Michigan
Immediate Bed Availability
Decompression Strategy
Guidelines and Toolkit

BETP
Bureau of EMS, Trauma & Preparedness

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Preface: Plan to Manage Medical Surge through Immediate Bed Availability

The development of an Immediate Bed Availability (IBA) process reinforces the critical role played by hospitals within a Healthcare Coalition. The ability to plan for and implement organizational strategies to make hospital beds available within a short period of time will prove crucial in assuring optimal outcomes during incident response. Based on national guidelines, the goal is for hospitals to put actions into place that will provide availability of approximately 20% of their normal staffed bed capacity for incoming casualties. The goal timeframe is to make these beds available within four hours of incident notification. Steps to obtain IBA may include rapid discharge for stable patients, moving stable critical care patients to step down units *within the facility*, canceling elective surgeries, procedures and *potentially* using Post Anesthesia Care Units (PACUs), medical holding areas and outpatient surgical preparation areas for incoming patients. This document provides guidelines as well as tools to assist hospitals to expand current levels of bed availability during a medical surge. It is understood that what can be accomplished may depend on the level to which a specific facility is involved in the occurring response. Healthcare Coalition members, working together, can strengthen efforts to assure adequate capacity to receive patients and maximize the care of patients impacted during a medical surge incident.

Members of a Healthcare Coalition (hospitals, long term care facilities, community health clinics and EMS) must have specific plans in place to ensure collective support within the coalition.

This toolkit is not intended to be a stand-alone document – it is intended as a supplement to support an organization's internal plans and preparatory activity. The toolkit can be modified to compliment an individual Healthcare Organizations (HCOs) Emergency Operations Plan (EOP) or internal disaster policies and procedures.

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Introduction

IBA guidelines provide a framework to open beds in a medical surge incident by using strategies such as rapid discharge of stable patients and transferring patients who are stable but cannot be discharged. This toolkit contains general conceptual information about the models related to IBA, associated recommended checklists and templates that may be used by hospitals to achieve the nationally recommended goal of opening 20% of the facility's *staffed* beds within four hours of incident notification to receive a surge of patients. It also provides information to assist with the development of documents and forms that can be adapted by each individual facility to aid in the process of rapid discharge. *To accomplish future healthcare capabilities, each facility should have a plan in place to decompress their existing patient census to prepare to receive numerous patients. This toolkit will assist with resources and recommendations*. [1]

Scope

This document will assist healthcare organizations in the development or revision of IBA strategies which should include the integration of IBA into organizational policies, protocols, and or the emergency response/disaster plan.

[1] .U.S. Department of Health and Human Services, Office of the Assistant Secretary for Preparedness and Response. (2013). Hospital Preparedness Program (HPP) Healthcare Preparedness Capability Review National Call: Capability 10: Medical Surge and Immediate Bed Availability (IBA).

Management of Medical Surge through Immediate Bed Availability

What is IBA?

IBA defines a concept where members of a healthcare coalition work together to ensure that an appropriate level of care is provided to hospital in-patients, while providing services to a large influx of disaster-related patients. This reduces the public health implications of mass casualties/medical surge. The foundation of IBA is opening 20% of a hospital facility's staffed beds available within four hours of incident notification through decompression strategies and by strategically re-distributing low acuity patients among other healthcare coalition partners (i.e. long term care, community health centers, and home health) is key to the management of a medical surge response.

What is the relationship between IBA and the Healthcare Preparedness Capabilities?

Though IBA is incorporated most closely in the **Medical Surge Capability**, found in the Office of the Assistant Secretary for Preparedness and Response*: 2017-2022 National Guidance for Healthcare System and Preparedness and Response* [2], IBA cannot be successfully realized without development of all four Healthcare Preparedness Program (HPP) capabilities.

The four HPP capabilities are:

1. Foundation for Health Care and Medical Readiness
2. Health Care and Medical Response Coordination
3. Continuity of Health Care Service Delivery
4. Medical Surge

What does IBA look like in practice? (Diagram 1)

To ensure IBA in times of crisis, healthcare coalition partners must continuously monitor the acuity of patients and maintain their ability for patient movement. Once a declared disaster happens, acute care facilities will need to prepare for an influx of new patients impacted by the incident. Through agreements specific to IBA with healthcare coalition partners, movement of lower acuity patients will begin to occur from hospitals to other appropriate facilities and care sites; making room for higher acuity patients. These same agreements ensure that receiving facilities are prepared to provide the appropriate level of care. This is what would be known as Executive IBA, where an executive makes the decision to cancel elective surgeries, starts moving patients to lower levels of acuity and begins to transfer patients to other appropriate facilities and care sites.

[2] Office of the Assistant Secretary of Preparedness and Response. (2016). *2017-2022 National Guidance for Healthcare System and Preparedness and Response,* Retrieved https://www.phe.gov/Preparedness/planning/hpp/reports/Documents/2017-2022-healthcare-pr-capablities.pdf Accessed: January 18, 2018

Diagram 1

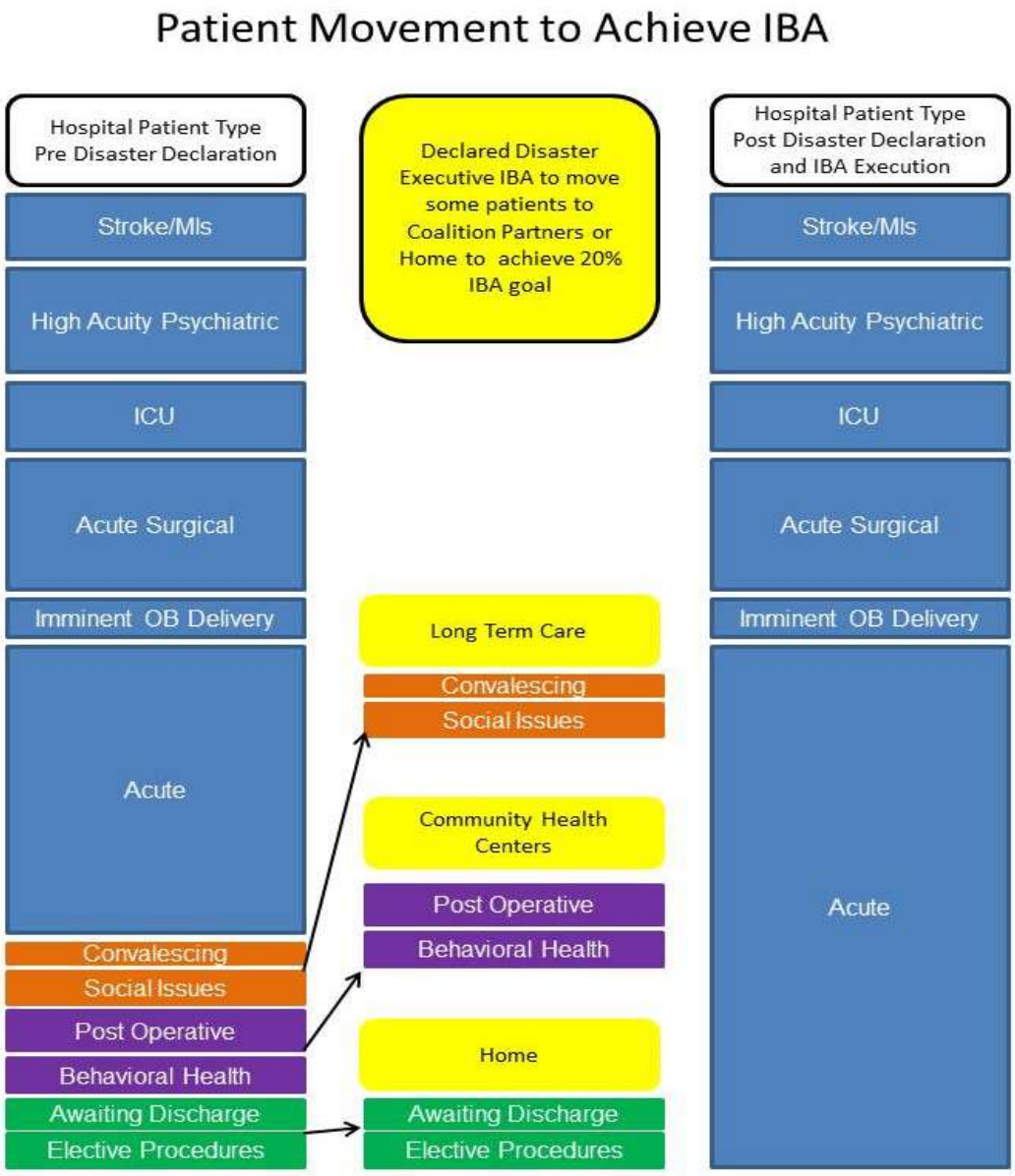


Diagram 1 demonstrates the shift in focus of beds during a medical surge.

