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BEST PRACTICE

Emergency Management Programs for Healthcare Facilities: The Incident Management System

PURPOSE

This Best Practice explains the utility of the Incident Management System (IMS) for healthcare facilities.

SUMMARY

The IMS may help a healthcare facility manage its internal emergency operations, facilitate coordination with other healthcare organizations, and integrate with community response and recovery operations. Operational consistency will be improved by establishing a common management structure, enhancing information management, and maintaining span of control at each level of activity.

DESCRIPTION

Healthcare facilities should establish an IMS for their organization to use when directing emergency response and recovery operations. Many healthcare facilities are adopting variations of the Incident Command System (ICS) that are tailored for medical operations. ICS principles enable a healthcare facility to improve emergency operations through use of a logical management structure, defined responsibilities, clear reporting channels, and common language. This helps manage facility operations during an emergency, as well as integrate the facility's response with that of other local, regional, and national efforts.

Background Terminology

The IMS is based on the same principles as the fire service's ICS. The term *management* is used with greater frequency by healthcare facilities and other organizations that adopt ICS principles, but operate in a management environment on a daily basis. It makes sense for them to adopt a *management* system over a *command* system, since the latter may run contrary to their organizational principles. The IMS therefore distinguishes healthcare facilities from the nation's fire, EMS, and police agencies that may operate in a command environment at all times. The ICS and IMS are fully compatible systems.

The Incident Command System

The ICS grew out of the Firefighting Resources of California Organized for Potential Emergencies (FIRESCOPE) program of the early 1970s. FIRESCOPE was created after a series of wildfires caused local, state, and federal fire officials to realize they needed a standardized, flexible, and user-friendly command system to coordinate massive responses. The ICS model has been adopted by fire fighting agencies nationwide as a command structure for both normal and emergency operations.

In addition to the fire service, many incident response professions have adopted the ICS or other compatible command structure. For example, many EMS agencies, emergency management agencies, federal response units, and law enforcement organizations use the ICS to organize normal and emergency operations.

The National Incident Management System

The U.S. Department of Homeland Security (DHS) is currently developing an ICS-like system for use by federal, state, and local governments nationwide. According to Homeland Security Presidential Directive-5 (HSPD-5), the National Incident Management System (NIMS):

“...will include a core set of concepts, principles, terminology, and technologies covering the incident command system; multiagency coordination systems; unified command; training; identification and management of resources; qualifications and certification; and the collection, tracking, and reporting of incident information and incident resources.”

The NIMS system is currently under development, and its implications for healthcare facilities are as yet unknown. Emergency Management Programs (EMPs) at healthcare facilities should track the progress of NIMS through DHS to ensure whatever IMS the facility chooses is compatible with the national system. For more information, go to www.dhs.gov.

Key Concepts and Principles

The IMS is based on the following key concepts and principles:

- **Flexibility and Scalability.** The IMS is sufficiently flexible and scalable to be customized to a specific incident response. It allows a healthcare facility to choose which assets to activate in response to a specific type of situation, as well as how much of an asset to activate given the incident's magnitude.
- **Common Management Structure.** The IMS enables a healthcare facility to benefit from a clear, pre-determined management structure. This structure can be used during all types of incidents, regardless of which personnel are physically present in the facility.
- **Span of Control.** The IMS uses a manageable span of control at each level of activity. The span of control is the number of individuals one supervisor can manage effectively. It ranges from between three and seven resources for any activity during an incident. Five is considered optimal.
- **Community Integration.** The IMS provides a means to coordinate the efforts of individual agencies as they work toward common objectives in simple and complex incidents. It allows facilities to communicate and coordinate operations under a formalized management structure that lends consistency, fosters efficiency, and provides direction during a response.

IMS Structure

The IMS organizes the many emergency roles and responsibilities of a healthcare facility's personnel into five sections. These sections interact to coordinate an incident response using the concepts and principles outlined above. It should be noted that the IMS focuses on job *functions* instead of job *titles*. This ensures that the IMS is universally applicable from facility to facility, and from shift to shift.

In its most basic structure, IMS can be broken down into the following five sections:

- Management
- Operations
- Logistics
- Planning
- Finance/Administration

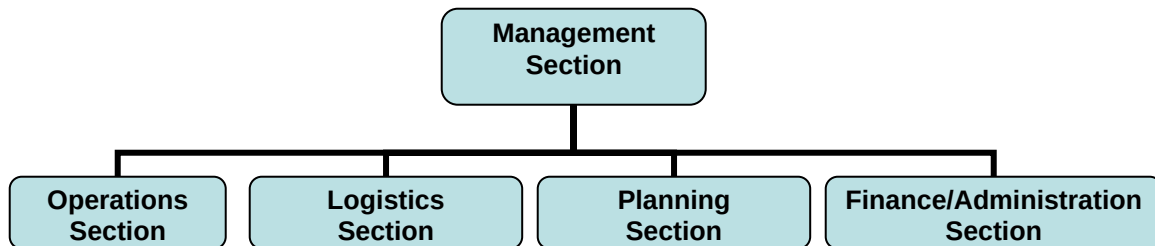


Figure 1. IMS Section Organization

This document provides a simple overview of the IMS. Other documents detail the specific tasks of the IMS sections. For further information on these systems for healthcare facilities, consult the resources at the end of this document.

