



Hospital Information System



Copernicus™ is Eutech's Healthcare product suite and **Hospital Information System (HIS)** is one of Copernicus™ modules.

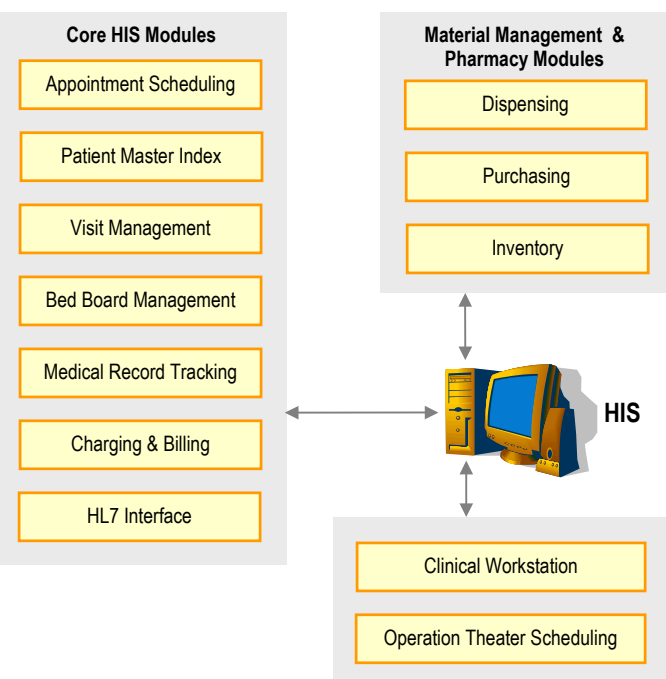
Hospital Information System (HIS) provides a complete suite of applications that are required to manage a modern hospital. It is an open, scalable, integrated solution covering clinical, administrative, financial and billing transactions for hospital management.

HIS is developed based on open standards like ODBC and HL7. Interfacing Copernicus with other hospital third party software is seamless and ensures smooth operation due to adaptation to open standards. Copernicus can be interfaced with various Accounting/GL software packages to provide a complete end-to-end solution for the hospital operations.

The Web architecture of the HIS enables certain modules accessible through Internet, which allows key users in the hospital to access the data anytime using the Internet as a communication channel.

Highlights of the system

- True 'N' tier Client Server based system
- Complete Graphical User Interface on Windows®
- Relational Database Management support (Oracle®)
- Industry standard HL7 interfaces
- ICD 9 CM, CPT 4 & ASA codes integrated
- Integrated with Bar Code scanners and printers
- High security options – User/Terminal/Function levels
- Day end processes to automate routine procedures
- Comprehensive Online Documentation



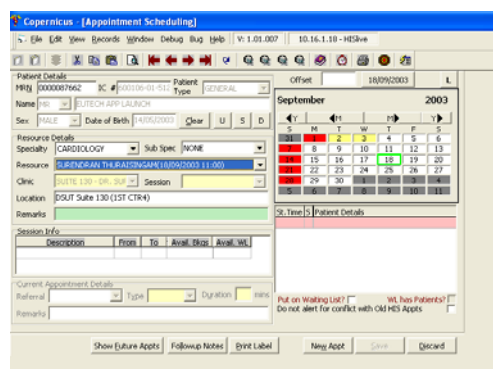
Modules in HIS

Appointments

This module provides comprehensive scheduling of appointments for the different clinics based on availability of various hospital resources such as doctors, equipment etc. The software gives a graphical view of the time slots available for booking.

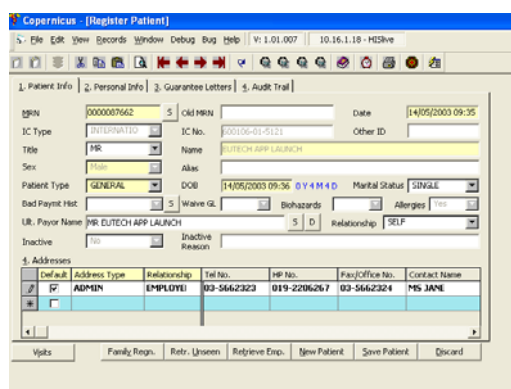
Expert functionality covers features such as configuration and maintenance of the hospital master calendar, clinic timings within the master calendar and the set-up of doctor and clinic sessions, including the flexibility to set absence times within a given session.

