TOF *Engineers and Consulting Ltd.*

Clinic Manager:Hospital Information Management System

User Manual

June 2006

Contact: TOF Engineers & Consulting Ltd.: 56 Femi Ayantuga Crescent, Off Adelabu Street Surulere, Lagos. P.O. Box 4629 GPO Marina, Lagos. Tel: 0803-3045117 E-mail enquiries@softprotof.com,

Important Information

When using Clinic Manager you must be mindful of the following.

- **The default user is "mainuser" without a password (blank password). This user has full access to all functionality of the software.**

- **Make sure each newly created user specifies a password for his/her user name (user account) to prevent other users operating with the user account.**

- **Make sure you read the messages you are prompted with and provide judicious responses to them. Respond with a safe choice if you are doubtful and then seek advice.**

- **Make sure you backup regularly to protect against loss of data and make recovery after a loss less costly. Do backups regularly via "Clinic Manager Backup" icon .**

1 Introduction

Clinic Manager software is designed to manage medical records, treatment and drugs dispensing history and patients billing in clinics and hospitals. Features of the solution will include the following.

- Provision for registration of patients including patients subscribing to the National Health Insurance Scheme.
- Management of a comprehensive databank of patients' medical records, consultations and treatment history.
- Management and monitoring medical charges, providing accurate information for billing patients and interacting with HMOs to receive payments.

Clinic Manager is developed in Microsoft Visual Basic 6.0, Microsoft VBA in Microsoft Access and Microsoft Access database management system. These tools supports graphical user interface and can run on a standard personal computer running Windows 95, 98, 2000 and XP. Te option of deploying on SQL-Server is provided on request.

Clinic Manager is configurable as a **stand-alone system or a multi-user system** on a network of computers such that multiple users can share application data from several workstations. **Clinic Manager** is also designed with the ability to easily customise to your specific environment and can be migrated easily to database platforms such as SQL Server.

1.1 Clinic Manager Software Modules

The key modules of **Clinic Manager** appropriately relate these key entities in the modules

- Patients Registration
- Patients Health Records
- Financial Information
- Enquiries and Reports

The Clinic Manager Database is resident on a computer dedicated as the server. All users of Clinic Manager share this data across the network.

1.2 Clinic Manager Software Architecture

- Multi-User, Client - Server Architecture.

1.3 Clinic Manager Development platform

- Visual Basic 6.0 and Microsoft Access for program design
- Microsoft Access Relational Database Management System for database design.
- Upgrading to SQL-Server database platform is accommodated

1.4 Clinic Manager Operating platform

- A local area Ethernet 100 Base-T network (or wireless network) of computers running traditional Microsoft Windows 2000/XP based operating systems.

1.5 Clinic Manager Key Modules

Clinic Manager**'s** key functional features are enumerated below according to the modules.

- Patients Registration:
- Patients Health Records
- Patients Invoicing and Accounts Charging

- HMO\Groups Accounts Charging

1.6 Clinic Manager Security & Confidentiality Module:

- No restriction on the number of users
- Each module has a set of privileges to which a user can be assigned.
- Each user is assigned privileges/roles for each user for each module.
- Total Control in security and access levels configuration suitable for your staff hierarchy.
- Ensures data integrity as the privileges of each user can be tailored to his\her work schedule.

1.7 Clinic Manager General Features

- Easy to use with its user-friendly graphical user interface (GUI).
- Configurable as stand-alone system or a client/server multi-user environment.
- Sophisticated security system that ensures integrity and confidentiality of your mission critical information, by controlling access to both information and functionality.
- Generates a wealth of current and historical information in its databank, enabling derivation of statistical information to inform policy making, budgeting and planning
- Efficient and effective search engine to query the databank.
- Maintains a concise audit trail of operational activities.
- Scaleable for future expansion to the higher platform, SQL-Server database engine.
- Exporting of all reports to remote locations as attachments to e-mail.

1.8 Guideline to this document

This document describes how to use Clinic Manager. It will, however, be valid for versions that would have been tailored to your environment. Furthermore, the words **interfaces** and **forms** are both computing terminologies describing the visual displays on the screen that users interact with; they will be used freely and interchangeably in the document.

To quickly grasp the concepts and procedures presented in this document, it is recommended you initiate a session of Clinic Manager on the computer in parallel to studying this document.

2 Clinic Manager Overview

2.1 Security and Confidentiality

Users are created to access Clinic Manager and each user in assigned a

- **security level**, which determines the type of operations (additions, modifications, deletions) that can be performed on data; and a
- **module access level**, which determines the modules that the user can access

2.2 Menus

Menu	Item	Purpose
File		
	Page Setup	
	Print	
	Change Password	
	Set Current User's Privileges	
	Connect To Datasource	
	Create Users and Assign Privileges	
	Audit Trail	
	View Defaults	
	Export Information	
	Main Switchboard	
	Exit	
Operational Data		
	HMOs	
	Primary Health Providers	
	Patients NHIS Registration Status	
	Retainerships	
	General Operational Data	
	Patients Status Definitions	
	Card Status Definitions	
	Cart Types Definitions	
	Medical Activities and Charges	
	Medical Diagnosis and Codes	
	Medical Treatments and Charges	
	Medical Charges Codes	
	Financial Instruments	
	Drugs\Medication Groupings	
	Units Bases	
	Units Categories	
	Units of Storage of Drugs	
	Module Defaults	
Patients Records		
	Patients List	
	Patients Registration (Data Entry and Modifications)	
	Patients Health Records (Data Entry and Modifications)	
	Patients Standard Search	
	Patients Advanced Search	
	Health Records Search	
	Pending Appointments	

	Honoured Appointments	
	Cancelled Appointments	
Financials		
	Patients Account Charging	
	Group Account Charging	
	Patients Invoices List	
	Patients Invoices (Data Entry and Modifications)	
	Patients Invoices Search	
	HMO Requisitions for Payment	
	HMO Requisitions for Payment List	
Pharmacy		
	Drugs\Medication Groupings	
	Drugs\Medication List	
	Drugs\Medication Full Details (Data Entry and Modifications)	
	Drugs\Medication Search	
Staff Details		
	Staff List	
	Staff Full Details	
	Staff Search	
Info		
	About	
	Welcome	

2.3 General interface layout

Interfaces \ forms used for data capture and modification have the following.

1. Buttons are at the footer of the interface to
   a. **Add**, initiates addition of a new record
   b. **Modify,** initiate modification of existing record in focus
   c. Save, to save new entries or modifications to data
   d. Discard to discard changes or new entries before it is saved**.**
   e. **Requery** to populate interface with all records of underlying table\query
   f. **Refresh** to update record in focus with new information

   Generally,
   - To add a new record, click Add (or New XXXX)
   - To modify existing record, move to the record, click Modify)
   - Click Save to save records (new or modified)
   - Click Discard to undo changes prior to saving the data.
2. Where appropriate, information are organised in tab pages labelled appropriately
3. A combo box is usually available at the header of the interface to locate specific record.
4. A button labelled Help is usually at the top of the interface to provide guidance to using the specific module.

2.4 Help facility on Clinic Manager

To assist in using Clinic Manager, you can view the operational and system manuals via the **Clinic Manager** group created on the Programs menu on the Start Menu bar.

1. Select **Clinic Manager** from the Programs menu on Start Menu bar
2. Select the document you want to view. This would display the required document in .pdf format (portable document format).

3. You can navigate/use the document as you normally use any similar document. You have the choices of
   - Clinic Manager Installation Guide
   - Clinic Manager User Guide
   - Customer Feedback Change Request
   - Customer Feedback Problem Reporting

You will require Microsoft Word and Acrobat Reader on your computer to view the files.

Further more, for ease of use, where appropriate, there is a **Help** button on specific Clinic Manager interfaces that display information to guide the user on how to use the functions\facilities of the module.

3 Starting Clinic Manager

To use Clinic Manager for any useful work you should have done the following

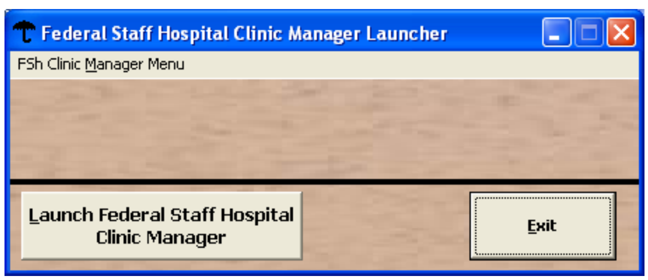
- Installed Clinic Manager on your computer and connected appropriately to the data source.
- Created user accounts that will use Clinic Manager and define privileges for each user.
- Configured Clinic Manager with operational data.

3.1 IMPORTANT:

- **The system administrator must use the default user "mainuser" as the user account to initially gain access to the software.**
- **After creating all users, the system administrator should specify a password to "mainuser" to prevent unauthorised access.**
- **Note that new users are created without a password (password is blank), therefore each user must specify his\her password for confidentiality.**

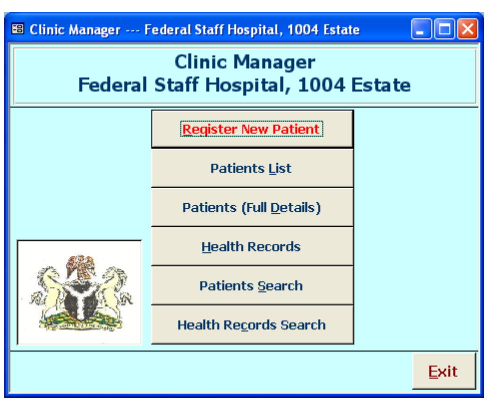
3.2 To run Clinic Manager Application

1. Select **Clinic Manager Software System** on the Start-Program bar, then select **Clinic Manager** OR Double-click on **Clinic Manager** icon on the desktop.
2. On the resulting interface displayed (below), click **Launch Clinic Manager**. You will be prompted for a username and password.



3. Enter your user name and password (if you have defined one for your user name)
   a. If this is the first time, enter user name as **mainuser** with no password.
4. Click **OK**. The program will start displaying the main interface below
5. The System Administrator must create all the users of the software via the menu.

File->Create Users and Assign Privileges.



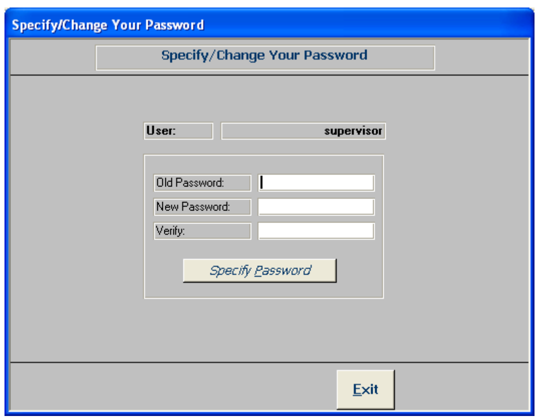
3.3 Specifying your password

Before you continue to use Clinic Manager for your operations, you must be aware that there is one function every registered user of Clinic Manager can perform. This is to change his/her password. Passwords must be secret to the user; even the system administrator should not be aware of your password. The system administrator(s) can only clear your password, if you forget it, to allow you to specify another one.