Management Section

The Management section addresses all “strategic” incident issues at a macro level by developing and overseeing the objectives and strategies for emergency response and recovery operations. Additionally, the Management Section is responsible for the following three sub-sections:

- The **Safety and Security Section** manages traditional safety issues, preventative medicine and public health issues, and security tasks being performed by the logistics support function.
- The **Public Information Section** develops the healthcare facility’s public messages released to the media.
- The **Liaison Section** establishes contact and maintains coordination with the management sections of external response organizations.

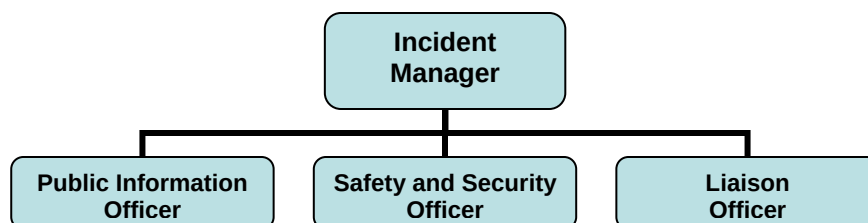


Figure 2. Management Section Organization

The Incident Manager directs the Management Section, and is responsible for the entirety of the emergency response. This is usually the senior administrator available at the facility when the incident is recognized. If the senior administrator is not available, another qualified staff member may assume the role of Incident Manager until the senior administrator arrives.

While the most obvious choice for this job may be the facility Chief Executive Officer (CEO), there may be others that are better suited for the position. Every Incident Manager should possess the following qualifications:

- An operational understanding of the EOP, the IMS, individual department operations, safety issues, finance issues, and potential threats to facility, staff, and patients;
- Solid leadership skills; and
- The ability to speak clearly, concisely, and comfortably to the media.

For small incidents, the Incident Manager may perform all the duties of the Management Section. However, as an incident evolves, the Incident Manager will most likely activate the Management Staff, and delegate duties to that staff. A Management Staff typically consists of a Safety and Security Officer, Public Information Officer, and Liaison Officer.

Operations Section

The Operations Section is responsible for actually responding to an incident. The tasks the Operations Section attempt to achieve are developed from objectives set by the Management Section. These tasks are intended to sustain the level of quality of care normally found in the facility. The Operations Section of a healthcare facility often consists of medical care, ancillary services, and human services. It may be further broken down depending on the size of the incident, and the resources available. The Operations Section is headed by the Operations Chief. This position is activated along with the EOP.

Logistics Section

The Logistics Section provides facilities, services, personnel, and materials in support of the incident responders. This section takes on greater importance during prolonged incidents where logistics may be a greater concern. The Logistics Section of a healthcare facility's IMS will likely assess the facility for damages, and maintain sanitation systems, communications, transportation, materials supply, and nutrition supply. This position is activated along with the EOP.

Planning Section

The Planning Section collects, evaluates, and disseminates information about the development of the incident, and the status of resources. For a healthcare facility this may include technical support of patient tracking, tracking the activities and progress of the various IMS Sections, and acquiring information from experts regarding specific response operations. While the Incident Manager will conduct planning during a smaller incident, a Planning Chief is often appointed for larger incidents.

Finance / Administration Section

The Finance/Administration Section maintains records of the incident, tracks incident costs, and conducts reimbursement accounting. If this section does not properly record and justify costs and financial operations, reimbursement may be impossible. Proper records are crucial for reimbursement of facility expenditures resulting from large-scale incidents, especially if the magnitude of the incident is sufficient to result in a presidential declaration. This section is activated along with the EOP.

The IMS for Healthcare Facilities

A healthcare facility's EOP should be based on its IMS. All clinical and other hospital staff should be trained to know their roles, responsibilities, and reporting duties when the EOP is activated. If a healthcare facility switches from another type of management system to IMS, its EOP should be revised accordingly.

Applicable Standards for Healthcare Facilities

The Joint Commission for the Accreditation of Healthcare Organizations (JCAHO) requires healthcare facilities that it accredits to establish an “all-hazards” command structure within the facility. According to JCAHO, this command structure should also link with the community’s command structure. The National Fire Protection Association (NFPA) similarly requires facilities that it accredits to model their emergency plans on the ICS in coordination with local emergency response agencies.