1. The first column represents a typical delineation of bed type and occupancy within most hospitals.
2. The second column represents the shift when an executive IBA is declared and the Emergency Response Rapid Discharge Plan is implemented. The use of healthcare coalitions (HCC) partners, long term care, community health centers, discharges home and the cancellation of elective surgeries and procedures are instituted.
3. The third column demonstrates the change in bed types or census. Notice the significant increase in acute care beds.

Diagram adapted from: South Carolina Hospital Association: Medical Surge through Immediate Bed Availability factsheet. https://www.scha.org/files/iba_fact_sheet_v6.pdf .

How do Healthcare Coalitions participate in meeting the goals of Immediate Bed Availability?

1) Communicate established disaster discharge protocols at patient admission.
2) Continuously monitor patient acuity across coalition facilities.
3) Rapidly discharge patients with the lowest acuity, consistent with established disaster discharge protocols.
4) Conduct expedited patient transport and transfer of care between facilities, outpatient sites or home.
5) Coordinate acceptance of inter-facility patients to healthcare coalition partners.
6) Coordinated exercises between partners to test the process.

All of these tasks can be done seamlessly through the constant assessment of people, processes and infrastructure, such as the following:

People:

- *Staffing considerations*
- *Staffing agreements*
- *Training and education*
- *Medical provider awareness and education*
- *Family support and awareness*

Processes:

- *Discharge planning and protocols*
- *Bed turnaround/housekeeping*
- *Billing and reimbursement services planning*
- *Patient transportation agreements*
- *Ongoing patient acuity monitoring*

Infrastructure:

- *Logistics (patient management and discharge processes)*
- *Pharmacy planning and protocols*
- *Patient tracking means and protocols*
- *Legal considerations*
- *Health record management*

How is the activation of IBA determined?

The activation of IBA processes occurs as the result of triggers identified in hospital/healthcare coalition medical surge plans and follows a flow such as that in Diagram 2:

Diagram 2

Medical Surge through Immediate Bed Availability

Immediate Bed Availability (IBA)

Goal: To quickly provide higher-level care to more serious patients during a medical surge declared disaster with healthcare implications.

- The reason for IBA: No new space, personnel or equipment available to provide care.

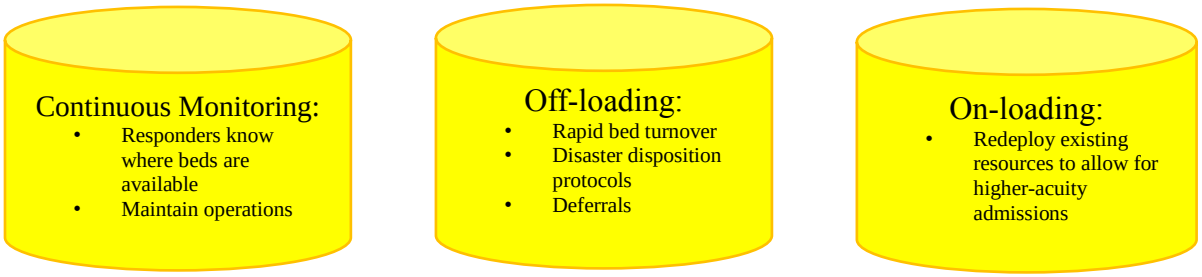
Definition: Provide no less than 20% of **staffed** beds within **four hours** to respond to declared disaster:

- Bed is available and cleaned for use as defined in healthcare system.

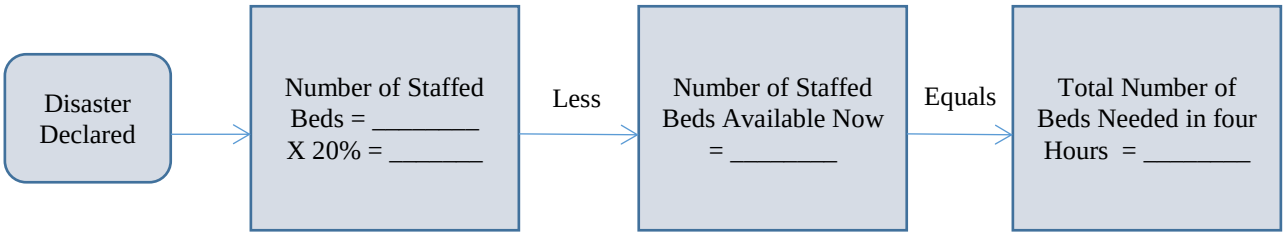
IBA is:

- Evidence-informed studying "Reverse Triage" methods.
- Operationally tenable using healthcare systems that track bed availability now and have staff available to care for patients.
- Economically sustainable as it allows for surge capacity without extra staff, space, supplies, etc.
- Ethically grounded and consistent with Standards of Care definitions.