The procedure for changing your password is simple.

1. Select "**Change Password**" from the File menu on the main interface.
2. On the resulting enter your **Old Password** in the appropriate field (Leave blank if you do not have a password or you are specifying one for the first time).
3. Enter your new password in the field labelled "**New Password**"
4. Enter the new password again in the field labelled "**Verify**"
5. Click "**Specify Password**".
6. You will be prompted if the **New Password** and the **Verify** do not match exactly. You must re-enter both again to ensure registration of the password.

The next time you log on to Clinic Manager, you will be required to specify this password with your user name to gain access.



4 System Administration Functions

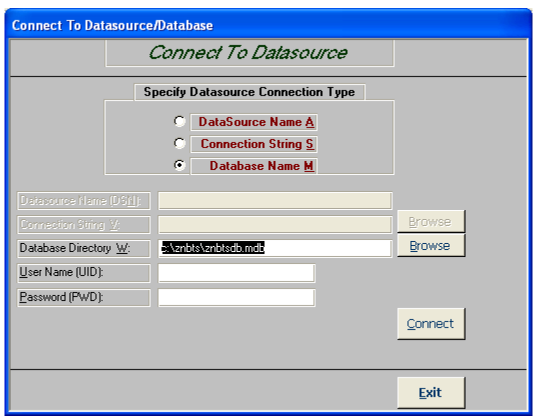
The **System Administration** functions include the following operations.

- Set Current User's Privileges
- Connect To Datasource
- Create Users and Assign Privileges
- Audit Trail
- Defaults
- Backup
- Restore Backup
- Compact\Repair data

4.1 Connect To Data Source

Provides means to connect/re-connect to Clinic Manager database if the location of the database has moved to another directory on your workstation or on to a different computer on the network.

1. Click **Connect to Data** on the File menu.
2. On the interface displayed below, click the radio button labelled "**Database Name**"



(Note: The database is given as the full path location for a Microsoft Access database. Other data sources, such as ODBC, are supported but not enabled on Standard Clinic Manager)

3. If the database displayed on Database Directory text box (with full path location) is different from the required one, enter the new location or click **Browse** to browse the system (and network) for the appropriate one. The database name must be **zpatientdb.mdb**.
4. Click **Connect** to establish connection with the source of data. You will be prompted appropriately on completion.

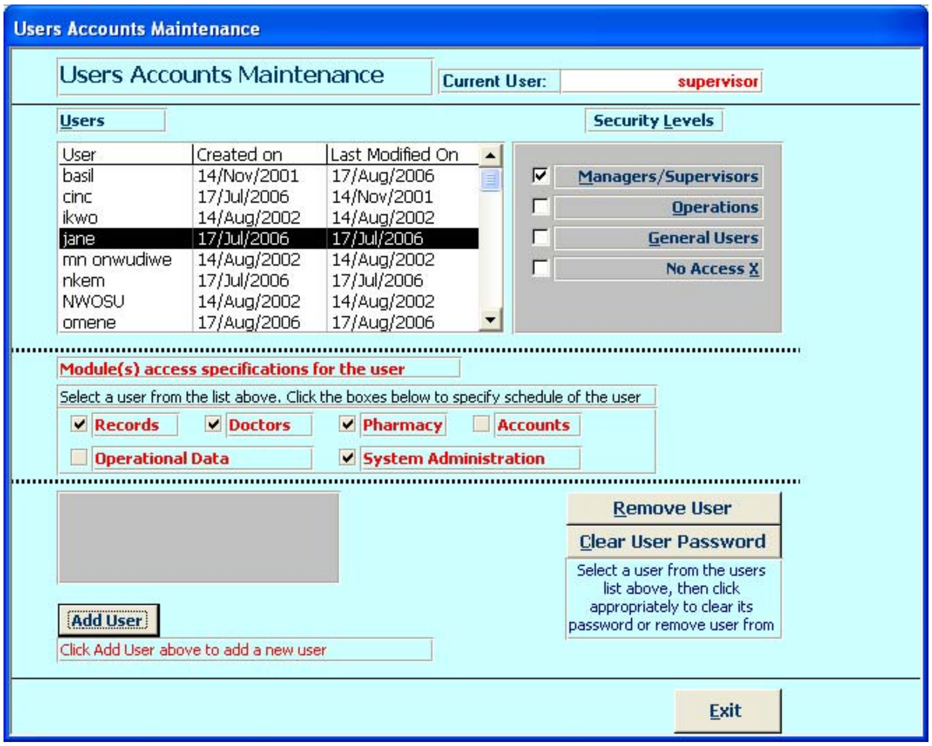
Note that this is an alternative method to connecting to data complementing the approach used in the "**Clinic Manager Installation Guide**" guide.

You have now established connection with the database. This procedure must be repeated on every workstation on the network where Clinic Manager will be run, since they will share the same database. Furthermore, all users have access to this function.

4.2 Security and Confidentiality – Creating Users and Assigning Roles

In this section we will learn how to create new users of Clinic Manager and assign Security Levels and Module Access levels to them. **You must have Managers/Supervisors security level to perform these operations; the default user, "mainuser", has this privilege.**

1. Double-click on **Clinic Manager** icon on the desktop.
2. On the resulting interface click **Launch Clinic Manager** Login with your user name and password (if any).
3. Select **File** menu.
4. Select **Create Users and Assign Privileges**. This displays the interface below.



4.2.1 To create a new user

1. Click **Add User**
2. Enter the name of the user in the text box labelled User Name
3. Click **Save User** to create the user and add to users list
4. Click **Finish** to complete the process an enable other utilities.

4.2.2 To remove a user

5. Select the user from the list and click **Remove User**

4.2.3 To clear a user's password

6. Select the user from the list and click **Clear User Password**

(Note: Remove User & Clear User Password will be inactive if creation of a user is still in progress)

4.2.4 To specify the security level to be assigned to a user

The security level assigned to a user defines if the user can add new information, modify existing information, delete information and have access to system administration functions. Once you create a user you should assign the user a security level to allow access. The security levels available are enumerated in the table below.

Module	Privilege/Role Description

Managers/Sys Admin	• Addition, modification and deletion of data • System Administration functions
Operations	• Addition and modification of data, excluding the System Administration.
General Users	View data only, excluding the System Administration
No Access	Access denied

From the User Accounts interface above,

1. Select a user from the list and
2. Click the desired security level

4.2.5 To specify module access levels of a user

The Module Access assigned to a user also depends on the roles or work scheduled for the user. Once you create a user you should then assign the modules that the user can access.

From the User Accounts interface above,

1. Select a user from the list and
2. Under the group Module Access to Selected User
3. Click to mark all the modules that the user can access

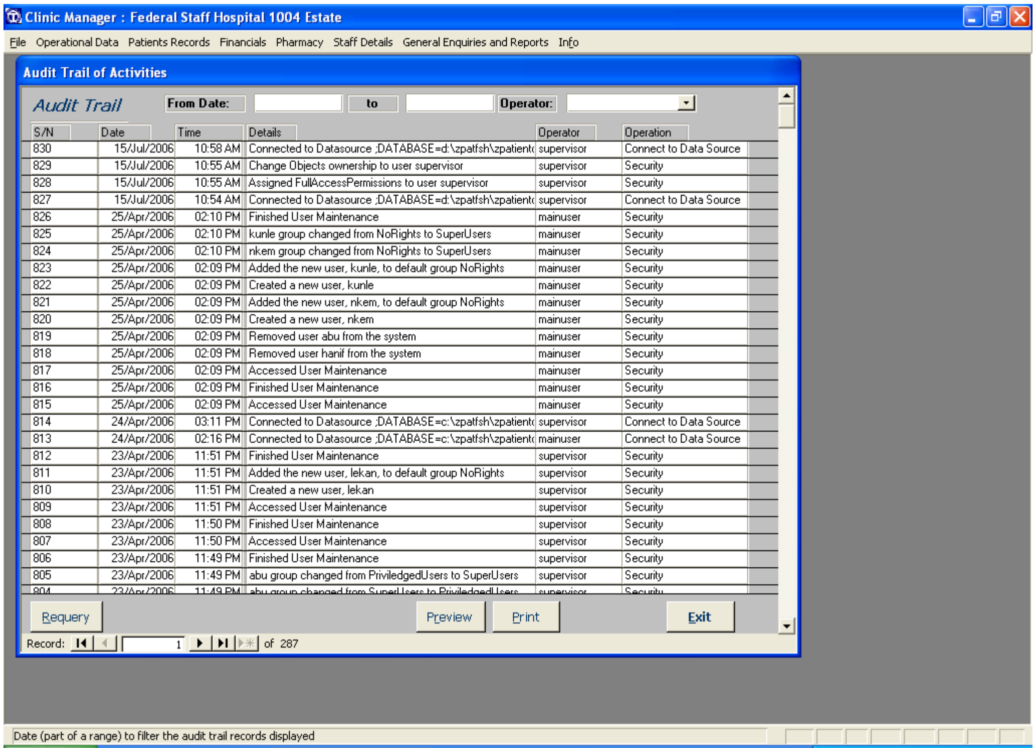
Possible Module Access levels are listed below.

Records
Doctors
Pharmacy
Accounts
Operational Data
System Administration

4.3 Audit Trail

The Audit Trail is a log of information on key activities, providing an effective tool to monitor activities on Clinic Manager. It captures the activities of each operator and each record is stamped with a date and time the activity took place.

1. Click **Audit Trail** on the File->System Administration menu t displays the interface below.
2. To view the audit trail for a particular operator select the operator from **Operator** combo box.
3. To view the audit trail for a particular duration, enter the date range in From Date and TO text boxes. If an operator is already selected, the audit trail of activities done by the operator for the date range specified will be displayed.
4. To view the audit trail for all activities to date, click "**Requery**".
5. Close the interface on completing your activities.



4.3.1 To print the audit trail

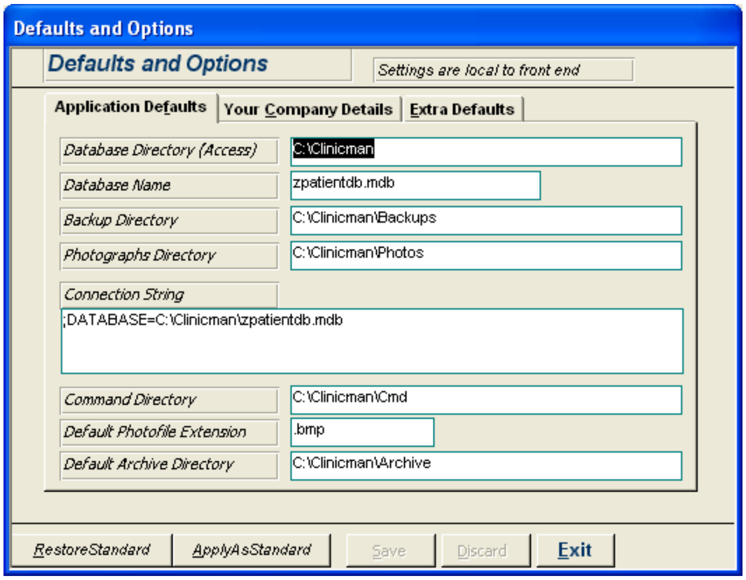
1. Enter the appropriate dates range.
2. Select an operator from the operator's combo box, if desired.
3. Click **Preview**. A preview of the audit trail will be displayed on the screen in report form
4. Click **Print**. The audit trail for the specification will be printed.