The system has the facility to capture Do On Arrival (DOA) and Trace On Arrival (TOA) instructions for each appointment, thereby facilitating the counter staff to ensure that proper steps are taken without any time delay when the patient arrives for the visit.



Patient Master Index

The patient registration module allows capturing patient basic information (contact details, allergies and biohazards etc) as well as financial related information (Insurance policy, payers- eligibility, conditions and amounts). Capturing financial information of the patient at this stage itself allows the hospital to streamline its billing and collection efficiently. The module optimizes and automates outpatient workflow from creation of individual visits and clinical consultations, right up to billing and collection of charges.



Visit Management

In addition to streamlining visit management, the system handles interim billing, visit closure and bill settlement.

This module enables users to create a Visit, apply GL's to the visit and print the necessary documents such as Face sheets and Labels.

This module also enables an interim bill to be generated, as well as close the visits with its final billing.

Bed Board Management

The system allows facilities to perform admissions, maintaining of bed board, bed-pricing structure, bed allocation, bed transfers and maintains up-to-date bed-status information.

The system alerts housekeeping staff of any changes of the bed allocations e.g. bed requires cleaning, and provides various reports like patient status and admission report by doctor.

Medical Record (MR) Tracking

HIS provides a sophisticated medical record tracking module.

For medico-legal purposes, certain details are still need to be maintained on paper, besides the availability of electronic medical records. Examples are consenting forms, legacy medical records, and medical records from other facilities, etc.

This module handles the tracking of the patient's MR folder within the organization. Barcode scanners can be utilized to rapidly check in patients' folders.

Key objective of this module is to be able to track who was responsible for the MR folder at any particular time and where was it last located. Search options as well as alerts are provided

Charging and Billing

This module caters to a one-point billing a particular visit. It handles discount & subsidy schemes, which may depend on numerous business rules. It is designed to handle the complexities of private hospital billing (including company schemes and packages).

The system allows for elaborate charging schemes per contract type and client. Various reports such as outstanding payments, counter reconciliation information are provided and postings to financial systems are optional.

HL 7 Interface

System provides HL7 interface for ADT, Diagnosis and Charging, thereby giving the option to interface with drug dispensers, coding software etc.

Material Management (MMS) and Pharmacy Modules

MMS & Pharmacy module is a synergetic combination of four distinct functions that are vital to a hospital's pharmacy - Dispensing, Billing, Purchasing and Inventory Management.

With emphasis on a decentralized workflow for front counter operations and a centralized back-office, this module can be readily integrated with HIS core module.

Dispensing

In all cases where medication is required, the doctor can prescribe on-line in the clinical module. The prescription is then sent automatically down to the main pharmacy where the labels can be printed directly (either automatically or after intervention by the pharmacist). This thus eliminates the time consuming and error-prone transcription step.

After the medication is picked, labeled and handed over to the patient the pharmacy staff prints a bill for the drugs, collect money, and issue a receipt for external patient.

Purchasing

Purchase requisitioning process is built into the system, thereby enabling controls on what is purchased & when. Departmental consumption of materials is tracked in addition to the patient being billed for supplies.

Upon order entry the system verifies the stocks and automatically reduce stock levels after which the patient is billed for the items.

The system also detects if the updated stock level falls below a certain level based on predefined algorithms. If so, the system issues a warning to inform staff to replenish the inventory. Auto purchase orders ensure that the system generates the purchase orders on the preferred supplier based on the par levels at the stores. This ensures that there is no delay in the ordering process, thereby ensuring continuous availability of all items.

Inventory Management

When the supplier provides items against the purchase order, the items will be received by appropriate staff, who will inspect, store items, and enter the receipt of items into the system. The system will update the purchase order with the items received.

The system provides for unlimited stores, rental items, blanket purchase orders, consignment items, stock transfers, department issues, stock take and stock adjustment.

Clinical Workstation

This module integrates clinical findings, lab/histopathology orders, clinical diagnosis, prescriptions and disposition of patients across multiple visits.

It standardizes the recording of consultation notes and streamlines visit management by managing order entry and results reporting across various departments such as biochemistry laboratory, histopathology, and nurses' workstation.

It standardizes the recording of consultation notes and streamlines visit management by managing order entry and results reporting across various departments such as biochemistry laboratory, histopathology, and nurses' workstation.