Pillars of IBA



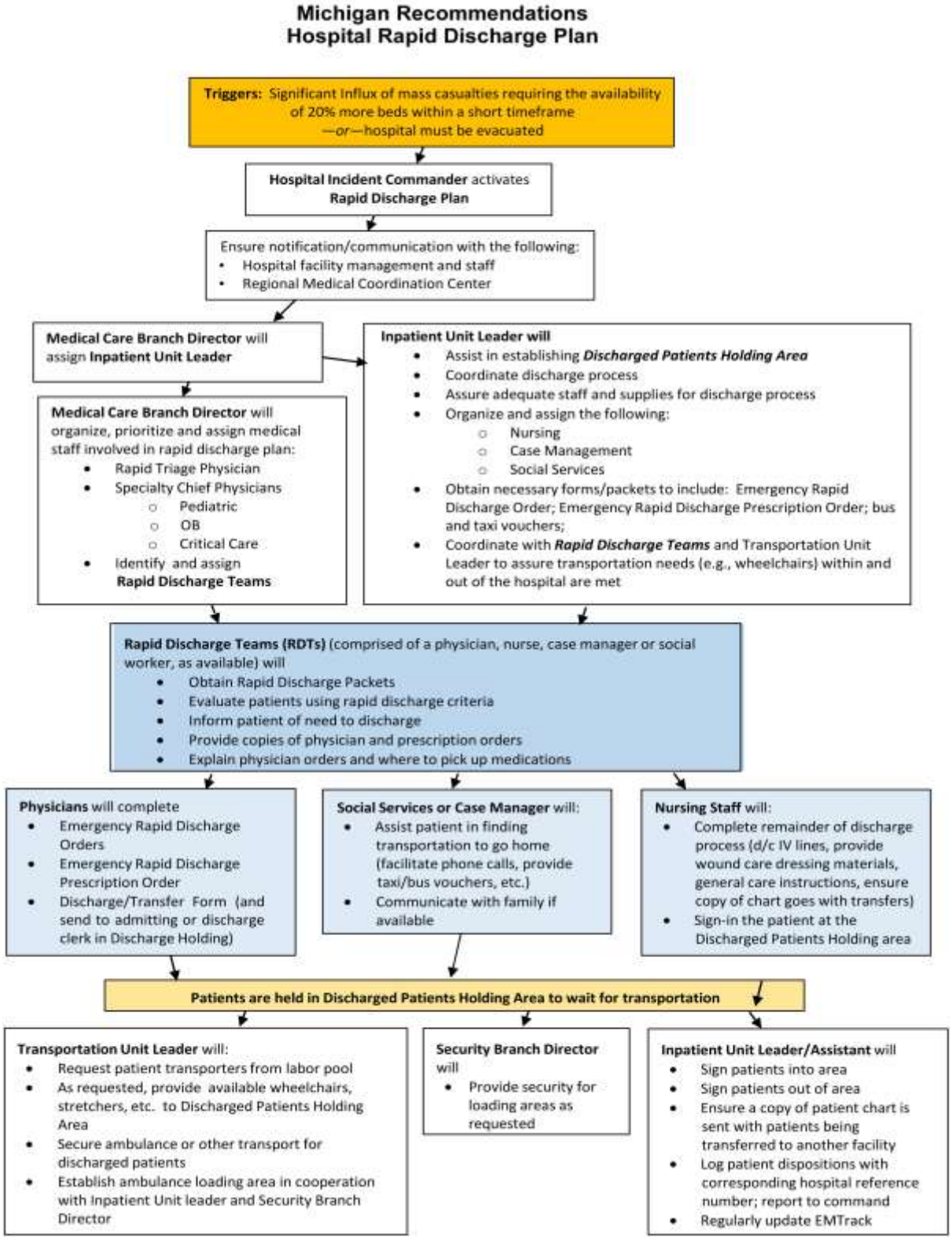
Immediate Bed Availability Measurement



Strategies to free beds or have staff available to meet IBA in four hours:

- Discharge holding lounge
- Convert private rooms to double rooms for non-acute patients
- Reopen closed areas
- Utilize hallways
- Convert patient step-down areas to critical care areas
- Temporary external structures for patient holdings (1135 waiver)
- Use other areas like lobbies, waiting rooms, hallways as needed
- Rapid bed/room cleaning when patient leaves room
- Rapid systems/processes to know when beds are available
- Discharge to other facilities including long term care when appropriate
- Cancel elective surgeries
- Protocols for revision of staff work hours
- Callback of off-duty personnel
- Untraditional patient care providers including family members, volunteers, non-clinical personnel
- Surge plans for home care agencies and clinics
- Use of healthcare coalition partners (MCC, Public Health, Emergency Management, Long Term Care, etc.)
- Use of healthcare coalition systems (EMResource, MICIMS, MI-HAN Alerts, MI-Volunteer Registry, etc.)

Diagram 3



Hospital Capacity Surge Toolkit. https://www.sccgov.org/sites/sccphd/en-us/HealthProviders/BePrepared/pages/Hospital-Surge-Capacity-Toolkit.aspx. Accessed July 25, 2017.

Decompression of the Emergency Department during a Mass Casualty Incident

1. Determine the number of patients in the Emergency Department (ED) currently being seen compared to total number of beds.

2. In a mass casualty incident where patients are coming in by privately owned vehicles (POV), begin triage in the ambulance bay. Think pre-hospital medicine in the parking lot.

3. Concurrently clear as many beds as possible, as quickly as possible.

4. Call –in extra staff per hospital/department policy.

5. Determine the number of patients that can be rapidly dispositioned.

6. Determine the number of patients waiting for admission – institute a Rapid Admission Policy (patients are sent to the floor or holding area for their admission work-up).

7. Open a designated holding area for patients waiting on test results prior to disposition outside of the ED.

8. Clean rooms, stage necessary equipment and prepare for incoming casualties.

9. Develop treatment areas according to triaged injuries. For example:
   Green – minor, "walking wounded"
   Yellow – moderate, can wait a period of time before definitive treatment
   Red – severe, requires immediate care and treatment
   Gray – expectant, require more resources than available

10. Assign staff to each of the triage/treatment areas.

11. Screen patients on arrival, outside of the ED, for the need of decontamination, consider activating hospital decontamination team.

12. Have a senior physician meeting the ambulances to triage patients to the appropriate areas.

13. Make sure all patients are registered into the system for an ED record and chart. Institute EMTrack for patient tracking.

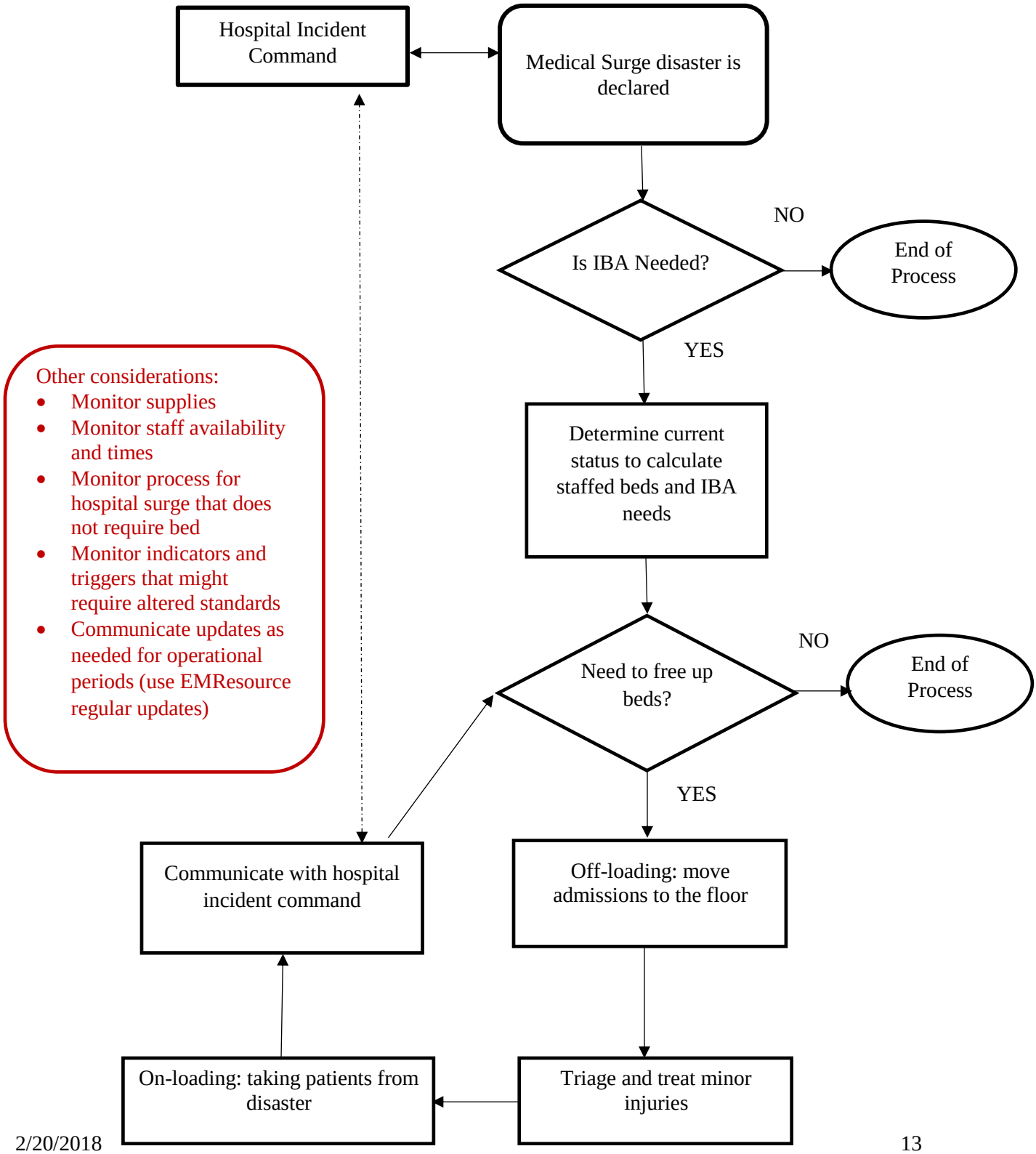
14. Move casualty patients through the ED system as quickly as possible:
    a. Examination
    b. Labs

c. Radiology
    i. CT Scan
    ii. Plain films
    iii. Specialized films
d. Special procedures
e. Operating Room (OR)

15. Move to inpatient bed once ED or trauma disposition is made or discharge patient.

Diagram 4

Medical Surge: Emergency Department Immediate Bed Availability



Medical Surge: Emergency Department Immediate Bed Availability Calculations

The Community Emergency Department Overcrowding Scale (CEDOCS)
The CEDOCS score helps determine the severity of overcrowding in community emergency departments (ED) with the use of several variables. The score ranges from 0 to 200.

