The Medical Surge Tier System and Healthcare Coalitions: Coordination and Collaboration

A Presentation to the Wisconsin Public Health Association

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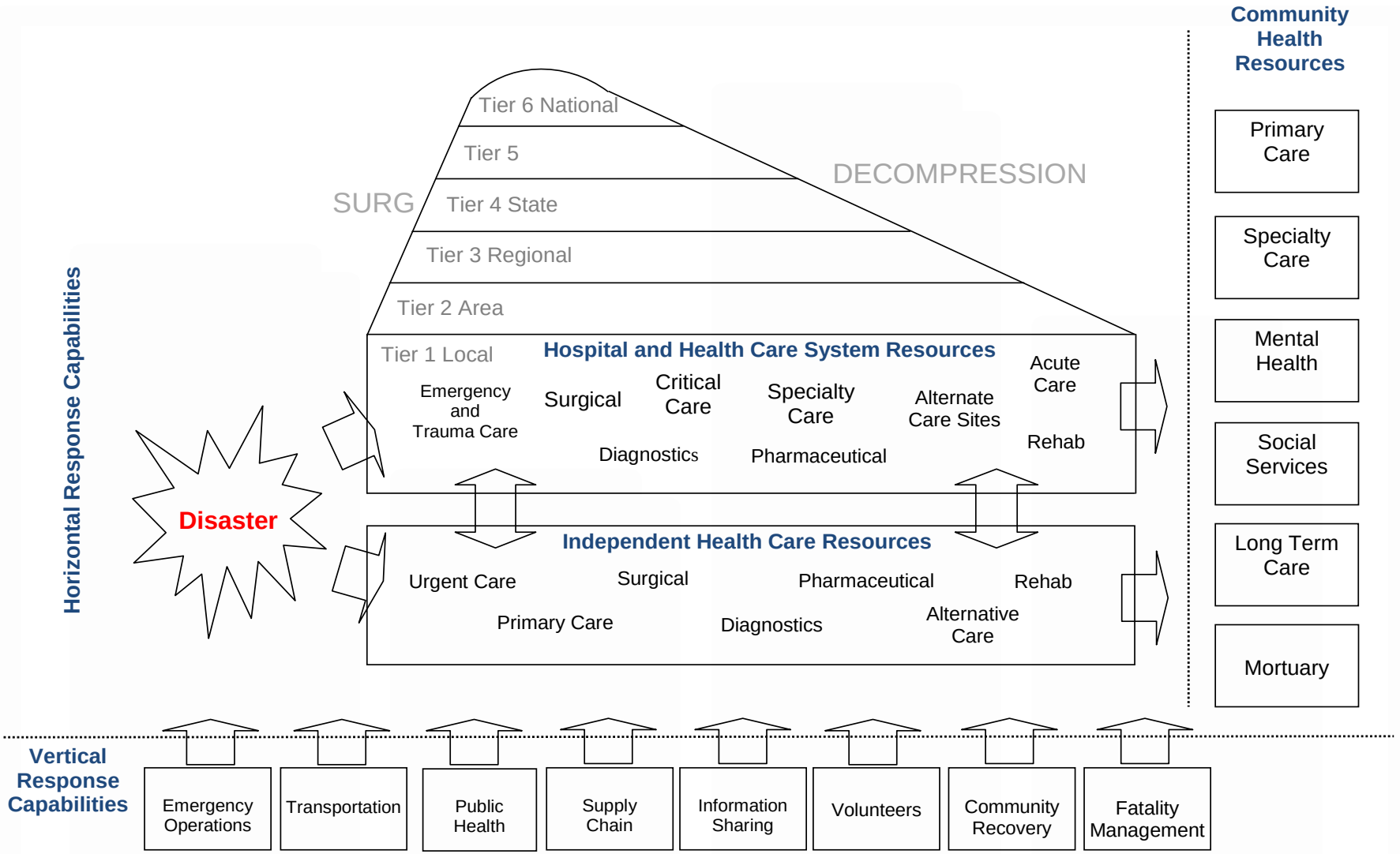
Previous Discussions – The Need

- Coordination for large-scale incidents
  - If a local healthcare organization does not have space or resources to manage a surge of patients, where does it turn?
  - Where can patients be moved?
  - How will patient movement or transfer be coordinated?

- Assistant Secretary for Preparedness and Response (ASPR) guidance
  - Specific patient capacity targets
  - Surgical capacity
  - Development of multi-disciplinary, multi-agency health care coalitions
  - Development of coordination systems/structures

DISASTER HEALTHCARE RESPONSE – A COALITION MODEL



The Process

- Medical Surge Capacity Workgroup
  - Workgroup of WHEPP
  - Multi-disciplinary representation
  - Multi-regional representation
  - Reports to WHEPP

- Development process
  - Workgroup discussion over two years to form draft
  - Distribution of draft tiers through WHEPP for feedback
  - Incorporation of feedback and finalization of tier structure
  - Development of resource document
  - Presentation and roll-out of final tiers and resource document

The WHEPP Coordination Tiers

- General framework for coordination

- 6 Tiers –
  - Tier 1 – Local Health Care Organization (Health Care Asset Management)
  - Tier 2 – Area (Coalition) Coordination
  - Tier 3 – Regional (Jurisdictional) Coordination
  - Tier 4 – Intrastate (Inter-jurisdictional) Coordination
  - Tier 5 – Interstate Regional Coordination
  - Tier 6 - Federal Support to Response

Principles of the Tier Coordination Structure

- Meets HHS/ASPR recommendations
  - Compatible with HHS tier structure
  - Promotes multi-disciplinary, multi-organizational coalition approach

- Provides framework for coordination
  - Adds structure to communication pathways
  - Standardizes the process

Principles of the Tier Coordination Structure

- Modular, bottom-up approach
  - Consistent with Incident Command System principles
  - Locally driven - each tier decides when to activate the next level
  - Area or Regional Medical Coordinating Centers only assume coordination function when tier below requests it (or if tier below is obviously incapacitated)

- Allows for flexibility while maintaining a standardized process
  - Each region tailors its coalition and internal area boundaries as needed
  - Adaptable to unique hazards faced in an area/region
  - Coalitions set their own triggers for activation

Principles of the Tier Coordination Structure

- Communication and coordination is the most important aspect of planning, mitigation, response, and recovery.
  - Healthcare coalitions will strive to maintain links within the coalition and with other organizations/agencies in order to allow for information flow and coordination throughout the community
  - During an incident, regular communication between the incident scene and the healthcare organization or coalition is critical for successful incident management.
  - The purpose of the Wisconsin healthcare coalition tiered response framework is to promote structured communication and coordination.

Definitions

- **Local healthcare organization** (**HCO**, or “healthcare organization”, “healthcare entity”): A single entity providing medical services, this may include (but is not limited to) a hospital, integrated healthcare system, emergency medical services (EMS) agency, physician office, outpatient clinic, nursing home or other skilled nursing facility.
- **Healthcare coalition** (**HCC**, or “coalition”): A multi-disciplinary, multi-organization partnership that organizes individual healthcare assets/organizations into a single functional unit in order to maximize cooperative planning, information sharing, and management coordination.
  - Include hospitals, public health agencies, EMS, emergency management, long-term care or alternative treatment facilities, dialysis and other outpatient treatment centers, nursing homes and other skilled nursing facilities, private physician offices, clinics, community health centers and any other healthcare asset.
  - May also include emergency response and public safety agencies, community and volunteer organizations, educational institutions, and any other organization that may provide resources to care for patients during an event.

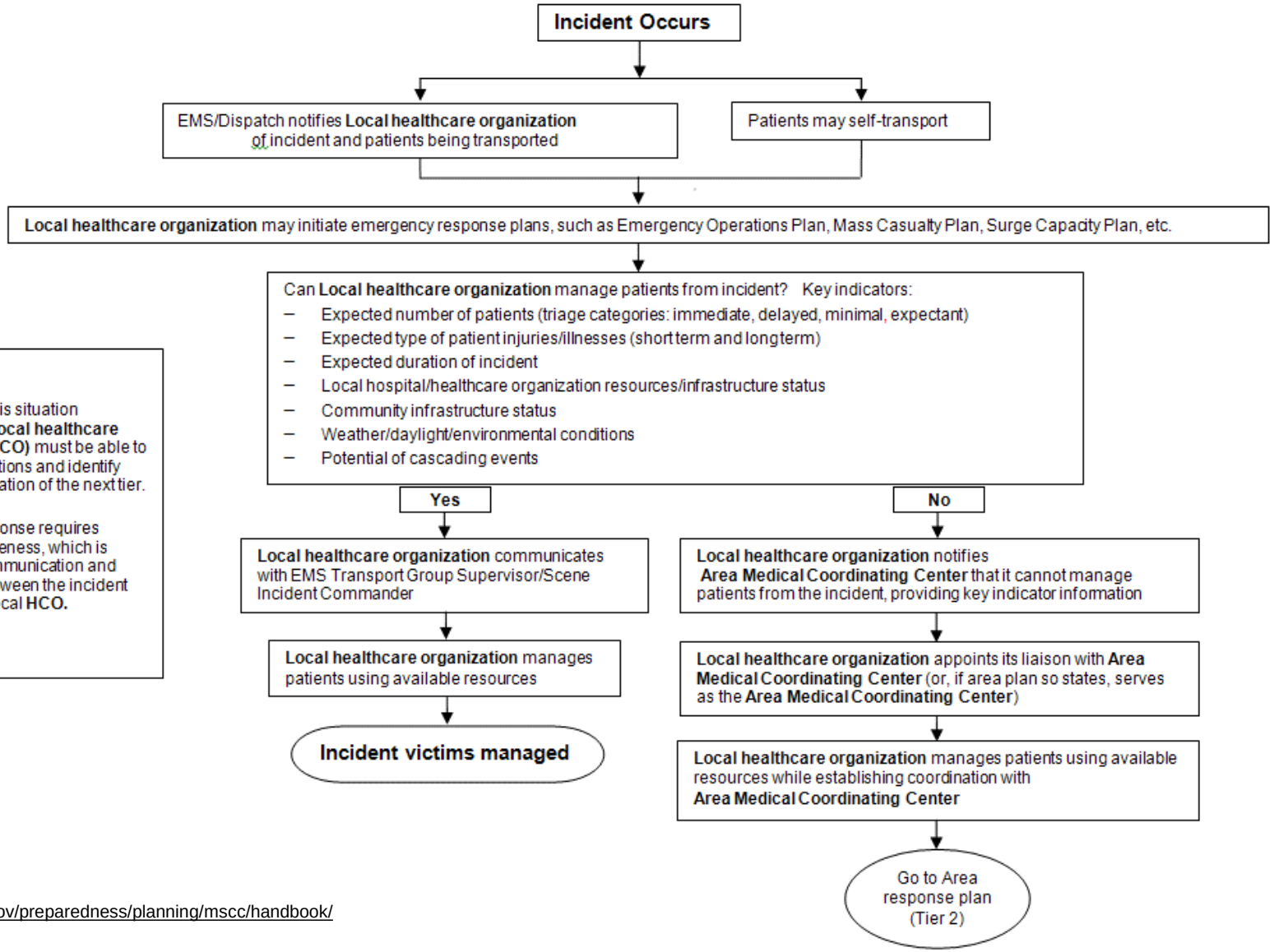
- **Health Emergency Region** (or “region”): A geographic region with borders defined by the Wisconsin Department of Health Services for the purposes of medical planning and response coordination in large-scale emergencies.
- **Area Medical Coordinating Center (AMCC)** – A healthcare or healthcare-related entity (such as public safety answering or dispatch center, transfer/access center, etc.) in the geographic area of an incident, with the ability to support the healthcare coalition with coordination of information and patient movement.
  - Designated through planned criteria or schedule.
  - Depending on the area and situation, an AMCC may be the initial healthcare organization impacted by an incident and/or may also be the Regional Medical Coordinating
  - For example, the closest trauma center to a mass casualty incident may serve as the AMCC.
- **Regional Medical Coordinating Center (RMCC)**: A designated healthcare or healthcare- related entity (public safety answering or dispatch center, transfer/access center, etc.) serving a Health Emergency Region, with the pre-determined ability to support the healthcare coalition with coordination of information and patient movement along with planning activities.
  - The RMCC can be seen as the coordinating center for a region’s healthcare coalition.

