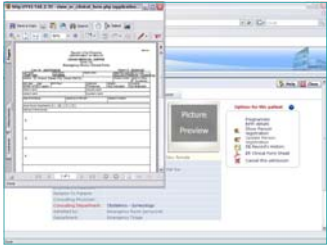


Our Services



Software Development

With software architects and developers trained in leading Philippine universities, Segworks Technologies has acquired unique expertise and track record in developing software solutions for accounting, education, healthcare and law.



Consulting Services

Segworks Technologies provides consulting services for network infrastructure, hardware specification and acquisition, Internet connectivity, hosting, financing, feasibility study, project management, and training.



Segworks Technologies Corporation

Development Center

Belacura Court
Seminary Road, Bangkal
Davao City, Philippines

Contact Us

Phone/Fax: +6382 2977035
URL: www.segworkstech.com www.segworks.wordpress.com
E-mail: samuel@matunog.com

v. 3/31/08

Hospital Information System

State-of-the-art. Cost-effective. Local Support.



Features

- Web-based
- Modular
- Integrated
- Comprehensive
- Customizable
- Localized
- Barcode Ready
- Secure

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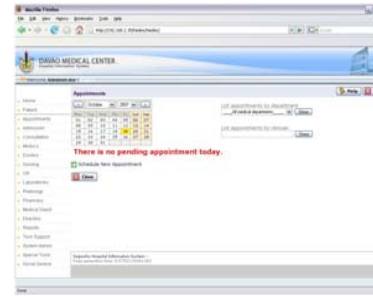
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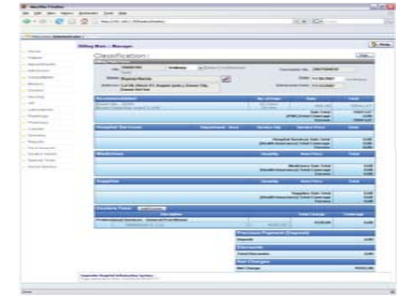
Appointment

Display of appointments according to date, department or clinician involved.
Scheduling new appointment.



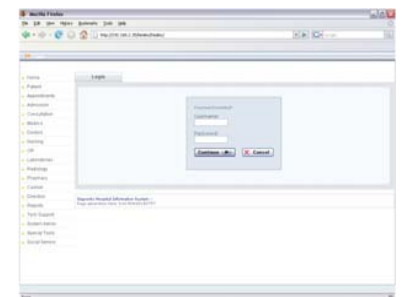
Barcoding

Barcode scanning support are built-in.



Billing

All services using the system are automatically captured for billing purposes, and can be integrated to an accounting system.



Log-in

Allows automatic loading of the user's personal preferences or the computer's particular configuration. Logging in gives the computer an identity which facilitates many automation features, otherwise the server will assume default values.



Overview

Healthcare Industry and IT

Adoption of information technologies (IT) in hospital operations is increasing at a rapid rate. Driven by competition, significant reduction in costs of high-end computer hardware, pervasive Internet access, proliferation of medical equipment with IT capability, appreciation by health workers of the use and potential of IT in their fields of specialization, more free and open source software (FOSS) alternatives, and several other factors, IT has become the mantra for survival and success.

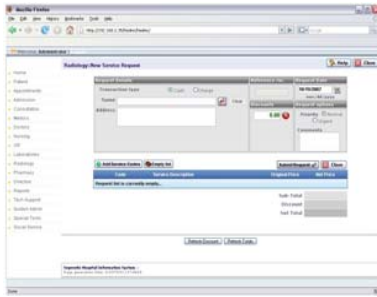
Free and Open Source Software Evolution

During the past two decades, the software market has been dominated by Commercial Off-the-Shelf (COTS) products such as MS Windows and Oracle database management systems that offer a myriad of functionalities at a reasonable price. However, the intrinsic limitations of COTS software (e.g. closed source code, lock-in effect, expensive upgrades, security weaknesses etc.) have emerged over time. This led to the development of a parallel 'economy' based on Free and Open Source Software (FOSS). FOSS refers to programs whose source code is made available for use and modification without the expensive license fees imposed by COTS software editors.*

"In what is probably the first major independent study contrasting Linux & open source against proprietary Microsoft software, open source was shown to have a lower TCO by up to 30%."
Research and Markets, 2004

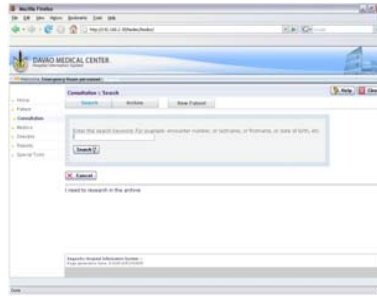
The good reputation of free and open source software has attracted the attention of many governments around the world and they are now considering the systematic migration of their servers and their workstations to FOSS. The leading countries, currently migrating to FOSS, are the United Kingdom, Germany and France but it is estimated that more than 20 other countries are preparing policies and action plans to adopt FOSS systematically in their government and industrial systems. The strategic rationale for migrating to FOSS is typically related to

*http://www.tbs-sct.gc.ca/fap-paf/oss-ll/foss-ll/foss-ll01_e.asp



Radiology

Add and view list of radiology test requests, schedule and archive requests, and manages borrowing of radiology materials such as x-ray films, CT scans, ultrasounds, etc.