The scale was developed by Dr. Steven Weiss, to help assess and objectively communicate overcrowding of the ED. The scale provides a more consistent approach to defining ED crowding and helps to clarify the distinctions between causes, characteristics, and outcomes.

CEDOCS assists in ED patient disposition, discharge, and rapid admission policies. This equation could be used on a daily basis to determine overcrowding, for a multi-casualty incident or medical surge incident to create beds.

The CEDOCS calculator is found at this link:
https://www.mdcalc.com/cedocs-score-emergency-department-overcrowding

Information needed for the ED Overcrowding Assessment

Available beds at the time of the incident

# Beds in ED	# Hallway Beds	Total # Beds	# Occupied	# Available

ED Occupancy Rate **Occupancy Rate = Total patients/B_T**
B_T = The total number of beds, or treatment bays, available in the ED.

Determine how many patients require admission. Initiate a Rapid Admission Policy to transfer patients out of the ED and to the appropriate care unit. Discharge as many patients as possible.

Pending Admissions	Pending Discharges	Hospital Beds	Ventilators in the ED	Last Bed Time, ED waiting to bed

The equation relates to the table below:

Not busy	Busy	Extremely busy but not overcrowded	Overcrowded	Severely overcrowded	Dangerously overcrowded
0-20	21-60	61-100	101-140	141-180	➢ 180

Definitions:

Total Patients: total number of patients in the ED, including those in the waiting room, fast- track or observation units.

ED Beds: Total number of ED beds, including those in hallways, fast track areas, chairs and elsewhere.

Admits: Total number of boarders/admitted patients in the ED at the time the score is calculated.

Hospital Beds: Total number of hospital beds, typically the number of licensed beds that could be used in a disaster.

Ventilators: The number of patients in the ED on ventilators.

Longest Admit: The longest patient holding time (in hours) at which the score is calculated.

Last Bed Time: The time (in hours) from arrival to ED to bed for the last patient assigned to a bed.

The manual equation for calculating CEDOCS is as follows:

CEDOCS = -20 + 85.8 x (total patients/ED beds)
+ 600 x (admits/hospital beds)
+ 13.4 x (ventilators) + 0.93 x (longest admit, in hours)
+ 5.64 x (last bed time)
Total

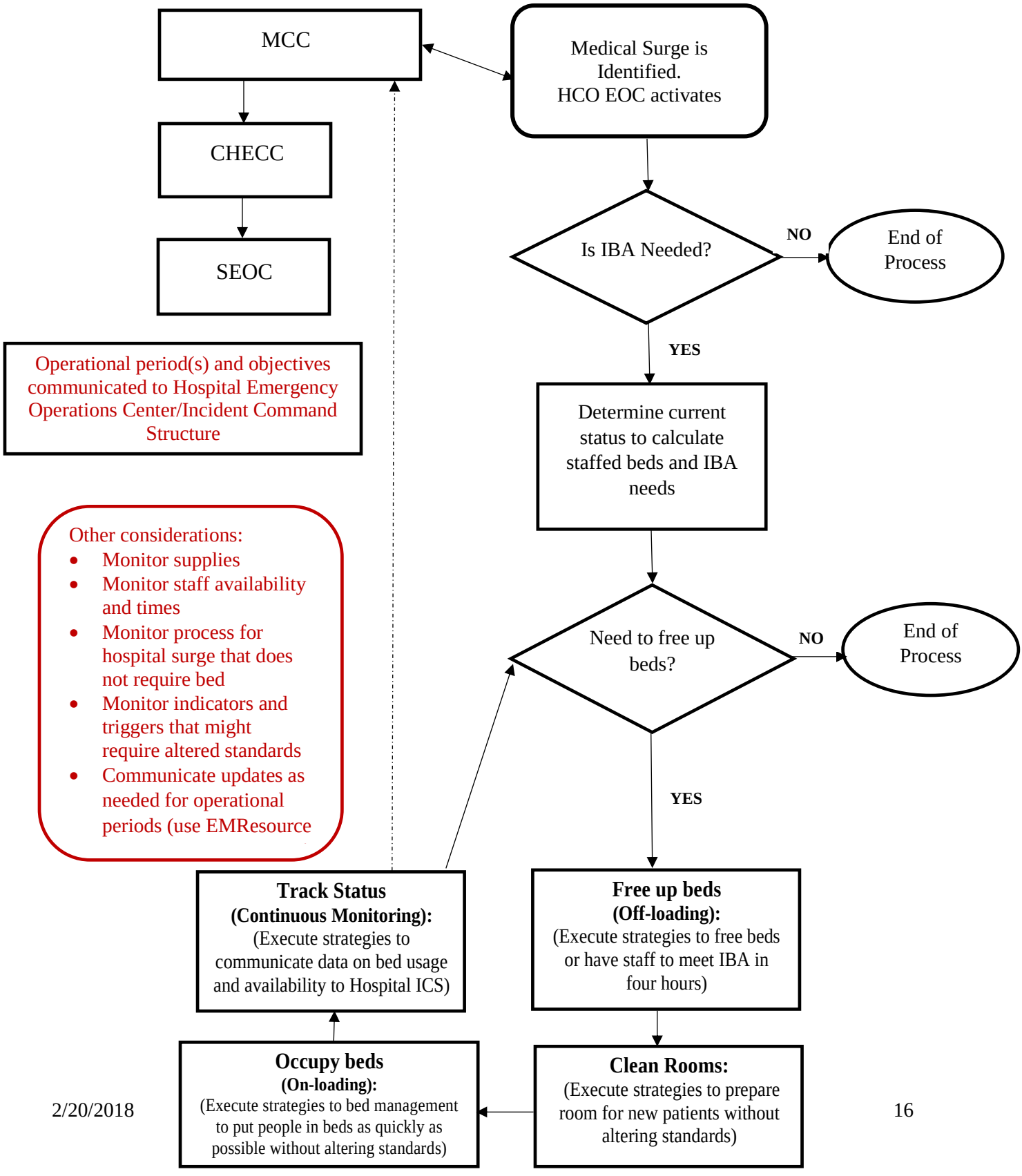
Example =	**-20 + 85.8 x (30 pts./52 beds)**	**-20 + 49.5= 29.50**	**+ 29.50**
	+ 600 x 5 (admits/180 hospital beds)	**600 * 0.28 = 16.67**	**+ 16.67**
	+13.4 x (1 vent) + 0.93 x (2 hrs.)	**13.4 + 1.86 = 15.26**	**+ 15.26**
	+ 5.64 x (1 hr.)	**5.64 * 1 = 5.64**	**+ 5.64**
		Total	**67.07**

[3]. Boyle, A., Beniuk, K., Higginson, I., Attkinson, P. (2012). Emergency Department Crowding: Time for Interventions and Policy Evaluations. Emergency Medicine International, Volume 2012, Article ID 838610. Hindawi Publishing Company.

Permission to use CEDOCs calculator obtained from Dr. Steven Weiss.

Diagram 5

Immediate Bed Availability Activation Monitoring Decision Tree



Rapid Discharge Plan (Model)

POLICY: In the event of a mass casualty incident requiring the availability of 20% more beds within a short period of time, the Rapid Discharge Plan may be activated by the facilities Incident Commander. The goal is to have stable patients discharged from the unit as soon as possible.

PROCEDURE:

A) Initiation of the Rapid Discharge Plan

1) Using normal Incident Command Structure the Incident Commander, in collaboration with the Operations Section Chief and the Medical Care Branch Director, has sole authority for implementing the Rapid Discharge Plan.

2) The Inpatient Unit Leader, upon assignment by the Medical Care Branch Director will:

   a) Oversee implementation of the Rapid Discharge Plan.

   b) Assist in establishing Discharged Patient Holding Area(s) located in _____ to secure patients until transportation is available.

   c) Coordinate with the Transportation Unit Leader and Security Branch Director to arrange for transport.