Tier 1 - Medical Management of Incident by Local Health Care Organization

REV 5.13.2014

Wisconsin Healthcare Emergency Preparedness Program (WHEPP) Healthcare Coalition Tiers

Medical Management of Incident by local Healthcare Organization (DHHS Tier 1 Response) - Decision Tree



Key Points:

- Every response is situation dependent. A **Local healthcare organization (HCO)** must be able to recognize limitations and identify triggers for activation of the next tier.
- Successful response requires situational awareness, which is obtained by communication and coordination between the incident scene and the local **HCO.**

Reference: http://www.phe.gov/preparedness/planning/mscc/handbook/

Tier 2 - Medical Management of Incident by Area Health Care Organization

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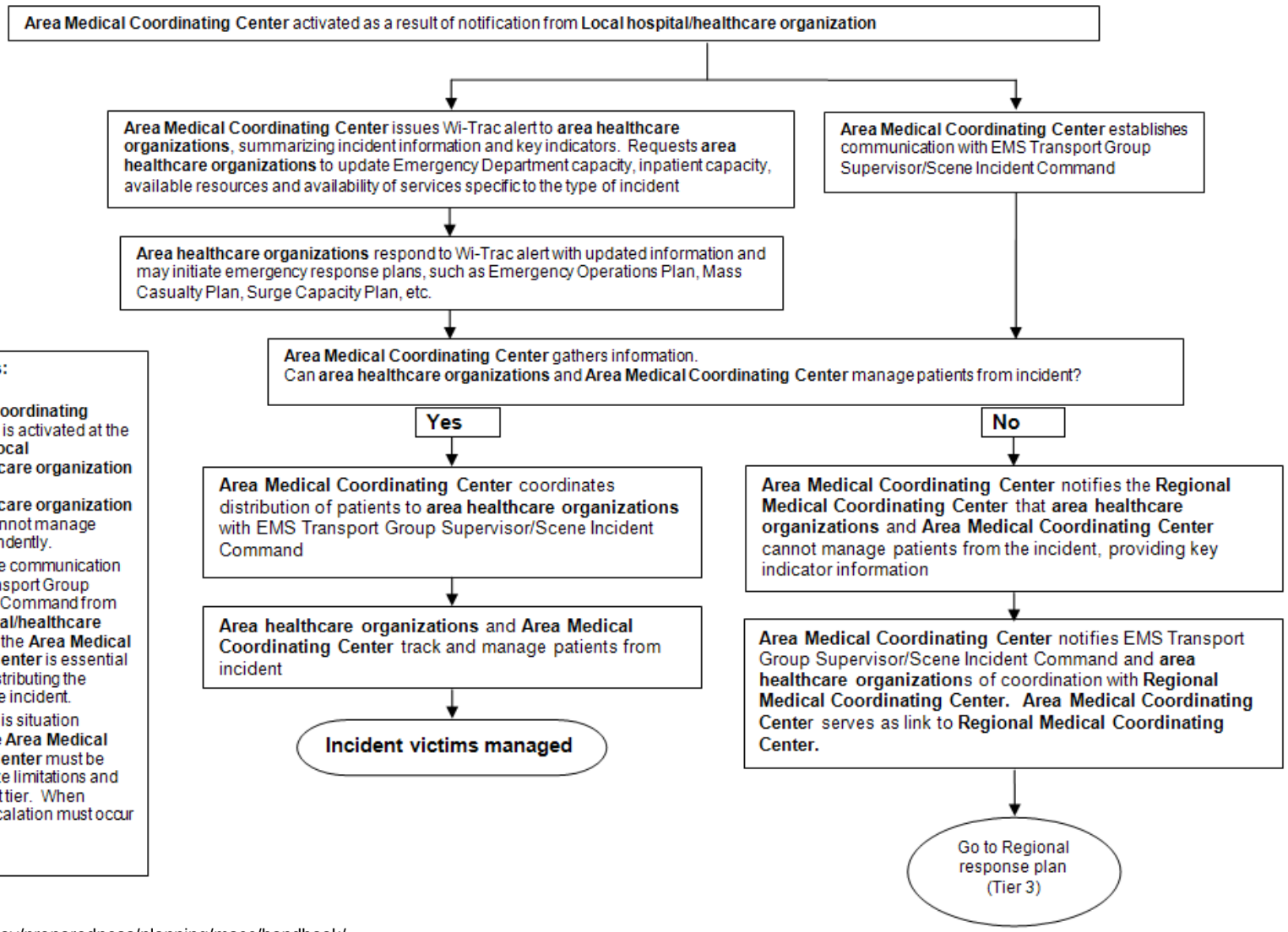
Wisconsin Healthcare Emergency Preparedness Program (WHEPP) Healthcare Coalition Tiers

Medical Management of Incident by area Healthcare Coalition (DHHS Tier 2 Response) - Decision Tree



Key Points:

- **Area Medical Coordinating Center** (AMCC) is activated at the request of the **Local hospital/healthcare organization** when the **Local hospital/healthcare organization** determines it cannot manage incident independently.
- Transitioning the communication of the EMS Transport Group /Scene Incident Command from the **local hospital/healthcare organization** to the **Area Medical Coordinating Center** is essential to effectively distributing the patients from the incident.
- Every response is situation dependent. The **Area Medical Coordinating Center** must be able to recognize limitations and activate the next tier. When needed, this escalation must occur rapidly.

Reference: http://www.phe.gov/preparedness/planning/mscc/handbook/

Tier 3 – Regional / Jurisdictional Incident Management

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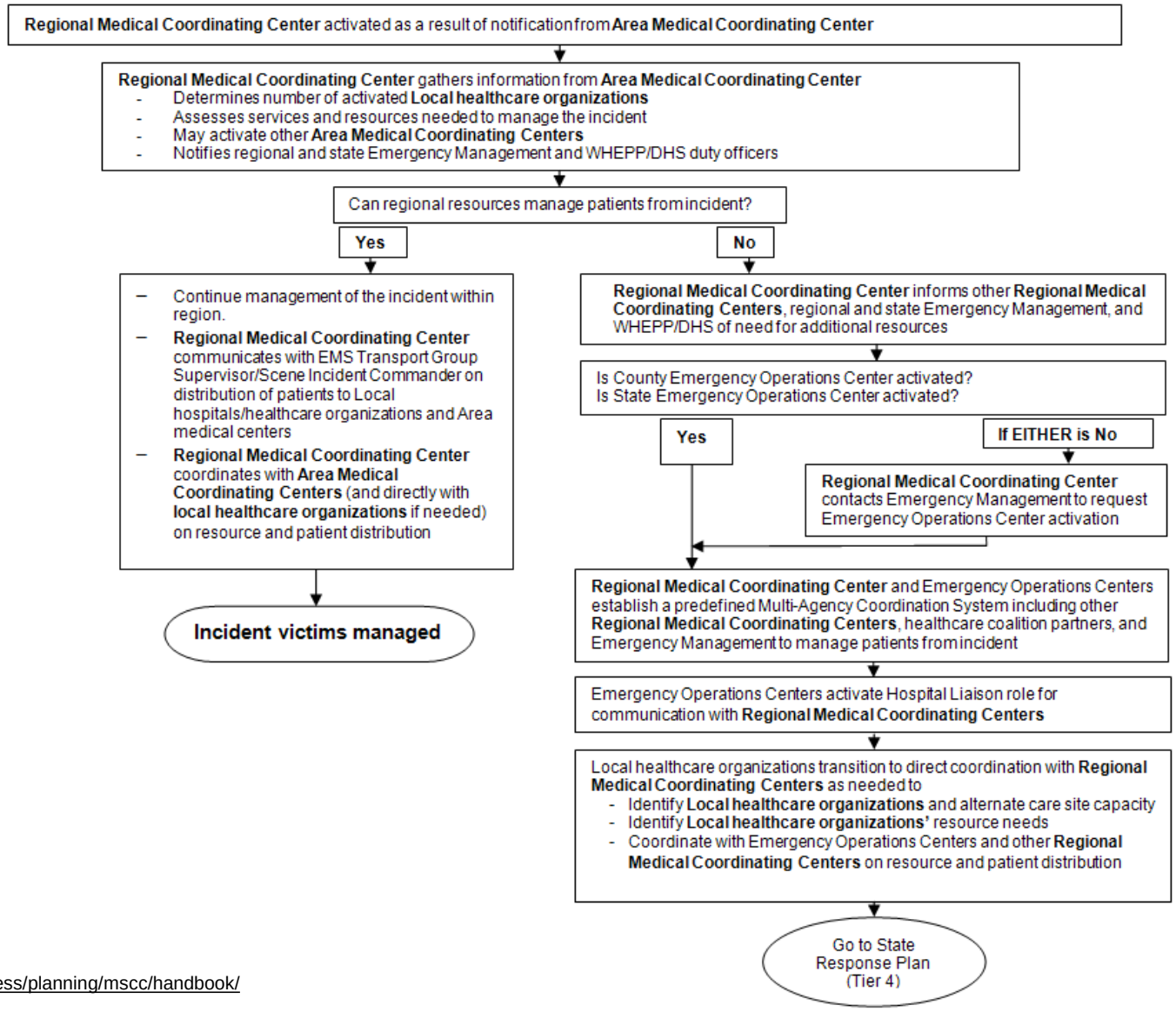
Wisconsin Healthcare Emergency Preparedness Program (WHEPP) Healthcare Coalition Tiers

