Operating Rooms Management (OR)

Overview

The Operating Rooms Management application supports the facility, within a healthcare organization, where surgical operations are carried out by medical and nursing professionals. More specifically, it supports recording of the minutes of a surgery, recording of the post-operative instructions, as well as electronic ordering of medicines and medical supplies at the pharmacy and materials management department.

The Operating Rooms Management application belongs to the nursing and medical applications family (ICS-M) 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 Operating Rooms 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 surgery clinics and operating rooms in healthcare facilities.
Description

Main Functionalities

The supported functionalities of the Operating Rooms Management application include: access to the time plan of each operating room, electronic ordering of medicines, medical supplies, and examinations, recording of medicines and materials administered to patient for the surgical operation, recording of the surgery minutes and of the post-operative instructions.

The application communicates with information systems for:

- Pharmacy and Materials Management for ordering, order cancellation and administration of drugs / medical supplies.
- RIS/ LIS for ordering / order cancellation of examinations and viewing results.
- Business Intelligence / MIS for the electronic transmission of data for statistical analyses.

Minimum Technical Requirements

Database server: Microsoft SQL Server 2000 SP3 or Oracle 10g R2 or PostgreSQL 9.1, 8 GB RAM, 200 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.).

The Nursing and Medical Applications (ICS-M) family of ICS is certified with the Seal of Quality Electronic Health Record (EHR) Level 2 by the European Institute for Health Records EuroRec. The testing took place in 2011 and proved compliance with all 50 Seal-2 criteria.

Other products of the nursing and medical applications family (ICS-M) of ICS include applications for Ward Management (WM), Supply Management (SM), Outpatient Clinic (OC), Emergency Department (ED), Radiology Information System (RIS), Electronic Health Record for medical specialties: Pathology, Cardiology, Pediatrics, Orthopedics, Intensive Care Unit (EHR), and Hospital IT Department (M-ITD).

Contact details: Dimitrios G. Katehakis
katehaki@ics.forth.gr
www.ics.forth.gr/ceha