



TECHSOLUTIONS



*Innovation. Excellence. Empathy*



The world today is becoming even more connected. Digital technology has launched a new era of human empowerment and a revolution in business and society as a whole.

In an effort to bridge the gap between legacy systems and advanced digital systems in hospitals and medical institutions, TechSolutions's expertise and technologies are sought by hospitals and medical entities across multiple areas such as Electronic Medical Record, Pharmacy, Laboratory, Enterprise Resource Planning etc.

TechSolutions introduces its healthcare software solution developed by Sisoft which has been soundly operating ever since 1989. After proving credibility through its outperforming built-in features, Sisoft earned over 29 awards from both national and international associations.

Our healthcare software solution is currently deployed in over 153 hospitals across the Middle East region.

Our aim in TechSolutions is to transform the patient hospitalization experience into a customer-centric healthcare ecosystem while providing cost-effective care. Our systems support distinctive patient interaction through enabling real-time digital information sharing between care providers and patients in terms of prevention methods and diagnosis to treatment.

## >> Health Information System (HIS)

With a system platform derived from ORACLE technology and database, SisoHIS flagship solution is a robust system capable of supporting patient care in a complex setting, ranging from 30 to 1000 beds. The system is implemented in top rated hospitals in Turkey and the Middle East. SisoHIS provides a paperless health care environment, as well as Electronic Health Records. The system is web-based and compatible with desktops, tablets and mobile devices.



### 1 Patient Registration and Kiosk

Using swift and detailed registration methods, the system searches for patient information and registers new patients, avoiding duplicate records. The patient uses ID cards to check-in to any facility in the hospital through patient Kiosk which will produce sequential check-in numbers to organize patient queues to manage smooth flow of hospital services.

### 3 Insurance Management

Hospitalization coverage can be systematically recorded and verified through multiple support methodologies that comply with the Lebanese billing system such as Ministry of Health - National Social Security Fund, private medical insurance coverage or direct cash payments. The system supports multiple insurance contracts and price ranges based on patient class and privileges.

### 2 Bed Management

A 'Bed Board' dashboard is available at the Admission Office which will identify the number of vacant beds to facilitate organized allocation of patient beds.

The Bed Board shows real time census of:

- Clean and unclean Beds
- Female, male and children's beds
- Reserved beds
- Isolation beds

### 4 Patient Pay Module

The system supports and records bill settlements under various payment methods (cash, credit card or cheque payment). All financial operations are reflected in the ERP system. Special discounts can be applied in accordance with hospital policies and upon approval of authorized personnel.

### 5 Billing and Collection

The system supports both simple and complex billing operations. Moreover, the schedule of payments is sent electronically to the concerned party with specified due dates in order to avoid late settlements.



### 6 Electronic Health Record (EHR)

Through this application, patients will be able to access personal medical record, check appointments, extract lab & radiology results and print medical reports.





## >> Electronic Medical Record (EMR)

The system supports ICD 10 (International Classification of Diseases). ICD 10 comprises of statistical and comparable classification used by the Ministry of Health, Statistics Institutions, Hospitals, Social Insurance Institutions, Disease Researches etc. The system is built according to HL7 standards for interfacing with other systems and medical devices. The system is capable of supporting the following health institutions:

- Large and small hospitals ranging from 30 to 1000 beds
- Health networks
- Ministry of Health
- Army Forces hospitals
- Primary Health Care centers
- Standalone clinic centers
- Day Surgery units

*Techsolutions provides a complete health care solution to support complex health care institutions with multi-sites and clinics.*

### Modules include: General Modules

- Clinics and Appointments
- Inpatient
- Lab Information System
- Pharmacy Information System
- Radiology Information System RIS+ PACS
- Nursing Forms and Procedures

### Specialty Modules

- Emergency Medical Service
- Intensive Care
- Surgical and Operations System
- Sterilization
- Hemodialysis
- Mother and Newborn
- Dental
- Dietary
- Electronic Health Record
- Medical Record Dictation System
- Morgue
- KIOSK
- Networking and Communication

## >> Laboratory Information System (LIS)

The LIS is fully integrated with HIS and ERP along with related laboratories and X-Ray machines.

Modules include:

- Microbiology and Parasitology
- Hematology
- Chemistry
- Blood Bank

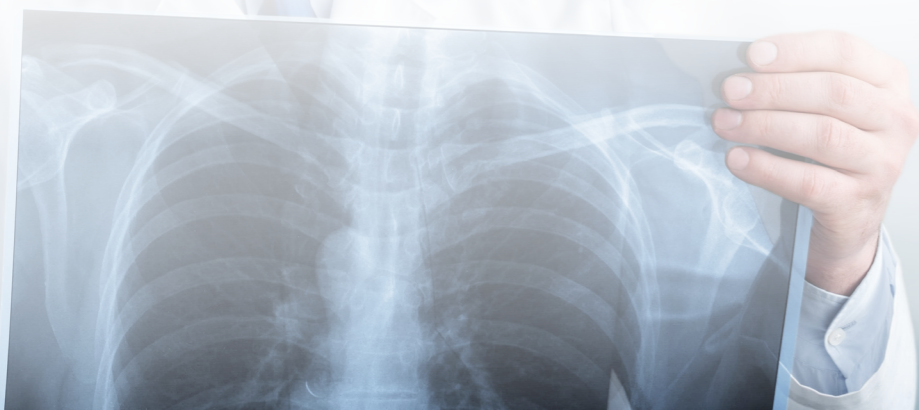
## >> Radiology Information System (RIS)

### 1 PACS

The SisoPACS medical image server works as an organizer that allows the system to interact, store and communicate with other systems. It may interact with devices and imaging softwares using Dicom 3.0, and can communicate with the radiology information system in HL7 format or in different formats.