Model Systems for Healthcare

The healthcare community is increasingly using the IMS to organize its emergency operations. The following are examples of model incident management systems that healthcare facilities can use to develop their own system:

- **HEICS.** The [*Hospital Emergency Incident Command System \(HEICS\)*](#) was developed from the ICS as an operational model for healthcare facilities by the San Mateo County Department of Health Services. First published for national distribution by the California Emergency Medical Services Authority in 1992, the most recent edition—the third edition—was published in 1998. HEICS is the most commonly used template for healthcare facilities that are developing their own IMS. It provides organizational charts, job action sheets, forms, nomenclature standardization, patient tracking charts, lesson plans, policies, procedures, a resource directory, and a glossary. HEICS is intended for healthcare facilities to use when developing their own EOPs from scratch, or when reviewing or revising existing EOPs. Individual healthcare facilities should tailor HEICS to their specific needs. HEICS is available free of charge at <http://www.emsa.cahwnet.gov/dms2/download.htm>.
- **MaHIM.** The [*Medical and Health Incident Management System \(MaHIM\)*](#) is another variation of the ICS, though it is intended for the regional coordination of healthcare facilities. MaHIM is the product of Drs. Joseph Barbera and Anthony Macintyre of the George Washington University. It stresses a systems approach to incident management. Copies of MaHIM may be requested at www.gwu.edu/~icdrm/.

Special Considerations

Information Management

Healthcare facilities should establish an information management system well ahead of emergency response operations. Plans should define what needs to be communicated, and in what format it should be done. Whatever system a facility selects, it should be used in daily operations, not just emergency operations. A healthcare facility should decide on procedures for disseminating situation and asset assessments during emergency operations. Procedures should be in place for sending information up the IMS chain of command, and outside the facility through the Liaison Officer and the Public Information Officer. Establishing an IMS involves developing effective procedures for gathering and disseminating information. It does not involve spending money on new communications systems.

Incident Management Post

An Incident Management Post is an essential component of any facility’s response capability. It enhances the incident manager’s ability to direct operations in the facility, coordinate with other healthcare facilities, and integrate operations with any local emergency operations center (EOC). Facilities should consider locating the Incident Management Post away from the emergency department, and designating a backup location. Healthcare facilities should predetermine standard operating procedures, chain of command, and internal and external communications systems for the Incident Management Post.

Community Integration

While neither JCAHO nor the NFPA requires that a specific management system be used for emergency operations in healthcare facilities, they do require facilities to use a system that is compatible with its community. Before adopting a specific management system, healthcare facilities should first contact local emergency response agencies to make sure the systems are compatible. This is a critical first step to a facility's preparedness to handle major emergencies.

It is also important for healthcare facilities to plan for integrated operations with other local healthcare facilities. A Mass Casualty Incident (MCI) will result in resource sharing on a local and regional basis. It will be important for facilities to communicate effectively and efficiently, and the IMS will help coordinate a regional medical response. For more information on developing a compatible regional management system for large medical incidents, please see *Regional Hospital Planning*.

RESOURCES

Standards

JCAHO Environment of Care

- EC.4.10.2. "The hospital establishes the following with the community:
 - Priorities among the potential emergencies identified in the hazard vulnerability analysis.
 - The hospital's role in relation to a communitywide emergency management program.
 - An 'all-hazards' command structure within the hospital that links with the community's command structure."
- EC.4.10.9. "The plan provides processes for identifying and assigning staff to cover all essential staff functions under emergency conditions."
- EC.4.10.15. "The plan provides processes for cooperative planning among hospitals that together provide services to a contiguous geographic area (for example, among hospitals serving a town or borough) to facilitate the timely sharing of information about the following:
 - Essential elements of their command structures and control centers for emergency response.
 - Names and roles of individuals in their command structures and command center telephone numbers.
 - Resources and assets that could potentially be shared in an emergency response.
 - Names of patients and deceased individuals brought to their hospitals to facilitate identifying and locating victims of the emergency."
- EC.4.10.19. "The plan identifies alternate roles and responsibilities of staff during emergencies, including to whom they report in the hospital's command structure and, when activated, in the community's command structure."

NFPA 99 Healthcare Facilities

- 12.2.3.2. "The emergency management committee shall model the emergency management plan on the incident command system (ICS) in coordination with local emergency response agencies."
- 12.3.2. "The decision to activate the emergency management plan shall be made by the authority designated within the plan, in accordance with the facility's activation criteria. The decision to terminate shall be made by the designated authority in coordination with the authority having jurisdiction and other civil or military authorities involved."

- 12.3.3.1. "Identification of Emergency Response Personnel. All personnel designated or involved in the emergency management plan of the health care facility shall be supplied with a means of identification, which shall be worn at all times in a visible location. Specific means of identification for incident command system (ICS) personnel shall be provided, such as vests, baseball caps, or hard hats."

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