4.3.2 To prune the audit trail

5. Enter the appropriate dates range.
6. Select an operator from the operator's combo box, if desired.
7. Click Prune Audit Trail. This will delete the log for the specified date range and/or operator

4.4 Default Settings

- Default settings are information about the location of program files and connection information.
- Each workstation on the network can have its own settings, by modifying the parameters accordingly.
- The standard settings are global to all workstation, so clicking **Apply As Standard** will make the settings on your workstation the standard setting.
- Click **Restore Standard** restore standard settings to overwrite you local workstation settings.
- The company details tab is simply information on location of the company.

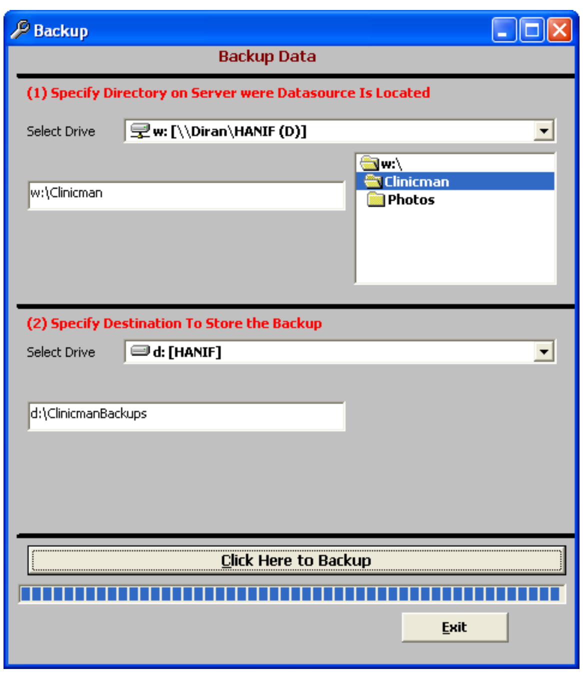


In the settings on all workstations, the **connection string** and **database name** must be the same for all workstations connected to the same database on the server. So ensure this is the case to ensure all users are sharing the same data for consistency of information processing.

4.5 Backup

4.5.1 To backup Clinic Manager database

1. Double-click **Clinic Manager Backup** on your desktop or select **Clinic Manager Backup** from the program group on the **Start -> All Programs** menu.



2. Select\specify the directory on the server where the datasource is located.
3. Select\specify the directory to store the backup

4. Click "**Click Here To Backup**". If the backup destination directory does not exist, you will be prompted that its will be created. Respond by clicking **Yes** or click **No** and specify an existing directory.

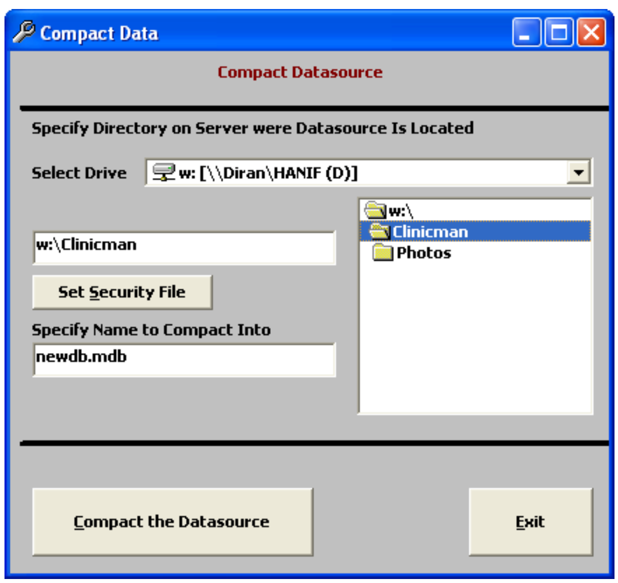
.
The backup will be copied to the destination path with the name **bkXXXXXX.mdb**, were XXXXXX is the short date format for the current date (e.g.bk110305.mdb). Therefore, if a backup exists for the date you will be asked in step 4 to overwrite the existing backup or create a new one. If you avoid overwriting, the existing backup will be renamed (by post fixing with the current time) and a new backup created as **bkXXXXXX.mdb**.

It is recommended that you backup Clinic Manager database regularly. If Clinic Manager is used on a daily basis, daily backups are strongly recommended.

4.6 Compact

Clinic Manager - database could become corrupted due to some unforeseen reasons such as power failures, and hard disk crashes are not uncommon and the consequences can be costly if regular backups are not made. It is possible to repair a corrupted database following the procedure below. If this fails then you must restore from a previous backup.

1. Double - click **Compact Clinic Manager**, on the desktop to display the interface below
2. Select\specify the directory on the server where the data source is located
3. Specify the Destination Directory to restore the backup (Step 2)
4. Click **Compact the Datasource**.
5. On completion continue using Clinic Manager



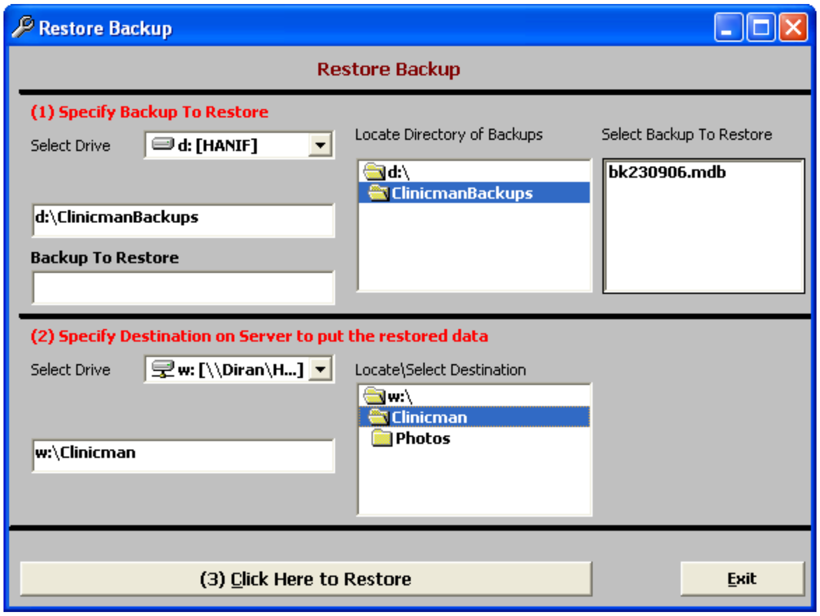
4.7 Restore Backup

Clinic Manager - database could be inadvertently deleted or corrupted due to some unforeseen reasons. Power failures and hard disk crashes are not uncommon and the effects can be costly if regular backups of Clinic Manager - database were not made. With regular backups you can restore from the most recent backup and you will only loose information entered from the last backup.

4.7.1 To restore Clinic Manager backup

6. Double - click **Restore Clinic Manager**, on the desktop to display the interface below
7. Specify the backup to Restore (Step 1)

8. Specify the Destination Directory to restore the backup (Step 2)
9. Click **"Click Here To Restore"**.
10. The backup will be restored into the destination directory, overwriting existing data.



5 Clinic Manager Operational Data

The table below lists the operational data that need to be defined to configure Clinic Manager for your site.

Operational Data	Usage\Purpose
HMOs	
Primary Health Providers	
Patients NHIS Registration Status	
Retainerships	
General Operational Data	
Patients Status Definitions	
Card Status Definitions	
Cart Types Definitions	
Medical Activities and Charges	
Medical Diagnosis and Codes	
Medical Treatments and Charges	
Medical Charges Codes	
Financial Instruments	
Drugs\Medication Groupings	
Units Bases	
Units Categories	
Units of Storage of Drugs	
Module Defaults	

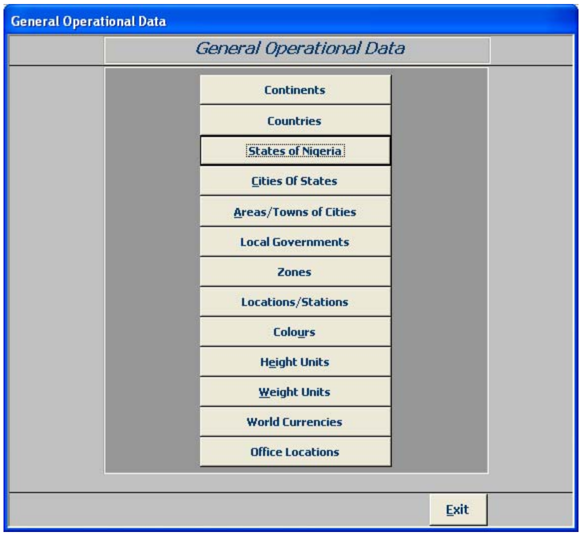
5.1 Defining operational data

Only users with operational data module access privileges have access to these functions. Operational data information is strategic to proper operation of Clinic Manager and as such access to its functions must be controlled.

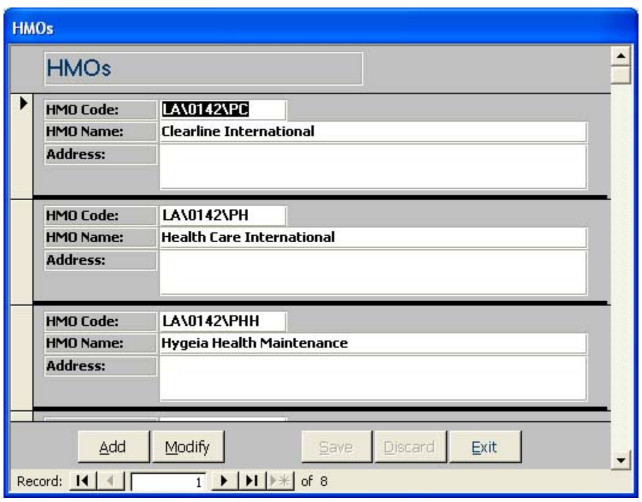
In each case, select the required menu and **Add** or **Modify** information as required.

