages 1-23. This document was a summary report of four National Regional Meetings. The participants consisted of policy makers from state and local public health departments, local and state government representatives, providers from the health care community, including relevant medical disciplines, nursing, EMS, palliative care, hospice, home health, and their associated employee unions, and health care and hospital administrators. The objectives for the four workshops were to:

- Illuminate the progress and successes of efforts underway to establish local, state, and regional standards of care protocols.
 - What have been some of the barriers in establishing protocols?
 - What solutions have you developed to operationalize standards of care protocols?
- Improve regional efforts by facilitating a dialog and coordination between neighboring jurisdictions.
- Discuss the roles and responsibilities of each stakeholder community in the development and implementation of standards of care protocols, including officials from state and local health departments and providers.
- Examine what resources, guidelines, and expertise have been used to establish standards of care protocols including legal and ethical expertise that has been used to establish standards of care protocols.
- Identify and discuss resource requirements that will be necessary from federal, state, and regional authorities to advance and accelerate the establishment of standards of care protocols.

The influenza pandemic caused by the 2009 H1N1 virus underscores the immediate and critical need to prepare for a public health emergency in which thousands, tens of thousands or even

hundreds of thousands of people suddenly seek and require medical care in communities across the US. This overwhelming surge on the healthcare system will dramatically strain medical resources and could compromise the ability of healthcare professionals to adhere to normal treatment procedures and conventional standards of care.

There was significant uncertainty about the likely severity and extent of the 2009 H1N1 influenza outbreak leading to a concern that demand for healthcare services would increase dramatically, resulting in a severe strain on medical resources across the state. While the H1N1 pandemic was not a severe pandemic in terms of numbers of individuals critically ill, the nation and Louisiana also faces the possibility of new pandemics due to other strains of influenza viruses (such as avian), as well as, many other potential public health emergencies and disaster that could severely strain medical resources. Other disasters caused by terrorism or by natural causes, such as fires, floods, earthquakes, and hurricanes, have the potential to overwhelm the medical and public health systems. Louisiana has already experienced severe medical crises as a result of Hurricanes Katrina, Rita, Gustav and Ike.

While the U.S. health system affords many Americans a high quality of health care, existing levels of health care in routine situations in the nation and Louisiana are unlikely to be available in times of a mass disaster involving scarce resources. Therefore, the state must continue to plan for a catastrophic public health event that will cause grave injury, disease, or death to potentially thousands within the state.

In preparation for response to any large-scale disaster or public health emergency, healthcare facilities must develop surge plans that include efforts to increase and maximize use of available resources, as well as, to manage demand for healthcare services. In the setting of an influenza pandemic, where the shortage of resources is likely to occur on a national scale, the availability of supplementary support is unlikely to occur. Beyond preparedness stockpiling, facilities can also implement a variety of strategies that permit conservation, reuse, adaptation, and substitution for certain resources, doing so in a way that minimizes the impact on clinical care.

However, these measures may not always be sufficient, especially in a wide-reaching public health emergency or disaster in which resources are simultaneously strained in communities across the state. Faced with severe shortages of equipment, supplies, and pharmaceuticals, an insufficient number of qualified healthcare providers, overwhelming demand for services, and a lack of suitable space, healthcare practitioners will have to make difficult decisions about how to allocate these limited resources if contingency plans do not accommodate incident demands. Under these circumstances, it may be impossible to provide care according to the conventional standards of care used in non-disaster situations, and, under the most extreme circumstances, it may not even be possible to provide the most basic life-sustaining interventions to all patients who need them. The impact of these circumstances will likely carry a tremendous social cost on the healthcare workforce and the state as a whole.

An important consideration regarding the framework for the implementation of crisis standards of care in a disaster includes the recognition that it will never be an "all or none" situation. Disasters will have varying impacts on communities, based on many different variables that might affect delivery of health care during such events. Response to a surge in demand for healthcare services will likely fall along a continuum ranging from "conventional" to "contingency" and "crisis" surge responses.

Conventional patient care uses usual resources to deliver health and medical care that conforms to the expected standards of care of the community. The delivery of care in the setting of contingency surge response seeks to provide patient care that remains *functionally equivalent* to conventional care. Contingency care adapts available patient care spaces, staff, and supplies as part of the response to a surge in demand for services. Although this may introduce minor risk to the patient compared to usual care (e.g., substituting less familiar medications for those in short supply, thereby potentially leading to medication dosage error), the overall delivery of care remains mostly consistent with community standards. Crisis care, however, occurs under conditions in which usual safeguards are no longer possible. Crisis care is provided when available resources are insufficient to meet usual care standards, thus providing a transition point to implementing *crisis standard of care*. Note that in an important ethical sense, entering a crisis standard of care mode is not optional—it is a forced choice, based on the emerging situation. Under such circumstances, failing to make substantive adjustments to care operations—i.e., not to adopt crisis standards of care—is very likely to result in greater death, injury or illness. The goal for the health system is to increase the ability to stay in conventional and contingency categories through preparedness and anticipation of resource needs prior to serious shortages, and to return as quickly as possible from crisis back across the continuum to conventional care.

Crisis of standards of care can be defined as a substantial change in usual healthcare 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 the state, in recognition that crisis operations will be in effect for a sustained period. The formal declaration (Executive Order) that crisis standards of care are in operation enables specific legal/regulatory powers and protections for healthcare providers in the necessary tasks of allocating and using scarce medical resources.

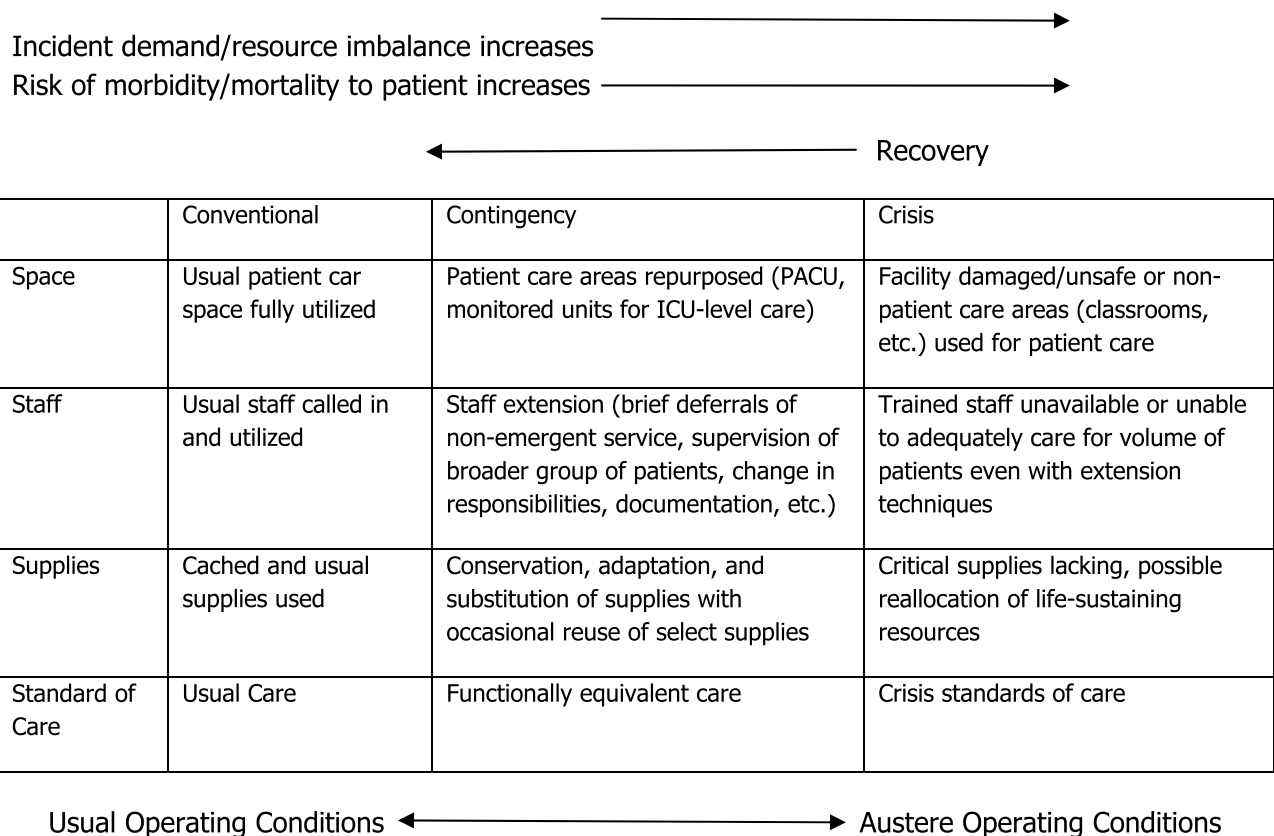
Disaster events will be marked by a sudden or gradual increase in demand for healthcare services and a related decrease in the supply of resources available to provide such care. This will result in a healthcare-sector response that requires implementation of a variety of “surge capacity” strategies that include steps taken to reduce demand for care (e.g., the implementation of community-based triage capabilities and risk communication about when to seek care) and the augmentation of ambulatory care capacity in addition to better described inpatient care strategies. Therefore, all healthcare entities, not just hospitals, should have plans to provide crisis care. Outpatient facilities (and community-based clinics, nursing homes, primary care, etc.) may use strategies modified from hospital guidance.

