

Hospital Management system.

It is Desktop -based meaning that it is built using Microsoft C# technology.

Programming languages used include SQL Server for database and C# from business logic and Infragistics /DevExpress for UI Design. These have all been used to create a perfect user-friendly system with an interface that gives the system user an experience like no other.

The web-based system gives the users the ability to work from anywhere in the world provided they can access internet.

In case the system is to be used in a specific location only; a local host server can be used and this option does not require internet services.

Our Hospital Management System is incorporated with a multi-user, multi-level authentication system which ensures that different users can only access the panels where their work is.

Computer software has revolutionized how we find, share and store information. The digital world is moving at a rapid pace and doesn't show any signs of slowing. For businesses, digitized operations have become a fundamental part of success. But why is this software so important? How significant is the impact of using it to run your operations? We're glad you asked.

Why Our Hospital Management System?

Computations

Computation of patient bills, and other charges is accurately done and is controlled by parameters that users can change.

Online

Any time a user can print off the ~~balance sheet~~ and P&L. Any transaction made on the front end affects the final accounts leaving no room for batching.

Multi-user and Multi-Locations

As long as server is powerful any number of users can work in the System concurrently.

Security

Each user created in our Hospital Management System can be restricted to certain levels of access depending on their duties and responsibilities.

Set-up time

Due to its simplicity, Our Hospital Management System takes a short time for users to have their books in the system.

Accountability

With Our Hospital Management System, all the Stock and commodities in the Hospital like foodstuffs, housekeeping items etc are managed with tracking for every piece used. Reports can be pulled anytime to ascertain whether the staff are managing the commodities well.

Robust, with good backup facilities

The server backs up the database automatically after every 24 hours.

Generating Reports

Our Hospital Management System is designed in such a manner that it generates different kinds of reports for any duration of business.

Biometric Technology

Our Hospital Management System is designed to incorporate biometric technology for identifying System Users, Employees and Patients, a feature that solves many problems which come due to lack of a proper way of identifying a patient with a unique system number.

Customization

Our Hospital Management System can be customized according to the customer needs. We pride ourselves of building custom systems.

Training

Our Hospital Management System comes with a comprehensive user manual that explains all the system operations. Training is also provided to users based on their needs.

Integrated Communications

Online systems are the future of digital systems. We bring you the future right now.

Our Hospital Management System Functionalities/Modules

The Features/Modules breakdown is as below:

1. Dashboard

The dashboard houses four other minor modules:

i) Appointments Manager

Adding new Patient appointments and printing appointment note. Editing upcoming appointments
View upcoming appointments.

ii) Summaries Mini-Panel

Graphical Representation of the income summary. (Income vs. Cost) for the past 7 days.
Graphical comparison between the numbers of new patients, Revisits and Reviews received in the hospital.

Pie chart representation of the Accounts Ledgers (Assets, Expenses, Revenue, Equity and Liabilities).

iii) Personal Manager

View messages sent from the system and other users.

Send Messages to various users, user groups or everyone. View online users for initiation of chats.

Add, Edit and update personal tasks once completed. The tasks come with a reminder feature.

iv) Queue Manager

View In real time all patients in various rooms and also all patients current on queue. Get automated user alerts when patients are queued to their rooms

Get automated patients dispatch alert.

Track patient movement within the hospital.

Improve services delivery by tracking waiting time and services.

Front Desk Queue - FlowMed- MAKINDU NURSING HOME

Front Office Queue | Dashboard | Find Patient | Register Patient | Patient Medical File | Nursing Station Queue | View/Reprint Acceptance Slip | Employee Self Service | Punch In/Out | Charges Settings | Front Desk Parameters | Appointment Calendar | Patients Reports | Encounter Reports | Charges Reports | Log Out | Exit

Queue Management

Search Patient | Register Patient | Refresh Queue | Generate Acceptance Slip | Proceed as Cash Patient | Add to Next Queue | Post Charges | View Patient Invoice | Schedule Appointment | View Patient Encounter | Cancel Encounter | Finalize Patient Encounter | Exit