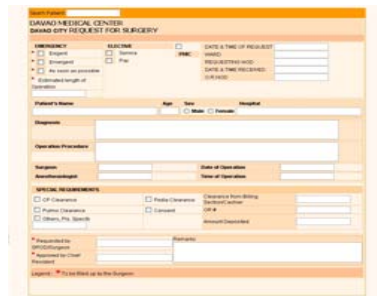
Consultation

This functionality is associated with the ER and Outpatient modules, where the user can view list of patients being served at the ER or OPD, search for patients and view a patient consultation data.



Special Tools and Functions

Special tools and functions. Document editor modules, "bundy clock" module, duty planner, news editor and submission system, color options configurator, access password manager, photolab, integrated intracam surveillance system, among many others.



Surgery

Entry form for request for surgery, with sections for clearances, billing charges, and notes from requesting surgeon.

three main factors: 1) the expectation of direct cost savings, 2) the reduction of economic loss at the national level caused by commercial software imports and 3) the hope to better develop national IT expertise by means of access to source code (and development of original components) which is not really possible with COTS packages.



Segworks Advantage

Segworks Technologies has embraced and is a leading FOSS advocate in southern Mindanao. As software developer and consultant, Segworks Technologies has developed, modified, installed and maintained a number of FOSS in varied settings. Our competitive advantages are:

Experience. Our growing list of satisfied clients—schools, cooperatives, construction companies, hotel, hospital, bank, church, among others—attest to the wealth of experience we have gained in the complex work of developing, customizing, updating, installing and supporting both proprietary and open source software in Microsoft and Linux platforms, in standalone, intranet and Internet installations.

Quality. Graduates of leading universities and computer schools in the country, our software engineers, developers and support staff bring well-rounded and cutting-edge education to the challenging work of software development and integration. Solid grounding in mathematics, humanities, computing technologies, oral and written communication give our **development team** a clear edge in handling the multi-faceted software needs and demands of clients.

Local Support. Clients require local training and technical support for they seldom have a dedicated and well-rounded IT team to handle their computing technologies. While vendor support and expertise are ideal, they are often expensive, inconvenient and untimely. Segworks provides clients with the comfort that expert support is always within reach.



Technical Support

Technical support and maintenance.
Reporting damage and requesting repairs.
Info query system. Automatic signalling for reception of queries and requests.
Documentation of technical jobs.
Information system.



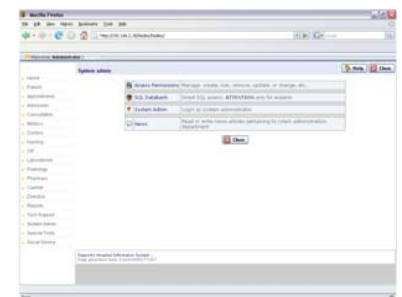
Insurance and PHIC

Services that are covered by insurance, such as the PHIC, can be coded, indexed and reported according to insurance specifications.



Pharmacy

Ordering of pharmaceutical products.
Organizing quick order catalogs.
Pharmacy database management.
Automatic signalling of reception of orders. Product search and archive functions.



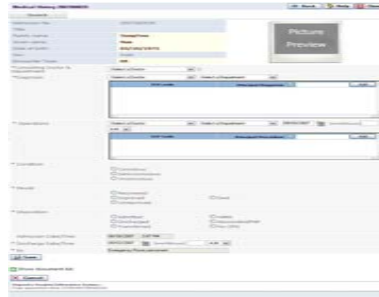
System Administration

A fine-grained system administration module allows the administrator to manage access permissions, database server, configuration functions, among others.



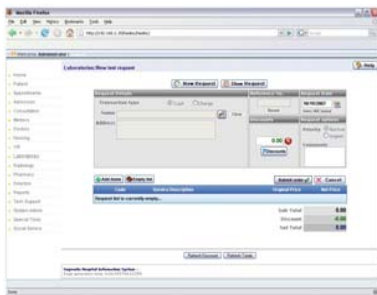
Person

Registration of person's basic personal data (demographics). This module stores and processes personal data for all persons not just patients. Display of past and current EMR records, PDF document, etc.



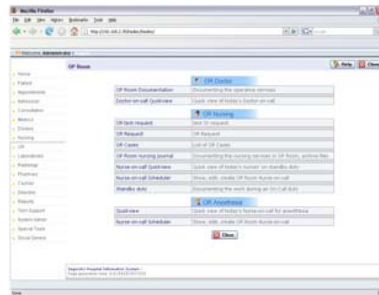
Medical Documents

A text based documentation system for both inpatient and outpatient departments, replacing a paper-based documentation of medical records. Auto-display of principal diagnosis/procedure for every ICD/ICPM code added.