A number of strategies can be used to bolster the supply of key resources (i.e., space to deliver care, clinical staffing availability, and the availability of key supplies). Most likely the crisis will occur over a spectrum of supply and demand spikes, suggesting that a continuum of care will be in place over the course of any disaster response. The Institute of Medicine suggests that surge capacity following a mass casualty incident falls into three basic categories, depending on the magnitude of the event: conventional, contingency, and crisis surge capacity. Note that the same event may result in conventional care at a major trauma center, but crisis care at a smaller, rural facility.

Conventional, contingency, and crisis care represent a continuum of patient care delivered during a disaster event. As the imbalance increases between resource availability and demand,

health care—emblematic of the healthcare system as a whole—maximizes conventional capacity, then moves into contingency, and, once maximized, moves finally into crisis capacity. Concurrent with this transition along a surge capacity continuum is the realization that the standard of care will shift. This occurs primarily as a result of the growing scarcity of human and material resources needed to treat, transport, and provide patient care. The goal of the healthcare agency or facility is to return as quickly as possible to conventional care by requesting resources or transferring patients out of the area, drawing on the resources of partner or coalition hospitals and the health system as a whole. Along the span from conventional to crisis care, healthcare facilities should attempt to minimize changes that significantly impact patient outcomes by changing work practices in order to focus resources on patient care.

Architecture: IOM Report: Guidance for Establishing Crisis Standards of Care



Catastrophic events will have an impact on the entire healthcare delivery system and will affect response and delivery of care that occurs in the home, community, hospitals, primary care offices and long-term care facilities. A number of strategies can be implemented along this continuum of care delivery to reduce the likelihood that standards of care will change in a disaster situation. These include steps taken to substitute, conserve, adapt, and reuse critical resources, including the way staff are used in delivering care. All these steps should be attempted prior to the reallocation of critical resources in short supply. Every attempt must be made to maintain usual practices and the expected standard of care and patient safety.

The Institutes of Medicine defines:

- Conventional capacity as the use of spaces, staff, and supplies that is consistent with daily practices within the institution. These spaces and practices are used during a major mass casualty incident that triggers activation of the facility emergency operations plan.
- Contingency capacity as the use of spaces, staff and supplies that is **not** consistent with daily practices, but provides care that is *functionally equivalent* to usual patient care practices. These spaces or practices may be used temporarily during a major casualty incident or on a more sustained basis during a disaster (when the demands of a the incident exceed community resources).
- Crisis capacity as adaptive spaces, staff, and supplies that are not consistent with usual standards of care, but provide sufficiency of care in the setting of a catastrophic disaster (i.e., provide the best possible care to patients given the circumstances and resources available). Crisis capacity activation constitutes a *significant* adjustment to standards of care.

Contingency or “surging” Plans

The Department of Health and Hospitals with the assistance of the Pandemic Influenza Clinical Forum, a committee of healthcare experts around the state from all areas of medicine, has developed a draft State Hospital Pandemic Influenza Plan. This document contains information on the state’s current healthcare status, the estimated shortages likely to occur in a moderate to severe pandemic and recommendations on contingency or surging activities/plans. The State Pandemic Influenza Plan can be found on the Louisiana Hospital Association’s website (www.lhaonline.org). All hospitals within the state should have developed their individual institution’s pandemic plans. These plans are to be used when conventional capacity has been exceeded.

Crisis Standards of Care

Crisis standards of care guidelines should be used for situations when healthcare resources are overwhelmed. To plan for a catastrophic event, Louisiana needs to ensure that 1) the response offers the best care possible given the resources at hand; 2) decisions are fair and transparent; 3) policies and protocols across the state are consistent; and 4) citizens and stakeholders are included and heard. Laws and the legal environment must support response efforts and create incentives for healthcare practitioners to care for affected populations. Although the usual high quality of health services cannot be assured during a catastrophic event, the state must do all it can to gain the trust of the public by responding fairly and effectively, particularly for vulnerable persons.

The following information is meant to serve as guidelines to provide direction to healthcare providers when the contingency capacity has been exceeded and crisis standards of care and an Executive Order for a declared state of emergency becomes necessary. Criteria should be implemented for determining when crisis standards of care should be implemented, key elements that should be included in the crisis standards of care protocols, and criteria for determining when these standards of care should be terminated. The guiding principle of Crisis Standards of Care is to do the greatest good for the greatest number of persons.

Core ethical precepts in medicine permit some actions during crisis situations that would not be acceptable under ordinary circumstances, such as implementing resource allocation protocols that could preclude the use of certain resources on some patients when others would derive greater benefit from them. Healthcare professionals are obligated always to provide the best care they reasonably can to each patient in their care, including during crises. When resource scarcity reaches catastrophic levels, clinicians are ethically justified and indeed are ethically obligated to use the available resources to sustain life and well-being to the greatest extent possible.

Definitions

Within these guidelines, several terms will require clarification:

- Surge capacity shall refer to the ability to increase facility space and occupancy, enlist staff, and obtain adequate supplies and equipment to meet the needs of an influenza pandemic or other catastrophic event. It is recognized that surge capacity will not be a static value and may be limited by scarce resources.
- Scarce resources shall refer to diagnostic methods, therapeutic devices (e.g. ventilators, noninvasive positive pressure ventilation), medications (e.g. antiviral medications), healthcare providers (e.g. physicians, nurses, respiratory therapists, technicians) and facility beds. In a crisis standard of care catastrophic event, the number of persons seeking medical care would outstrip these scarce resources.

Development Methods

To ensure equity in utilization of scarce resources, and to provide equal care to all members of the community, the state brought together a broad spectrum of professionals including state and local public health, emergency medicine and response, critical care, infection control, hospital administration, pharmacy, primary care, nursing, palliative care, ethics, legal, behavioral health, and risk communication. These guidelines are based on the Utah Pandemic Influenza Hospital and ICU Triage Guidelines (UPIHITG) and the draft CSOC Guidelines for Acute Care Hospitals during an Influenza Pandemic from Region 2 (Baton Rouge).

Region of the state then convened a similar panel of experts and reviewed the aforementioned documents and other available resources. This document should serve as guidance for healthcare facilities and professionals in the development of systematic and comprehensive policies and protocols for standards of care in disaster where resources are scarce. These standards should be consistent across all regions of the state.

These guidelines may be superseded by any future guidance that may be provided by public health authorities.

Guiding Principles

In developing guidelines for Crisis Standards of Care in the setting of a pandemic, an ethical framework must guide the allocation of scarce resources. Within this framework, the following concepts were utilized:

Duty to Care

Duty of care is guided by the obligation of health care professionals to care for patients at all times. Any system must sustain the patient-provider relationship ensuring that patients are not

abandoned. In an influenza pandemic with scarce resources, it is understood that all patients may not be eligible for all therapies, but other curative and/or palliative treatments should be provided.

Duty to Steward Resources

During times of scarce of resources, the obligation of duty to care for all patients must be balanced by the duty of care for each individual patient. The estimated benefit of an intervention will need to be balanced against the availability of scarce resources leading to circumstances in which patients may not receive the level of resources or interventions available during non-pandemic events. Priority should be given to patients for whom treatment would most likely be lifesaving and whose functional outcome would most likely improve. Such patients should be given priority over those who would likely die even with treatment and those who would likely survive without treatment.

Duty to Plan

During an influenza pandemic, planning for allocation of scarce resources is an obligation. The absence of guidelines in this situation represents a failure in the responsibility to both patients and providers. It is recognized that any plan for utilization of scarce resources will be imperfect, but remains vital in preparation for a pandemic.

Distributive Justice

A just system for the allocation of scarce resources must be applied broadly in order to fair. The timing, components and implementation of guidelines in altered standards of care must be coordinated across an entire community. Patients must have equal access to care. Cooperative agreements must be present to help alleviate shortages of resources thereby decreasing disparities in access to care and resources.

Transparency

A just system for the allocation of scarce resources requires transparency with broad input into the design and implementation of the system. As part of this process, the Department of Health and Hospitals contracted with a media consultant firm to develop a "public" version of the state Crisis Standards of Care Guidelines in order to provide Louisiana's citizens with a basic understanding of how the plan works and how it is designed to be used. Additionally, the contractor conducted statewide public forums. These forums were designed to provide an opportunity for review and comment by the public and to ensure that the "at-risk" (vulnerable) population is included in this process. A total of one hundred thirty-six (136) organizations and community groups were contacted and invited to participate. The forums included an explanation of the need for crisis standards of care, the process for development of these standards, when and how CSOC would be implemented and individual and group working sessions designed to provide the participants with the opportunity to share their thoughts, belief, values, attitudes and an opportunity to comment on the draft plan.