OP No:	Patient Name:	Visit Date:	Start Time:	Length(Minutes):	Encounter ID:	Billing Mode:	Initiated By:	Initiate Date:	Invoice No:	Acceptance Slip No:	Invoice Amount:	Current Location:
OP20180042	NOONE EDGAR	26/03/2019	18:39:24	94492	13	CASH	System Admin	26/03/2019	INV201952	0	500.00	CASH OFFICE
OP20180049	KELLERMAN JAKE BALLARD	30/01/2019	12:44:30	164047	12	CREDIT	Salim Mkirani	30/01/2019	INV201951	CR18044	18,850.00	RADIOLOGY
OP20180048	OTILE BROWN	23/01/2019	23:12:54	173499	11	CREDIT	System Admin	23/01/2019	INV201950	CR18043	1,250.00	FRONT OFFICE
OP20180047	OLIVER QUEEN	22/01/2019	14:46:28	175445	10	CREDIT	System Admin	22/01/2019	INV201949	CR18042	7,420.00	IN PATIENT
OP20180046	CONNIE NIELSEN	21/01/2019	11:23:27	177088	9	CREDIT	System Admin	21/01/2019	INV201948	CR18041	200.00	IN PATIENT
OP20180045	K.SISTO JEREMY	21/01/2019	10:44:40	177127	8	CREDIT	System Admin	21/01/2019	INV201947	CR18040	20,700.00	DOCTORS CONSULTATION
OP20180044	R. JASON MOORE	20/01/2019	11:31:01	178520	7	CREDIT	System Admin	20/01/2019	INV201946	CR18039	9,500.00	BILLING DEPARTMENT

User Name: Salim Mkirani | User Level: Admin | SALIM-SERVER\SQLEXPRESS01 | Biometric Authenticated: False | Login Time: 2019-05-24 10:51:08 AM | PC Name: SALIM-SERVER

Image 1: Hospital Management System Dashboard

2. Reception

Registration of New Patient- capturing the personal details (Demographics), next of kin details, employer details, insurance scheme details. Thumbprints can be captured at this stage using thumbprint scanners. Photo of the patient is also captured during this stage. Quickly search patients by names, telephone no, email address ID no and other patient details.

Manage patient information where editing is needed for change .

Patient Chart: Contains all the information about a certain patient. From consultation files, patient bills, admission forms, discharge summaries etc; this panel has everything the system has on a certain patient.

Quick Billing of patients for consultation services.

Queue patients to different department / rooms .

Front Desk Queue - FlowMed- MAKINDU NURSING HOME

Find Patient

Save Changes Initiate Patient Encounter View Patient Medical Data Authenticate Patient Schedule Appointment Delete Patient Data Take Picture Exit

Find Patient

Patient Name: OP20180042 EDGAR NOONE Find Sur Name: EDGAR
 OP Number: OP20180042 First Name: NOONE
 Other Names: Gender: Male Age: 52
 Encounter Type: Regular Emergency

Patient Details

ID Number: 12900809 Telephone: 0000000000000000
 Address: Employer: Religion:
 Gender: Male Female
 Nationality: Get Passport Upload Finger Print
 Category: MALE ADULT Blood Group:
 Date of Birth: 18/01/1967 Registered By: Hospital Admin
 Date Registered: 18/01/2019 14:21:41 Finger Print Status: FINGERPRINT NOT ENROLLED

Active Out Patient Encounters

OP No:	Patient Name:
OP20180042	NOONE EDGAR
OP20180049	KELLERMAN JAKE BALLAR
OP20180048	OTILE BROWN
OP20180047	OLIVER QUEEN
OP20180046	CONNIE NIELSEN
OP20180045	K SISTO JEREMY
OP20180044	R JASON MOORE

Amount: Current Location:
 500.00 CASH OFFICE
 18,850.00 RADIOLOGY
 1,250.00 FRONT OFFICE
 7,420.00 IN PATIENT
 200.00 IN PATIENT
 20,700.00 DOCTORS CONSULTATION
 9,500.00 BILLING DEPARTMENT

User Name: Salim Mkirani User Level: Admin SALIM-SERVER\SQLSERVER01 Biometric Authenticated: False Login Time: 2019-05-24 10:51:08 AM PC Name: SALIM-SERVER

10:52 24/05/2019

Image 2: Patient Data Management

3. Triage

Quick and easily input vital signs of the patient (Temperature, Weight, Blood Pressure, Pulse Rate, Respiratory rate, Random Blood sugar).