Regional / Jurisdictional Incident Management (Tier 3 Response) – Decision Tree



Key Points:

- **Regional Medical Coordinating Center** is activated at the request of the **Area Coordinating Medical Center** when the area determines it is unable to manage incident independently.
- An incident of regional scale should trigger notification of other **Regional Medical Coordinating Centers** and state Emergency Management.
- Communication between the **Regional Medical Coordinating Center** and **Area Medical Coordinating Centers** is essential to transitioning the patient distribution function of managing the incident.
- **Area Medical Coordinating Centers** will communicate with EMS Transport Group Supervisor/Scene Incident Commander and all **local hospital/healthcare organizations** of the **Regional Medical Coordinating Center's** assumption of patient coordination duties.
- Every response is situation dependent. The **Regional Medical Coordinating Center** must be able to recognize limitations and activate the next tier. When needed, this escalation may occur rapidly.

Reference: http://www.phe.gov/preparedness/planning/mscc/handbook/

Tier 4- State Response and Coordination of Intrastate Jurisdictions

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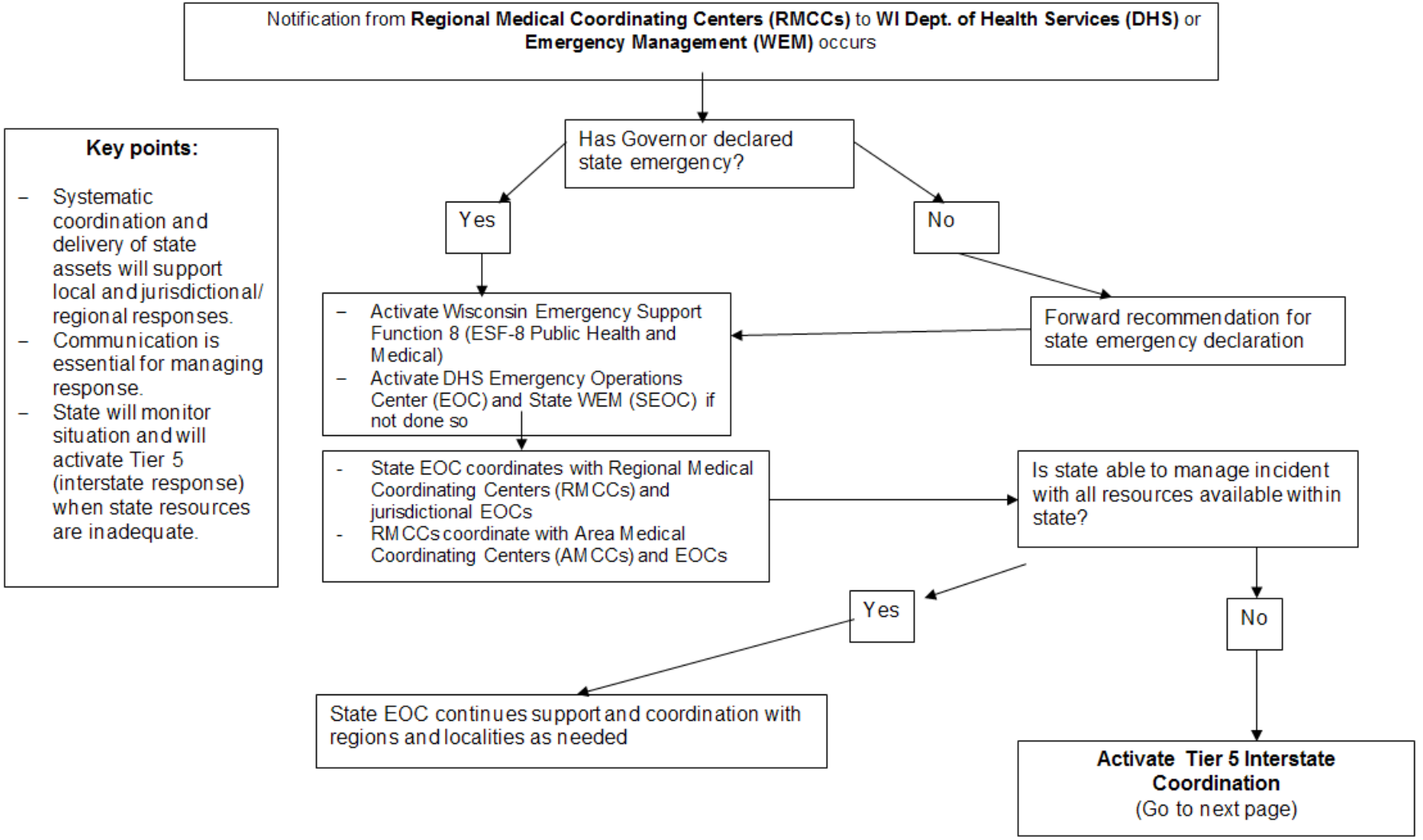
Wisconsin Regional Healthcare Coalitions

State Response and Coordination of Intrastate Jurisdictions (Tier 4 Response) - Decision Tree



Reference: http://www.phe.gov/preparedness/planning/mscc/handbook/

Tier 5- Interstate Regional Management Coordination

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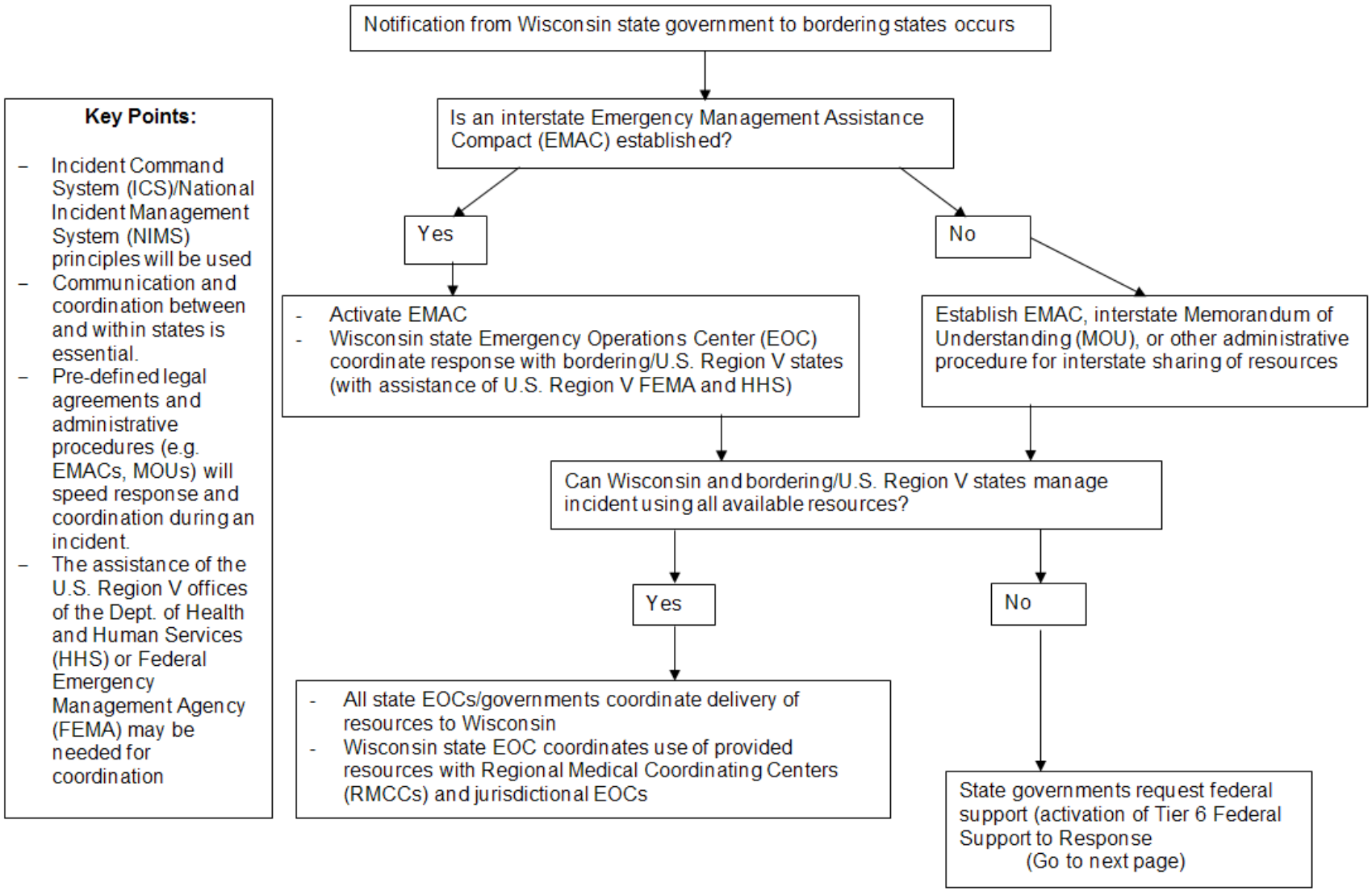
Wisconsin Regional Healthcare Coalitions

