



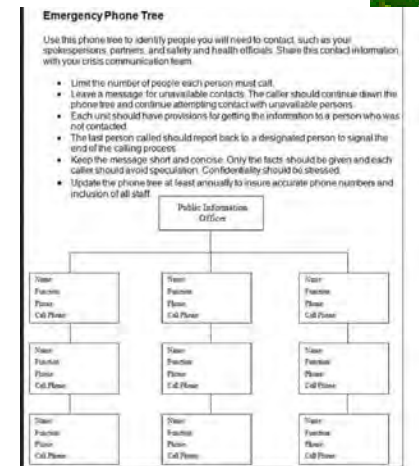
Healthcare Disaster Preparedness through Lessons Learned

November 14th , 2018

Chris Crabtree, DrPH, CEM
Executive Director
Hawaii Healthcare Emergency Management

Lessons Learned

- ★ Lack of timely accurate vetted information
- ★ Lack of updated phone trees
- ★ Lack of confirmation of response



Lessons Learned

- ★ Lack of contingency communication
 - Phone lines down
 - Cell service and internet down
 - Lack of depth in comms and contingencies



Contingency Communication

- ★ Analog Phones
- ★ Satellite Phones
- ★ HAM Radio
- ★ Shares Resource
- ★ Wireless Priority Cell



Lessons Learned

*Back Up Power (Generators)

- * Generators not used to running for that period of time.

 - * Many broke down and did not have backup.

 - * Parts difficult to get

- * Lack of generators at facilities forced evacuations, and resulted in heat illness.

- * Not enough fuel on hand and fuel hard to get

*Medical Gases

- Lack of Electricity



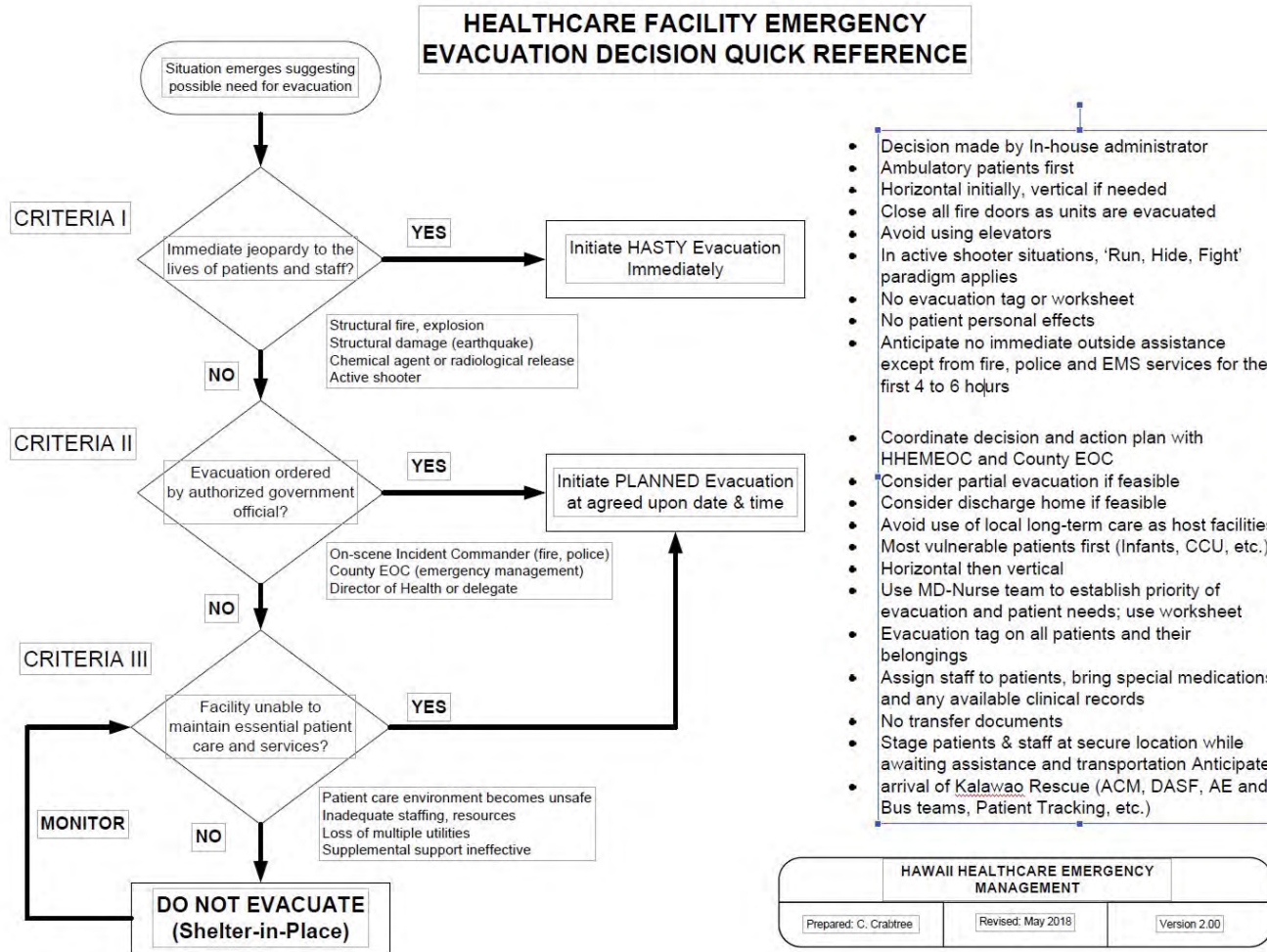
Lessons Learned

- ★ Evacuation
 - Lack of Transportation
 - ★ Buses
 - ★ Ambulances
 - ★ Specialty vehicles
 - Lack of decision algorithm

 - Lack of receiving facility



Evacuation



Relocation Capacity

- ★ Lack of Beds availability
 - Other facilities in anticipated impact area evacuated earlier resulting in the lack of beds.
 - The Coalition played a significant role in coordinating the placement and relocation of the patients, etc.



Lessons Learned

- ★ Transportation challenges
 - Unable to access locations due to high water levels.
- ★ Sheltering in place
- ★ Lack of medical shelters.



Lessons Learned

- ★ External Water System Failure – Resulted in evacuations and closure of medical facilities.
 - Lack of emergency water storage tanks
- ★ Waste management System
 - Lack of contingency waste management system or protocol.



Lessons Learned

- ★ Lack of paperwork to follow patient
 - Electronic Medical Records System were down.
 - ★ Resulting in the lack of available patient records for transfers and evacuations.
- ★ Staff
 - Family accommodations facilitated staff returning.
 - Lack of access to return resulted in staffing shortages.



Lessons Learned

★ Dialysis Patients

- Lack of food for specialized diet
- Lack of open acute or non-acute dialysis centers.



★ Chronic Medications refill

- Lack of refrigeration (Insulin)
- Pharmacies closed
- Lack of adequate supply



Lessons Learned

★ Security Challenges

– Looting

- ★ Pharmaceuticals
- ★ Fuel
- ★ Food and Water



★ Social Media

– Controlling staff and volunteers

Questions



Hawaii Hospital Education and Research Foundation





Christopher Crabtree, DrPH, CEM
Executive Director

Hawaii Healthcare Emergency
Management

Email: ccrabtree@hhemc.net

Phone: 808-599-2899