Laboratories

Entering and displaying laboratory examination results for patients. Pending tasks processor. Currently, the blood bank, medical/serological, pathological, bacteriological laboratories are functional.



Operating Room

Operating Room. Documenting surgical operations (surgery, anesthesia, nursing, material, medicines, etc.), OR duty planner, search and archive functions, international ICD and OPS documentation systems, surgical operation planner, DRG intra/post op diagnosis/procedures documentation, etc.

Hospital Information System

A **hospital information system (HIS)** is a comprehensive, integrated information system designed to manage the administrative, financial and clinical aspects of a hospital. This encompasses paper-based information processing as well as data processing machines. As an area of medical informatics, the aim of a HIS is to achieve the best possible support of patient care and administration by electronic data processing.

The Business Need and Challenge

For hospitals without a HIS, the challenge is to acquire one that addresses present and future IT requirements. It must be modular, scalable, web-based and cost-effective.



For hospitals in various stages of automation, the challenges are, among others: making proprietary specialized software to work with each other; making the network flexible to handle multiple platforms and operating systems; reducing data redundancy and making data sharing possible; facilitating upgrades and avoiding delays in development and downtimes; simplifying graphical user interfaces (GUI); and improving user navigation design.

SegHIS Solution

SegHIS is a localized, customized and enhanced version of an open source hospital information system. It is a smart software for hospitals and health care organizations. It is designed to integrate the different information systems existing in these organizations into one single efficient system.

SegHIS solves the problems inherent in a network of multiple programs that are noncompatible with each other. It can integrate almost any type of services, systems, departments, clinic, processes, data, communication, etc. that exist in a hospital. Its design can even handle non-medical services or functions like security, maintenance, etc. It is modular and highly scalable.

SegHIS uses a standard SQL database format for storing and retrieving data. The use of a single data format solves the problem of data redundancy. When config-



ured accordingly, it can support multiple database configuration to enhance data security and integrity.

It is a web based software and all its functions can be accessed with a common web browser thus there is no need for a special user interface software. All program modules are processed on the server side. Module updates and extensions do not require changes on the browsers thus there are no network interruptions and downtimes. Its design supports multiple server configuration to distribute traffic and improve speed and efficiency.

Security

SegHIS is secure. All entries to departments, clinics, services, functions, sub-functions, all modules where data is entered or changed are password protected. A user must have an access permission for the function that he wants to use. The access permission has only limited hierarchical privileges. That means that a physician with an access permission to a module for documenting patient's therapy progress has no automatic access permission to nursing ward management. An access permission must be explicitly granted to a user. Only the system administrator can access the databank. Passwords are stored in encrypted form in the databank.

All access and access attempts are logged. HTTPS server encrypts the data being transported. Additional security features under development include expiry date for access permissions, encryption of data in the databank, and special access permission and password for external access (e.g. from outside via Internet).



Data Privacy

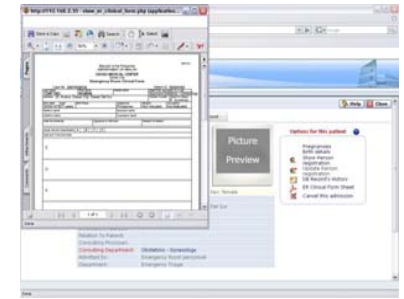
SegHIS respects and observes the laws and regulations regarding data privacy specially the protection of medical records, patient's medical history, and organizational, business and trade secrets. All entries to SegHIS modules where patient's data can be viewed, changed, or deleted require proper access permission.

Sample Modules and Functionalities



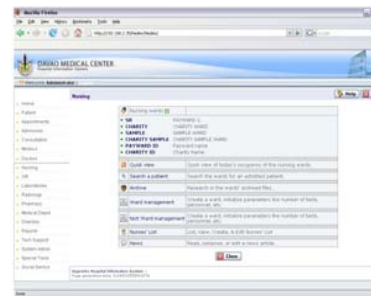
Home

Standard intranet browsable pages for the hospital presenting general information, news, etc. Online editing with WYSIWYG editor.



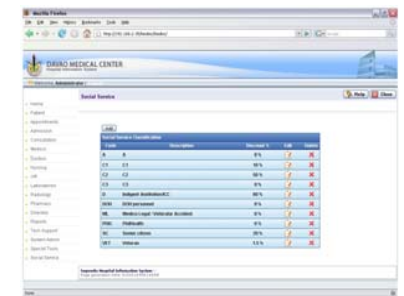
Admission / ER

Barcode-ready patient admission system, such as sample ER admission entry form, with search and archive functions. Edit and display of current EMR records; create, view and print Inpatient Clinical Form/Cover Sheet in PDF format.



Nursing

Nursing wards administration, patient bed planner, patient data monitoring, nurse planner, appointment scheduler, patient search, documentation, patient data folders, test request scheduler, on-duty doctor quickview, lab test results, DRG documentation, photo documentation, etc.



Social Service

A special module for government hospitals which offer various social services to indigent patients.