Enter any known problems/allergies plus any other details of the patient.

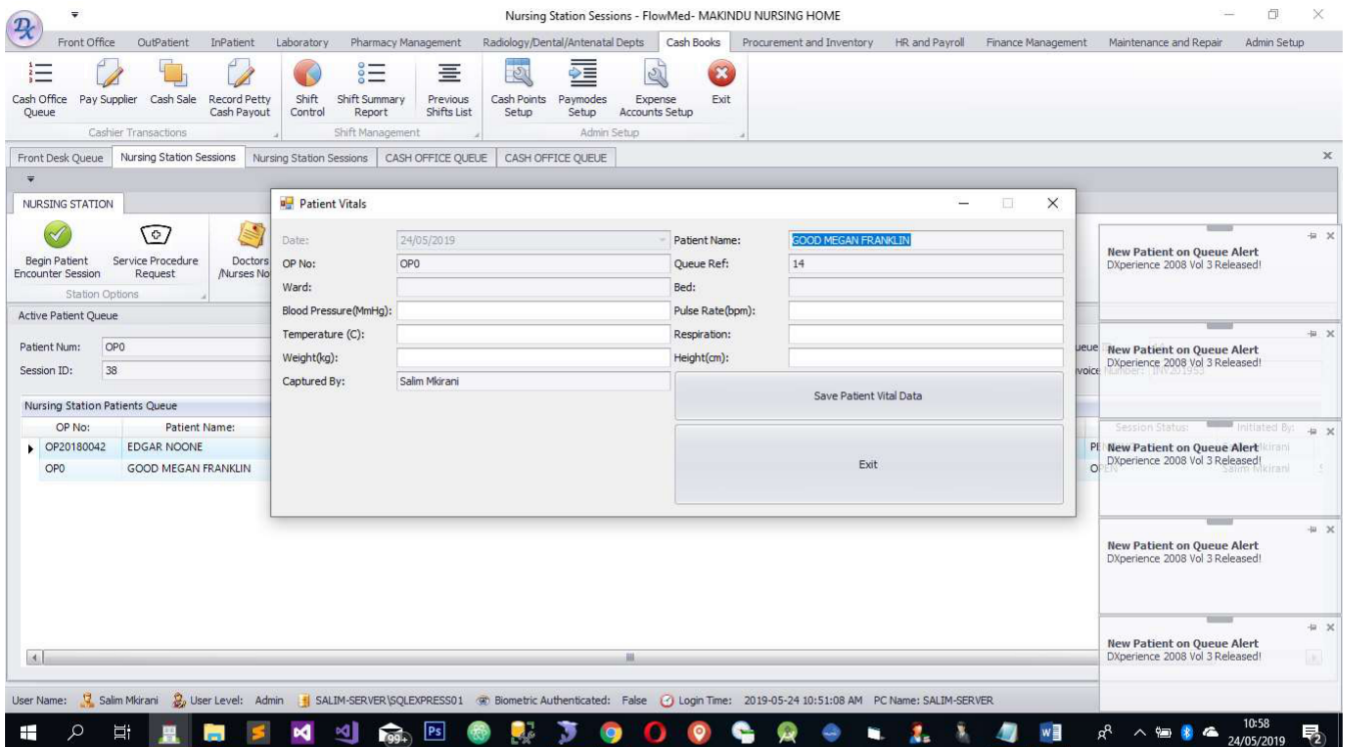


Image 3: Triage Panel

4. Consultations

NB: This module is replicated in the following modules/ departments: General Consultations, Pediatrics, Eye Clinic, Dental Clinic, Physiotherapy, Emergencies, HDU, Dialysis, Ambulance, MCH.