1. Click the button required or select the menu required
2. To enter new record
    a. Click **Add**
    b. Click **Save** to save the record.
3. To modify existing record.
    a. Navigate to the record of interest
    b. Click **Modify**.
    c. Change the information.
    d. Click **Save**

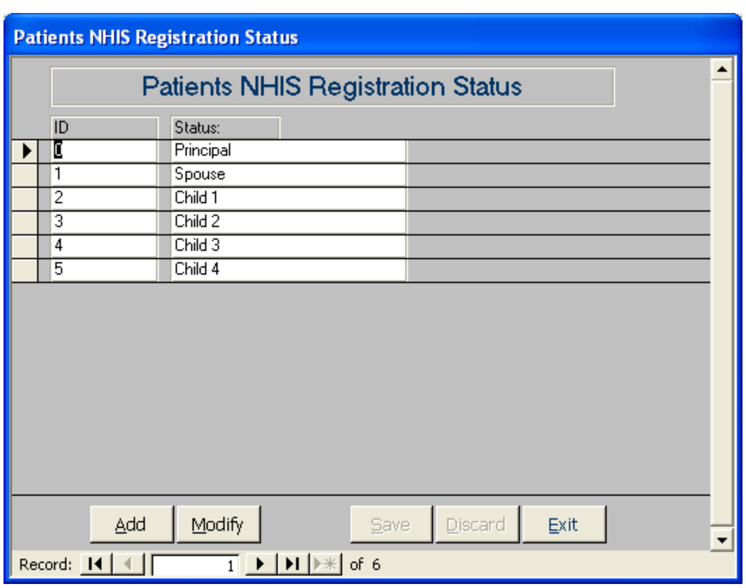
5.1.1 General Operational Data



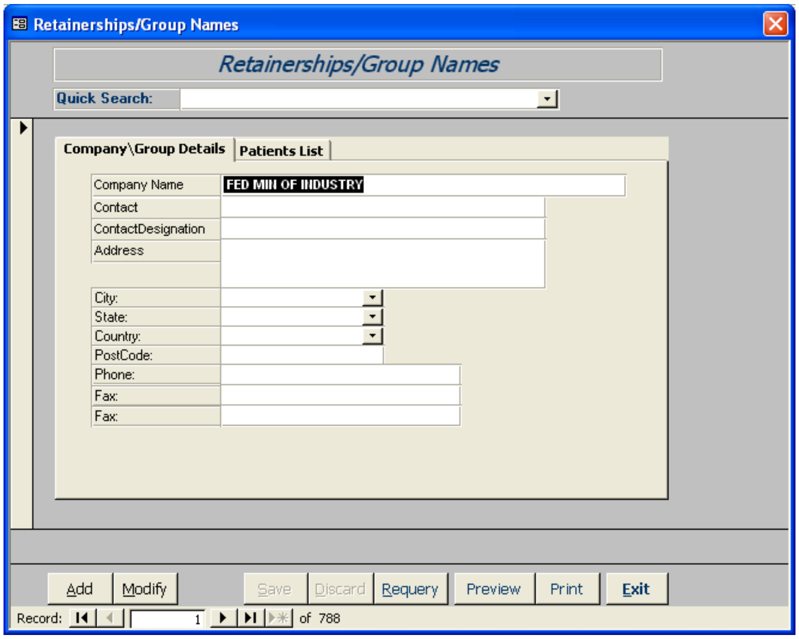
5.1.2 Health Management organisations; HMOs

