PATIENT CARE

STRATEGIES FOR SCARCE RESOURCE SITUATIONS

<table>
<tr><td>Potential trigger events:</td><td>Mass Casualty Incident (MCI)
Infrastructure damage/loss
Pandemic/Epidemic</td><td>Supplier shortage
Recall/contamination of product
Isolation of facility due to access problems (flooding, etc)</td></tr>
<tr><td colspan="3">How to use this card set:
1. Recognize or anticipate resource shortfall.
2. Implement appropriate incident management system and plans; assign subject matter experts (technical specialists) to problem.
3. Determine degree of shortfall, expected demand, and duration; assess ability to obtain needed resources via local, regional, or national vendors or partners.
4. Find category of resource on index.
5. Refer to specific recommendations on card.
6. Decide which strategies to implement and/or develop additional strategies appropriate for the facility and situation.
7. Assure consistent regional approach by informing public health authorities and other facilities if contingency or crisis strategies will continue beyond 24h and no regional options exist for
1. re-supply or patient transfer; activate regional scarce resource coordination plans as appropriate.
2. 8. Review strategies every operational period or as availability (supply/demand) changes.</td></tr>
<tr><td colspan="3">Core strategies to be employed (generally in order of preference) during, or in anticipation of a scarce resource situation are:
Prepare - pre-event actions taken to minimize resource scarcity (e.g., stockpiling of medications).
Substitute - use an essentially equivalent device, drug, or personnel for one that would usually be available (e.g., morphine for fentanyl).
Adapt – use a device, drug, or personnel that are not equivalent but that will provide sufficient care (e.g., anesthesia machine for mechanical ventilation).
Conserve – use less of a resource by lowering dosage or changing utilization practices (e.g., minimizing use of oxygen driven nebulizers to conserve oxygen).
Re-use – re-use (after appropriate disinfection/sterilization) items that would normally be single-use items.
Re-allocate – restrict or prioritize use of resources to those patients with a better prognosis or greater need.</td></tr>
<tr><td colspan="3">Capacity Definitions</td></tr>
<tr><td>Conventional capacity – The spaces, staff, and supplies used are consistent with daily practices within the institution. These spaces and practices are used</td><td>Contingency capacity – The spaces, staff, and supplies used are not consistent with daily practices, but provide care to a standard that is</td><td>Crisis capacity – Adaptive spaces, staff, and supplies are not consistent with usual standards of care, but provide sufficiency of care in the setting of a catastrophic</td></tr>
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during a major mass casualty incident that triggers activation of the facility emergency operations plan.	functionally equivalent to usual patient care practices. These spaces or practices may be used temporarily during a major mass casualty incident or on a more sustained basis during a disaster (when the demands of the incident exceed community resources).	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 (Hick et al, 2009).
This card set is designed to facilitate a structured approach to resource shortfalls at a health care facility. It is a decision support tool and assumes that incident management is implemented and that key personnel are familiar with ethical frameworks and processes that underlie these decisions (for more information see Institute of Medicine 2012 Crisis Standards of Care: A Systems Framework for Catastrophic Disaster Response and the Minnesota Pandemic Ethics Project). Each facility will have to determine the most appropriate steps to take to address specific shortages. Pre-event familiarization with the contents of this card set is recommended to aid with event preparedness and anticipation of specific resource shortfalls. The cards do not provide comprehensive guidance, addressing only basic common categories of medical care. Facility personnel may determine additional coping mechanisms for the specific situation in addition to those outlined on these cards. The content of this card set was developed by the Kansas Department of Health and environment (KDHE) in conjunction with the Technical Assistance Panel (TAP) and Community Advisory Board (CAB). This guidance does not represent the policy of KDHE. Facilities and personnel implementing these strategies in crisis situations should assure communication of this to their health care and public health partners to assure the invocation of appropriate legal and regulatory protections in accord with State and Federal laws. **This guidance may be updated or changed during an incident by the TAP, CAB and KDHE.** The weblinks and resources listed are examples and may not be the best sources of information available. Their listing does not imply endorsement by KDHE. This guidance does not replace the judgement of the clinical staff and consideration of other relevant variables and options during an event.		

Staffing

Strategies for Scarce Resource Situations

Recommendations	Strategy	Conventional	Contingency	Crisis
Staff and Supply Planning • Assure facility has process and supporting policies for disaster credentialing and privileging - including degree of supervision • required, clinical scope of practice, mentoring and orientation, electronic medical record access, and verification of credentials. • Encourage employee preparedness planning (www.ready.gov and other resources).	Prepare			

• Cache adequate personal protective equipment (PPE) and support supplies. • Educate staff on institutional disaster response and their potential disaster role(s) and any specific skills/knowledge they may • require. • Educate staff on community, regional, and state disaster plans and resources. • Develop facility plans addressing staff 's family/pets or staff shelter needs. • Develop rapid on-boarding procedures as well as orientation materials and policies on access, supervision, charting, and • limitations for temporary personnel.				
Focus Staff Time on Core Clinical Duties • Minimize meetings and relieve administrative responsibilities not related to event. • Implement efficient medical documentation methods appropriate to the incident. • Cohort patients to conserve PPE and reduce staff PPE donning/doffing time and frequency.	Conserve			
Use Supplemental Staff • Bring in equally trained staff (burn or critical care nurses, Disaster Medical Assistance Team [DMAT], other health system or • Federal sources). • Bring in equally trained staff from administrative positions (nurse managers, educators, outpaitent staff, etc). • Adjust personnel work schedules (longer but less frequent shifts, etc.) If this will not result in skill/PPE compliance deterioration. • Use family members/lay volunteers to provide basic patient hygiene and feeding – releasing staff for other duties.	Substitute Adapt			
Focus Staff Expertise on Core Clinical Needs • Personnel with specific critical skills (ventilator, burn management) should concentrate on those skills; specify job duties that • can be safely performed by other medical professionals.	Conserve			

• Implement tiered staffing where specialty staff oversee larger numbers of less-specialized staff and patients (e.g., a critical care nurse • oversees the intensive care issues of 9 patients while 3 medical/surgical nurses provide basic nursing care to 3 patients each). • Limit use of laboratory, radiographic, and other studies, to allow staff reassignment and resource conservation. • Limit availability/indications for non-critical laboratory, radiographic, and other studies. • Reduce documentation requirements. • Restrict elective appointments and procedures.				
Use Alternative Personnel to Minimize Changes to Standard of Care • Use less trained personnel with appropriate mentoring and just-in-time education (e.g., health care trainees or other health • care workers, Minnesota Responds Medical Reserve Corps, retirees). • Use less trained personnel to take over portions of skilled staff workload for which they have been trained. • Provide just-in-time training for specific skills. • Cancel most sub-specialty appointments, screening endoscopies, etc. and divert staff to emergency duties including inhospital or assisting public health at external clinics/screening/dispensing sites.	Adapt			

BURN TREATMENT

REGIONAL RESOURCE CARD

Category	RESOURCE and RECOMMENDATIONS	Strategy	Conventional	Contingency	Crisis
Command, Control, Communication, Coordination		Prepare			
Space		Adapt			
Supplies		Conserve			
Staff					
Special Considerations					

Transport	Treatment	Triage