The forum process was designed using the Seattle-King County process for validation purposes and to assess any differences between the results. While Seattle-King County's demographics are different from those in Louisiana, the results were similar. The participants felt that the chance of survivability, treating the most people and providing care for first responders may be part of a decision-making priority. The least important factors were: first-come, first-served, randomization and ability to pay. The participants acknowledged the importance of and need for state "guidelines" but wanted the guidelines to be flexible enough to allow the final decisions

to be made by the local physicians (“boots on the ground”). Encouragingly, the groups expressed trust in their medical community to make the best decisions as fairly as possible under extreme conditions.

Ethical Considerations

In trying to determine the appropriate allocation of extremely scarce healthcare resources during a major disaster, there are several ethical principles to consider. When dealing with large events, the general philosophy is to “provide the most good for the greatest number of people”. It is less about the individual patient and more about the community as a whole. Some of the ethical principles are:

- First come, first served – this is mostly what is done during normal conditions. However, this principle violates the duty to steward resources, the duty to plan and the distributive justice standards.
- Most likely to recover – this too can violate the duty to steward resources and duty to plan at the extreme of the most likely to recover. Provision of care to those most likely to recover with no further treatment might need to be WITHHELD to better steward resources in a time of great resource scarcity. This will be imperfect in practice but will likely be required under crisis standards of care. People who are deemed only mildly sick may be sent home who might otherwise be admitted and observed, in a time when the resources are scarce and when it is felt these patients would likely not require hospitalization as much as others.
- Instrumental Value (Multiplier effect) – this means that if you provide care for this individual, they would then be able to care for others, increasing the number of people being cared for. An example of this might be a doctor or a nurse. This is a subject for discussion but choosing to allow medical personnel the chance to be put on ventilators makes sense from two standpoints: 1) The medical personnel who survive will be there to take care of patients in year 2 and 3 of a pandemic. They may even be there to take care of patients in the 3rd month of year one and 2) If the medical personnel have some assurance that they may get a ventilator, they may be more likely to come in to work especially once the fatality rate of the “really bad virus” becomes obvious.
- Broad Social Value – this means that society could imply that someone like the President or Governor or Mayor would have a higher social worth. However, in our morally pluralistic society, it is impossible to agree on “value”.
- Life Cycle Principle (fair innings) – this means that younger individuals should have a right to the same number of years to live as an older person has already had. Using this principle, age would become the driving force. All other things being equal, with one ventilator to spare, it would go to someone 28 y/o over someone 82 y/o. Studies show the decline of the immune system with advanced age makes this easier to defend than it would seem based on what we know about the aged immune system. This also brings us back to the most likely to recover principle.
- Maximizing Net Benefit – this is similar to “most likely to recover” but is more encompassing. It is probably the one principle that serves as a basis for much of any crisis standards of care plan.

Population

It is recognized that during an influenza pandemic and declared state of emergency, that patients presenting to acute care hospitals may be suffering from conditions not related to influenza. **These guidelines should apply to ALL patients seeking care at acute care hospitals during an influenza pandemic. Social worth and other non-medical factors should not be used in the decision making process.**

Implementation Plan

As an influenza pandemic progresses, it is recognized that individual institutions may be reaching surge capacity at different times. Given this, each individual institution should be responsible for the initiation of limiting need protocols and the pursuit of maximizing surge capacity.

Limiting Need shall refer to the non-critical use of potentially scarce resources. As an example of limited need, elective surgical procedures should be postponed during a period of impending emergency unless used to facilitate the discharge of inpatients.

In addition to decreasing non-essential use of potentially scarce resources, facilities should make every effort to secure additional resources to limit the impact of a pandemic and ensure that surge capacity is maximized.

The decision to implement the Crisis Standards of Care guidelines should be based upon the degree of the pandemic (or other disaster) and hospital capacity, in conjunction with a governor ordered state of emergency. Specifically, Crisis Standards of Care may be initiated only after all of the following conditions have been met. It is imperative that all hospitals work together and utilize the ESF-8 Hospital DRC network to maximize all available resources.

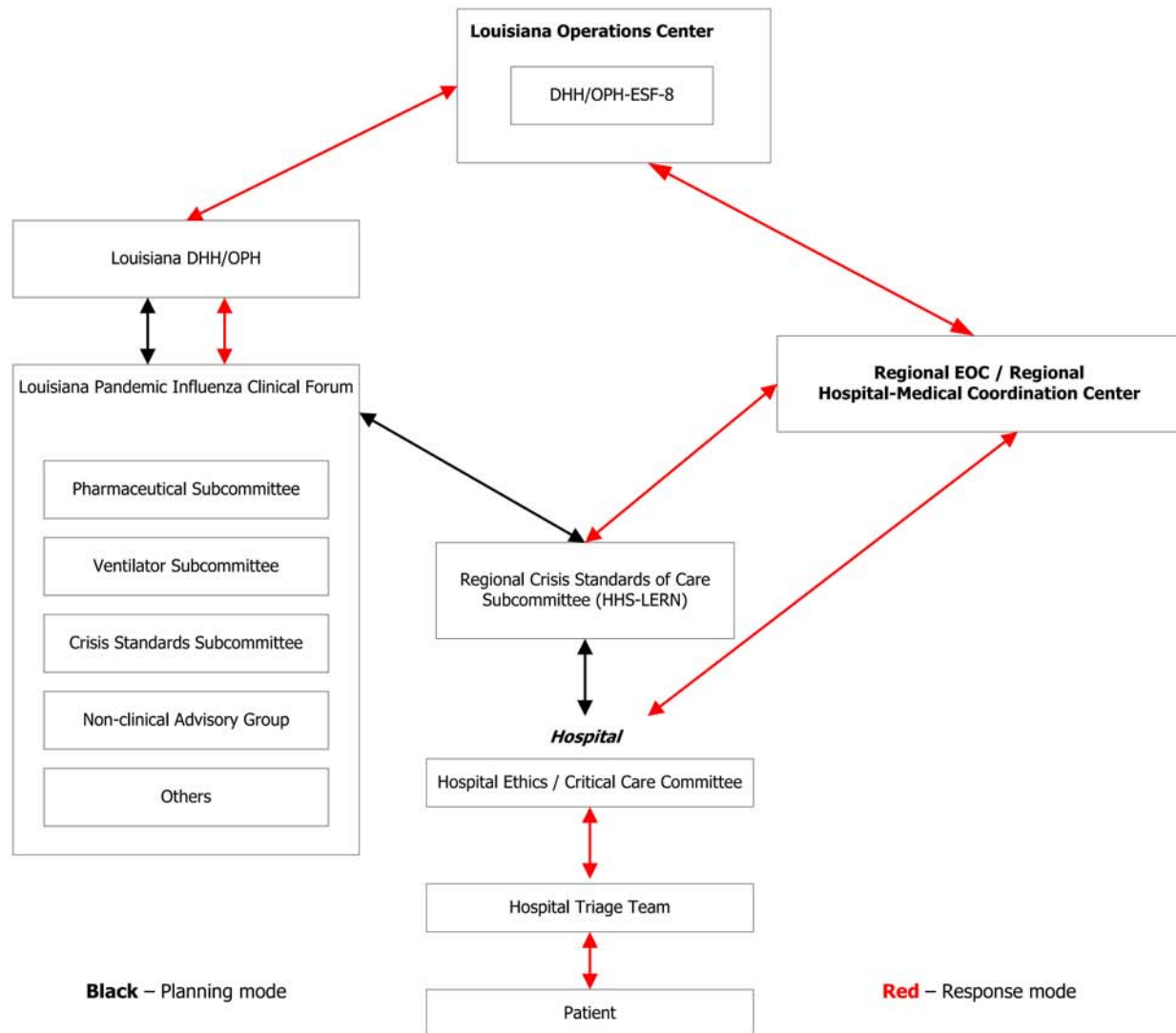
1. Initiation of national disaster medical system and national mutual aid and resource Management
2. Surge capacity fully employed within healthcare facility
3. Attempts at conservation, reutilization, adaption, and substitution are performed maximally
4. Identification of critically limited resources (e.g., ventilators, antibiotics)
5. Identification of limited infrastructure (e.g., isolation, staff, electrical power)
6. Request for resources and infrastructure made to local and regional health officials
7. Current attempt at regional, state, and federal level for resource or infrastructure allocation
8. Institutional implementation team has requested initiation of CSOC
9. Declared state of emergency or incident of national significance

It is recognized that within individual regions and institutions, the criteria for implementation of these guidelines may occur at different times. As such, the decision to implement the guidelines will be made by individual institution's committees. The committee of each institution should consist of (at a minimum):

- i. The Chief of Staff (or designee)
- ii. The Chief Medical Officer (or designee)

- iii. The Chief Nursing Officer (or designee)
- iv. The Infection Control and Prevention Nurse (or designee)
- v. The Emergency Department Director (or designee)

Upon decision for implementation of crisis standards of care, the Department for Health and Hospitals, and the other regional hospitals shall be notified by the implementing institution. The organizational structure for both the development and response in Crisis Standards of Care is illustrated below:



Community Communication Plan For Pandemic Influenza

Open communication between healthcare facilities is key for an effective response during a pandemic. Ongoing communication between hospitals will be coordinated through the Hospitals' Designated Regional Coordinators system, part of the Louisiana Hospitals Emergency Response Network Plan.