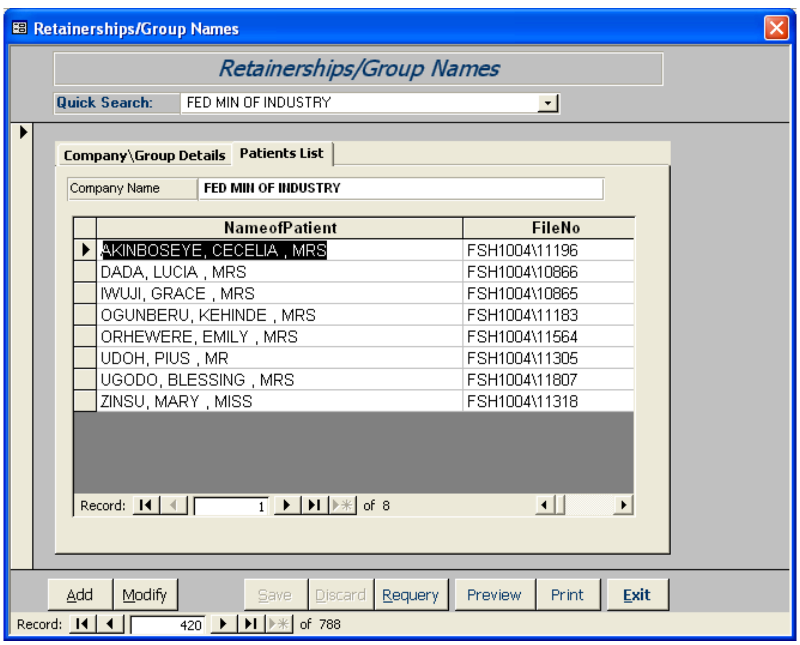


5.1.3 Patients NHIS Registration Status

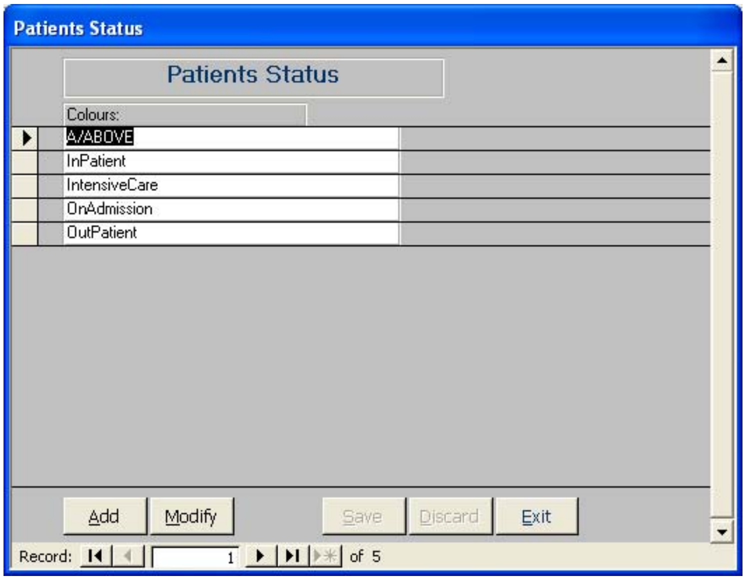


5.1.4 Retainerships

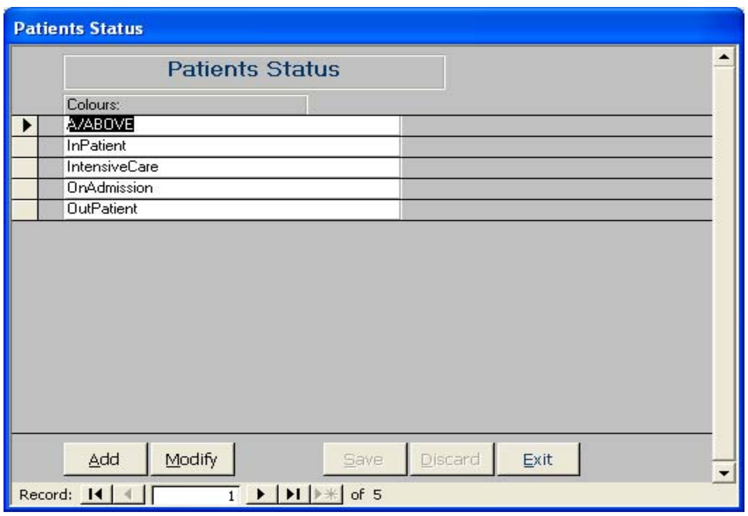




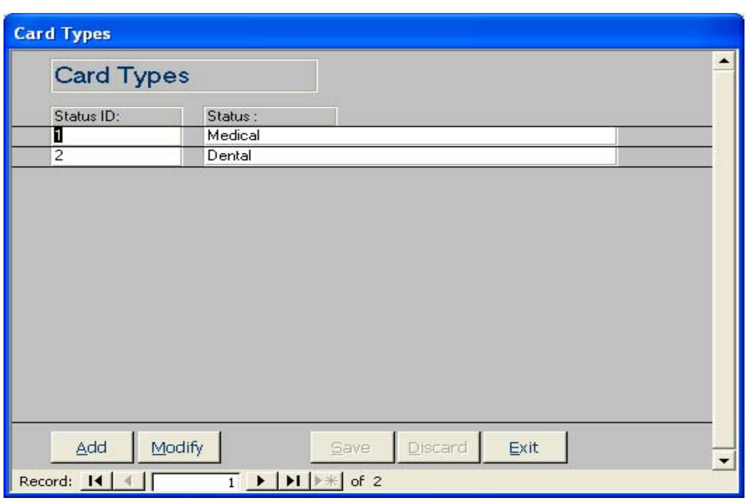
5.1.5 Patients Status Definitions



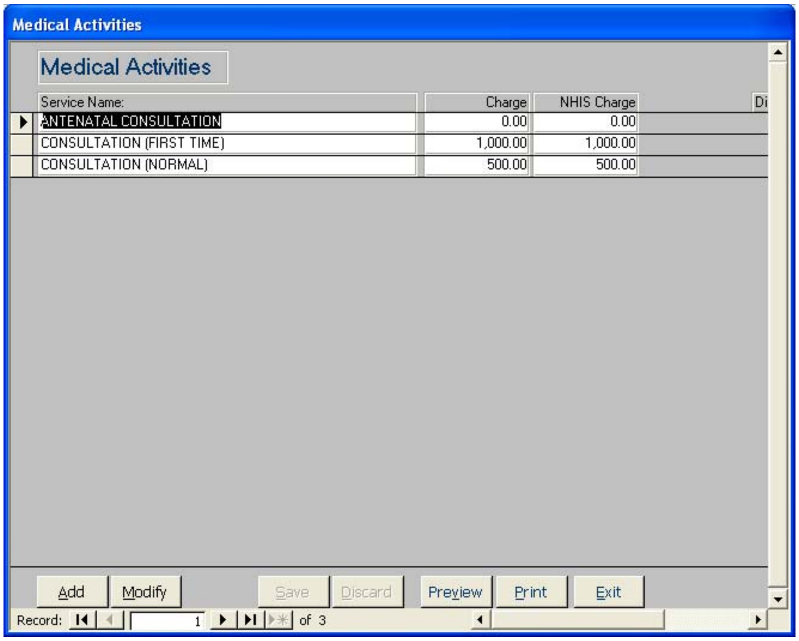
5.1.6 Card Status Definitions



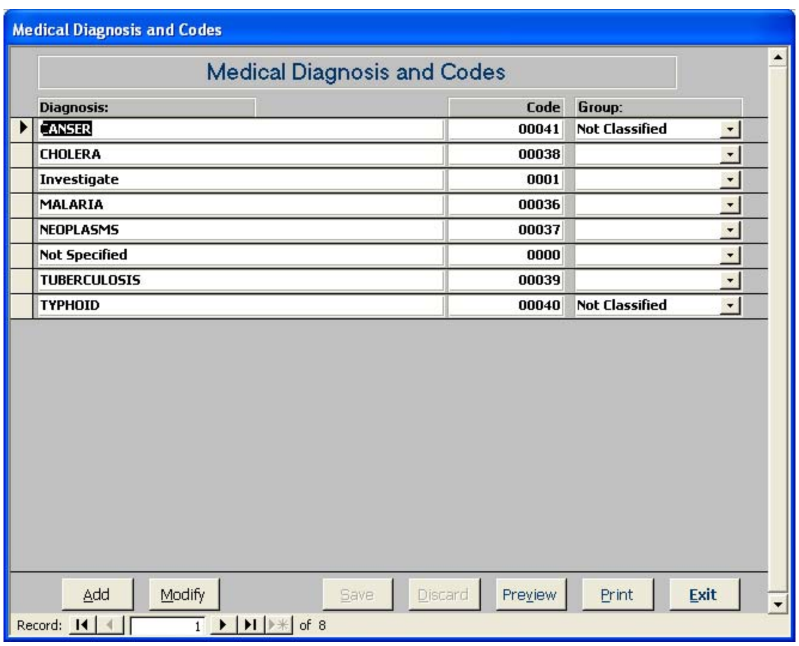
5.1.7 Cart Types Definitions



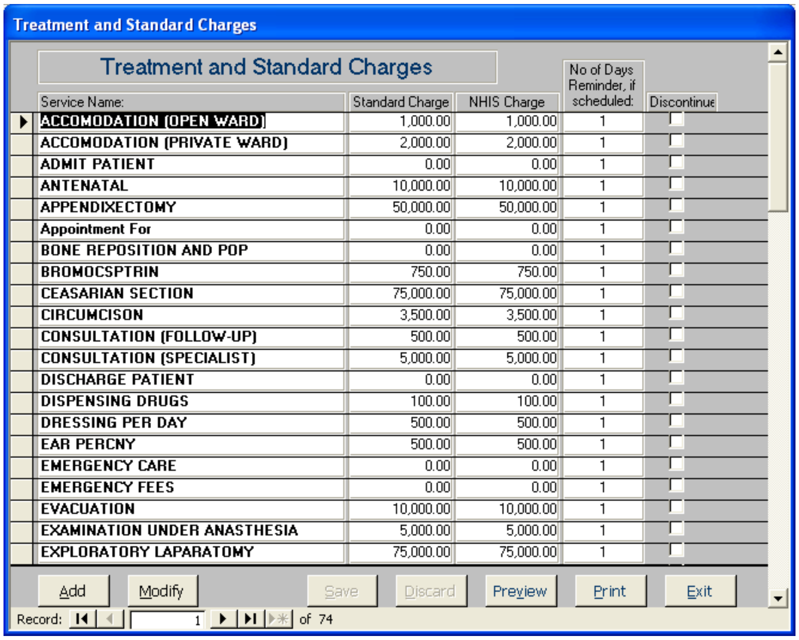
5.1.8 Medical Activities and Charges



5.1.9 Medical Diagnosis and Codes



5.1.10 Medical Treatments and Charges



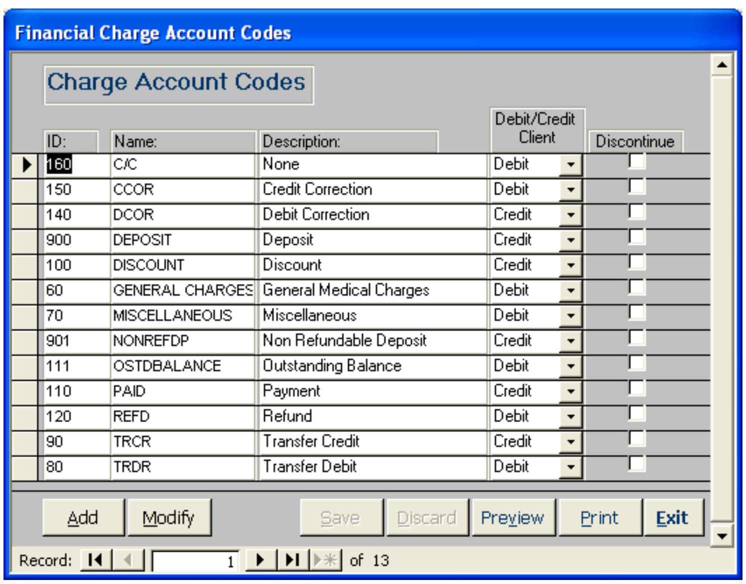
Treatment and Standard Charges

Service Name:	Standard Charge	NHIS Charge	No of Days Reminder, if scheduled:	Discontinue
ACCOMODATION (OPEN WARD)	1,000.00	1,000.00	1	
ACCOMODATION (PRIVATE WARD)	2,000.00	2,000.00	1	
ADMIT PATIENT	0.00	0.00	1	
ANTENATAL	10,000.00	10,000.00	1	
APPENDIXECTOMY	50,000.00	50,000.00	1	
Appointment For	0.00	0.00	1	
BONE REPOSITION AND POP	0.00	0.00	1	
BROMOCSPTRIN	750.00	750.00	1	
CEASARIAN SECTION	75,000.00	75,000.00	1	
CIRCUMCISON	3,500.00	3,500.00	1	
CONSULTATION (FOLLOW-UP)	500.00	500.00	1	
CONSULTATION (SPECIALIST)	5,000.00	5,000.00	1	
DISCHARGE PATIENT	0.00	0.00	1	
DISPENSING DRUGS	100.00	100.00	1	
DRESSING PER DAY	500.00	500.00	1	
EAR PERCNY	500.00	500.00	1	
EMERGENCY CARE	0.00	0.00	1	
EMERGENCY FEES	0.00	0.00	1	
EVACUATION	10,000.00	10,000.00	1	
EXAMINATION UNDER ANASTHESIA	5,000.00	5,000.00	1	
EXPLORATORY LAPARATOMY	75,000.00	75,000.00	1	

Add Modify Save Discard Preview Print Exit

Record: 1 of 74

5.1.11 Medical Charges Codes



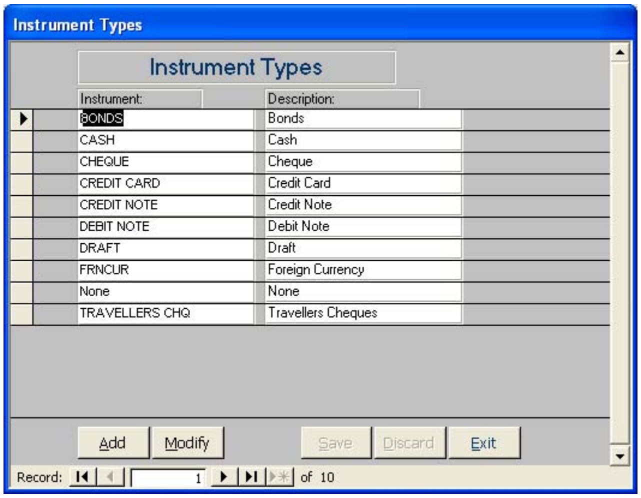
Charge Account Codes

ID:	Name:	Description:	Debit/Credit Client	Discontinue
160	C/C	None	Debit	
150	CCOR	Credit Correction	Debit	
140	DCOR	Debit Correction	Credit	
900	DEPOSIT	Deposit	Credit	
100	DISCOUNT	Discount	Credit	
60	GENERAL CHARGES	General Medical Charges	Debit	
70	MISCELLANEOUS	Miscellaneous	Debit	
901	NONREFDP	Non Refundable Deposit	Credit	
111	OSTDBALANCE	Outstanding Balance	Debit	
110	PAID	Payment	Credit	
120	REFD	Refund	Debit	
90	TRCR	Transfer Credit	Credit	
80	TRDR	Transfer Debit	Debit	

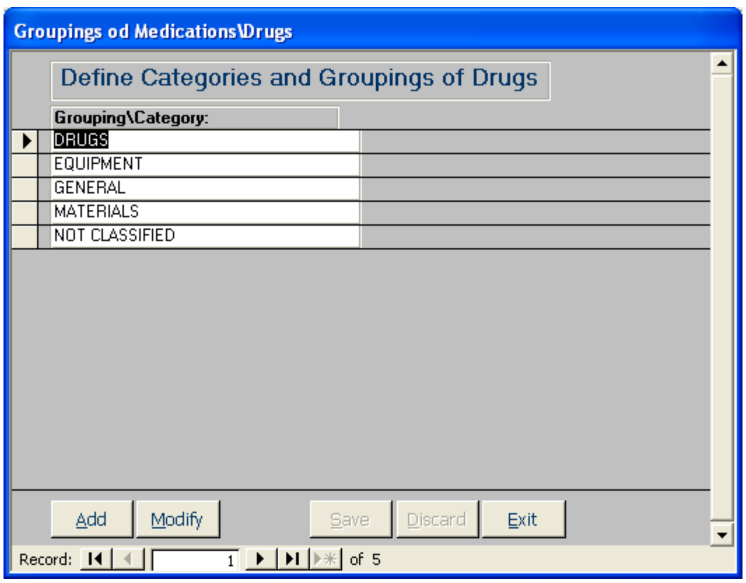
Add Modify Save Discard Preview Print Exit