Interstate Regional Management Coordination (Tier 5 Response) - Decision Tree



Key Points:

- Incident Command System (ICS)/National Incident Management System (NIMS) principles will be used
- Communication and coordination between and within states is essential.
- Pre-defined legal agreements and administrative procedures (e.g. EMACs, MOUs) will speed response and coordination during an incident.
- The assistance of the U.S. Region V offices of the Dept. of Health and Human Services (HHS) or Federal Emergency Management Agency (FEMA) may be needed for coordination

Reference: http://www.phe.gov/preparedness/planning/mscc/handbook/

Tier 6- Federal Support to Response

REV 2.2.2014 - DRAFT

Wisconsin Regional Healthcare Coalitions
Federal Support to Response (Tier 6 Response) - Decision Tree

Key Points:

- Incident Command System (ICS), National Incident Management System (NIMS), and National Response Framework (NRF) principles and process will be used.
- Federal assistance requires the approval of a request from a state governor.
- State governments are responsible for coordinating the use/delivery of provided federal support with federal authorities.
- The U.S. Dept. of Health and Human Services (HHS) will deploy an Incident Response Coordination Team (IRCT) to coordinate all deployed ESF-8 (Public

Federal government receives request for federal assistance from state governor(s)

↓

Federal assets under National Response Framework Emergency Support Function 8 (ESF-8 Public Health and Medical) are activated if the following occur:

- Presidentially declared disaster or emergency
- Declaration of incident of national significance by U.S. Dept. of Homeland Security
- Request from another federal agency

↓

U.S. Dept. of Health and Human Services (HHS) Secretary's Operations Center (SOC) is activated to coordinate ESF-8 Public Health and Medical response to support tiers 1 through 6

↓

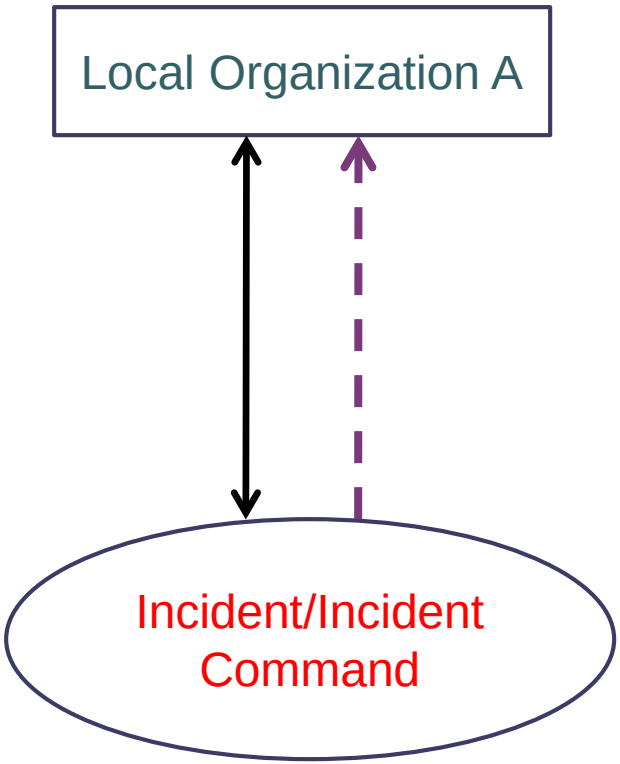
HHS SOC coordinates with HHS Regional Response Coordination Centers (RRCCs), U.S. Dept. of Homeland Security's National Response Coordination Center (NRCC), and state governments to manage response

Reference: http://www.phe.gov/preparedness/planning/mscc/handbook/

Clarifications between AMCC and RMCC:

- Both centers serve to coordinate information and patient movement, but on different scales and usually at different points in a response operation.
- Both are pre-determined centers.
- Multiple AMCCs will be present within a Health Emergency Region.
  - The number, location, and area covered by an AMCC will vary, depending on groupings of hospital and/or locations of potential hazards (airports, festival grounds, etc).
- Each Health Emergency Region will have a one RMCC.
- AMCC's role is to coordinate smaller surge events able to be handled primarily by a few hospitals located in same local geographic area
  - For example, a bus or multi-vehicle crash), as well as provide coordination of the initial triage and transport for larger scale surge events (such as a plane crash, building explosion, etc.).
- RMCCs role is coordination of larger scale surge events requiring the resources of the entire region (multiple areas); especially coordination of secondary triage and transfer to tertiary care centers.
- RMCC also has a lead role in the medical planning and response to large-scale hazards within a region.