Situational awareness will be ensured with frequent communication between each hospital regarding patient volume and acuity experienced by the facility, as well as resource status information. This

information will be used to facilitate decision-making to determine when and how altered standards of care are implemented across the community.

Hospitals will provide ongoing status information as requested by the State. Data will be reported using existing electronic reporting systems. The Hospital Designated Regional Coordinators will monitor data reports for potential trends across the community.

EMS Triage System

Recognizing that within certain regions, ability and expertise to care for certain types of patients will affect an EMS triage system. The sample triage tree below represents efforts by Region 7 (Shreveport area) to not only assess a patient's need for hospital care but also to which medical facility best fits the patient and his/her condition. Their institutional routing includes pediatrics, higher acuity patients being routed to intensivist-driven ICU's, critically ill requiring special services such as ECMO, and pregnant patients. A similar effort at identifying an effective EMS triage system for each region of the state is needed. An EMS assessment for pediatrics, pregnancy, mechanically ventilated and vasopressors may be included. Defining hospitals which may selectively receive these patients pre-hospital will avoid utilization of scarce EMS resources and personnel in transport.

This sample triage process is currently being evaluated and will be updated as it primarily assesses patients for H1N1 and does not adequately screen for a novel influenza virus or any other type condition/disaster. Further considerations might include tachycardia, O2 saturations of 92-94 in the young or bronchospastic, shock index >1, high fever, further definition for vasopressor, etc. Additional information will be added as it becomes available.

EMS Disaster Triage Tree

Date: / /	Patient Info	Allergies:	DNR or Hospice care does not meet transport criteria. DNR Hospice
Time: AM PM	Age:	Meds:	
EMS:	M / F		

Chief Complaint:

1	BP: /	HR:	RR:	O2 sat: %
2	Confirmed Pregnancy	Chemotherapy*	Long Term Steroids**	HIV
	RR > 24 at rest	O2 sat < 92% at rest	Confusion -not baseline	
	None of the above present***			

***Criteria for transportation not met, patient's are to be informed to contact their local physician for further care. Discourage ED visit as they will likely be turned away. If case does not meet criteria but extenuating circumstances are present, contact medical control.

<p>Vasopressor or MV</p> <p>If any of the history or signs in # 2 are present, transport per protocol. If vasopressor support or mechanical ventilation required, transport to LSUHSC, CS-St Mary's, WK-N, WK-P, WK-B only.</p>	<p>Pregnancy</p> <p>If confirmed pregnancy, transport to LSUHSC, CS-ST Mary's, WK-P, WK-B only.</p>	<p>Pediatrics</p> <p>Transport to LSUHSC, Sutton's or WK-P only.</p>
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*Confirmed pregnancy defined as either physical signs of pregnancy, actively following an OB or US confirmation.

**Long-term steroid use means they have been on a steroid for greater than one month.

Pre-Hospital Admission Triage Model (Figure 1)

Upon the decision to initiate Crisis Standards of Care, operational activities of emergency departments should proceed according to institutional pandemic influenza plans or a Mass Casualty Incident Plan. A necessary component of these plans should include the pre-hospital admission triage of patients. To limit spread of influenza, triage should occur in a fashion that limits exposure of suspected influenza patients to non-suspected influenza patients.

Each institution may designate a Pre-Hospital Admission Triage Officer or implement a CSOC Pre-Hospital Admission Protocol. The Triage Officer may be responsible for the assessment of pregnancy (and estimated gestation age) and exclusion criteria (Table A). If a criterion for exclusion is unknown, it should be assumed to be **NOT** present. Upon identification of exclusion criteria, the Triage Officer should communicate these findings to an emergency room physician. If the Triage Officer and emergency room physician are in agreement, alternative care and/or discharge planning, with attention to palliative care (if indicated) should be initiated for the patient. If the Triage Officer and emergency room physician are in disagreement regarding the presence of an exclusion criterion, a second physician should adjudicate and document the decision.

If no exclusion criteria are present, the patient should be admitted to the emergency department as is usual care and quantification of the Simple Triage Score (Table J) should occur. Decision to admit, admit to ICU or discharge should proceed per figure 1.

ICU Triage Model (Figure 2)

The primary physician treating a patient should not be directly responsible for the allocation of scarce resources. Once admitted to the ICU, daily assessment of ICU exclusion criteria should occur (Table B). If no ICU exclusion criteria are present, the Modified Sequential Organ Failure Assessment (MSOFA) should be calculated. The primary physician will be responsible for the clinical assessment of the patient and calculation of the MSOFA. A triage review officer may determine the appropriate level of care based upon the MSOFA and Figure 2.

Pediatric Triage Model (Table A 2; Figures 3, 4)

The subcommittee on Pediatric Crisis Standards of Care has been assigned the task of developing guidelines for providing care to the pediatric population in the face of a public health disaster. This could be related to weather, disease or bioterrorism. Basically, the goal is to design a system that would provide the greatest care to the most children in a time when hospitals have exceeded surge capacity and resources are scarce, particularly ICU beds and ventilator access.

There is no national consensus on allocation of scarce resources in the pediatric population and how care should be triaged. The dilemma is made more complex in the fact that the pediatric population brings a cohort of patients that are somewhat unique-mainly children with severe genetic diseases, terminal genetic diseases, terminal congenital heart diseases, cystic fibrosis, etc.

There are several other issues that must also be considered. One is that there are few scoring systems that have been validated in children that may accurately predict mortality over a broad age group such as pediatrics and that credit underlining disease states. PRISM III is validated but best at 24 hours. PIM-2 does account for underlying diseases and has a POC of .89 over all age groups and may be the best admission score to predict mortality but not designed or validated to be used

over time. An additional advantage is that it does account for pre-existing diseases. However, it cannot be calculated easily or without a pre-set calculator.

PELOD may offer the best predictability of mortality over time since it measures degree of organ dysfunction and because of its ease of measurement, can overcome the problems in obtaining PIM-2. However, it is not meant to be a static measurement for use to predict outcomes on admission so it is not perfect.

In order to address these concerns, the committee recommends the following:

1. All comers should be admitted and triaged based on PELOD.
2. A PELOD score should be obtained at < 24 and 48 hours (called PELOD-24 and PELOD-48). Based on these scores, the patient will be assigned level of care (Figure 1, 2, and 3).
3. The survival expectation rule will be used to help delineate those patients with terminal genetic and congenital disease.
4. Each hospital will enact surge capacity protocols and put all pediatricians, family practice physicians and family nurse practitioners on alert and activate their services.
5. Adopt child custody protocols within each institution to care for separated or abandoned children.

Decisions regarding a change in the level of care may be appealed by the primary physician or designee to a Central Triage Team which should consist of:

1. The Chief of Staff (or designee)
2. The Chief Medical Officer (or designee)
3. The Director of Nursing (or designee)

The Central Triage Team may decide upon the appropriate level of care based upon the above assessment and available resources. The decision should be made in a timely fashion and communicated to the primary physician, patient and family.

Palliative Care

"The needs of those who may not survive catastrophic mass casualty events and the 'existing' vulnerable populations affected by the event should be incorporated into the planning, preparation, response, and recovery management systems of all regions and jurisdictions."

—Joint Commission on Accreditation of Healthcare Organizations, 2004

Aggressive management of symptoms and relief of suffering is what generally have come to be called "palliative care." The World Health Organization defines palliative care as "an approach which improves the quality of life of patients and their families facing life-threatening illness, through the prevention, assessment, and treatment of pain and other physical, psychosocial, and spiritual problems."

While it is important to understand what palliative care is, it is also important to specify what palliative care is not. Palliative care is not abandonment of the patient or reduction or

elimination of treatment. Rather, it involves active treatment for symptom management and aggressive support to ensure the comfort of the patients and their families. Finally, the aggressive and appropriate treatment of pain and other symptoms is not euthanasia, nor does it intend to "hasten death". The application of palliative care principles in a healthcare emergency would include:

- Recognizing that initial prognostication may change if additional resources become available or if the situation deteriorates.
- Honoring the humanity of the dying and those who serve them (whether loved ones, professionals, or strangers) by providing comfort through medical, social, psychological, and spiritual support.

In an MCI (mass casualty incident), standards of care will require adaptation. Unfamiliar personnel will be providing services, supplies will be strained, and command and control lines of authority will need to be established. In the interest of maximizing good outcomes for as many patients as possible, and at the very least, providing palliative care to all, treatment decisions will have to balance utilitarian notions against other ethical values, with medical effectiveness as a key determinant. Priority access to scarce resources, including structural and skilled personnel resources, may be applied or moved to those with the greatest potential for survival. Although, services to those expected to die soon, to a degree, will fall to those who do not have substantial prior health experience and expertise it is important to emphasize that the well established principles of palliative care must be applied to these patients. The level of skill required to care for a patient who is dying in many ways is no less than the skill required to care for a patient who may survive. Although palliative care may be low tech in some regards, it sometimes warrants high tech interventions with advanced care skills. It should be emphasized that even in the setting of MCI the palliative care skills provided to dying patients should not be diminished. These patients will need aggressive management of dyspnea, pain and anxiety not to mention, psychosocial, spiritual and emotional needs. The care of these patients will require a substantial commitment to proper medical care and a more coordinated response across multiple disciplines.