Record: 1 of 13

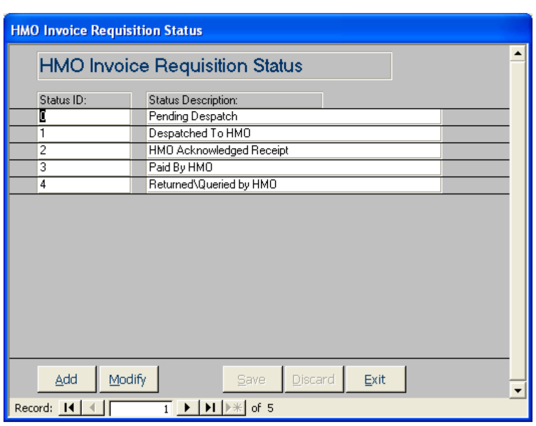
5.1.12 Financial Instruments



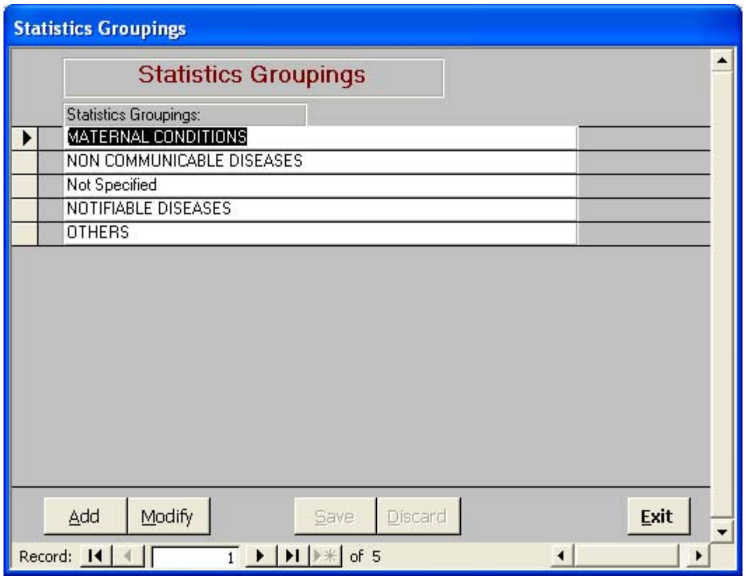
5.1.13 Drugs\Medication Groupings



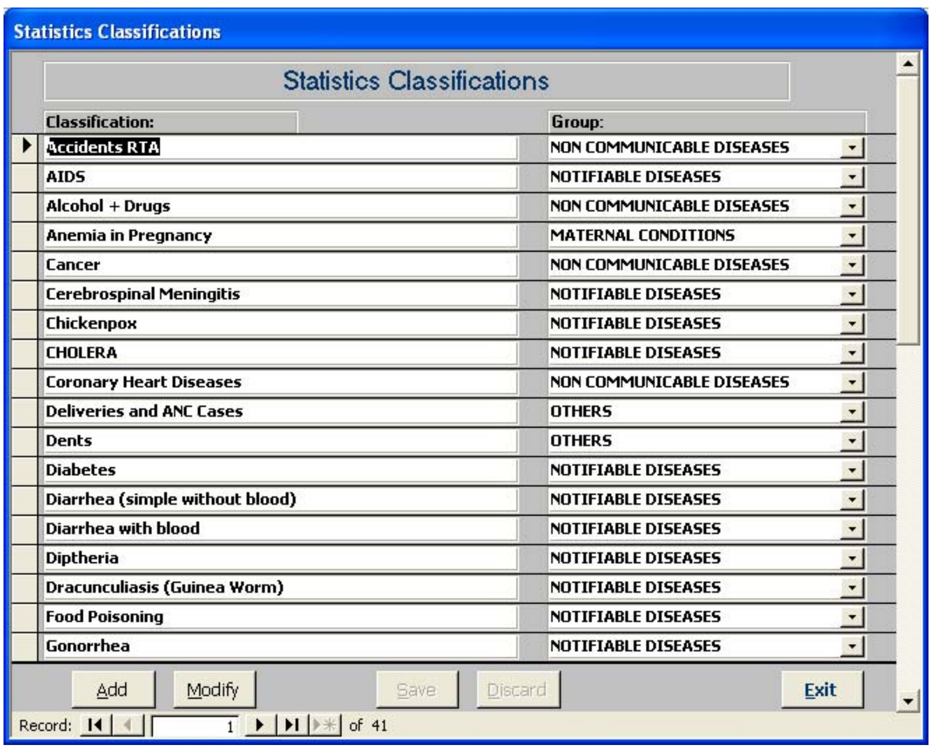
5.1.14 Invoice Requisition Status



5.1.15 Statistics Groupings



5.1.16 Statistics Classifications



6 Patients Registration and Health Records Management

In this section we will learn how to

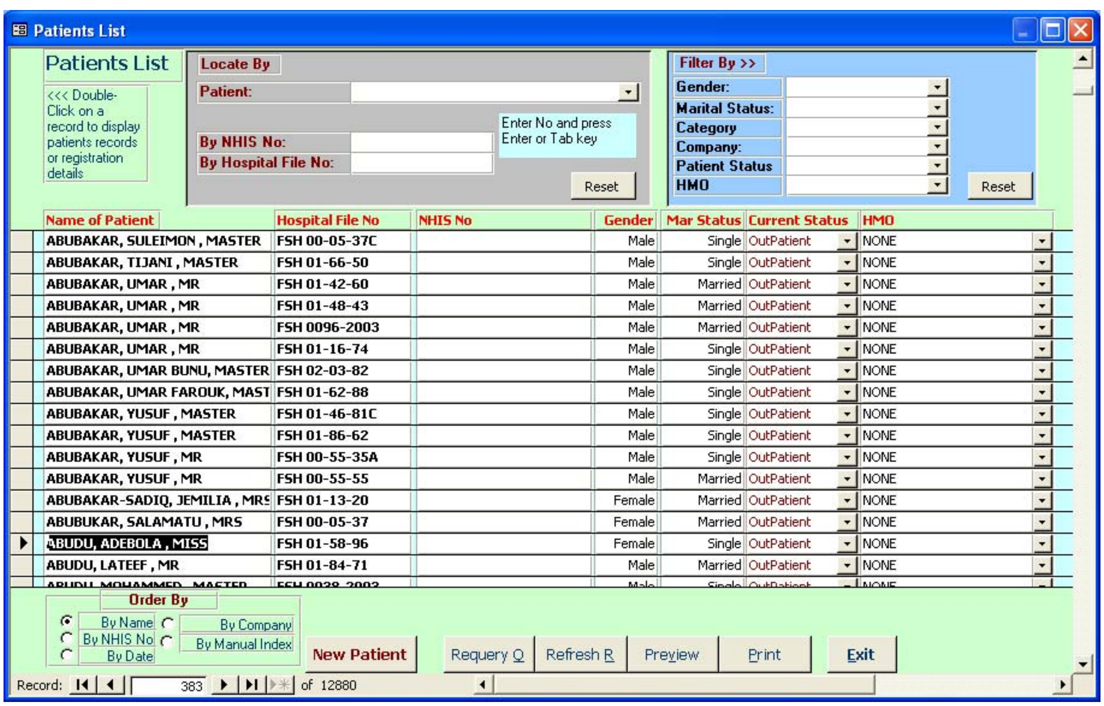
1. Register Patient's Records
2. Search for Patient's Details
3. Enter Patient's Health Records (Consultations, Diagnosis and Treatments)
4. Search Patient's Health Records.

The menu used for these operations is labeled Patients Records with the following menu items

- Patients List
- Patients Registration (Data Entry and Modifications)
- Patients Health Records (Data Entry and Modifications)
- Patients Standard Search
- Patients Advanced Search
- Health Records Search
- Pending Appointments
- Honoured Appointments
- Cancelled Appointments

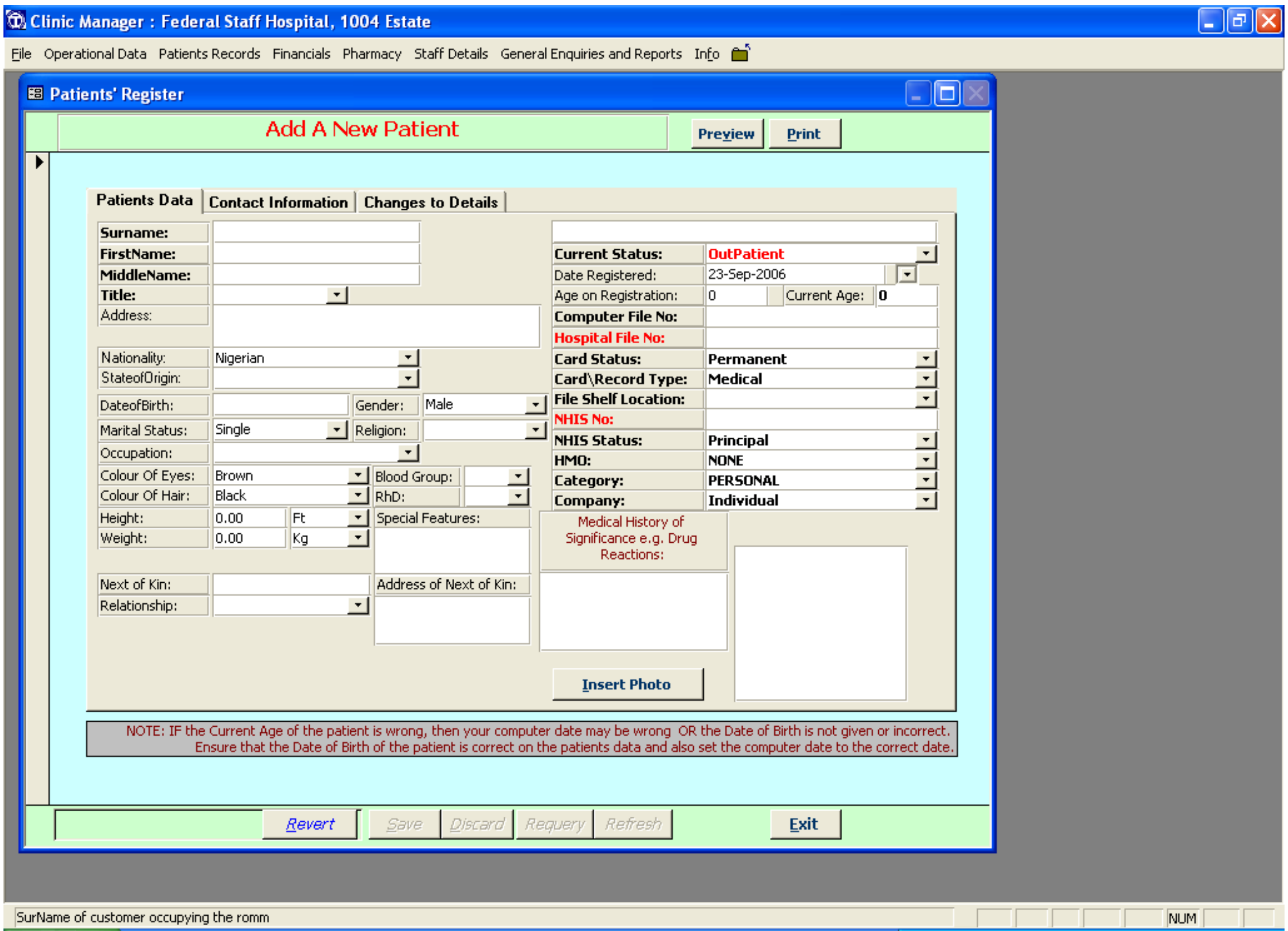
6.1 To display the list of patients

1. Click **Patients List** button on the main interface or select **Patients List** from the Patients Records menu. This will display the interface below, listing all the patients in your database.
2. Navigate to the patient record of interest and double click on the left hand edge of the record to display registration or health records details of the patient.