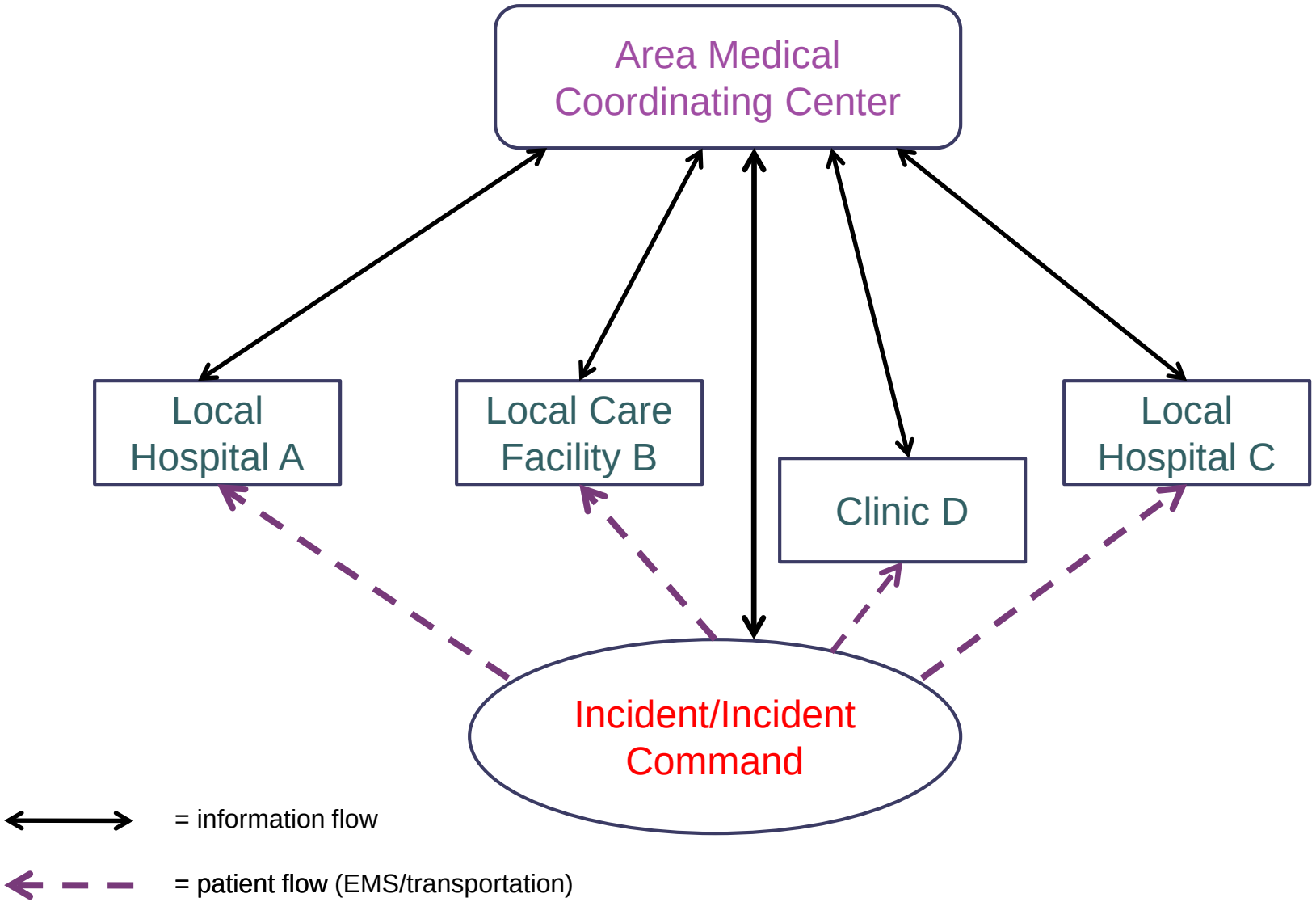
Tier 1



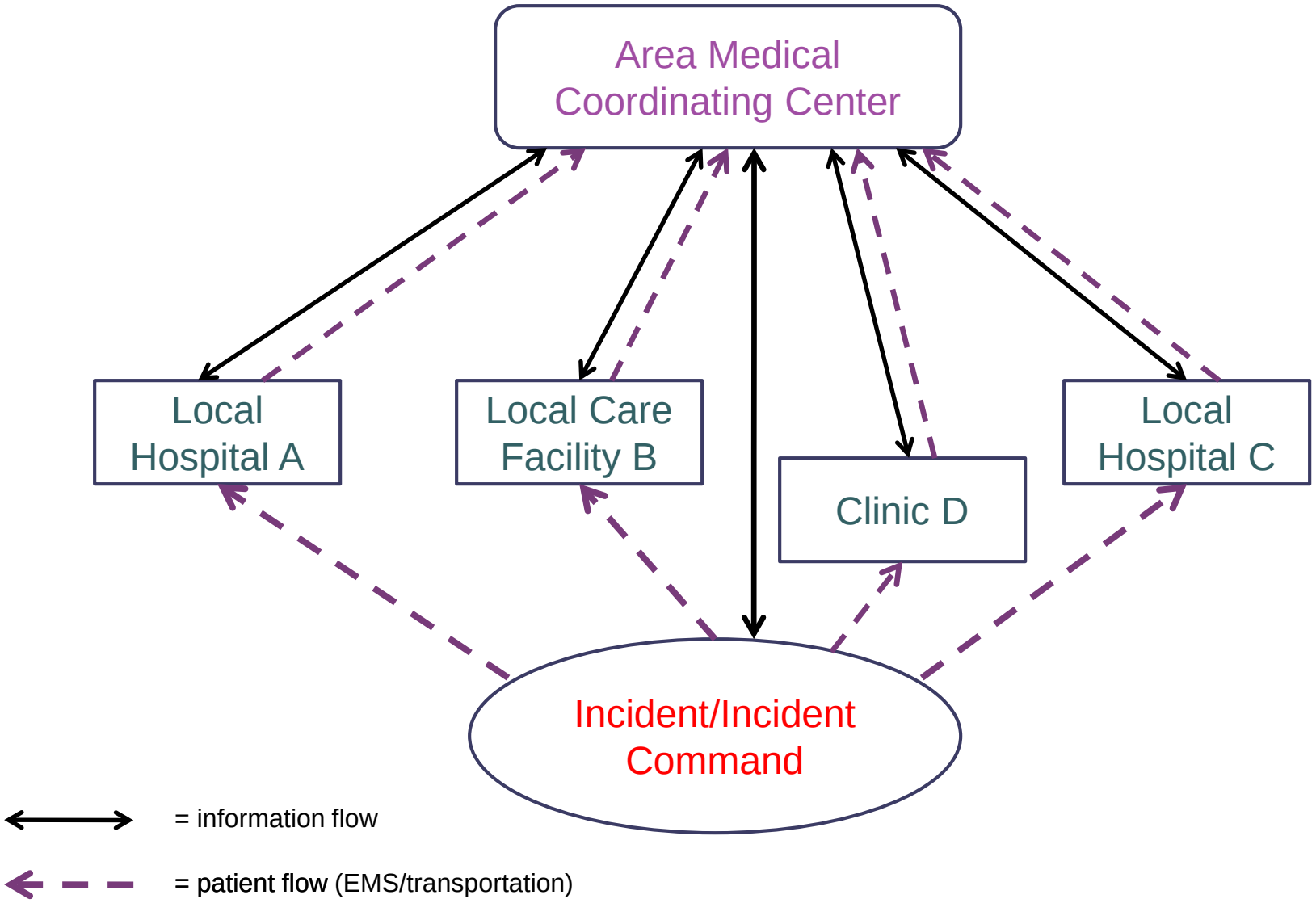
= information flow

= patient flow (EMS/transportation)

Tier 2


Area Medical Coordinating Center
Local Hospital A
Local Care Facility B
Clinic D
Local Hospital C
Incident/Incident Command
= information flow
= patient flow (EMS/transportation)

Tier 2 (cont.)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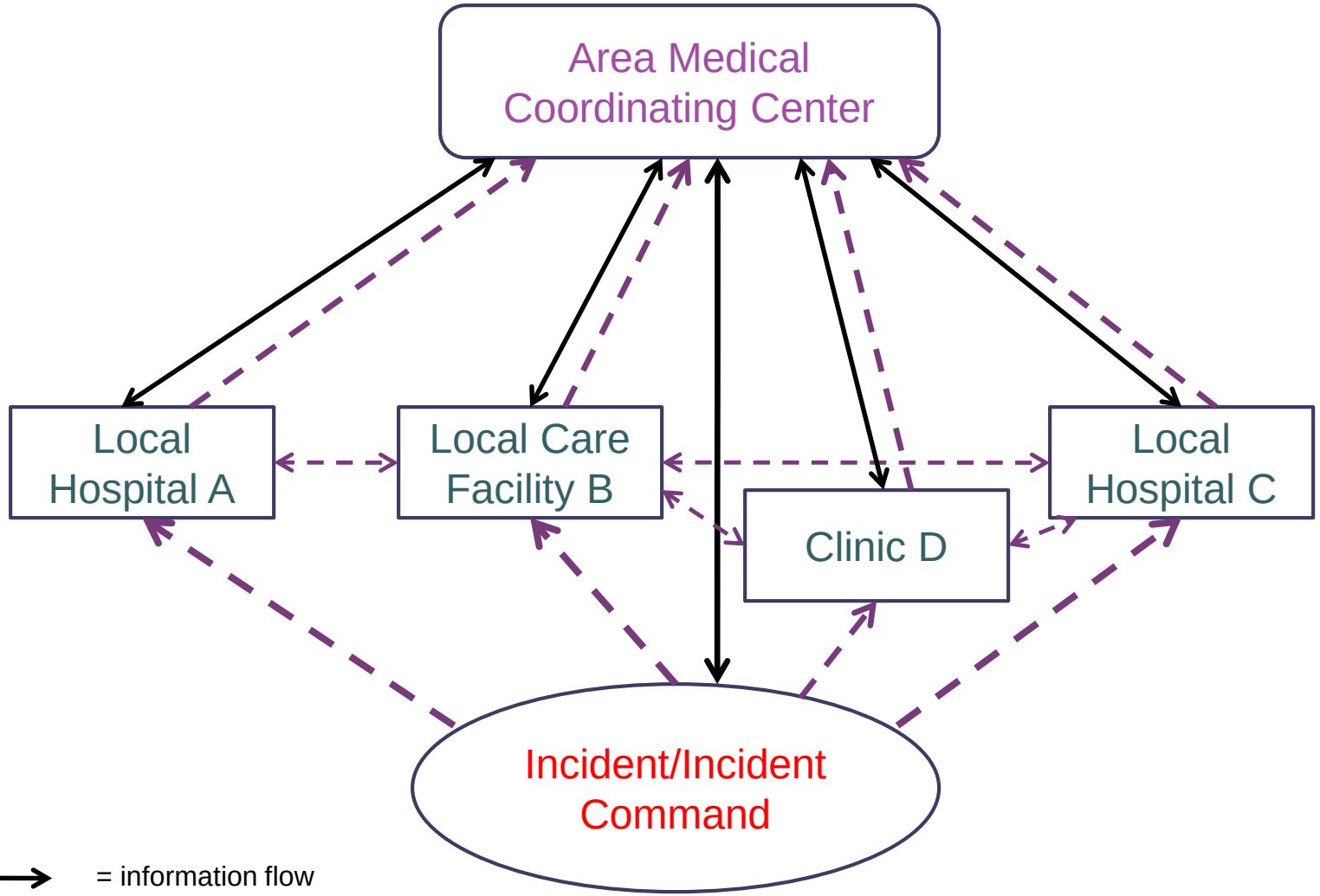
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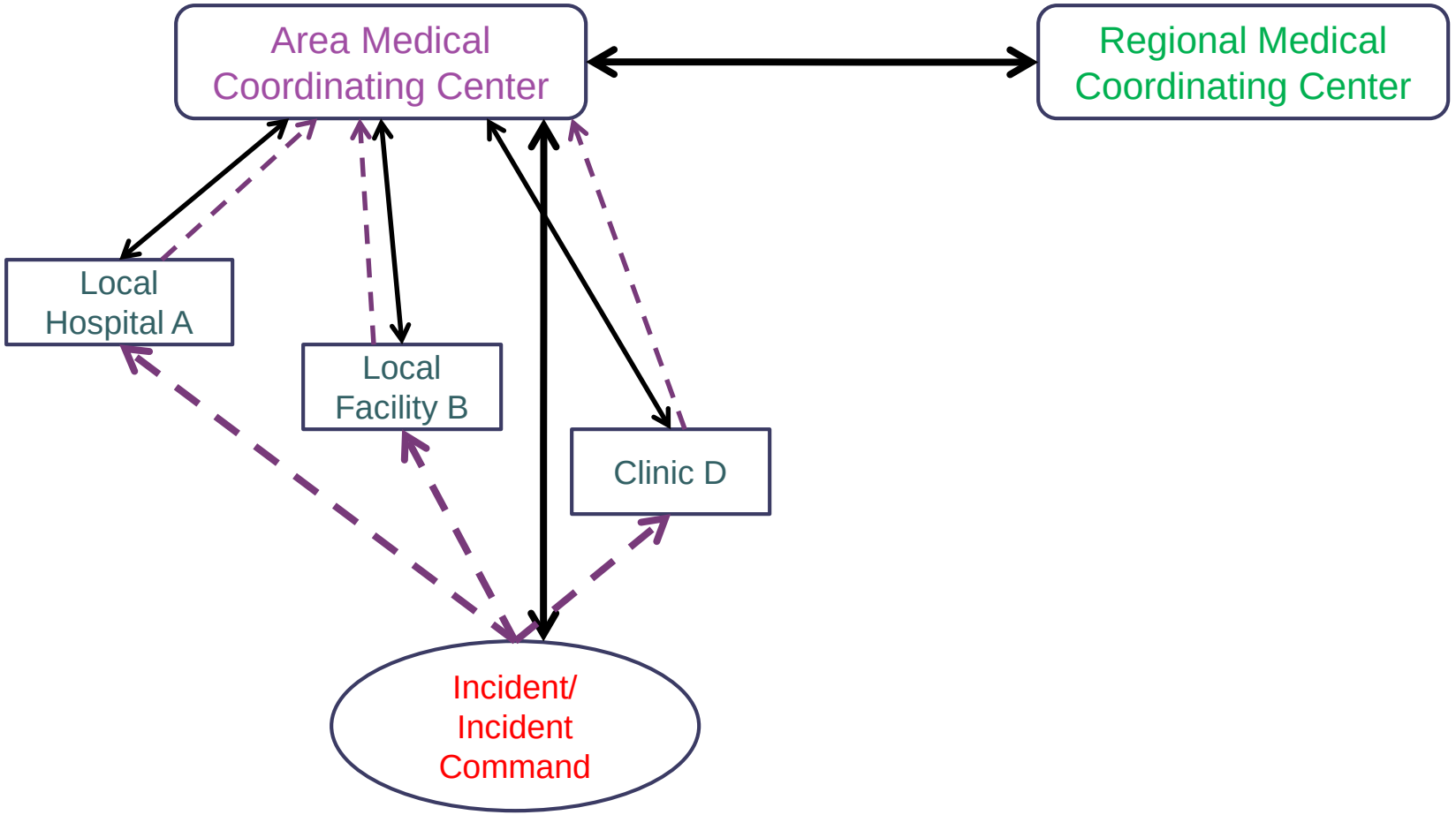
Tier 3