For the sickest, with extreme symptom management needs, appropriate staffing for nursing will be crucial. In order to properly to care for these patients it will be important to have the following on hand: oral and IV fluids, oral and IV anti-anxiety and agitation treatments, anti-nausea treatment, medications to address excessive oral-tracheal secretions. Consideration should also be given to maintaining a stock pile of IV and PCA pumps, IV tubing, nebulization equipment, oxygen and suctioning equipment. Routine medications used for palliative care include: roxanol, Dilaudid, phenergan, Haldol, scopolamine, etc.

In anticipation of the need to provide palliative care, facilities should develop plans for a Discharge/Palliative Care Unit. Experts already working with seriously, chronically ill patients should assist with planning. Inexpensive options to meet demand for pain control and sedation need to be developed. Palliative pain control and sedation guidelines need to take into consideration patient conditions that include dehydration and impaired nutrition due to lack of intake and air conditioning that may occur during a healthcare emergency.

Based on the above information from the Joint Commission it is suggested that the Operations Chief appoint a Palliative Care Unit Leader to manage the Palliative Care Unit. All patients in this unit must be assessed with a frequency commensurate with their level of suffering.

The hospital and/or Palliative Care Unit Leader is responsible for:

- Designating an area for the Palliative Care Unit
- Staffing: Physician; Nursing; Social Worker; Case Manager; Respiratory; Ancillary Support; Clergy; and Volunteers
- Daily review and assessment for change in patient's condition and level of care
 - Better than expected, able to transfer to an acute care setting
 - Transfer to other levels of care such as LTAC, nursing home, hospice or discharge to home
 - Patient/family wishes: Allow Natural Death
- Ongoing assessment of community resources (hospice; home health); ability to move patients out of the acute care hospital or the palliative care unit.

Termination of Crisis Standards of Care

As the severity of pandemic subsides, the scarcity of certain resources may be resolved at different times (e.g. critical care beds may be available, but ventilators may remain scarce). Each institution should apply the hospital triage plan based on the availability (or lack thereof) of resources during daily assessments (figure 2).

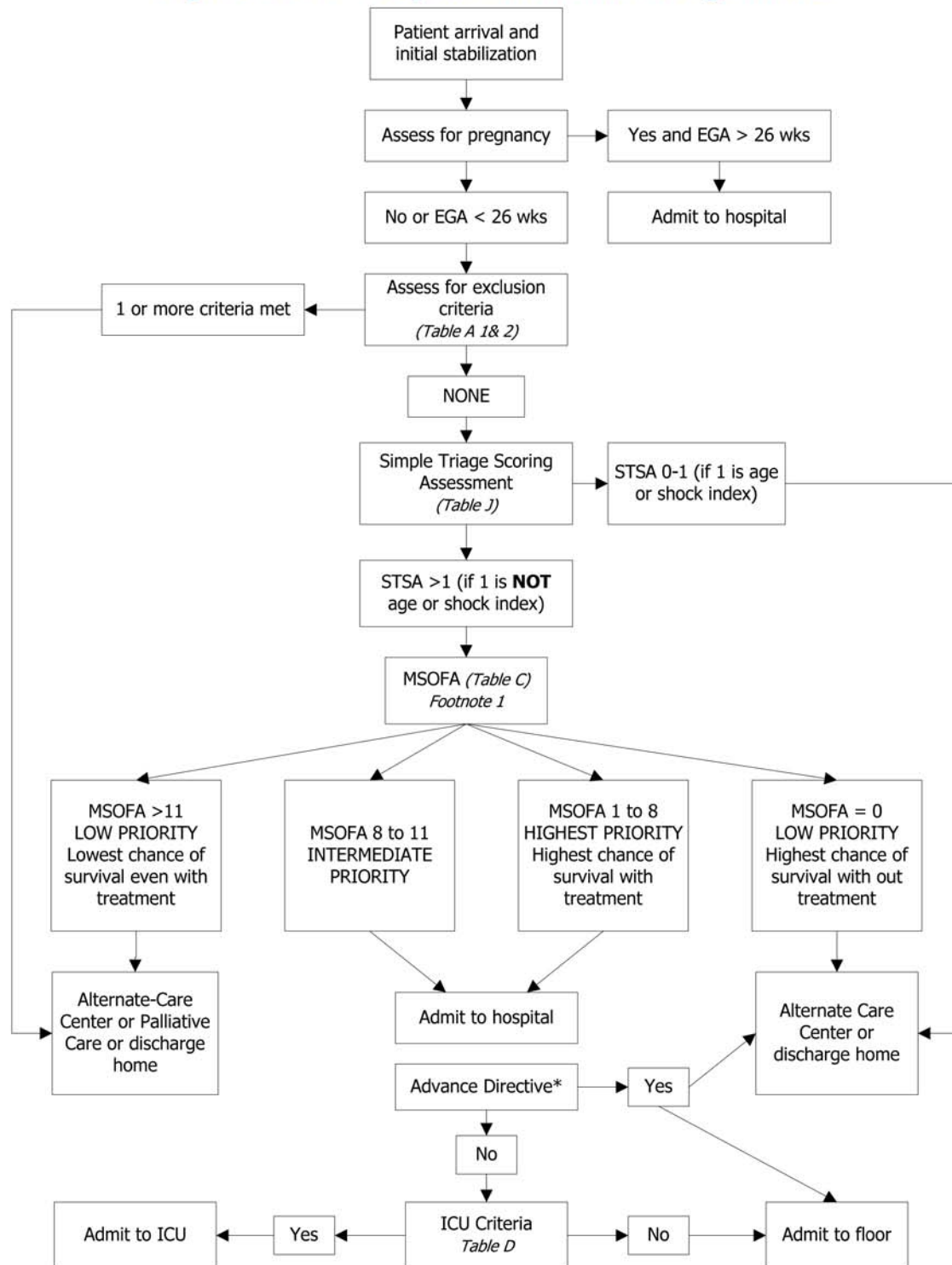
When scarce resources are no longer present, termination of Altered Standards of Care should occur and the Governor's office, the Secretary of the Department for Health and Hospitals, and the other regional hospitals should be notified by the institution.

Should a severe pandemic occur, all areas and levels of healthcare would be affected. It is essential that primary care/rural health, nursing homes and home health agencies also develop guidelines for managing their patients during a crisis standard of care event.

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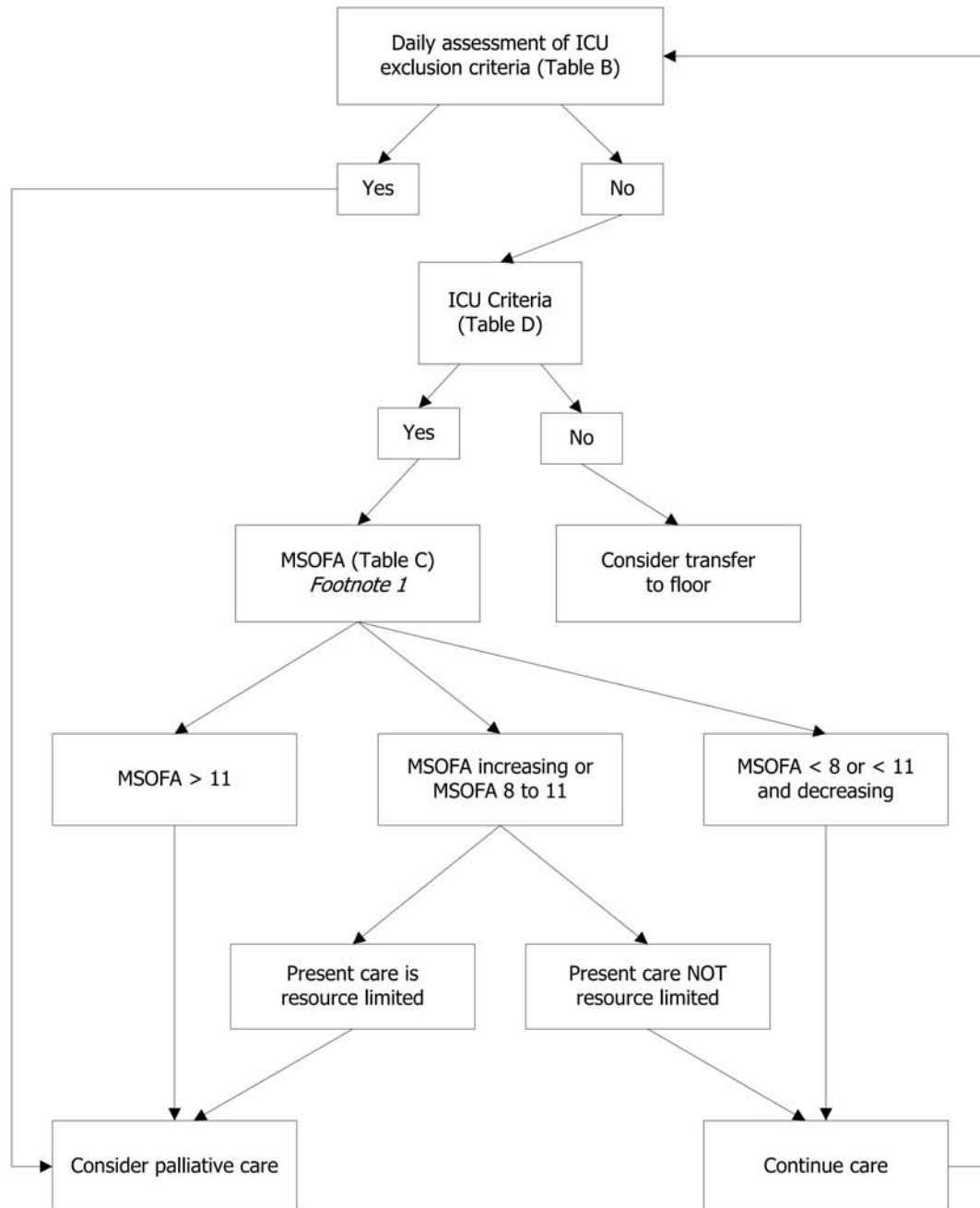
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Figure 1: Pre-Hospital Admission Triage Model