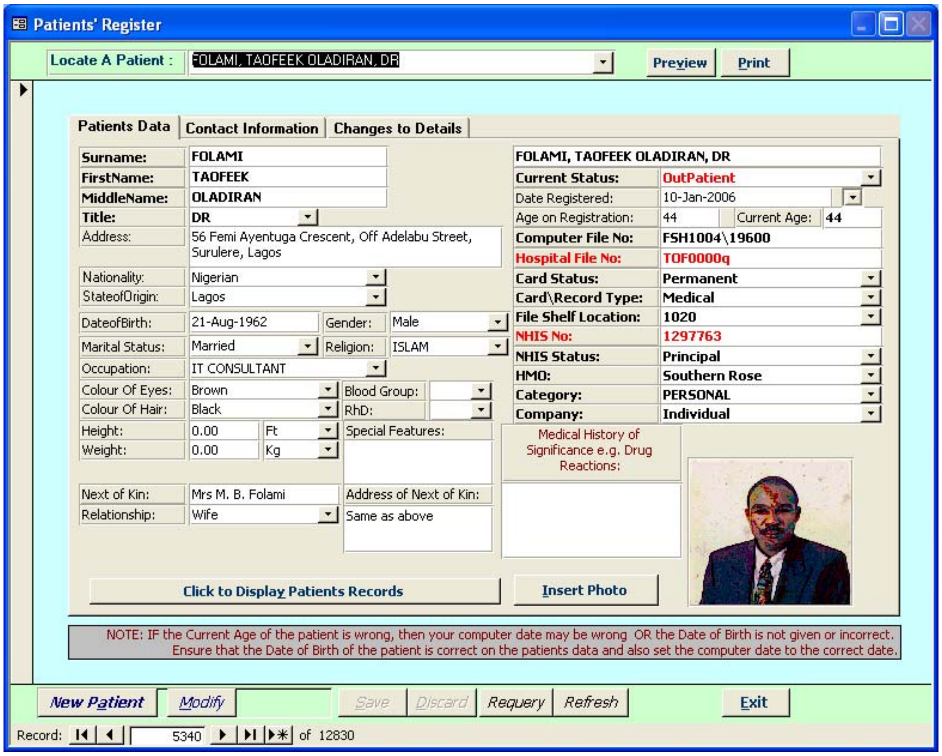
6.2 To register a new patient

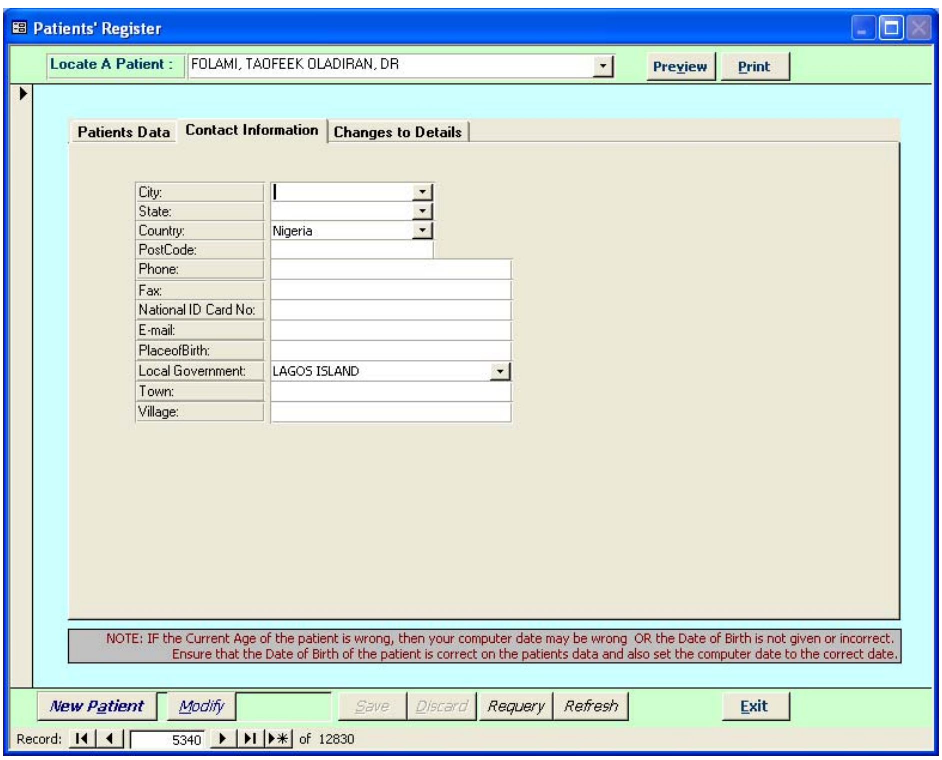
1. Click **Register New Patient** on the main interface or select **Patients Registration** from the Patients Records Menu OR
2. If you are already in the Patients Register interface viewing a particular patient's detail, click **New Patient** on the interface. This will display the interface below with relevant text boxes cleared ready for data of a new patient.



3. Enter the details of the patient in the appropriate text boxes on the **Patients Data** tab.
4. Click **Contact Information** tab and enter the patients contact details and other bio-data.
5. On completion, click **Save** to store the registration details of the new patient.
6. To modify existing patients details, navigate to the patient or locate the patient by selecting the patient from the combo box **Locate a Patient** at the top of the interface.
7. Click **Modify**; then make changes to the details in the required text boxes.
8. Click **Save** when you finish. The changes will replace existing information on the patient.

- ***Note** that a complete history of changes made to details of each patient is logged for future audits and can be view via the **Changes to Details** tab.*

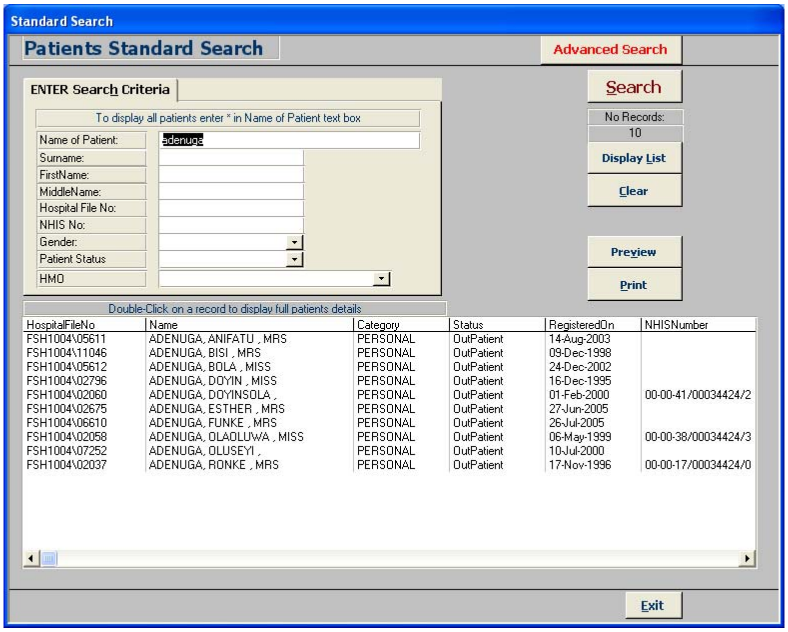


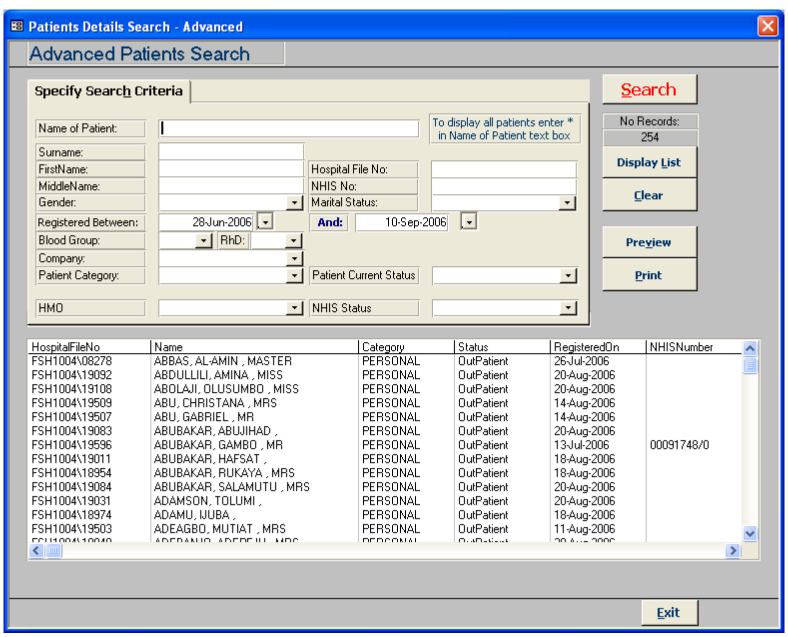


6.3 To search for patients' details

You can search for patients' information using one or a combination of criteria such as Name of patient, Surname, First Name, Middle Name, Hospital File Number, NHIS Number, Gender, Patients Status and HMO.

1. Click **Patients Search** on the main interface OR select **Patients Standard Search** on the Patients Records Menu. This displays the search interface below.
2. Enter the criteria for search in any of the text boxes and click Search. If results are found the list of patients will be displayed.
3. Double-Click on a record on the results list to display either the full registration details or the health records of the particular patient
4. Click **Preview** (or **Print**) to preview corresponding reports on the screen (or directly to the printer). When in Preview mode send the report to the printer via File->Print menu.
5. More complex searches can be performed by clicking **Advanced Search** button or selecting **Patients Advanced Search** from the Patients Records menu. For example, you can extend search criteria to search for patients with particular blood groups or those registered on or between particular dates.





6.4 To enter patients' health records

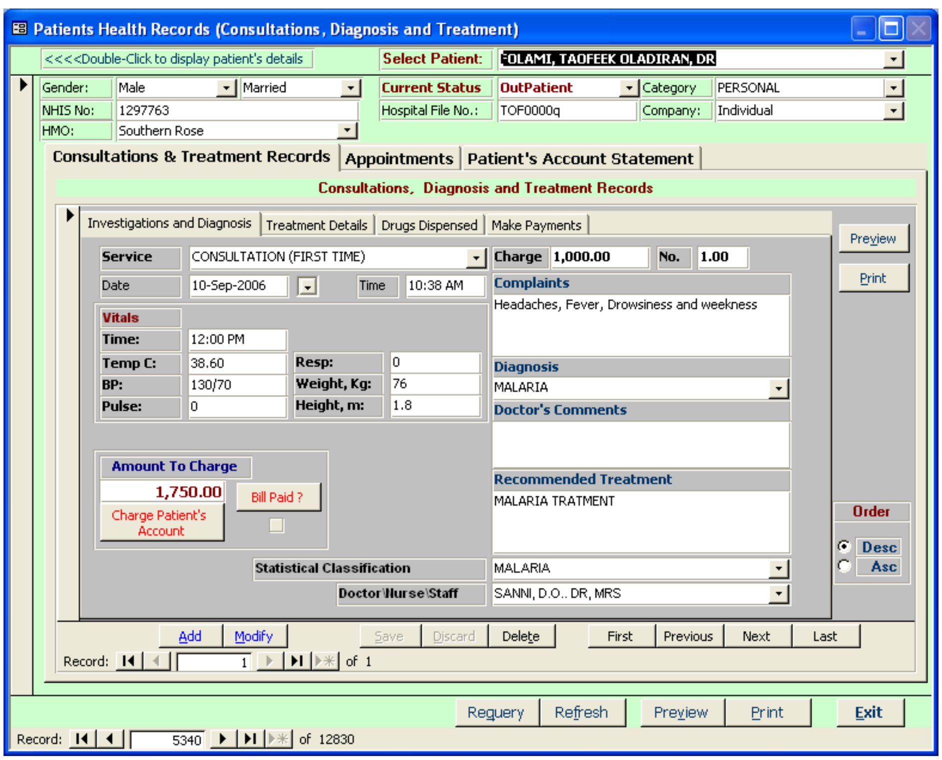
Health records are grouped according to the following; **Investigations and Diagnosis, Treatment Details** and **Drugs Dispensed**

6.4.1 Investigations and Diagnosis

Investigations and Diagnosis information include vitals, patient's complaints, doctor's diagnosis and treatment recommendations for each consultation.