3) The Medical Care Branch Director will notify the Medical and Surgical services Department Heads/Division Chairs to initiate the Rapid Discharge Plan. The highest ranking physician, or designee, who is present and available in each division will report to their assigned unit to initiate the plan.

4) The Hospital Operator will announce activation of the Rapid Discharge Plan via the hospital wide immediate notification system.

B) Obtaining Materials

The Rapid Discharge Team Member/designee will obtain the Rapid Discharge packets located on each unit. The packets contain the following emergency materials:

- *Emergency Response Rapid Discharge Order Forms*
- *Emergency Response Rapid Discharge Prescription Order Form*
- *Facility Transfer Short Form Medical Record*

C) Identifying Patients for Discharge

1) The Rapid Discharge Teams, comprised of a Physician, Nurse, Case Manager or Social Worker, as available, will make rounds on each unit to determine which patients can be discharged immediately. The reverse triage method will be used to determine who can be safely discharged.

2) The following guidelines may be used to identify patients for Rapid Discharge:

Medical Specialty	**Guidelines**
Medicine	Stable for care at home
Obstetrics (OB)	Multipara > 8 hour post delivery Primipara > 24 hours post delivery No complications Selected C-sections No infant to take home Infant stable for discharge
Surgery	Patient stable No need for IV therapy Eating and ambulating Pain controlled with oral agents
Pediatrics/Neonates	Stable Noncritical Parent on unit with patient

D) Discharge Process

Once a patient has been identified for immediate discharge:

1) The reverse triage system is used to identify patients who can be discharged.

   Note: *Reverse triage is a system of categorization of patients in a mass casualty incident based on decisions as to which patients can most safely be discharged rather than on priority for treatment.*

2) The physician will fill out the Emergency Response Rapid Discharge Orders and, if needed, the Emergency Response Discharge Prescription Order for each patient.

3) The Rapid Discharge Team member will:

   a) Inform the patient of the need to discharge.

   b) Provide copies of the physician and prescription order forms.

   c) Provide an explanation of the physician orders and instructions on where to pick up medications.

d) Discuss with the patient options on how to get home, including facilitating phone calls to family/friends. If necessary, the Rapid Discharge Team member will alert the Inpatient Unit Leader concerning patient transportation needs.

e) Nursing staff completes the remainder of the discharge process, including disconnecting IV lines, providing wound care dressing materials, and any general care instructions as needed.

f) Transfer patient to the Discharged Patients Holding Area in the _____ to wait for their ride. (Make arrangements for wheelchair transportation through the Inpatient Unit Leader, if needed.)

g) Sign in the patient at the Discharged Patient Holding Area.

h) Complete and send a copy of the Discharge/Transfer Form to Admitting.

4) The Inpatient Unit Leader/designee will sign patient out of the Discharged Patient Holding Area, and provide taxi or bus voucher as needed.

5) EMS will control all inter-facility medical/emergency transport resources for discharge patients.

6) Utilization of healthcare organization shuttles, if available, for transport of ambulatory patients.

Appendices

A. Emergency Response Rapid Discharge Orders *(Appendix C)*
B. Emergency Response Rapid Discharge Prescription Orders *(Appendix D)*

Note: ***Reverse triage is a*** *system of categorization of patients in a mass casualty incident based on decisions as to which patients can most safely be discharged rather than on priority for treatment.* [2]

[2] Reverse triage. (n.d.) *Collins Dictionary of Medicine*. (2004, 2005). Retrieved March 14 2017 from http://medical-dictionary.thefreedictionary.com/reverse

Emergency Response Rapid Discharge Checklist

Yes	No		Date	Time
		1. Incident Command initiated (Incident Commander has sole authority for the implementation of Rapid Discharge Plan, in collaboration with the Operations Section and Medical Branch Director)		
		2. Contact Regional Medical Coordination Center		
		3. Medical Branch Director assigns Inpatient Unit Leader who: • Oversees implementation of Rapid Discharge Plan • Assists in establishing a Discharge Holding Area • Coordinate with Transport Unit Leader and Security Branch Director to arrange transport		
		5. The Medical Care Branch Director will notify the Physician Department Heads/Division Chairs to initiate the Rapid Discharge Plan		
		6. The Hospital Operator will announce activation of the Rapid Discharge Plan via overhead paging system		
		7. The Rapid Discharge Team Members will obtain the Rapid Discharge packets		
		8. Identifying Patients for Discharge • The Rapid Discharge Teams, composed of a Physician and Nurse (and Case Manager or Social Worker, as available) will make rounds on each unit to determine who can be discharged immediately. The reverse triage method will be used to determine who can be safely discharged		
		9. Discharge Process: • Physician fills out Rapid Discharge Form and Rapid Discharge Prescription Form if needed		
		10. The Inpatient Unit Leader or designee will sign patients out of the Discharged Patient Holding Area, and provide taxi or bus vouchers as needed		

		11. EMS will control all inter-facility medical/emergency transport resources of patients discharged from the hospital		
		12. Utilize healthcare organization shuttles, if available, for transportation of ambulatory patients		

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APPENDICES

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Appendix A

Rapid Discharge Unit Assessment

Hospital Name: _____

Date: _____ Time: _____

Unit Name: _____
(Note: on following forms, please be consistent and fill in the unit name as listed here)

Title (e.g. Nurse Manager): _____

Unit Type (Check the most specific type)

	Medical		Neurology only		Critical Care:
	Surgical		Chemical Detox		Medical CC
	Pediatric		Physical Rehab		Surgical CC
	Cardiology only		Hospice or Palliative Care		Trauma CC
	Oncology only				Burn CC
	Psychiatric				Neuro CC
	Step-down (any type)				Pediatric CC
	Other Specify:				Neonatal CC
	Other:				
	Other:				
	Other:				

CENSUS

Total number of patients currently on the unit: _____

Number of identified confirmed discharges (except critical care*): _____
***If critical care, number of potential downgrades: _____**

Number of patients awaiting departure: _____

Number of patients discharged still on the unit: _____

Number of identified potential discharge (except critical care): _____

Return Completed Form to Bed Management Committee Leader

Appendix B

Inpatient Potential Discharge Assessment Profile Form – Page 1 of 2

Patient Name: _____

Unit Name: _____

Patient information

Bed number: _____

MRN: _____ (for possible future reference)

Sex: ☐ Female ☐ Male

Age: _____

Primary Admission (Check the one that most specifically describes reason for patient stay.)

	Surgical		OB/GYN
	Cardiology		Transplant
	Respiratory		Oncology
	Neurology		Hospice or Palliative Care
	Pediatric		Infectious Disease (including TB)
	Trauma		Psychiatric
	Orthopedics		Chemical Dependency
	Spine		
	Other Specify:		

Residence before admission? ☐ Home

☐ LTC ☐ Assisted-Living ☐ Skilled Nursing

☐ Shelter ☐ Other, Specify _____

This patient can be transferred to: ☐ Step-Down Unit ☐ Medical/ Surgery

☐ Other, Specify _____

This patient can be discharged ☐ Yes ☐ No

Inpatient Potential Discharge Assessment Profile Form – Page 2 of 2

Patient Name: _____

		Yes	No	Unknown
Is lab work or lab work results required before discharge?				
Is an imaging study or radiology results required before discharge? (e.g., CT, echocardiogram, X-rays, etc.)				
Are meds from pharmacy needed before discharge?				
Are discharge orders currently written OR is a completed intend to discharge form in the patient's chart? If NO, is the patient's attending physician available to write the discharge order at this moment?				
Are prescriptions for after care available now?				
Is a specialist consult required prior to discharging the patient?				
Does patient education require greater resources in time beyond the typical discharge instructions? (e.g., diabetic care)				
Does this patient have a functional disability (e.g., wheelchair bound, vision or hearing impairment) that requires special arrangements on discharge?				
Is patient clothing available now?				
Is there a language barrier that would require an interpreter?				
The transportation required for this patient to leave the hospital is:				
• Pt can leave on their own				
• Pt needs assistance of family/friend				
• Pt requires an Ambu-Cab or wheelchair van				
• Pt requires ambulance If family/friend picking-up, has that person already been notified?				
If ambulance, have arrangements already been made?				
Is this patient being transferred to a care facility upon discharge?				
If YES, type of facility?				
• Nursing Home/LTC facility				
• Physical Rehab facility				
• Halfway House				
• Substance Abuse Rehab				
• Shelter Bed				
• Hospice Bed				
• Other, specify_____				
Is Home Health Care/Visiting Nurse Service needed for this patient?				
Would a Social Worker need to be consulted before discharge?				

