

**Principles in Ethical Decision Making During Critical Resource Scarcity (e.g. mass casualty, disaster, pandemic)**  
**Zuckerberg San Francisco General Hospital**

*Overview:*

The goal of this document is to assist healthcare providers and clinical teams to make reasoned clinical decisions during periods of severe strain on the healthcare system, such as a mass casualty event, disaster or pandemic illness. Ethical principles may assist in triage and distribution of scarce resources in a maximally beneficial fashion while respecting distributive justice.

*Basic Principles:*

Biomedical ethics concepts are central to clinical decision making:

- **Respect for Persons** – honoring a patient’s autonomy; eg. a patient with decision-making capacity has the right to refuse or choose medically-indicated treatment
- **Beneficence** – practitioners should provide care with definable benefit in the best interest of the patient
- **Non-maleficence** – "first, do no harm"; practitioners should limit excess risk and avoid options where risk outweighs benefit
- **Justice** – practitioners should consider fairness and equity in the distribution of health resources; i.e. providers and health systems should use a consistent method to make treatment decisions among like patients in resource-limited situations, thereby avoiding case-by-case bedside rationing

*Concepts and Principles in Disaster Management:*

Specific to situations of crisis involving scarce resources, providers and teams will face challenges and need to adapt to a crisis standard of care in which they may deviate from the normal protocols during a non-crisis period. ***In a critical resource shortage, all efforts should be made to mitigate shortages through division of resources to allow all patients to receive therapy*** (eg. using a single mechanical ventilator for multiple patients who need similar settings in shortage of mechanical ventilators, using alternative medications with similar effects in pharmaceutical shortage, using blood conservation techniques or alternatives to blood products in a shortage of blood products, etc.) or seeking transfer to another hospital in order to provide the opportunity for the desired treatment.

***The worst case scenario in a shortage occurs when there is no mitigation potential, and the hospital/clinicians are required to make allocation decisions to provide life-prolonging care to only some critically ill patients.***

Resources that may become limited include access to acute and intensive care beds and life supportive equipment (e.g. mechanical ventilators, dialysis equipment) as well as to durable goods, pharmaceuticals and biological supplies (eg. blood products and medications.) Such situations predictably cause existential and moral distress among patients, families, caregivers, healthcare providers and staff.

**In making difficult decisions about treatment allocation, clinicians and teams should pause to consider the following questions:**

- Am I certain that this requested treatment is outside of the available scope of treatment available?
- Have I presented the patient or surrogate all of the available, beneficial alternatives to the requested treatment?
- Am I sure that race, ethnicity, religion, language, immigration status, gender identity, sexual orientation, superficial physical appearance, housing status, profession, income or other social factors are not entering into my decision?
- Am I acting in fairness and equity with regard to vulnerable and historically marginalized communities, including people of color, LGBTQ and people living with homelessness, substance use disorders and mental illness?
- Am I acting in fairness and equity with respect to people with chronic, stable levels of physical and developmental disability and their right to life prolonging treatment?
- Am I using the best practice method for approach to this decision?

In severe resource shortage, consensus guidelines from international and domestic health organizations (e.g. World Health Organization, US Centers for Disease Control) and domestic professional societies (e.g. American College of Emergency Physicians, American Thoracic Society) recommend the following general principles:

- **to distribute treatment resources based on evidence-based guidelines and disease-specific policies** – e.g. [ZSFG Infection Control Policy 2.03 Pandemic Influenza and Other Novel Respiratory Viruses \(E.G. Coronaviruses\) Exposure Control Plan](#)
- **to allocate critical care and life support resources to patients based on the greatest likelihood of long-term survival and benefit (eg. focus on patients who represent the greatest number of life-years)** – providers are encouraged to use critical care prognostic tools to calculate likelihood of survival and to document clinical reasoning in the medical record
- **to provide compassionate symptom management to patients who are unable to receive life prolonging care and all patients progressing toward end of life** – use of palliative care, spiritual support and other psychosocial support services is highly encouraged to alleviate physical and psychological suffering and to decrease moral distress
- **to create regular debriefing/support sessions for providers and staff** to provide updates on resource availability and patient flow, assess teamwork, discuss concerns, and process moral distress

*Conflict Resolution in Clinical Decisions and Resource Scarcity:*

**In case of a critical shortage of life prolonging resources** (eg. blood products, mechanical ventilation, ICU services) the hospital has created a detailed triage guideline to help make decisions about resource allocation, based on the clinical characteristics of the patient and the likelihood of benefit from the proposed treatment in the individual patient. If this situation occurs, the hospital will appoint (1) triage officers who will be responsible for making decisions with attending physicians and assisting in communication about allocation decisions to patients/families/caregivers; and (2) a triage review committee composed of multidisciplinary leadership who will provide oversight for the hospital's care distribution process and support for the triage officers. These groups will be integrated into the hospital's usual disaster response organization system (HICS).