Aided entry of ,family & socio-economic history ,past medical history of presenting illness ,physical examination and other clinical notes.

Computers assisted differential diagnosis and drug prescriptions.

View the vital signs of the patient as pre-entered by the nurse

Review previous visits notes, prescriptions, investigation and patient history Quickly select/enter diagnosis for each patient.

Send the patient to another department e.g. physiotherapy or eye clinic to see a specialist.

Prescribe drugs , order investigation and view results ones posted by the relevant department.

Prescribed drugs are automatically reflected at the pharmacy where they are located by patients.

Clinical instruction template to be filled by the doctor while sending laboratory, x-

ray and ultra-sound request.

Patient bill is automatically updated whenever an investigation is requested or a prescription is made.

Recommend patient for admission and record admission notes.

Review inpatient by viewing cadex, prescription administration chart and vitals entries. Doctor can also write their progress notes in this panel.

Make patient appointments.

A billing module is provided for any sort of special services offered that the doctor might want to bill.

Image 4: Consultations/Doctor's Panel

5. Laboratory

Billing of Lab tests posted by the doctor.

Lab technologist can view if requested lab test has been paid for before proceeding with the test for cash paying patients.

Manage all lab requests(both internal and external).

All lab tests are standardized and pre-configured in the system.

Quickly and easily fill lab results and send back to the doctor.

Automatically generate lab reports indicating time of request and time test is done.

Automatically append the name of the technician connecting and posting the result. Track all laboratory consumables and get a alerts on stock levels .

View a printable lab result

The screenshot displays the 'Service Lab Request' window in the FlowMed- MAKINDU NURSING HOME system. The window is divided into several sections:

- Request Details:** Includes fields for Request No. (0), Patient No., Patient Name, Requested By, Serviced By (Salm Mirani), Session ID (0), Queue ID (0), and Specimen ID.
- Examination Requests:** A table with columns for Specimen, Test Code, Test Description, Test Charge, Time Collected, and Collected By.
- Item Used:** A section for recording items used, with fields for Item Code, Item Description, Qty Used, Qty Wasted, and Wastage Comment.
- Status:** Radio buttons for 'Failed' and 'Successful'.

The background shows a sidebar with navigation options like 'Laboratory Queue', 'Specimen Setup', and 'Test Categories'. The taskbar at the bottom indicates the user is Salm Mirani, logged in on 2019-05-24 at 10:51:08 AM.

Image 6: Laboratory Analysis Panel

7. Radiology

Billing of Radiology scans posted by the doctor.

Radiology technologist can view if requested services has been paid for before proceeding with examination for cash paying patients.

Manage radiology requests(both internal and external) .

Most radiology tests are preconfigured in the system.

Quickly and easily fill results and send back to doctor.

Upload scans to the system for viewing by the doctor.

Automatically generate radiology report showing time of request and time done. Automatically append the name of technicians collecting and posting the results. View a printable radiology result.

Radiology Station Sessions - FlowMed- MAKINDU NURSING HOME

Front Office OutPatient InPatient Laboratory Pharmacy Management Radiology/Dental/Antenatal Depts Cash Books Procurement and Inventory HR and Payroll Finance Management Maintenance and Repair Admin Setup

Radiology Queue Radiology Booking Stock Requisition Receive Stock Radiology Reports Charge Setup Antenatal Queue Receive Stock Stock Requisition Antenatal Reports Theatre Department Options Exit

Front Desk Queue Nursing Station Sessions Nursing Station Sessions CASH OFFICE QUEUE CASH OFFICE QUEUE Laboratory Queue Radiology Station Sessions

Nursing Station

Begin Patient Encounter Session Triage Vitals Procedure Request Admit Patient Suspend Encounter Session Add Patient to Queue Refresh Queue Exit