Appendix C

Emergency Response Rapid Discharge Orders

Patient Name: _____ Date: _____ Unit: _____

Hospital MRN #: _____

☐ Dr. _____ has determined that _____'s condition no longer requires hospital care.

☐ Advise patient to contact their primary physician, Dr. _____, on the next business day for follow-up.

☐ Advise patient that if they experience any medical problems, to call _____ for follow-up instructions.

Discharge Diagnosis:

_____

_____

Discharge to:

_____

_____

Discharge Medication(s):

_____

_____

_____

_____

☐ Medications:

- Inform patient that they are to take any prescriptions provided to either an [Insert Hospital Here] pharmacy or to a commercial pharmacy and take as directed.
- Give a copy of Emergency Rapid Discharge Prescription Order form. (Appendix F)

☐ Diet: _____. Call your physician if you have any questions.

☐ Follow-up appointment: You should schedule an appointment with:

_____

☐ If you are a new mother, call the _____ for a follow-up home visit.

Provider Signature: _____ Printed: _____

Date: _____Time: _____

Copy to: Patient **To: Medical Records**

Appendix D

Emergency Response Rapid Discharge Pharmacy Order Form

Patient Name: _____ Date of Birth: _____

Emergency Rapid Discharge Prescription Orders

Weight	Height	Temperature	Blood Pressure	Pulse	Respiration

Allergies: ☐ No Known Allergies ☐ Penicillin ☐ Sulfa ☐ Other:

	Drug, Strength, Form, Sig	Qty.	Date:
1.			
2.			
3.			
4.			
5.			
6.			
7.			Other Language (Insert Below)
8.			
9.			

Provider Signature:	License #:	Dr. #:
Printed Name:	DEA #:	

Instructions to Patient: **IMPORTANT**

You are being discharged with written prescription(s) for medications that you must continue to take for your ongoing care. These prescription(s) may be filled at any of the [Insert Hospital Here] pharmacies listed below. If you are unable to reach these pharmacies, you may take your prescription(s) to any community pharmacy, pay to have them filled, and submit your receipt to [Insert Hospital Here] for repayment.

Name	Location	Days of Operation	Hours of Operation

Copy to: Patient **To: Pharmacy** **To: Medical Records**

Appendix E

Facility Transfer Summary Form

Facility: _____ Date: _____

Address: _____

Contact Person: _____ Contact Number: _____

Reason for Transfer/Evacuation: ☐ Full ☐ Mass Casualty Incident ☐ Mandatory ☐ Voluntary

Patient Name (Last, First)	Transport*	Time	Receiving Facility Name and Phone Number	Sent with Patient		Tracking Number
				Meds	Chart	

***Transport:** A = ambulance; C = car; E= EMS; F = family; O = other - specify; V = van

Appendix F

Facility Transfer Short Form Medical Record

Demo-graphic

Patient Name: _____ DOB: _____
Parent/Guardian: _____ MRN: _____
Primary Physician: _____
Allergies: _____ ☐ NKA

History

Chief Complaint: _____
Significant Medical History: _____
_____
Pregnancy Status: _____

Medications

Name	Route		Dose	Time/Frequency

Time Recorded						
Temperature						
Pulse						
Respiration						
Blood Pressure						

Notes: _____
_____
Special Dietary Needs: _____
_____
Total Intake: _____ Total Output: _____

Physical Exam

HEENT: _____
_____
Cardiovascular: _____ Pulmonary: _____
Neurological: _____ Abdomen: _____
Extremities: _____

Test Results

Lab Results: _____
X-ray Results: _____
Other: _____
_____

Disposition

Discharge: ☐ Home ☐ ACS ☐ Shelter ☐ LTC ☐ Deceased Date: _____
☐ Transfer: _____ ☐ Other: _____ Time: _____
Diet: ☐ Regular ☐ Soft ☐ Liquid ☐ Other: _____
Activities: ☐ No Restrictions Restrictions as follows: _____
Physician Signature: _____ Nurse Signature: _____
Other Signature: _____ Other Signature: _____

Adapted from Wong, DL., Et al. **Wong's Essentials of Pediatric Nursing**, Ed. 6. St. Louis. (2001) p. 1301.

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Appendix G

Small and Rural Hospitals

IBA remains the same regardless of the size of the healthcare facility. It is more challenging in rural areas and small hospitals and is not implemented as frequently as in larger hospitals. In an article (included in the references) by the National Association of County and City Health Officials (NACCHO) that addresses practices for IBA in rural communities. They offer four strategies for implementation:

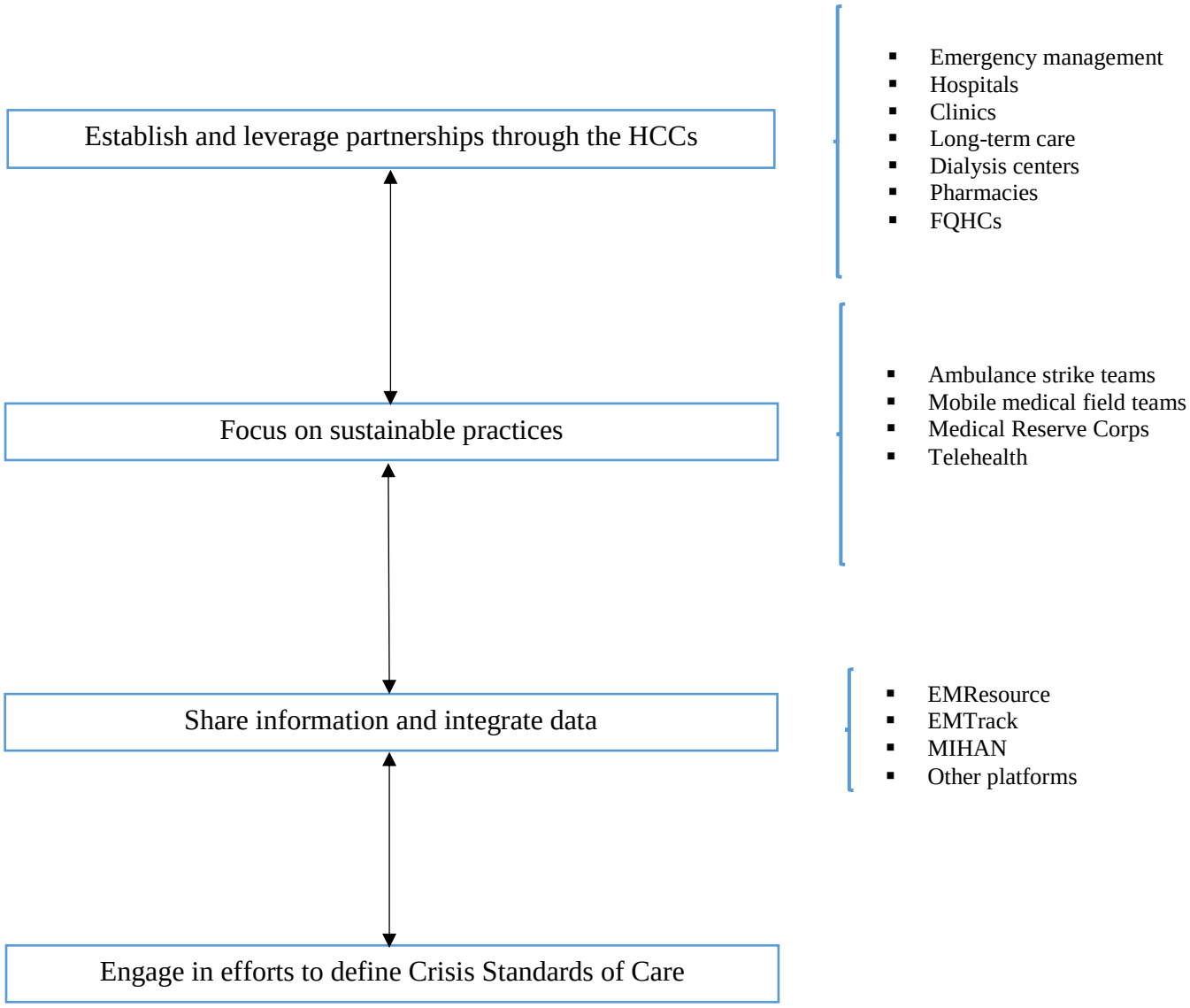
1. **Establish and leverage partnerships.**
   Well-coordinated medical surge response is effective due to the formal and informal partnerships developed long before an incident takes place. Working with the Regional Healthcare Coalition can help to foster these relationships. The affiliations include other larger hospital facilities, clinics, long-term centers, dialysis centers, pharmacies Federally Qualified Health Centers (FQHC), and Emergency Managers. Other relationships to nurture include churches, schools, community centers and local businesses. While non-traditional, these collaborators are entrusted community members and could potentially lighten the load on the hospital by providing food, shelter, other resources including emotional support, and community assistance in family reunification.
2. **Focus on sustainable practices.**
   Cutbacks in healthcare preparedness funding, a deficiency in extra space and equipment, and healthcare worker shortages are listed as obstacles to IBA implementation. Working collaboratively with the HCCs allows for single healthcare facilities with partial or inadequate capacity access to collective resources of a system of providers. Utilization of ambulance strike teams, mobile medical field teams, and Medical Reserve Corps (MRC) volunteers are great assets during an incident. Telehealth programs are also available to assist in assessment and treatment of patients without the need to build larger facilities. There are established programs in some states that provide emergency medical, psychiatric, wellness care and other services.
3. **Share information and integrate data.**
   Real-time situational awareness is critical during IBA to deliver the highest level of care. The monitoring of healthcare organization capacity, patient acuity, and services available are all core components of situational awareness. Detailed information regarding bed availability and the medical needs of patients in a precise and timely format must be accessible to healthcare organizations, EMS and emergency management personnel. Platforms such as EMResource for bed availability, EMTrack for tracking of a patient, and the Michigan Health Alert Network (MIHAN) for messaging, alerts, and information requests are all available.
4. **Engage in efforts to define crisis standards of care.**
   There needs to conversations regarding altered or crisis standards of care at the local, regional, state and national level. Healthcare coalitions and partners can have these discussions at the local level to develop guidance documents for inclusion into the healthcare organizations EOP. Coalitions can ensure the developed guidance, including definitions, indicators, triggers, and protocols are relevant for both urban and rural settings. Specific guidelines have been developed

in some states for hospitals, EMS and intensive care units for the allocation of scarce resources during a disaster. The guidelines are accepted scoring rubrics and processes for those states. The developed strategies also delineate roles for the different stakeholders in the process.

National Association of County and City Health Officials. (2014). Responding to medical surge in rural communities: Practices for immediate bed availability. Retrieved http://nacchopreparedness.org/wp-content/uploads/2014/11/Responding-to-Medical-Surge-in-Rural-Communities.pdf. Accessed February 20, 2018.

Diagram 6

Small and Rural Hospital Flowsheet



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RESOURCES

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Resource 1:

Hospital Immediate Bed Availability (IBA) Planning Checklist

Using the Checklist: The individual or team responsible for disaster planning should review the checklist.

Name and title of initial Incident Commander: _____

Operational Period: **_____** ***Date:*** **_____** ***Time:*** **_____**

Command and Management Structure

Status	Location	Plan Elements
C-Completed IP-In Progress, NS- Not Started, and NA-Not Applicable	***Which Plan is referenced? Safety Mgmt. Plan, Infectious Disease Plan, EOP, etc.***	**Identifies indicators and triggers, determine who has decision-making authority, what is the process for activating the Emergency Operations Plan (EOP) and the IBA plan:**
		• Establish communications with Regional Medical Coordination Center (MCC) following ESF-8* reporting systems to report: patient census and bed capacity using EMResource, standardized reporting terminology; hospital status, critical issues, and resource requests
		• Activation (define responsibility and activation process)
		Begin thinking about and developing indicators and triggers to end IBA and begin to return to normal activities
		• Develop indicators and triggers for stopping IBA and returning to normal operations
		Surge Space: Specific protocols for creating capacity to care for a significant surge of disaster incident patients
		• Reverse triage to discharge patients from the hospital, including transport methods

		• Implement protocols for rapid and periodic review of patients for admission, discharge or transfer
		• Implement plan for immediate cancellation/delay of scheduled/non-emergent admissions, procedures, and diagnostic testing
		• Diagnostic/Ancillary services (Laboratory, Imaging, and Special Procedures)
		• Capacity and use, considering cohorting of patients (inpatient, minor care, holding)
		• Communication and coordination with Healthcare Coalition regarding activated and available community resources to triage, discharge or transfer (plan should include checklist with location, level of care and contact information)
		• Management and operation of the area (describe responsibilities and procedures)
		• Identify how clinical areas may be utilized
		• Defer scheduled clinic visits
		• Equipment and supplies (including re-supply)
		• Staffing (identify requirements and staffing plan)
		• At-Risk populations requiring medical treatment, sheltering and/or safe harboring (including admission and/or transfer information)
		Additional Initial Care Areas
		Inpatient capacity: specific plans for increasing bed capacity to care for a surge of inpatients while maintaining continuity of operations and care for current patients.

		• **Critical care:** expansion of bed capacity in existing units, use of other areas/units. This may include admitting trauma, burn patients or specialty patients who are stable and unable to transfer to appropriate level of care.
		• **Utilization of Intermediate Care:** step-down, telemetry units
		• **Medical/surgery care:** possible use of alternative care areas within the facility
		• **Specialty units:** pediatric, neonatal, and maternity: this may include plans for increasing bed capacity or delivery of care. This may be due to the inability to transfer to appropriate level of care.
		• **Ambulatory Care Capacity:** specific plans for expanding capacity for surge of emergency/ambulatory patients, including use of ambulatory care centers, and opening alternative treatment areas (clinics, other hospital areas and facilities)

* Emergency Support Function (ESF) #8 – Public Health and Medical Services provides the mechanism for coordinated Federal assistance to supplement state, tribal, and local resources in response to a public health and medical disaster, potential or actual incidents requiring a coordinated Federal response, and/or during a developing potential health and medical emergency. ESF-8 also includes mental health services and mass fatality management.