Area Medical Coordinating Center
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Local Facility B
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Incident/ Incident Command
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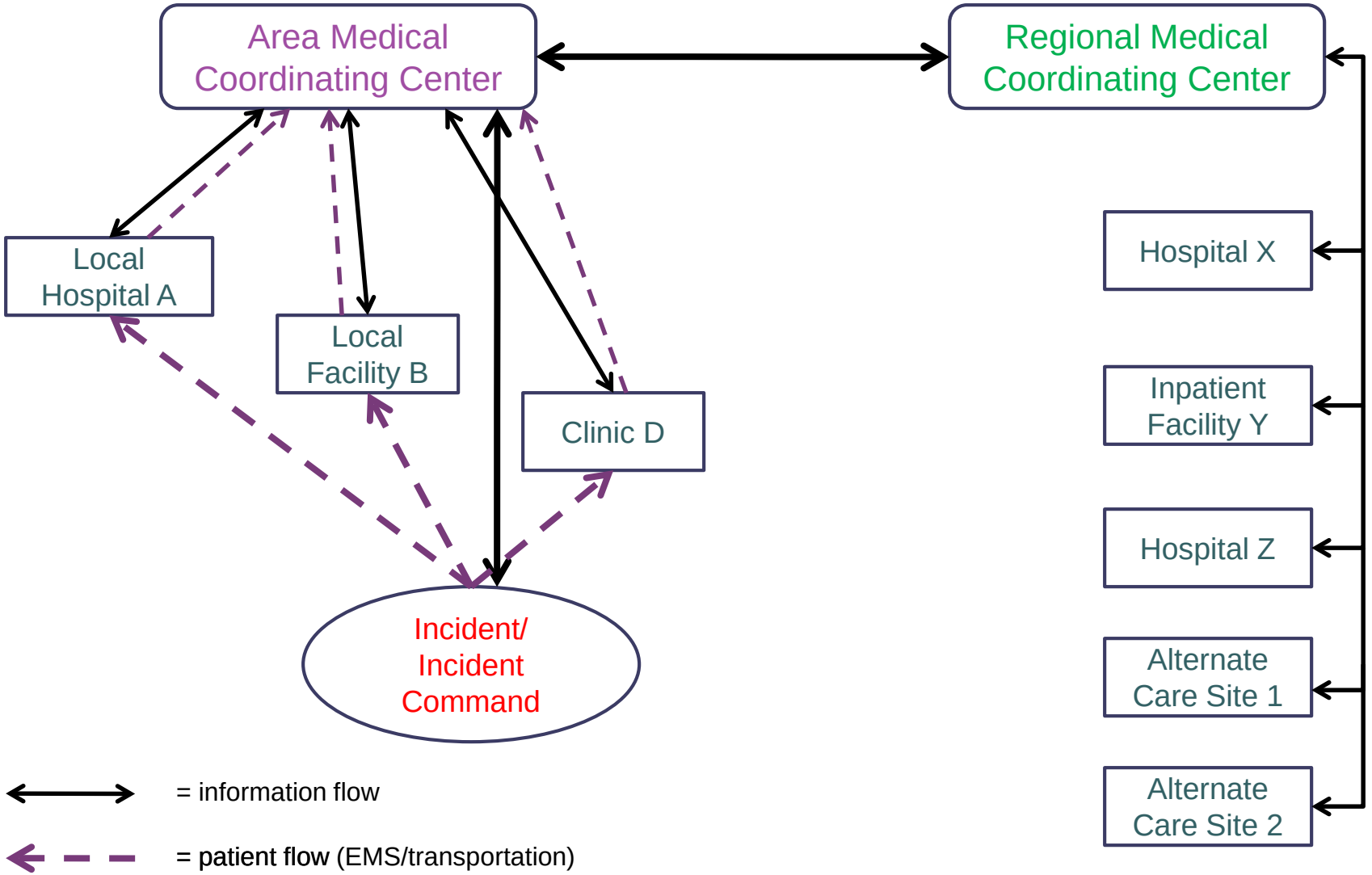
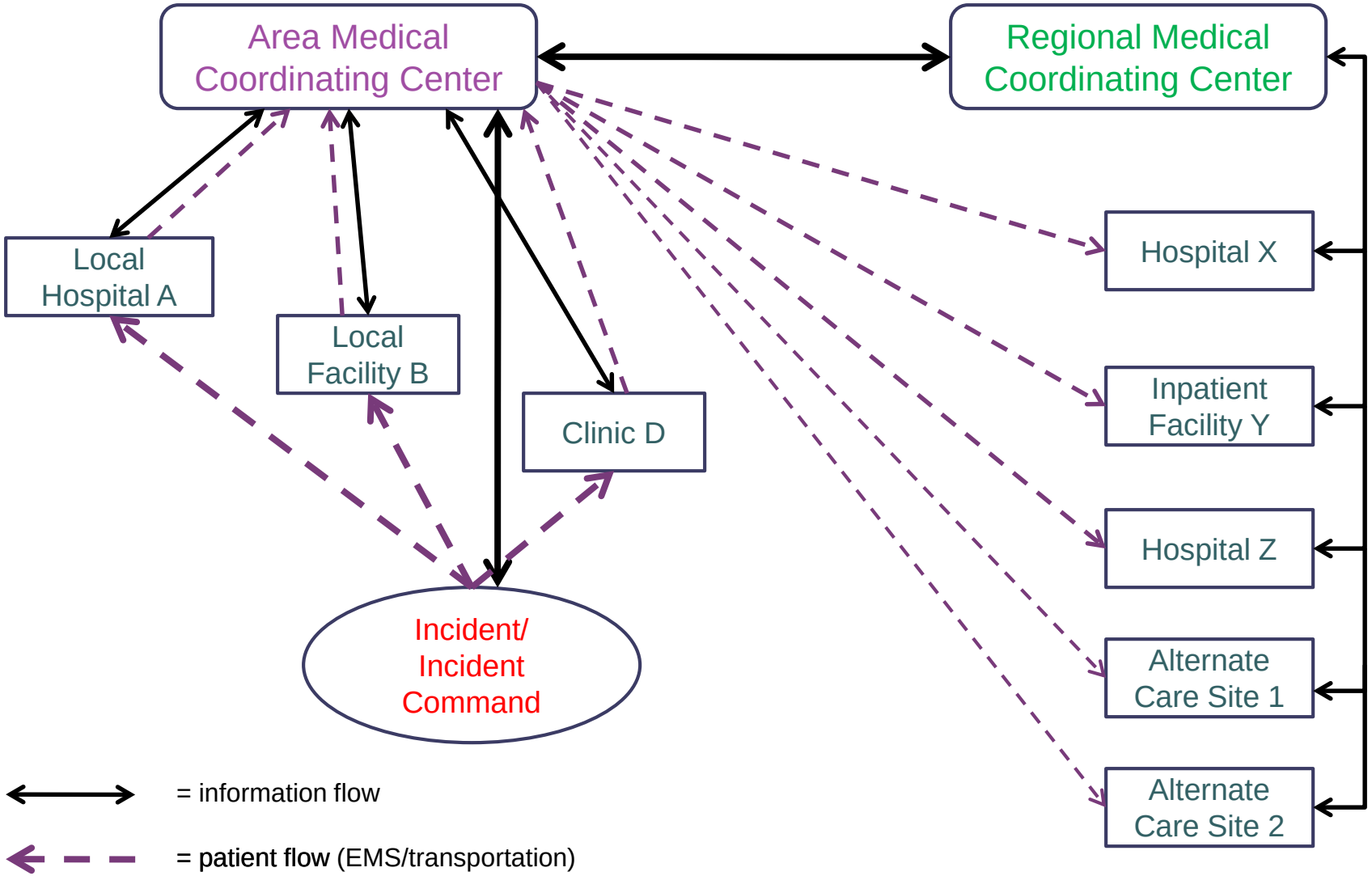
Tier 3 (cont.)


Area Medical Coordinating Center
Regional Medical Coordinating Center
Local Hospital A
Local Facility B
Clinic D
Hospital X
Inpatient Facility Y
Hospital Z
Alternate Care Site 1
Alternate Care Site 2
Incident/ Incident Command
= information flow
= patient flow (EMS/transportation)

