Recommendations for implementing the CICOM methodology during the COVID-19 response

Medical Coordination and Information Cell

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Glossary

**Alternative medical care sites (AMCS)**
Places that provide medical surge capacity in the health services network by increasing beds with adequate staffing and self sufficiency in care and operations, in keeping with the principles and standards of the emergency medical team (EMT) initiative.

**Emergency medical team (EMT)**
Teams of health professionals (doctors and nurses, physical therapists, paramedics, etc.) that provide direct clinical care to populations during emergencies, epidemics, and disasters, in support of local health systems.

**Guiding principles and fundamental and technical standards**
Principles and standards developed and promoted by the Pan American Health Organization and the World Health Organization that define the minimum requirements for emergency medical teams (EMT)\(^1\).

**National EMT requirements**
National adoption of the minimum technical requirements, principles, and standards, in accordance with the country’s own standards for its national response.

**Primary information**
Data compiled, processed, and communicated during the crisis by teams on the ground or by the competent institutions.

**Resource mapping**
Collection of information on the capacity of integrated health services networks to provide clinical care (number of available beds, operating rooms, clinical staff, ambulances, etc.) and on medical surge capacity through the deployment of EMTs and AMCS.

**Secondary information**
Documentation, evidence, or data developed in recent years that serve as the basis for determining actions and setting response priorities during an emergency.

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Background

The technical recommendations in this guide provide information on the methodology for setting up medical coordination and information cells (CICOM, Spanish acronym) as a key function of health emergency operations centers (EOCs). This will facilitate decision-making on how to increase surge capacity through the deployment of emergency medical teams (EMTs) and the installation of alternative medical care sites (AMCS), in cooperation with integrated health services networks and prehospital health care systems.

The key functions of the CICOM methodology are:

- Mapping of national resources that facilitate the deployment of EMTs and/or AMCS
- Flexible registration and verification mechanism through the Virtual CICOM platform
- Technical and operational support for EMT and/or AMCS response
- Support for information management to identify clinical care needs and facilitate the response
- Support for the health EOC in decision-making
- Support for case management and patient transfer
- Monitoring of adherence to EMT principles and standards
Key roles of CICOM

CICOM can provide support in four key roles:

1. **Mapping national resources**
   - Continuous ongoing information gathering.
   - Updating of care resources (ambulances, medical air transport, local EMT, etc.)
   - Information from public and private, fixed and mobile health facilities (number of available beds, operating rooms, doctors and nurses, etc.).

2. **Data entry, processing, and verification**
   - Collection and analysis of information on the national and/or regional availability of EMTs and AMCS.
   - Support for building the capacity of local response teams, in keeping with the recommendations and requirements of the PAHO/WHO EMT initiative.

3. **Supporting the response**
   - Contextual assessment to determine the need for medical surge capacity.
   - Coordination support for the deployment of EMTs and AMCS.
   - Technical and operational support during EMT and AMCS response.

4. **Monitoring the response**
   - Monitoring deployment of EMTs and AMCS.
   - Monitoring of compliance with the recommendations and requirements for EMT and AMCS response.
Basic CICOM components

CICOM consists of the following basic components:
The table below describes the key functions of each CICOM component:

<table>
<thead>
<tr>
<th>Components</th>
<th>Functions</th>
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| Coordination          | • Ensure that the components are adequately linked.  
                       • Support the information management mechanism.  
                       • Support the health EOC to facilitate decision-making on clinical care and EMT/AMCS management.  
                       • Ensure close and ongoing communication between the CICOM components and EMTs/AMCS                                                                 |
| Technical support     | • Coordinate the registration of EMTs and AMCS, following national procedures.  
                       • Improve the clinical care provided during the response by monitoring compliance with the recommendations and requirements established for EMT and AMCS response.  
                       • Facilitate access to national clinical protocols and guidelines and monitoring of their application.                                                                 |
| Operational Support   | • Facilitate links with immigration and customs authorities to streamline the arrival and deployment of regional teams.  
                       • Support the placement and deployment of EMTs and AMCS.  
                       • Look for gaps and logistical needs that may arise during EMT and AMCS operations.  
                       • Ensure the development and implementation of national and local procedures for transferring patients between EMTs, AMCS, and integrated health services networks.  
                       • Support EMTs during mission completion and demobilization.                                                                 |
| Information Management| • Facilitate the mapping of EMTs and AMCS and health care resources to guarantee clinical care during the emergency.  
                       • Set up an information management system to facilitate monitoring and reporting on EMT and AMCS activities.                                                                                                                                                   |
| Point of contact      | • Guarantee smooth and timely communication, both physically and virtually, with the actors involved in EMT and AMCS response  
                       • Establish formal channels for receiving calls and messages or written reports through systems such as e-mail or other messaging applications.                                                        |
Considerations when setting up a CICOM

The following are the key recommendations for setting up a CICOM:

- **Structure**
- **Supplies and equipment**
- **Staffing**
- **Information management system**

**Structure**

The CICOM’s physical area and structure will depend on the available space in the health EOC’s facilities and the volume of the expected EMT and AMCS response, based on the context or scenario of the emergency.