### 2 Mobile PACS Solution

PACS Mobile interface is fully integrated with the SisoPACS server. It allows images to be viewed on all devices that are capable of running IOS and Android operating systems. In addition, some basic image editing tasks can be performed. Thus radiologist can read the images from anywhere and dictate the radiology reports.



## >> Pharmacy Information System (PIS)

The pharmacy Information system supports complex pharmacy operations in advanced care setting such as receiving order from physician, medication search, dose calculation, lot number tracking, vendor display and dispensing. Using the barcode technology the system can identify the drug name, dose expiry date, and other user-specified criteria. Moreover, the system supports inpatients and outpatients requests. Reports can be produced reflecting pharmacy operations, productivity and stock level. The system applies HL7 standards and thus it can be integrated with automated medication dispensing systems.



## >> Sisoft Mobile

Sisoft Mobile supports access to EMR by health care providers. The Mobile devices supplied by Sisoft, are durable and easy to clean handheld devices which allows physicians to access their patient medical records.

Physicians can simply access entire inpatient information swiftly through Sisomobile iOS application independently of time and place. Diagnosis and treatment methodologies related to each patient can be monitored easily through the application.

## >> Security and Accessibility Module

The system incorporates "RFID" security module to define the access level for each employee or visitor. Dashboards and reports are available to show the flow of staff and equipment throughout the hospital. Moreover, valued assets and expensive medications can be tracked using RFID technology.

## >> Networking and Communication Module Kiosk Module

Kiosk System enables the patient to electronically take a queue number at the polyclinic and check - in his/her appointment with the physician.



## >> Enterprise Resource Planning (ERP)

The ERP system works in harmony with the SisoHIS on the same platform which adds value to the hospital as no additional efforts are needed in terms of cost and resources on integrating the two systems. This unified platform maximizes the benefits of automating hospital operations and transactions.

### 1 Finance Module

The financial module supports complex financial operations which can be managed and monitored centrally. Accounting forms (offsetting, collection, and payment), debit notes, notice payments, accountable forms, writs and transfer letters can be formed.

### 3 Purchasing, Bidding and Stock Management Module

The purchasing module supports fully electronic bids starting from technical and financial specifications, stocks under promotion, and submission instructions. The bids can be received electronically and distributed to specialized committee for evaluation. Received stock can be fully tracked for quantities and critical low levels.

### 2 Human Resource Management Module

The human resource module creates a record for each employee including his/her contract and payroll. Annual performance appraisal can be done electronically as per criteria set by HR department. Complex HR operations can be tracked for each employee including hiring, promotion, resignation and termination of services. In addition, reports on workforce can be compiled in charts and tables format.

### 4 Patient Billing

TechSolutions will allow health care institutions to record all services, including medication and material for each patient separately. Patient bill can be produced instantly and settlement can be done according to guarantor coverage.

### 5 Debit and Credit Follow-up

The auxiliary accounts, (owing/payee, deposit fund account etc.) can be collectively recorded and tracked based on institution/person and billing in the current system.

### 6 Budget Account Tracking

The Budget Account option is available along with relative accounting statements.

The following features and financial characteristics can be produced systematically:

- Expense Budget and Comparison Identifications
- Tender Budget Expense Reports and Budget Expense Reports (Budget Account Code, Accounting Calculation Code, Form Date, Receiving Type)
- Revenue Budget Balance (Period Budget Chart, Date Ranged Chart), the Expense Chart (Period Budget Chart, Date Ranged Chart) and the Revenue Chart (Period Revenue Chart)
- Financial charts (comparative balance sheet, budget comparative balance sheet, revenue/expense chart, budget comparative revenue/expense chart etc.)



## >> Consultation Services

Our team constitutes of specialists in health informatics systems implementation, designated to provide premium consultation services for the successful delivery and maintenance of the project assigned. We can map your current system; re-engineer its mechanism to deliver a top performing scheme. Once completed, we will perform training sessions for elected staff in order to ensure right execution of the new system.



The project plan takes into consideration the following:

- Time Management
- Resources Available
- Financial Aspects & Cost Control
- Risk Factors
- Quality Control & Customer Satisfaction
- Effective Communication and Reporting to Stakeholders

### 1 Business Analysis

Proper Business Analysis will enable change in an organizational context by defining needs and recommending solutions that deliver value to stakeholders and guide your organization towards success amidst achieving your mission.

### 5 BI and Reporting

What is not measured cannot be controlled; hence proper reporting sheds the light on how your organization is currently performing and what areas need improvement based on Key Performance Indicators.

### 2 Business Process Re-engineering

Upon introducing new systems or while enhancing existing ones, performing adequate workflow analysis will highlight present impeding factors and system complexities that affect overall process efficiency. Subsequently, enhancements are made accordingly, which in return will ease operations for both patients and the health care team.

### 3 Enterprise Architecture Design

Defined organizational structural planning will direct IT architecture efficiently so as to construct an extensive Enterprise Architecture that corresponds to current and future requirements.

### 4 Project Management

Project management is the key factor in achieving success in any venture. We can plan your project according to PMP methodologies and make sure the plan is implemented on time and according to the set budget.

### 6 Training

In TechSolutions we acquire a specialized team dedicated to extensively guide nominated staff to further facilitate efficient implementation process.

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Innovative solutions empowering healthcare

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