Tier 3 (cont.)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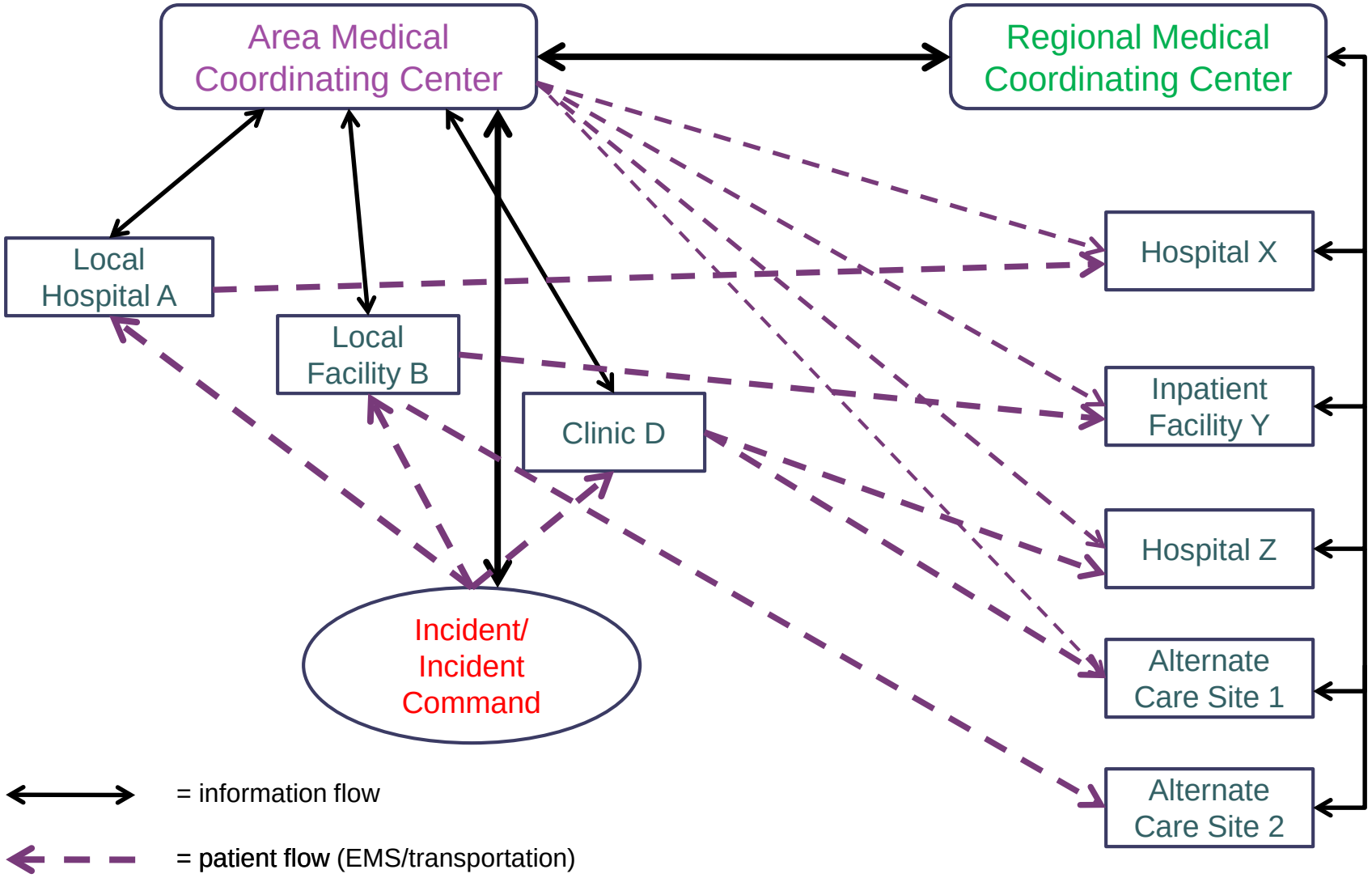
Tier 3 (cont.)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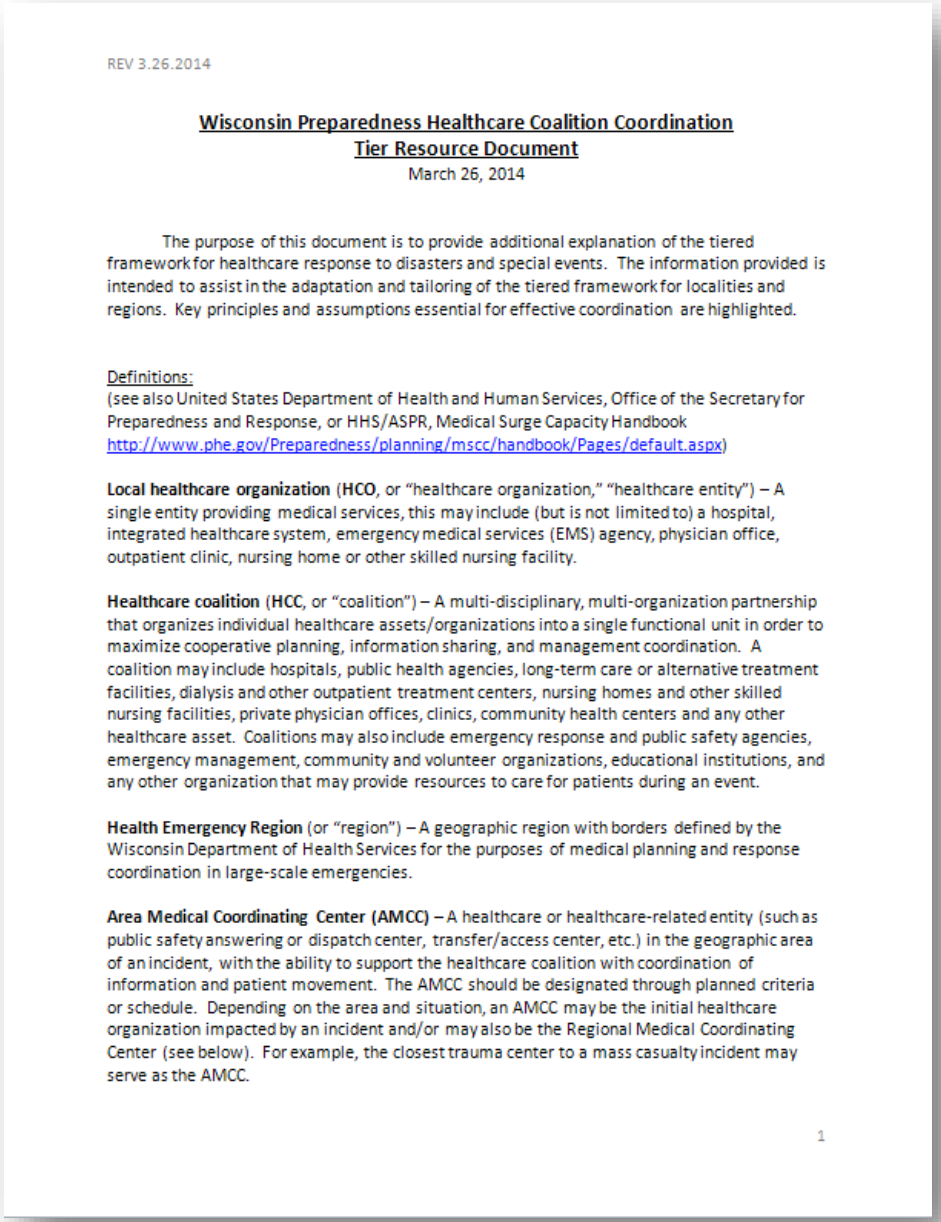
Tier Resource Document



REV 3.26.2014

Wisconsin Preparedness Healthcare Coalition Coordination
Tier Resource Document
March 26, 2014

The purpose of this document is to provide additional explanation of the tiered framework for healthcare response to disasters and special events. The information provided is intended to assist in the adaptation and tailoring of the tiered framework for localities and regions. Key principles and assumptions essential for effective coordination are highlighted.

Definitions:
(see also United States Department of Health and Human Services, Office of the Secretary for Preparedness and Response, or HHS/ASPR, Medical Surge Capacity Handbook http://www.phe.gov/Preparedness/planning/mscc/handbook/Pages/default.aspx)

Local healthcare organization (**HCO**, or "healthcare organization," "healthcare entity") – A single entity providing medical services, this may include (but is not limited to) a hospital, integrated healthcare system, emergency medical services (EMS) agency, physician office, outpatient clinic, nursing home or other skilled nursing facility.

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1

Disaster Planning and Response –

Where Do HCCs and Organizations Fit In?

HCC Purpose

- Coordinate how public health, healthcare institutions, and first responder agencies will manage their efforts to enact a uniform and unified response to an emergency, specifically the medical surge aspect of an event (ESF-8)
- Shift from planning to include response and recovery

- **Does <u>not</u> replace day-to-day functioning of individual disciplines**

ESF-8 Areas by Essential PH Services

- **Assessment**
  - **Monitor** health status to identify community health problems
    - Assessment of Public Health/Medical Needs
    - Health Surveillance
    - Agriculture safety and security
    - Behavioral healthcare
    - Food safety and defense
  - **Diagnose and Investigate** health problems and health hazards in the community.
    - Health Surveillance
    - Medical Surge
    - All-hazards public health and medical consultation
    - Behavioral healthcare
    - Vector control
    - Mass fatality management

ESF-8 Areas by Essential PH Services (cont.)

- **Policy Development**
  - **Inform, Educate, and Empower** people about health issues.
    - Safety and security of drugs, biologics, and medical devices
    - Blood and tissues
    - Food safety and defense
    - Agriculture safety and security
    - All-hazards public health and medical consultation
    - Behavioral healthcare
    - Public health and medical information
    - Vector control
    - Guidance on potable water/wastewater and solid waste disposal
  - **Mobilize** community partnerships to identify and solve health problems.
    - **ALL CORE FUNCTIONAL AREAS**
  - **Develop policies and plans** that support individual and community health efforts.
    - **ALL CORE FUNCTIONAL AREAS**

ESF-8 Areas by Essential PH Services (cont.)

- **Assurance**
  - **Enforce** laws and regulations that protect and ensure public health and safety
    - Medical Surge
    - Patient Care
    - Safety and security of drugs, biologics and medical devices
    - Blood and tissues
    - Food safety and defense
    - Agriculture safety and security
    - Vector control
    - Guidance on potable water/wastewater and solid waste disposal
    - Mass fatality management, and decontaminating remains

ESF-8 Areas by Essential PH Services (cont.)

- **Link** people to needed personal health services and assure the provision of health care when otherwise unavailable.
  - Assessment of public health/medical needs
  - Health surveillance
  - Medical surge
  - Health/medical/veterinary equipment and supplies
  - Patient movement
  - Patient care
  - All-hazards public health and medical consultation, technical assistance, and support
  - Behavioral healthcare
  - Public health and medical information

ESF-8 Areas by Essential PH Services (cont.)

- **Assure** a competent public and personal health care workforce.
  - All-hazards public health and medical consultation, technical assistance, and support
- **Evaluate** Effectiveness, Accessibility, and Quality of Personal and Population-Based Health Services.
  - Assessment of public health/medical needs
- **Research** for New Insights and Innovative Solutions to Health Problems
  - ALL

ESF-8: Shared Healthcare and Public Health Core Areas

- Assessment of public health/medical needs
- Health surveillance
- Medical surge
- Health/medical/veterinary equipment and supplies
- Patient movement
- Patient care
- Safety and security of drugs, biologics, and medical devices
- Blood and tissues

Shared Core Areas (continued)

- All-hazards public health and medical consultation, technical assistance, and support
- Behavioral healthcare
- Public health and medical information
- Mass fatality management, victim identification, and decontaminating remains

How does HCC participation benefit an organization/agency?

- Gateway to all partners involved in a healthcare emergency/special incident
  - Able to reach all coalition partners more efficiently
    - "One stop shop" off-loads burden of a single organization having to contact each partner by itself
  - Receiving organization(s) able to off-load patients/workload in order to receive additional patients or emergent tasks
  - Allows scene Incident Command to have information to better coordinate patient distribution/transport and incident tasking
  - Healthcare sector able to collectively work with government and private partners

How does HCC participation benefit an organization/agency? (cont.)

- Streamlined information flow
  - Surveillance/intelligence and situational awareness
    - Allows for collective awareness by pooling all of coalition's information/sources
    - Offloads burden of collecting/sorting information from single organization
    - Reduces "information overload"
    - Ensures relevance/utility for organization
  - Public and media information
    - Pool coalition's resources to assist in development and dissemination of materials
    - Promotes uniform message across region to reduce confusion/conflicting information

How does HCC participation benefit an organization/agency? (cont.)