**In cases of disagreement between the patient/family/surrogate and healthcare team,** providers are encouraged to compassionately explain the recommendation for care with patient/family/surrogate, recruiting supportive resources as desired (e.g. Palliative Care, Chaplaincy, Social Work.) In the case of an allocation decision during critical shortage (i.e. a decision made by the hospital using triage allocation protocol), the hospital will have a triage officer who makes the allocation decision and can communicate this to the patient/family/surrogate if the attending physician would like support in explaining the plan of care.

Patients/families/surrogates who request resources unavailable at ZSFG have the right to seek transfer to another hospital, however in a situation of widespread emergency, there is likely to be severely limited capacity at other hospitals. The patient/family/surrogate have the right to request an appeal to review whether the triage protocol was followed appropriately. The primary attending physician should consult with the Triage officer to initiate an appeal if needed. Appeals to question the fairness or legality of the process itself will not be evaluated, because the critical shortage is an acknowledged reality and a structure for decisions must be provided to avoid inequitable distribution (such as bedside rationing.) In emergency situations, the clinical team may need to make the best available clinical decision with limited information. Time permitting, the Ethics Committee can provide consultation to assist in decision making.

**In cases of disagreement between clinicians** about resource allocation, the primary attending physician should involve the unit medical director (eg. MICU, SICU, Medical-Surgical Unit) to facilitate resolution. In the case that the primary attending is the unit medical director, then the Chief of Service should facilitate resolution. For further detail on dispute resolution, see [ZSFG Policy 23.01 Withholding and Withdrawing of Medical Treatment](#)

**Nurses and allied health providers with concerns about resource allocation** are encouraged to discuss with the involved clinical team. If the concern cannot be addressed, nurses and allied health providers should discuss with their supervisor, who can address with unit's medical leadership.

**In cases involving an incapacitated patient,** a surrogate is needed to provide substituted decision-making. In the case that there is not enough time to seek a surrogate, the service

attending physician will need to provide emergent consent using substituted judgment based on the decision making principles described above. If the decision is not an emergency, the hospital should seek a family or legally designated surrogate, please see [ZSFG Policy 3.09 Consent to Medical and Surgical Procedures](#).

*Resources for consultation and support include:*

- ZSFG Ethics Committee 415-443-0595 or [www.pagerbox.com](http://www.pagerbox.com)
- ZSFG Supportive and Palliative Care Service 415-443-5063 or [www.pagerbox.com](http://www.pagerbox.com)
- ZSFG Administrator on Duty 628-206-3519
- ZSFG Patient Experience 628-206-5176
- ZSFG/DPH Risk Management 628-206-6600
- UCSF Risk Management 628-206-6052

*References:*

ZSFG Policies and Procedures

- [ZSFG Infection Control Policy 2.03 Pandemic Influenza and Other Novel Respiratory Viruses \(E.G. Coronaviruses\) Exposure Control Plan](#)
- [ZSFG Policy 2.05 Management of Severe Bed Shortages](#)
- [ZSFG Policy 3.09 Consent to Medical and Surgical Procedures](#)
- [ZSFG Policy 23.01 Withholding and Withdrawing of Medical Treatment](#)

Additional References:

- [Centers for Disease Control: Ethical Guidelines in Pandemic Influenza](#)
- [American College of Emergency Physicians: Code of Ethics](#)
- [World Health Organization: Critical Preparedness, Readiness and Response Actions for COVID-19](#)
- [SIAARTI Clinical Ethics Recommendations For Admission To Intensive Treatments And For Their Suspension, In Exceptional Conditions Of Imbalance Between Needs And Available Resources](#)
- [Allocation of Scarce Resources During a Public Health Emergency, UPMC](#)
- [Meeting the Challenge of Pandemic Influenza, VA National Center for Ethics in Health Care](#)
- [Fair Allocation of Scarce Medical Resources in the Time of Covid-19, NEJM](#)
- [Too Many Patients...A Framework to Guide Statewide Allocation of Scarce Mechanical Ventilation During Disasters, CHEST](#)