The CICOM should be physically located within the health EOC. It is important to ensure that emergency information boards are set up in the operational situation room and are accessible to all members of the health EOC.
**Staffing**

It is recommended that the health professionals in the CICOM receive training as EMT coordinators\(^2\) at either the national or regional level, as it will give them a better understanding of their role in the CICOM and the tools to employ for its operations.

The CICOM organizational structure is modeled after the incident command system (ICS), and the number of professionals in each component will be determined by the range of control\(^3\) that ensures its good performance.

When there are not enough human resources to fill the posts in the CICOM components, a single professional can exercise the functions of multiple components.

**Equipment and supplies**

A CICOM requires logistical resources for its operations, including computers and printers, office materials and supplies, and especially whiteboards or walls to share and display the information. It is necessary to facilitate supplies, support equipment, and daily maintenance of the facilities, since these have a significant impact on staff activities and performance.

**Information management system**

Information management (IM) consists of a series of processes that control the life cycle of the information – from collection (by creation or capture) to its final disposition (archiving or deletion) – guaranteeing the integrity, availability, and confidentiality of the information.

Figure 1 depicts the primary flow for information management. This goes from data collection, processing, and analysis to generate updated products for the health EOC, to the reports that will be distributed to the various audiences and authorities for the necessary national and/or local decision-making.

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\(^2\) EMT coordinators are professionals who have taken the regional (or national) International EMT Coordinator course and play an important role in the country’s EMT initiative. Their role centers on emergency deployment to support the coordination of EMTs; support the health EOC, through the CICOM, with information management and EMT coordination; and participate in missions to evaluate EMT capacities in the countries of the Region, among other functions. See the document on implementation of the EMT initiative in the Americas, 2020. [https://www.paho.org/es/documentos/implementacion-iniciativa-emt-americas-2020](https://www.paho.org/es/documentos/implementacion-iniciativa-emt-americas-2020)

\(^3\) Under the incident command system (ICS) methodology, the span of control determines the number of people that a supervisor can manage in every component of the structure. The maximum number is five people.
Much of this information interacts with numerous actors that provide information on the situation and collaborate in communications. In many cases, these same actors become consumers of the information products (for example, evaluation reports, key messages for the media, situation reports, and maps).

It is recommended that the professionals working in information management have communication and planning skills and be detail-oriented and highly capable of analyzing large volumes of information, including qualitative information that may be relevant to the needs of the population living near the alternative sites.

**CICOM tools**

A key aspect for information management is having the digital and physical tools needed to do the work.

These tools require a physical and technology infrastructure that is continuously available during an emergency, along with adequate technical support to guarantee their operation.

Physical tools include charts, whiteboards, and flipcharts. Documents should be in formats and sizes that are easy to view and should adequately display the information in the right order, without providing excessive information. The objective is for EOC staff and visitors to have a clear picture of the current status of the emergency at a glance.

Even when digital tools or systems are in place, there should always be physical back-ups in order to ensure that activities can continue if the digital systems are interrupted.

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4 Adapted from OCHA (2017), UNDAC Course, PowerPoint presentation.
Virtual CICOM
The Virtual CICOM is an on-line CICOM tool for information management and coordination of EMT and AMCS response. Relevant information from any EMT or AMCS can be entered and made available on this platform, facilitating the flow of information from each of the teams to the health EOC and other actors in the integrated health services network.

EMT and AMCS coordination toolkit
Every CICOM should have a physical and digital toolkit to optimize the coordination and management of information on the response. These tools may include:

- A document folder with guidelines and recommendations for EMT and AMCS operations
- Digital tools (applications, internet, etc.)
- CICOM activation procedure
- List of key contacts, including CICOM and health EOC staff
- Calendar of CICOM meetings
- Registry of EMTs in the country
- List of available international EMTs and their status in the WHO classification process
- Matrix of available international EMTs
- Evaluation forms and reports on the EMTs and AMCSs deployed
- Logistical form for receiving and deploying EMTs
- List of providers and technical services of interest for EMT and AMCS operations
- Matrices of the capacities of the integrated health services networks
- Matrices of the capacities of the prehospital emergency medical services
- Matrix for rapid evaluation of facilities
- Daily reporting folder and end-of-mission folder
References