Nursing Station Encounter Activities

Active Patient Queue

Patient Num: OP20180049 Patient Name: JAKE KELLERMAN BALLARD Queue ID: 12

Session ID: 34 Session Status: OPEN Queue Name: RADIOLOGY Invoice Number: INV201951

OP No	Patient Name	Queue Date	Time Queued	Wait Time	OpenTime	Session Close Time	Session Length(m)	Session Ref	Queue ID	Referred From
OP20180049	JAKE KELLERMAN BALLARD	30/01/2019	15:30:00	0	15:30:18	16:40:52	34	12		

Session Status: Initiated By: [User Name]

New Patient on Queue Alert
DXperience 2008 Vol 3 Released!

New Patient on Queue Alert
DXperience 2008 Vol 3 Released!

User Name: Salim Mkirani User Level: Admin SALIM-SERVER\SQLEXPRESS01 Biometric Authenticated: False Login Time: 2019-05-24 10:51:08 AM PC Name: SALIM-SERVER

13:42 24/05/2019

Image 7: Radiology Panel(X-Ray and Ultrasound)

8. Theatre

Billing of procedures performed on the patient in theatre. Taking down of theatre notes on the patient file.

Theatre timetable to manage all upcoming theatre procedures.

Automatically generate theatre report showing time of request and time done. Automatically append the name of theatre technicians posting the theatre notes. View a printable document showing the theatre notes.

Image 8: Theatre Module

9. Pharmacy

Billing of Patient's drugs as prescribed by the doctor.

Pharmacist can view if drugs have been paid for before issuing to cash paying patients.

Can print prescriptions if required.

Maximum and minimum stock levels (for stock control and reorder) Ability to control expiry dates

Automatic mark-up unit cost.

Track stock movement (Bin Card).

Special treatment bonus stock and discount.

Image 9: Pharmacy Module

10. Payments/ Cashier Module

Bills posted from all other departments are viewed in this module for payments. The bill can be broken down to be paid using several methods of payment i.e. Cash, Credit, Companies(Insurance companies), and Bank(e.g. Lipa na M-Pesa). The total payments have to match the total bill for payment to go through. In case of credit, the transaction has to be authorized by a user with higher powers. Cash payments automatically hit the cashier's ledger for End-Of-Shift Cash reconciliation summary report.

Print receipts and invoices incase of company patients.

Image 10: Payments Module

11. Records

Admitting patients to the system, noting down their mode of payment and the doctor in charge of them.

Automatic generation of printable admission report.

Discharge of patient noting down diagnosis code and patient diagnosis.

11. Records Module

12. Inpatients Management

View all available beds under ward manager.

Admit patient to specific bed via the system

Carry out bed and ward transfer.

Update the system's prescription administration sheet each time a drug is administered.

Record patient's vital entries each day . The system automatically generates graphical representation of these figures in terms of bar and line charts. A module for nurses to type their cadex.

Update patient's bill as drugs/services are administered.

Finalize bills and automatically generate patient's medical bill report.

Discharge patient via the system and automatically generate discharge summary.

13. Procurement

A panel for finding stock items using several parameters.

Processing GRN(Goods Received Note) during Purchases(Goods Received Inwards). Managing stock requests and transfers from other departments.

Regular and random stock taking.

Making stock adjustments in case of stock variance. This has to be approved by higher powers though.

Stock Valuation of the whole store.

Stock usage register to manage non-billable items like foodstuffs.

Goods returned Outwards to manage items returned to suppliers.

Raising LPO's which are then authorized by the accountant before being forwarded to the supplier.

Image 13: Procurement(Goods received Inwards)

14. Stores & Pharmacy Management

Ability to create multiple storage locations for your stock items.

Issue stock items and pharmacy and other departments.

Track stock movement from purchases to sales (also generate reports). Stock level and expiry date alerts.

Stock ledger.

Automatic update on stock ledger once goods are received . Carry out stock take and adjustments.