- Provides enhanced response and treatment resources
  - Receive and disseminate information and translate into actions
  - Ability to reach multi-disciplinary healthcare providers across region
  - Coordinated distribution of patients to reduce chance of disproportionate surges on any single organization
  - Easier access to knowledge resources – regional and state experts, etc.
  - Easier access to physical resources – bed space, equipment, supplies, medications, etc.

How does HCC participation benefit an organization/agency? (cont.)

- HCC enhances ability to meet regulatory requirements
  - Joint Commission rules
  - CMS regulations
  - ASPR/CDC grant requirements
  - DHS/FEMA grant requirements
  - Provide tools/templates, content experts, other resources to assess and meet compliance
  - Current emphasis on collective preparation and community resilience

How does Public Health agency participation benefit the HCC?

- Provide population health and safety perspective
  - Versed in prevention strategies
  - Epidemiologic training and tools
  - Core knowledge of public health threats

- Incident response
  - Legal authority of surveillance, investigation, enforcement, and declarations of emergency
  - Linked into governmental structure
  - Established systems
    - Epidemiologic surveillance
    - Public communication and education/outreach
  - Special resource access (stockpiles, etc)

How can administration/leadership help?

- Support internal and external emergency planning
  - Strengthening partnerships with other healthcare, public health, and public safety organizations/agencies
  - Institutional approval/support of staff to work on plans
  - Participation in exercises
  - Encouraging familiarity with preparedness and Incident Command System at all levels of organization
  - Mobilization of organizational resources (both for planning and in an actual event)

How can administration/leadership help?

- Support Healthcare Coalition development
  - Support of multi-disciplinary, multi-organizational coalition concept and development
    - Organization/agency/system participation
    - Outreach to partners
  - Provide administrative/business expertise to coalitions
  - Support of information and resource sharing
    - Situational awareness
    - Current capacity/capabilities
    - Resources available

Next Steps – Continuing Development

- Identification of partners needed to develop the healthcare coalition
- WHEPP guidance document on development of governance structure of regions/healthcare coalitions

- How would the health care organizations in your area/region respond to incidents such as:
  - A commercial plane crash?
  - A collapse of the grandstands at the county fair?
  - An outbreak of highly contagious disease at the local school?
  - A chemical tanker spill in a high-traffic area?

The Vision

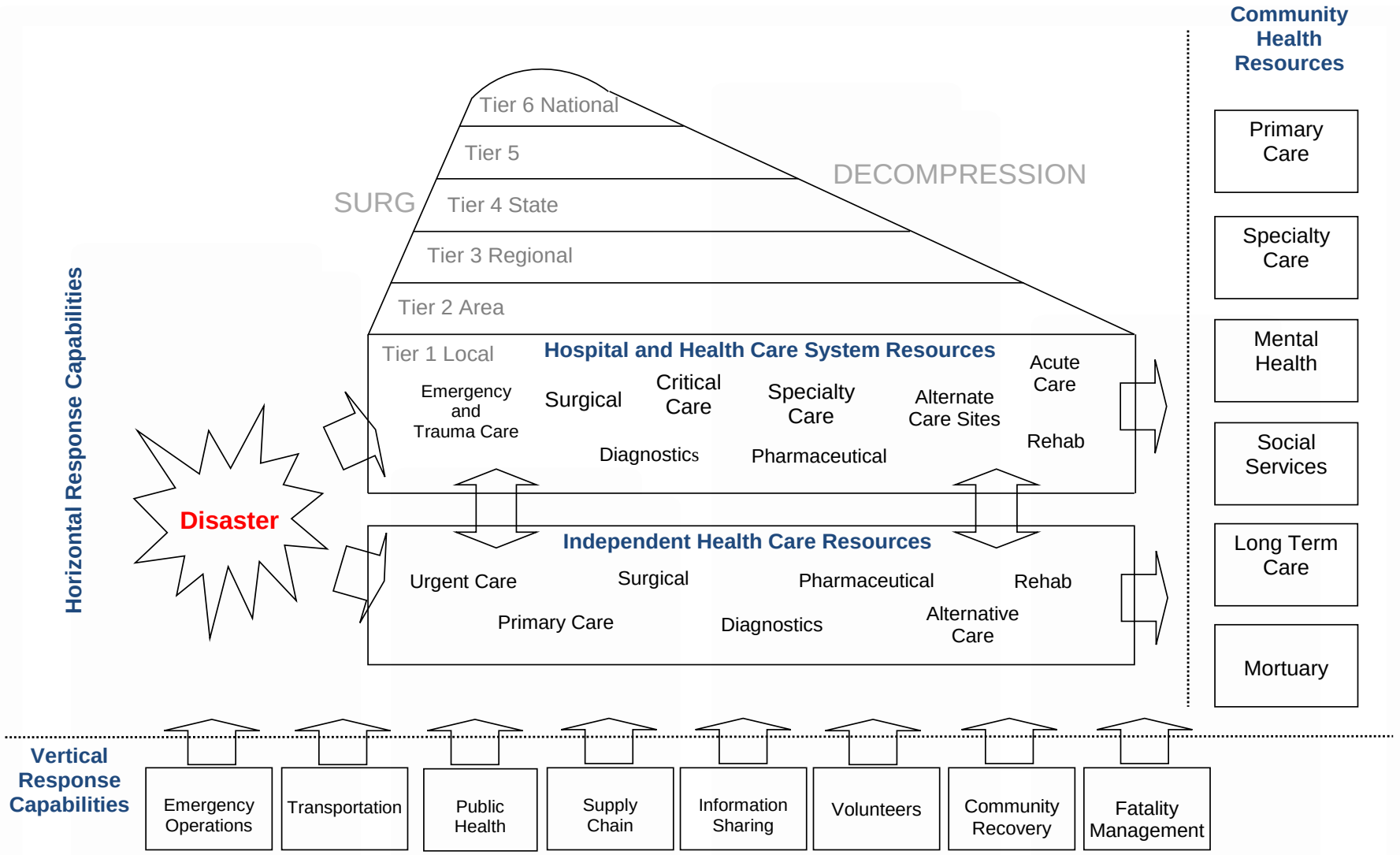
- The vision of the tier framework and healthcare emergency coalitions is to provide…
  - Rapid activation and coordinated approach to managing patients from large-scale or unusual incidents
  - Increased collaboration between health care, emergency response, and public service sectors
  - Increased communication interoperability between all participants in the greater Healthcare Coalition
  - Seamless integration with the national/federal system

- …so that our state will be able to provide the best medicine in the worst of times!

Appendix

Ebola Preparedness:
An Example of the
Healthcare Coalition Concept

DISASTER HEALTHCARE RESPONSE – A COALITION MODEL



The Ebola Apocalypse?

How could functional healthcare emergency preparedness coalitions help us in this current situation?

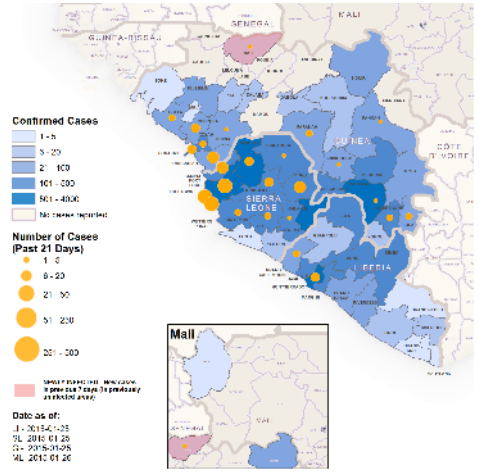
Ebola Preparedness and Coalitions

- Involvement of many organizations/disciplines
  - Public health
  - Hospitals, clinics, and healthcare facilities
  - EMS and Emergency Responders
  - 911 call/dispatch centers
  - Law enforcement
  - Emergency Management
  - And many others!

- Involvement of many levels
  - Private – Single location/facility vs. System
  - Local
  - State
  - National/Federal

Detection and Screening

- Situational awareness requires up-to-date, accurate information from numerous sources
- Consistent screening criteria to reduce confusion and/or panic
- Ability to quickly disseminate information among all partners



Detection and Screening – What Our Coalition Could Provide

- Regular medical intelligence reports
  - Collect and sort information from numerous sources
  - Provide analysis and summarize into “digestible” form
  - Allows for better informed decisions
- Make technical expertise from around the region available to all
  - Advise screening policies and procedures
  - Interpret clinical presentation (“Is this real or not?”)
  - Assist in education and outreach to staff and public
- Common forum/network for communication and dissemination
  - Easier to monitor
  - Easier for partners to push out information (“one-stop shop”)

Patient Referral/Transport

- Organized plan for safe, effective movement of patient to a healthcare facility for evaluation and care

- Linking the organizations/agencies involved
  - Ensure situational awareness
  - Ensure appropriate procedures activated
  - Smooth hand-offs/transitions

Patient Referral/Transport – What Our Coalition Could Provide

- Common forum/network to
  - Discuss designation of appropriate agencies and facilities
  - Ensure plans are operationally compatible between agencies/organizations
  - Disseminate information

- Make resources from around the region available
  - Technical expertise
  - Personnel
  - Equipment/vehicles

Patient Evaluation and Management

- Efficient use of resources to manage the patient as well as personnel
- Cross-disciplinary collaboration
  - Clinical providers and experts
  - Infection control
  - Supply chain
  - Environmental services
  - Public health and epidemiology
  - Media relations

Patient Evaluation and Management – What Our Coalition Could Provide

- Share resources and expertise
- Coordinate respective roles/responsibilities
- Ensure flow of necessary information to all partners
- Manage messaging to public

The Aftermath

- Coalition collaboration to assist in
  - Continued patient and contact monitoring
  - Clean-up and disposal
  - Continued public messaging and education
- Post-event assessment and improvement
  - Comprehensive analysis of strengths and weaknesses
  - Production of an integrated plan for future events

In Summary

- “Never let a good disaster go to waste.”
  - This is not just about ebola!
  - Utilize knowledge gained and progress made
- Opportunity to foster collaboration and coordination
  - New contacts and agreements
  - Development of regional healthcare preparedness coalition