Operation Theater Scheduling Module

The Copernicus ORS forms a tightly integrated part of the HIS solution. It shares critical masters (like surgery master checklist) with the HIS, including medical alerts and allergy data. This module has the facility to define Surgeon specific preference cards for each surgery. This ensures that the exact supplies/equipments/intra-op items/drugs are made available for the surgery.

In addition to this there is a seamless interface with Inventory & Billing systems to handle supplies and charging. This ensures that the stock levels are depleted on usage and the patient also gets charged correctly.

The ORS captures pre-surgery and post-surgery details in detail. These details include the doctors, resources, tests to be done, medication to be given, the times – in OR time, Begin Anesthesia time, End Anesthesia time and so on. The times captured will be used along with few factors like surgery type, place of surgery, etc. to calculate the tariffs, which will then be transferred to the main module of HIS, thus facilitating efficient charging system.

Theatre scheduling plays a critical role in helping an OR department improve the quality of its managing time and service. Copernicus provides an easy to use Graphical User Interface that shows the progress of each case as they are happening with details of the patient and the surgeons who are involved in the surgery.

Copernicus also has a white board option wherein, the staff who are supposed to be involved in the surgery are shown on this screen, which can then be projected.

Corporate Headquarters

Eutech Cybernetics (S) Pte Ltd

Blk 55 Ayer Rajah Crescent
#04-01/07 Singapore 139949
Tel: (65) 6778 7995
Fax: (65) 6777 4186

Global Offices

Eutech Cybernetics (M) Sdn Bhd

Suite No 1701, 17th Floor,
Wisma Hamzah Kwong Hing,
No. 1 Leboh Ampang, 50100
Kuala Lumpur, Malaysia
Tel: (60) 3 5630 6512
Fax: (60) 3 56306513

Eutech Cybernetics India (Pvt) Ltd

1st Floor, G.K.S. Tower, 935,
Poonamallee High Road, Chennai
600084 India
Tel: (91) 44 2661 1897
Fax: (91) 44 2661 1898

Eutech Cybernetics (Lanka) Pvt Ltd

No. 48, Park Street, 2nd Floor,
Parkway Building, Colombo 2
Sri Lanka
Tel: (94) 112 304 493
Fax: (94) 112 542 305

Eutech Cybernetics Inc, USA

2581, Washington Road,
Suite 230, Pittsburgh,
PA 15241
Tel: (1) 412-854 7889
Fax: (1) 412-854 7899

Eutech Cybernetics Inc, USA

333, Twin Dolphin Drive,
Suite 145, Redwood City,
CA 94065
Tel: (1) 650 654 1141
Fax: (1) 650 654 8928

For More Information

Contact

sekar@ecyber.com

Visit Online

www.ecyber.com

Key Features

Among the key features of the HIS system are:

- Appointments, Admission and Visit Management
- Bed Board Management
- Operation Room Management System
- Visit Charging and Invoicing
- Pharmacy Management
- Inventory Management
- Claims Management
- AR/Debt Collection – interface with SAP/Oracle Financials and Great Plains
- Medical Records Management
- HIPAA Compliant

Competitive Advantages

- HIS covers the combined benefits of a Hospital Administrative System, a Physician Support System and a Decision Support System
- Compliant to industry standards such as HL7 (version 2.3), ICD-9, CPT4 and NDC data standards).
- Interfaces to devices (DICOM standard)
- Flexible, modular design, facilitating easy incorporation of added functionality
- Meets the needs of hospitals of all sizes- from small, rural hospitals, to large healthcare enterprises
- Supports payment through insurance and online processing of insurance claims for patient. Charges can be sent to the insurance company in the form of UB 92 reports

List of modules of Copernicus™ Healthcare Suite:

- Hospital Information System
- Pharmacy Management System
- Purchase Order & Inventory System
- Accident & Emergency System
- Mammography System
- Operating Room Scheduling System
- Clinical Workstation System
- Electronic Medical Records
- Generic HL7 Engine

For more details on Copernicus™ and Eutech's client references contact: sekar@ecyber.com or mag@ecyber.com



Copyright © 2003 Eutech Cybernetics. All rights reserved.
Eutech Cybernetics Pte Ltd.

All other brand names are trademarks or registered trademarks of their respective owners and are used herein for identification purposes only.