Health Emergency Coordination Center Management (PHE-M)

Overview

The Health Emergency Coordination Center Management application supports the whole process from the citizen’s emergency call to the hospital. All the detailed information about the incident is recorded, and the episode is monitored from the time of dispatch until its arrival to the hospital. Among other functionalities, the use of triage protocols (special algorithms) for the operators / dispatchers is important for better estimation of the severity of the incident and the selection of the appropriate resources (e.g., ambulance, mobile unit) to be dispatched.

The Health Emergency Coordination Center Management application belongs to the pre-hospital emergency care family (ICS-E) of FORTH-ICS’ Integrated Care Solutions suite. It is based upon an open, scalable and evolvable architecture that integrates distributed information and knowledge in a flexible manner, focusing on the timely and effective delivery of the appropriate information to all authorized users. Being the outcome of applied research, it encompasses both state of the art trends and real-world requirements for effective use.

The main characteristics of the Health Emergency Coordination Center Management application are:

- It can be installed either as stand-alone system or in combination with other ICS applications.
- It is a subsystem of an integrated solution.
- It supports automation of business processes both within and between healthcare facilities.
- It can electronically interface with third party applications and open devices. All interfaces are based on standards such as HL7, DICOM, XML, and web services.
- It is customizable and scalable according to the needs of each institution.
- It supports role based access control.

Target Domains

The application is suitable for pre-hospital health emergency coordination centers.
Description

Main Functionalities

The supported functionalities of the Health Emergency Coordination Center Management application include:

- Creation and filling of an electronic “Incident Card” (e.g., demographics, incident details).
- Severity estimation of an incident by means of triage protocols.
- Selection of domains to coordinate.
- Creation of crew shifts for ambulances and mobile units.
- Support for mass accidents.
- Electronic health record of chronic patients’ history, and history of patients (transferred patients) already in the system’s database.

Minimum Technical Requirements

Database server: SAP Sybase SQL Anywhere 9 or PostgreSQL 9.1, 4 GB RAM, 100 GB Hard Disk. Application Server: 4 GB RAM, 200 GB Hard Disk. Clients: Compatible with the latest versions of popular web browsers (e.g., Microsoft Internet Explorer, Google Chrome, Mozilla, etc.). Windows desktop version also available.

Additional Information

The ICS suite follows high quality international trends regarding both the structure of the Electronic Health Record (EHR), as well as integration with third party systems through the use of internationally acclaimed communication standards and protocols (like HL7, DICOM, etc.). This system is deployed at the Pre-hospital Emergency Coordination Center (EKAB) of Crete and has already recorded more than 450,000 incidents since 1996.

Other products of the pre-hospital emergency care family (ICS-E) of ICS include applications for the Telephone Operator (PHE-TO), the Radio Dispatcher (PHE-RD), Incident Monitoring (Coordination Center part) (PHE-IM), Incident Monitoring (Ambulance part) (PHE-AA), Automated External Defibrillator Network Management (PHE-ED), and Pre-Hospital Emergency Care Protocol Management (PHE-PM).

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