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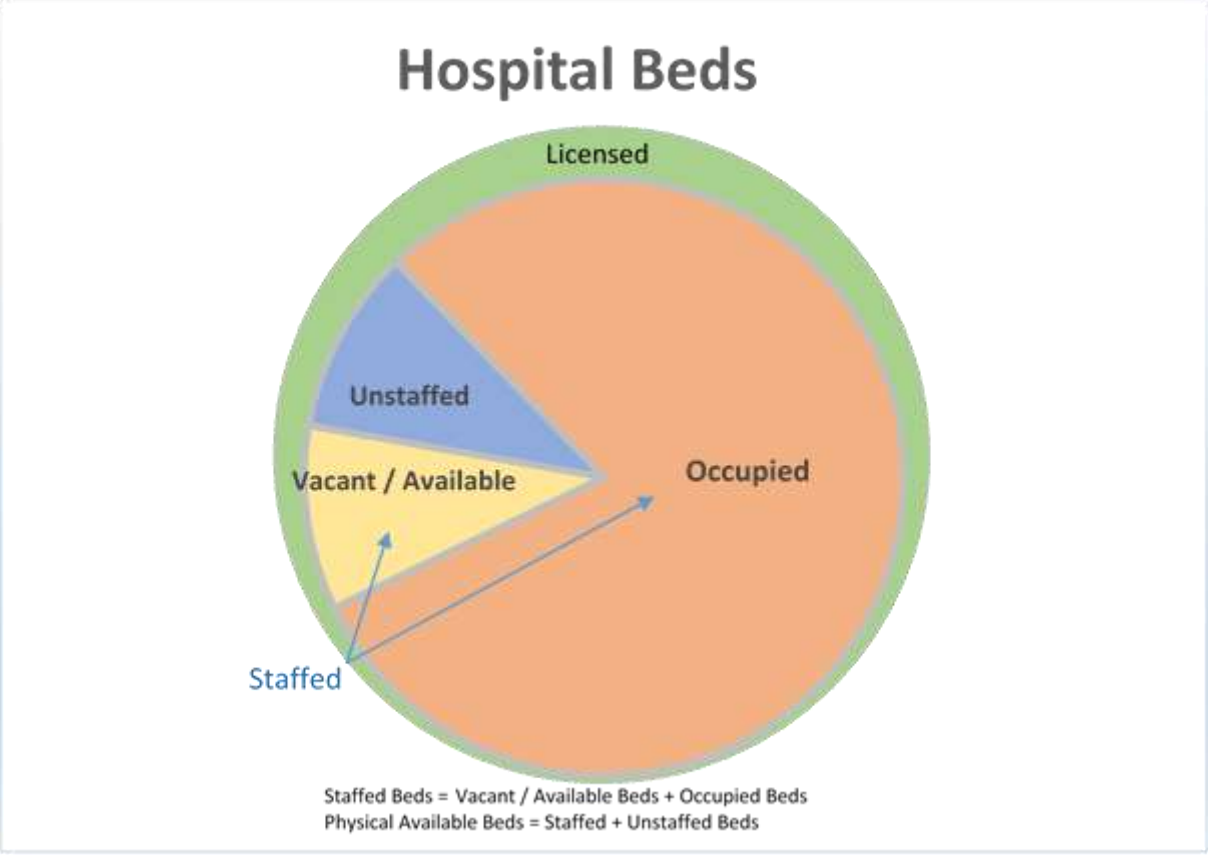
Resource 2

Staffed Versus Licensed Beds

Staffed Beds: Beds that are licensed and physically available for which staff is on hand to attend to and treat the patient who occupies the bed. Staffed beds include those that are occupied and those that are vacant.

Licensed Beds: The maximum number of beds for which a hospital holds a license for a specific type of bed. Many hospitals do not operate all of the beds for which they are licensed.

Note: *The Michigan Licensing and Regulatory Agency does not have definition of staffed beds under statute. They did approve the definition above. The licensed beds definition in state statute is noted above.*



Resource 3

Hospital Emergency Operation Plans to Refer to in an Immediate Bed Availability Response

1. Incident Command
2. Medical Surge
3. Communications
4. Reverse Triage
5. Bed Management
6. Staffing
7. Resources
8. Volunteers
9. STAT cleaning of rooms

Resource 4

Michigan's Regional Medical Coordination Center's Contact Information

Region 1
MCC: 517-546-9111
D1rmrc@sbcglobal.net

Region 2 North
MCC: 248-267-0535
RMCC@region2north.com

Region 2 South
MCC: 863-203-7733
email@2south.org

Region 3
MCC: 800-571-8859
BTDNregion3@gmail.com

Region 5
MCC: 269-337-2500
Aircare.org

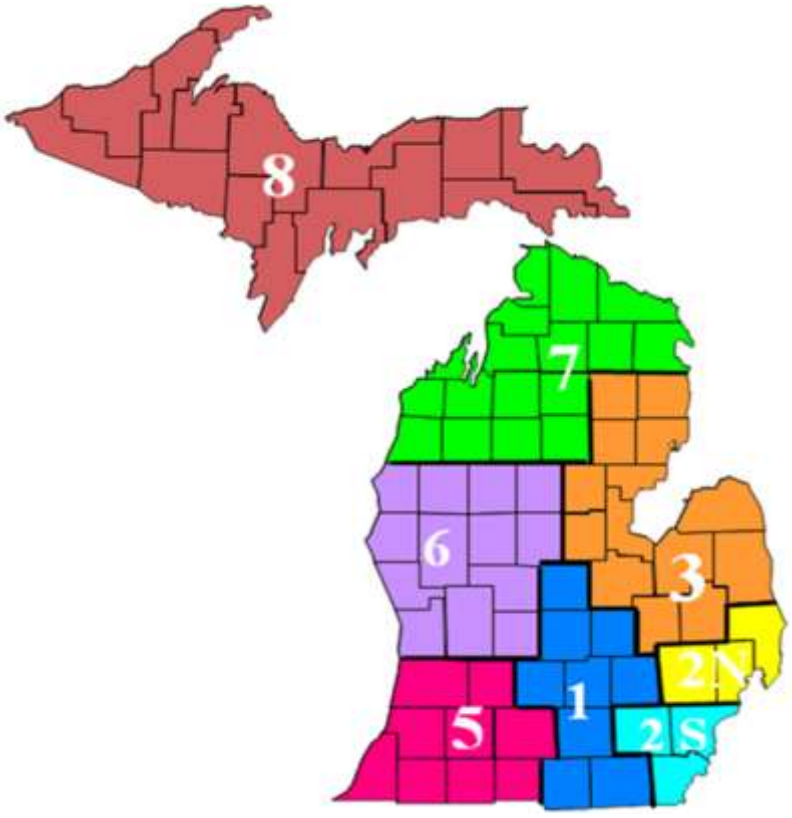
Region 6
MCC: 855-734-6622
MIRegion6.org

Region 7
MCC: 989-731-4975
MIregion7.com

Region 8
MCC: 866-276-4443
R8MCC@r8hcc.org

Resource 5

Map of the Healthcare Coalition Regions



Resource 6

Acronym List

Acronym	Term
ACS	Alternative Care Site
ASPR	Assistant Secretary for Preparedness and Response
CEDOCS	Community emergency department overcrowding scale
CHECC	Community Health Emergency Coordination Center
CT	Computed Tomography
ED	Emergency Department
EMResource	Supports status reporting and bed availability
EMTrack	A web-based patient tracking process
EMS	Emergency Medical Service
EOP	Emergency Operations Plan
ESF #8	Emergency Support Function #8 – Public Health and Medical Services
FQHC	Federally Qualified Health Centers
HEENT	Head, eyes, ears, nose, throat
HCC	Healthcare Coalition
HHS	Health and Human Services
HPP	Hospital Preparedness Program
IBA	Immediate Bed Availability
IC	Incident Command
IV	Intravenous
LTC	Long Term Care
MCC	Medical Coordination Center
MDHHS	Michigan Department of Health and Human Services
MICIMS	Michigan Critical Incident Management System
MIHAN	Michigan Health Alert Network
MRC	Medical Reserve Corps
MRN	Medical Record Number
NACCHO	National Association of County and City Health Officials
NKA	No Known Allergies
OB	Obstetrics
OR	Operating Room
PACU	Post Anesthesia Care Unit
POV	Privately Owned Vehicle
SEOC	State Emergency Operations Center
TB	Tuberculosis

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Contributors

Rick Drummer, BS, MBA, MS, CHEP
Regional Coordinator
Region 2 North Healthcare Coalition

Richard Ross, DO
Medical Director
Region 3 Healthcare Coalition

Dena Smith, MPA, NRP, IC
Former Regional Coordinator
Region 5 Healthcare Coalition

Kal Attie, MD, FACEP
Medical Director
Region 7 Healthcare Coalition

Gary Rapelje, MBA, RRT
Former Regional Coordinator
Region 7 Healthcare Coalition

Lauren Korte, BAS, RRT, NHDP-BC
Medical Surge Planner
Michigan Department of Health and Human Services,
Division of Emergency Preparedness and Response

Gloria Zunker, MPA, RDN
Hospital Preparedness Program Unit Manager
Michigan Department of Health and Human Services,
Division of Emergency Preparedness and Response