Footnote 1: If alternative severity of illness scoring systems are available (e.g. APACHE), may substitute MSOFA with respect to predicted hospital mortality.

Figure 2: ICU Triage Model



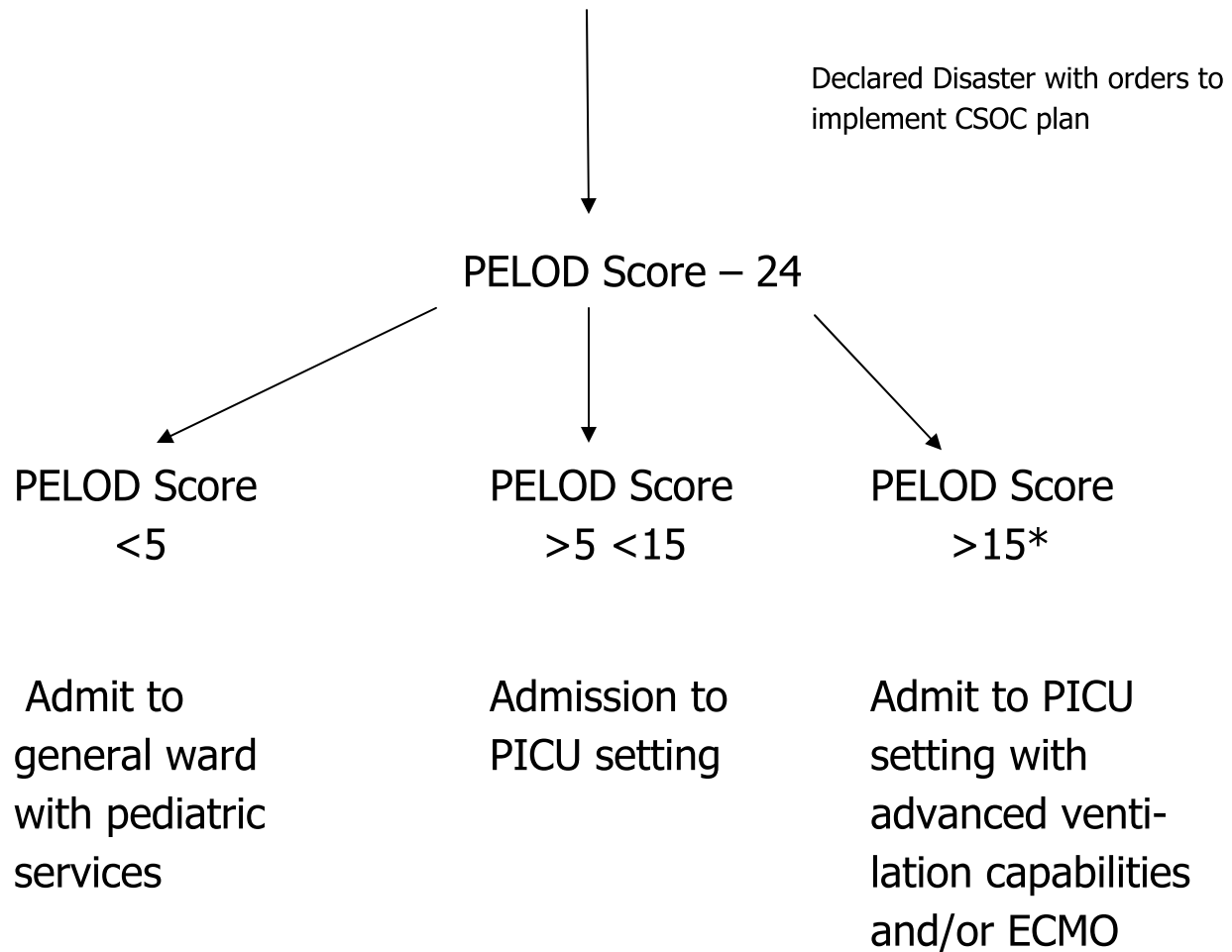
Footnote 1: If alternative severity of illness scoring systems are available (e.g. APACHE), may substitute MSOFA with respect to predicted hospital mortality.

Table A 1: Exclusion Criteria For Pre-Hospital Triage

Any unknown value is assumed to NOT be present at time of triage.

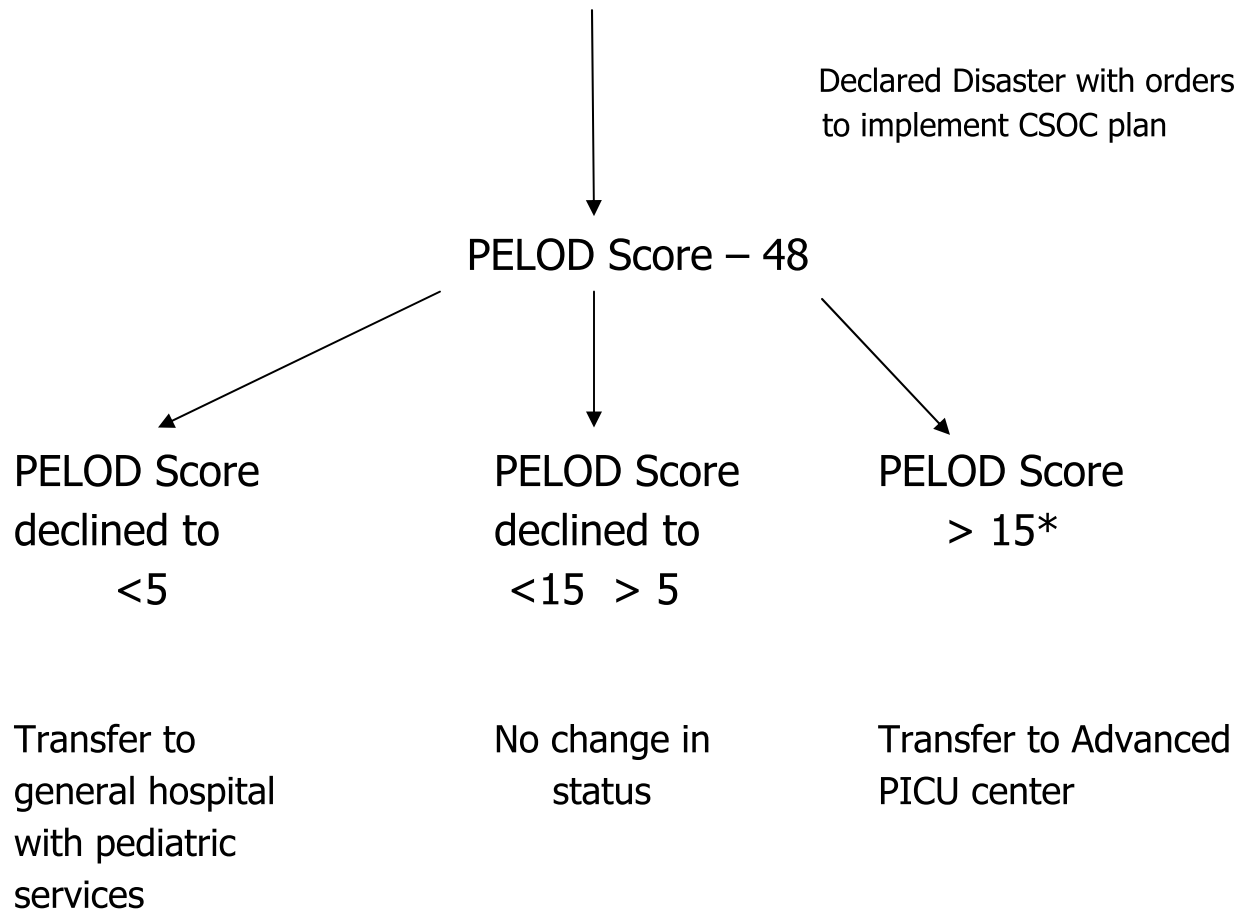
1. *Severe Trauma with a Revised Trauma Score of < 2 (Table E)*
2. *Severe and irreversible neurologic event or condition with persistent (>72 hours) coma and GCS < 6 (Table F)*
3. *Severe burns with a Low/expectant or Expectant outcome on the Triage for Burn Victims Assessment (Table G)*
4. *Cardiac Arrest without return of spontaneous circulation.*
5. *Known severe dementia (Limited speech ability, no independent ambulatory ability, cannot sit up without assistance, loss of ability to smile, loss of ability to hold up head independently).*
6. *Advanced untreatable neuromuscular disease (such as ALS, end stage MS or SMA) requiring assistance with activities of daily living or requiring chronic ventilatory support*
7. *Patient is currently admitted / enrolled in hospice.*
8. *Incurable metastatic malignant disease*
9. *End-stage organ failure meeting the following criteria:*
 - a. *NYHA Class IV heart failure (Table H)*
 - b. *Lung*
 - i. *COPD with FEV1 < 25% predicted or severe secondary pulmonary hypertension*
 - ii. *Cystic fibrosis with post-bronchodilator FEV1 < 30% predicted*
 - iii. *Pulmonary Fibrosis with VC or TLC < 60% predicted, baseline PaO2 < 55 mmHg, or severe secondary pulmonary hypertension*
 - iv. *Primary pulmonary hypertension with Class IV heart failure*
 - c. *Liver*
 - i. *Pugh score of > 9 (Table I)*
10. *Known Do Not Resuscitate status*