Generate variance report. -

Image 14: Stock Request Module

15. Accounts Module

Making journal entries to debit/credit various ledgers. Finding journal entries.

Chart of Accounts plus a provision of adding new accounts, editing and deleting existing ones.

Debtors Management :Adding and editing Debtors(Insurance Companies); receiving payments to clear invoices, printing out debtors' statements for any period of business.

Creditors Management :Adding and editing Creditors(Suppliers); making payments to clear invoices, printing out creditors' statements for any period of business.

A panel for finding invoices and previewing them.

Chief Cashier cash collection at the end of cashier shift.

Expenses Management(Petty Cash Management).

Chief Cashier bank deposits to various bank accounts created in the system.

Image 15: Accounts(Debtors Management)

16. Human Resource Management

Employee data management-Adding Employee data, editing and deleting.

HRM documents-A portal where employees can download HR documents e.g. Employee Self-Assessment Form for filling.

Attendance-A sub-module where employee attendance is taken. The total number of days worked are transferred to the payroll for calculation of the basic salary.

Leave management-Employee leave request, Leave authorization and Leave Calendar.

Payroll-Processing employees' pay using the current tax, nssf and nhif rates. Pay slips are also printed from this panel.

Payroll Settings-Editing the tax rates, nhif rates, nssf rates and overtime rates in case of future changes.

Image 16: HRM Module(New Employee Information)

17. Reports

Cashier Daily Summary.

Financial Statements-Trial Balance, Income Statement, Balance Sheet.

Income Report-Today Income, All Income, With profit, With Loss, By Cashier, By Item, By Department, By Patient, By Doctor, Unposted Entries.

Invoices Reports- Today Invoices, All invoices, By Company. Receipts Reports.

Procurement-

Goods Received Report-By item, All, By Supplier.

Goods Returned Report-By item, All, By Supplier.

Reprint-Goods Received Note, Goods Returned Note, Local Purchase Order. Invoice Listing-Inwards and Outwards.

Summarized Bin Card.

Inventory-All, By Category, By

Supplier. Expiry Report.

Reprint Variance Report.

Health Reports-Reprint Admission Form, Reprint Discharge Summary, Diagnosis Reports, Birth Reports.

Payroll Reports-Detailed Monthly Report, Monthly Bank Summary, Individual Bank Report, Salaries Summary, Employee Summary, Individual Pay slips, All Pay slips.

Stock Usage Reports

Ledger Reports

Queue Reports

Messages Reports

**Activity Log-All, By
User. Debtors List
Creditors List
System Users List
Stock Movement
Report. Employees List
Goods Price List-All, By Section
Services Price List-All, By
Section Stock Transfer Report-
All, By Dept. Bin Card
Re-order Level-All, By Supplier.
Patients Reports-All Patients, In-
Patients. Inpatients Reports
Outpatient Reports
All Patients Reports**

Image 17: System Reports

18. Tools and Administrator Settings

Hospital Details Management.

System Users Manager-Adding or Editing Users. The access level is also managed in this panel.

User Access Rights-Discriminating what each access level can do and not do.

Items Access Rights-Discriminating what items (goods and services) each user can see and not see (department based).

Editing Account Details-Change Login

Credentials. Set up Inpatient Ward Beds.

Set up Computer Internet

Protocols. Set Up Banks.

Set up External

medics. Medical Notes.

Add/edit Medical Data.

Import Database

Export Database (The system does this automatically every 24 hours).

Image 19: Tools and Administrator Settings(Set up Computer IP's)

19. Other Unique System Features

Highly customizable to suit your size and exact need.

Consistent and attractive user interface that makes it easy to use. Fast, stable, reliable and secure.

Perfectly integrates with your hospital **workflow.**

Well organized and informative reports that can export to Word, Excel and PDF among other formats.

According that smoothly integrates with all your hospital opera with minimum user intervention.

Readily available & well organized data that can be used for different types of analysis.

Remote access view in real time and any time what is happened your facility from anywhere in the world.