Pediatric Triage Plan



*Positive expectation rule

Pediatric Triage Plan



*Positive expectation rule

Table A 2: Pediatric Criteria

	Scoring system			
	0	1	10	20
Organ dysfunction and variable				
Neurological*				
Glasgow coma score	12-15	7-11	4-6	3
Pupillary reactions	Both reactive	NA	Both fixed	NA
Cardiovascular†				
Heart rate (b/min)				
<12 years	<195	NA	>195	NA
≥12 years	<160	NA	>160	NA
Systolic blood pressure (mm Hg)				
<1 month	>65	NA	35-65	<35
1 month-1 year‡	>75	NA	35-75	<35
1-12 years‡	>85	NA	45-85	<45
≥12 years	>95	NA	65-95	<55
Renal				
Creatinine (μmol/L)				
<7 days	<140	NA	≥140	NA
7 days-1 year‡	<85	NA	≥85	NA
1-12 years‡	<100	NA	≥100	NA
≥12 years	<140	NA	≥140	NA
Respiratory§				
PaO ₂ (kPa)/FIO ₂ ratio	>9.3	NA	<9.3	NA
PaCO ₂ (kPa)	<11.7	NA	>11.7	NA
Mechanical ventilation¶	No ventilation	Ventilation	NA	NA
Haematological				
White blood cell count (×10 ⁹ /L)	>4.5	1.5-4.4	<1.5	NA
Platelets (×10 ⁹ /L)	>35	<35	NA	NA
Hepatic				
Aspartate transaminase (IU/L)	<450	≥450	NA	NA
Prothrombin time‡‡ (cr INR)	>60	<60	NA	NA
	(<1.40)	(≥1.40)		

PaO₂=arterial oxygen pressure, FIO₂=fraction of inspired oxygen, PaCO₂=arterial carbon dioxide pressure, INR=international normalized ratio, *Glasgow coma score: use lowest value if patient is sedated, record estimated Glasgow coma score before sedation. Assess patient only with known or suspected acute central nervous system disease. Pupillary reactions: non reactive pupils must be >3 mm. Do not assess after iatrogenic pupillary dilatation. †Heart rate and systolic blood pressure: do not assess during crying or iatrogenic agitation. ‡Strictly less than. §PaO₂: use arterial measurement only. ¶Percentage of activity. PaO₂/FIO₂ ratio, which cannot be assessed in patients with intracardiac shunts, is considered as normal in children with cyanotic heart disease. PaCO₂ may be measured from arterial, capillary, or venous samples. Mechanical ventilation: the use of mask ventilation is not counted as mechanical ventilation.

Table B: ICU Triage Exclusion Criteria						
<ol style="list-style-type: none"> 1. Change in patient or proxy decision to withdraw life-sustaining measures. 2. Severe and irreversible neurologic event or condition with persistent (>72 hours) coma and GCS < 6 						

Table C: Modified Sequential Organ Failure Assessment (MSOFA)						
MSOFA Scoring Guidelines						
Variable	Score 0	Score 1	Score 2	Score 3	Score 4	Score for each row
SpO2/FiO2 ratio OR nasal cannula to keep SpO2 > 90%	SpO2/FiO2 >400 Or Room air SpO2 > 90%	SpO2/FiO2 216-400 Or Room air SpO2 >90% at 1-3 LPM	SpO2/FiO2 231-315 Or Room air SpO2 >90% at 4-6 LPM	SpO2/FiO2 151-230 Or Room air SpO2 >90% at 7-10 LPM	SpO2/FiO2 ≤ 150 Or Room air SpO2 >90% at > 10 LPM	
Bilirubin (mg/dL)	< 1.2 Or No scleral icterus	1.2 to 1.9	2.0 to 5.0 Or Scleral icterus	6.0-11.9 Or clinical jaundice	≥12	
Hypotension	None	MABP < 70	DOP < 5	DOP 5 to 15 Or EPI ≤ 0.1 Or NOREPI ≤ 0.1	DOP > 15 Or EPI > 0.1 Or NOREPI > 0.1	
Glasgow Coma Score	15	13 to 14	10 to 12	6 to 9	<6	
Creatine (mg/dL)	<1.2	1.2 to 1.9	2.0 to 3.4	3.5 to 4.9 Or Urine output < 500 in 24 hours	>5	

MSOFA score = total scores from all rows

Table D: ICU Criteria

Patients must have NO exclusion criteria (Table A) AND at least one of the following criteria:

1. Requirement for invasive ventilatory support as evidenced by:
 - a. Refractory hypoxemia ($\text{SpO}_2 < 90\%$ on non-rebreather mask or $\text{FiO}_2 > 0.85$), or
 - b. Severe acidosis ($\text{pH} < 7.2$), or
 - c. Clinical evidence of impending respiratory failure
 - d. Inability to maintain airway
2. Hypotension with clinical evidence of shock refractory to volume resuscitation, and requiring vasopressor or inotrope support that cannot be managed in the ward setting.
 - a. Hypotension is defined by a $\text{SBP} < 90$ or $\text{MAP} < 60$.
 - b. Clinical evidence of shock shall consist of an altered level of consciousness, decreased urine output or other evidence of end-organ failure

Table E: Revised Trauma Score

(online calculator available at <http://www.trauma.org/archive/scores/rtts.html>)

REVISED TRAUMA SCORE CALCULATION

Criteria	Score	Coded Value	Weighting	Adjusted Score
Glasgow Coma Score	3	0	X 0.9368	
	4 to 5	1		
	6 to 8	2		
	9 to 12	3		
	13 to 16	4		
Systolic Blood Pressure	0	0	X 0.7326	
	1 to 49	1		
	50 to 75	2		
	76 to 89	3		
	>89	4		
Respiratory Rate (BPM)	0	0	X 0.2908	
	1 to 5	1		
	6 to 9	2		
	>9	3		
	10 to 29	4		
REVISED TRAUMA SCORE (add 3 adjusted scores)				

Table F: Glasgow Coma Score			
GLASGOW COMA SCORING CRITERIA			
Criteria	Adults and Children	Score	Criteria Score
Best Eye Response 4 possible points	No eye opening	1	
	Eye opens to pain	2	
	Eye opens to verbal command	3	
	Eyes open spontaneously	4	
Best Verbal Response 5 possible points	No verbal response	1	
	Incomprehensible sounds	2	
	Inappropriate words	3	
	Confused	4	
	Oriented	5	
Best Motor Response 6 possible points	No motor response	1	
	Extension to pain	2	
	Flexion to pain	3	
	Withdraws from pain	4	
	Localizes to pain	5	
	Obeys commands	6	
TOTAL SCORE Range 3 to 15			

Table G: Triage Decision for Burn Victims

Age (yrs)	Burn Size (%TBSA)									
	0-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91%
0-1.9	Very High	Very High	Very High	High	Medium	Medium	Medium	Low	Low	Low expectant
2.0-4.9	Outpt	Very High	Very High	High	High	High	Medium	Medium	Low	Low
5.0-19.9	Outpt	Very High	Very High	High	High	High	Medium	Medium	Medium	Low
20.0-29.9	Outpt	Very High	Very High	High	High	Medium	Medium	Medium	Low	Low
30.0-39.9	Outpt	Very High	Very High	High	Medium	Medium	Medium	Medium	Low	Low
40.0-49.9	Outpt	Very High	Very High	Medium	Medium	Medium	Medium	Low	Low	Low
50.0-59.9	Outpt	Very High	Very High	Medium	Medium	Medium	Low	Low	Low expectant	Low expectant
60.0-69.9	Very High	Very High	Medium	Medium	Low	Low	Low	Low expectant	Low expectant	Low expectant
70.0+	Very High	Medium	Medium	Low	Low	Low expectant	Expectant	Expectant	Expectant	Expectant

Outpt – outpatients – Survival and good outcome expected without initial admission

Very High – Survival and good outcome expected with limited/short-term initial admission and resource allocation.

High – Survival (>90%) and good outcome expected

Medium – Survival 50-90%

Low – Survival <50%

Expectant – Predicted survival $\leq 10\%$

Table H: New York Heart Association Stages (NYSA) of Heart Failure

NYSA	Classes
Class	Patient Symptoms
Class I Mild	No limitation of physical activity. Ordinary physical activity does not cause undue fatigue, palpitations or dyspnea.
Class II Mild	Slight limitation of physical activity. Comfortable at rest, but less than ordinary activity causes fatigue, palpitations or dyspnea.
Class III Moderate	Marked limitation of physical activity. Comfortable at rest, but less than ordinary activity causes fatigue, palpitations or dyspnea.
Class IV Severe	Unable to carry out physical activity without discomfort. Symptoms of cardiac insufficiency at rest. If any physical activity is undertaken, discomfort is increased.

Table 1: Pugh Score			
Scoring	Criteria		
Criteria	Value	Points	Total for Criteria
Total serum	<2	1	
Bilirubin mg/dL	2-3	2	
	>3	3	
Serum Albumin g/dL	>3.5	1	
	2.8-3.5	2	
	<2.8	3	
INR	<1.70	1	
	1.71-2.20	2	
	>2.20	3	
Ascites	None	1	
	Controlled medically	2	
	Poorly controlled	3	
Encephalopathy	None	1	
	Controlled medically	2	
	Poorly controlled	3	
		Total Pugh Score	
Score Interpretation			
Total Pugh Score			
5-6	A	Life expectancy 15-20 years	
7-9	B	Liver transplant evaluation indicated	
10 to 15	C	Life expectancy 1-3 years	

<i>Table J: Simple Triage Scoring (STSA)</i>	
Age \geq 65	
Respiratory Rate > 30	
Shock Index > 1 (HR > SBP)	
Low oxygen saturation*	
Altered mental status	

*Hypoxemia is defined as initial oxygen saturation of <90% on room air or <93% on supplemental oxygen

Appendix A: Delivery of Care Guidelines for Essential Inpatient Nursing Care

Essential Inpatient Nursing Care during a healthcare crisis is defined as those patient care tasks that have higher priority for completion when patient care staff and supply/equipment resources are limited. As the needs of patients increase and resources become limited, patient care services may have to be limited. The most critical aspects of patient care for clinicians providing care are: a) maximizing worker and patient safety, b) maintaining airway and breathing, circulation and control blood loss; and c) maintaining or establishing infection control (ANA, 2008). The following information provides several examples of recommendations on methods on how patient care staff productivity may be increased and how staff time and supply resources may be conserved; overall providing safe and quality care to the patient. It is recommended that each hospital develop its own recommendations for Essential Inpatient Nursing Care.

CARE ELEMENTS	ESSENTIAL PATIENT CARE
1. Assessment	<ul style="list-style-type: none"> • Resuscitation status – identify upon admission and review daily • Screenings (i.e. nutrition, immunizations) <ul style="list-style-type: none"> ○ Limit according to nursing assessment and judgment ○ Screenings and education limited to situations that pose an immediate threat to the patient in areas such as: <ul style="list-style-type: none"> ▪ Fall risk ▪ Skin care ▪ Alcohol abuse ▪ Suicide risk • Initial patient assessment – within first 4 hours • Patient reassessment – every 24 hours • Patient observation – every 4 hours or more often based on nursing judgment
2. Patient Hygiene	<ul style="list-style-type: none"> • Baths or partial baths performed only as needed or by family members or volunteers • Oral hygiene performed daily, when possible • Change linen only when soiled
3. Infection Control	<ul style="list-style-type: none"> • Maintain infection control procedures as much as possible • Hospital should have a procedure for the conservation of personal protective equipment • Trash should be picked up daily or when containers are full
4. Respiratory	<ul style="list-style-type: none"> • Cough and deep breath should be within nursing judgment • Suction patients prn
5. Patient and family education	<ul style="list-style-type: none"> • Patient and family education provided prn and at discretion of nursing staff
6. Vital signs	
7. Nutrition	<ul style="list-style-type: none"> • Every 24 hours and Nursing judgment based on the patient's condition • Nursing assessment completed for patients who have feeding problems such as swallowing difficulties, potential for aspiration of food or drink • Encourage family members, volunteers or other hospital staff to feed patients that are unable to feed themselves • For tube feedings, provide as ordered by the physician • Prescription diets may not be available and Food Service should develop alternative menus

- Artificial nutrition and hydration are ethical decisions and should be subject to the protocols for the allocation of scarce resources
 - Medications – administered as ordered by a physician
 - IV site care – follow according to hospital policy
 - Medication reconciliation
 - Done in collaboration with a physician
 - May be limited to verification that the medications are being dispensed to the right patient and at the right dose
 - Home medications
 - To the extent possible and based on the nature of the incident, patients may be encouraged to bring their own medications
 - Collaborate with physician regarding home medications
 - Collaborate with patient taking their home medications and properly document the administration of home medications on the MAR
 - Ensure that home medication is properly labeled and identified
- 9. Elimination
 - Patients who need assistance – provide bedpan
 - Incontinent patients – change prn
 - Patients with an ostomy – change prn
 - I & O – completed as ordered
- 10. Treatments
 - Dressings – change only when soiled
 - Weighing patients – based on nursing assessment
 - NG irrigation, glucometer checks – implement as ordered
- 11. Patient Safety
 - Fall prevention – maintain at all times
 - Restraint protocols
 - Medical (Non-behavioral) Restraints
 - RN monitors physical and emotional well-being of patient at least every 2 hrs, including behavior, checking pulses and/or vital signs, ensuring that restraint device is safely intact and documents assessment
 - Recognize clinically relevant observations to report and/or document
 - RN or designee **must provide comfort care at least every two hrs**, including turning patient to a different position; range of motion to extremities; skin care to pressure pts; offering food and fluid; and toileting
 - Maintain the patient's rights, dignity, and safety
 - Recognize changes in the pt.'s behavior or clinical condition needed to initiate the removal of restraints
 - Conduct ongoing checks to ensure that the restraint has been appropriately applied, removed, or reapplied
 - Behavioral Restraints
 - Continuous monitoring – Ancillary staff must continuously monitor every pt. in behavioral restraints
 - RN must document an assessment of the patient every hour
 - A trained staff member must document assessment of the patient every 15 minutes. This includes vital signs, pulse checks, patient behaviors, device integrity and circulation
 - Provide comfort care at least every two hours, including turning patient to a different position; range of motion to extremities; skin care to pressure points; offering food and fluid; and toileting
- 12. Indirect Care
 - All physician orders – transcribe as soon as possible
- 13. Documentation
 - Patient care documentation – document at least every shift and as needed when any type of care, treatment and daily physician assessment is provided

- Document patient location and when patient is moved to alternate locations
 - Extensive documentation should be limited
 - Implement computer down-time procedures if computer systems for documentation are not available
 - Print out patient care summary, if available
 - Discharge early if possible
 - Place high-risk populations in isolation or in patient areas that mitigate risk of cross-contamination
 - Candidates for self-care as appropriate, based on nursing assessment
 - For life saving measures as ordered by a physician
 - Establish standardized discharge orders
 - RNs should be permitted to initiate patient transfers to a lower level of care following pre-identified criteria
 - Assess current numbers of health care workers and skill levels
 - Hospital should consider alternative staffing models with the trigger being the number of patients being cared for plus the number of staff available and length of time that the incident is expected to occur;
 - Using nurses from other in-house services (i.e.. human resources, employee health, administration, home health)
 - Using professions that have nursing skills such as paramedics
 - Using other hospital staff to perform ADL patient care support functions
 - Hospital, prior to an incident, prioritizes hospital service and functions that can be closed or down-sized so that staff from these areas can be used for pt. care support functions
 - Hospital should consider, prior to the incident, its policies for limiting vacation and other time-off benefits
 - Job action sheets should be developed so staff have available their responsibilities for particular tasks
 - Identify multiple shifts 2, 4, 6, or 12 hours
 - Ensure that there is an “active” team of employees to work the incident, and a “relief” team of employees that is stationed nearby to come in and relieve employees
 - Support staff through critical incident debriefing, grief counseling, child care, and other types of support that the hospital deem necessary
14. High-risk populations
15. Diagnostic testing
16. Discharge of patients
17. Staffing
18. Bed Assignment
- Cohort patient populations as much as possible

****If you have any questions, comments, or input regarding this document, please forward them to Karen.stassi@la.gov.