1. Click **Health Records** on the main interface or select **Patients Health Records** from the Patients Records menu. This displays the interface below.
2. Select the patient of interest from **Select Patient** combo box at the top of the interface.
3. Select **Investigations and Diagnosis** tab.
4. To add details of a new consultation, click **Add**, and enter the details including vitals, complaints and diagnosis.
5. Click **Save**.
6. To modify existing information, click **Modify**, change existing details.
7. Click **Save**.
8. You can preview\print the report of the consultation in view by clicking **Preview** or **Print**.

The next stage is to enter treatment details and drugs dispensed for this particular consultation.

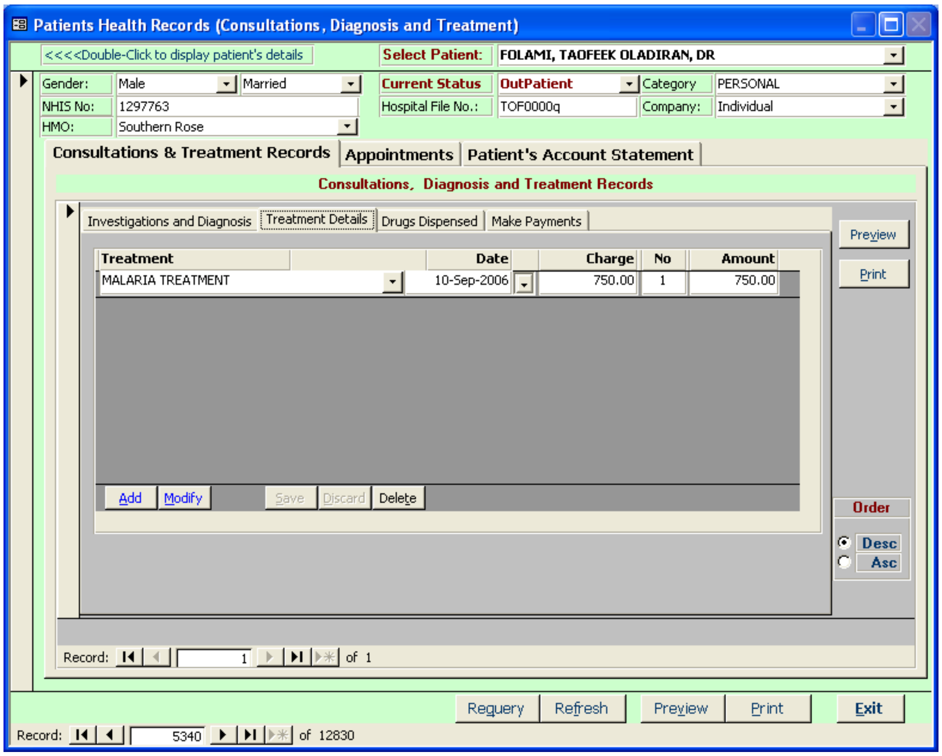


6.4.2 Treatment Details

Treatment details for each consultation are entered as standard treatments pre-defined as operational data. To enter treatment details follow the procedure below.

1. Navigate to the consultation detail of interest and click **Treatment Details** tab.
2. In the resulting inset, click **Add**.

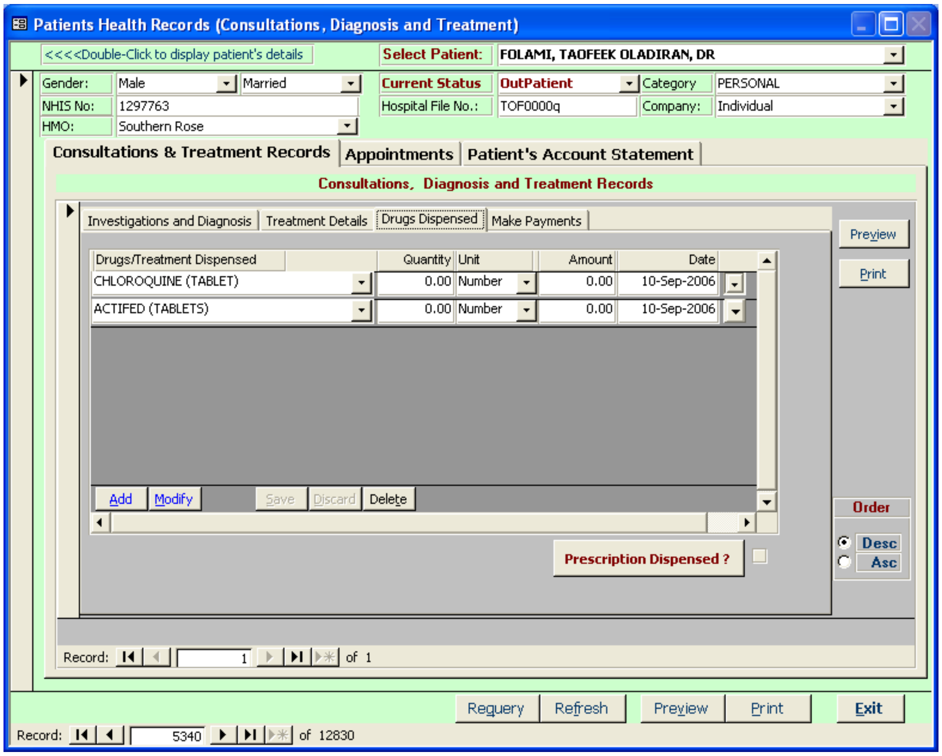
3. Select the **Treatment** from the appropriate combo box. The amount to be charged for the treatment would be displayed automatically
4. Enter the **Date**.
5. Enter the number to indicate the amount of times the treatment is required, which adjusts the charge automatically.
6. Click **Save**.
7. To modify existing treatment record, click **Modify**, change the details and the click **Save**.
8. If you move back to the **Investigations and Diagnosis** tab you will notice that the **amount to charge** has been updated to reflect the cost of the treatment.
9. You can preview\print the report of the treatments in view by clicking **Preview** or **Print**.



6.4.3 Drugs Dispensed

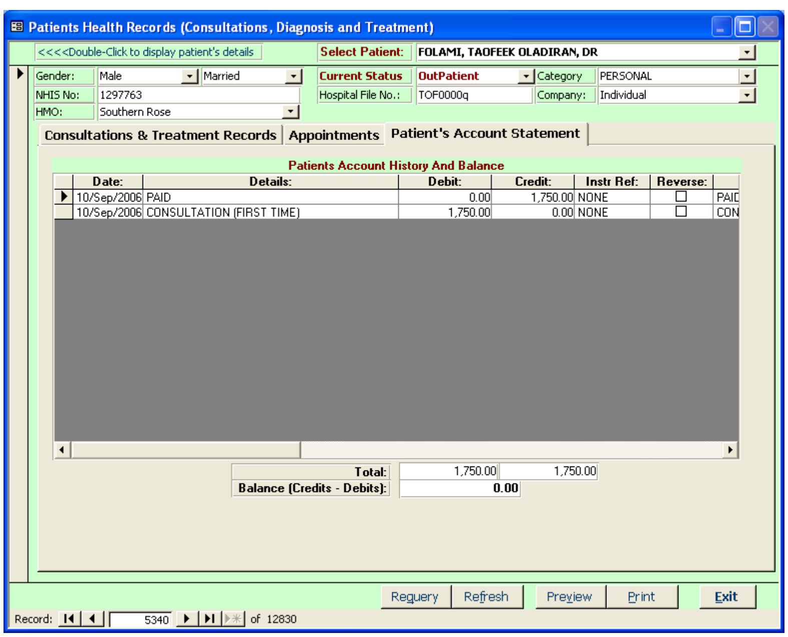
The drugs dispensed for the consultation is entered as follows

1. Navigate to the consultation detail of interest and click **Drugs Dispensed** tab.
2. In the resulting inset, click **Add**.
3. Select the Drug Dispensed from the appropriate combo box. The amount to be charged for the drug would be displayed automatically
4. Enter the quantity required, which adjusts the charge automatically.
5. Enter the **date**.
6. Click **Save**.
7. To modify existing record, click **Modify**, change the details and then click **Save**.



6.4.4 Charging Patients Accounts and View Patients Account Statement

1. If you move back to the **Investigations and Diagnosis** tab you will notice that the **Amount To Charge** will have been updated to reflect the cost of the drugs. You can now charge the patient's account with the total amount reflecting the bill for the consultation, treatment and drugs.
2. Click **Charge Patient's Account** button. The charge will be reflected in the patients account statement, which can be viewed immediately by selecting **Patients Account Statement** tab.

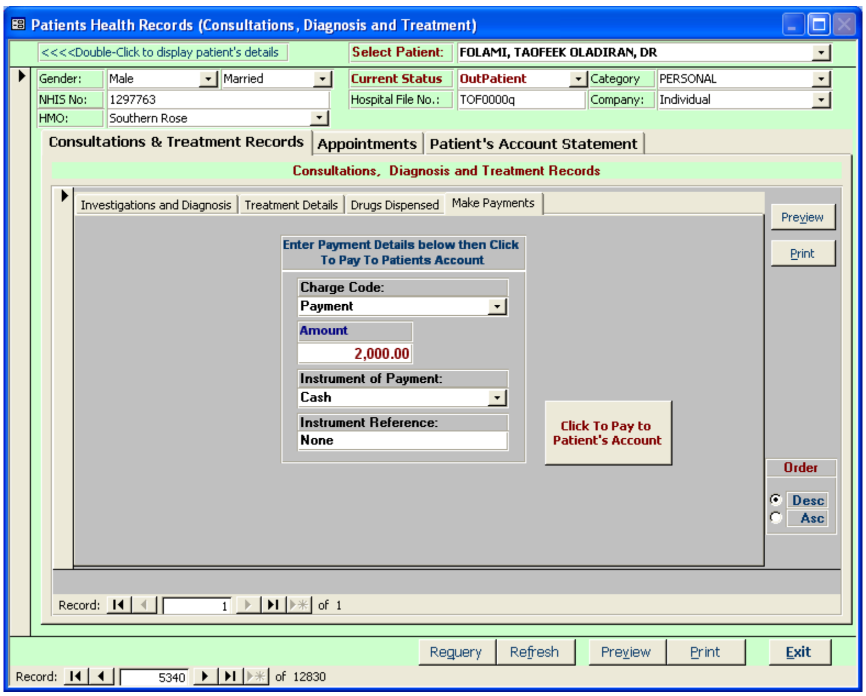


6.4.5 Making Payments

To make payments (or debit) to a patient's account directly from this environment

1. Click **Make Payments** tab
2. Select the **Charge Code**.
3. Enter the **Amount** .
4. Then click the button **Click to Pay to Patients Account**.
5. To debit a patients account with other charges:
    a. Select the **charge code**
    b. Enter the **amount**
    c. Select the **Instrument** (e.g. Invoice, Debit note, etc.)
    d. Enter the **Instrument Reference** Number (e.g. Invoice no)
    e. Then click button **Click to Pay to Patients Account**

The payments\charges will be reflected immediately on the patients account statement.

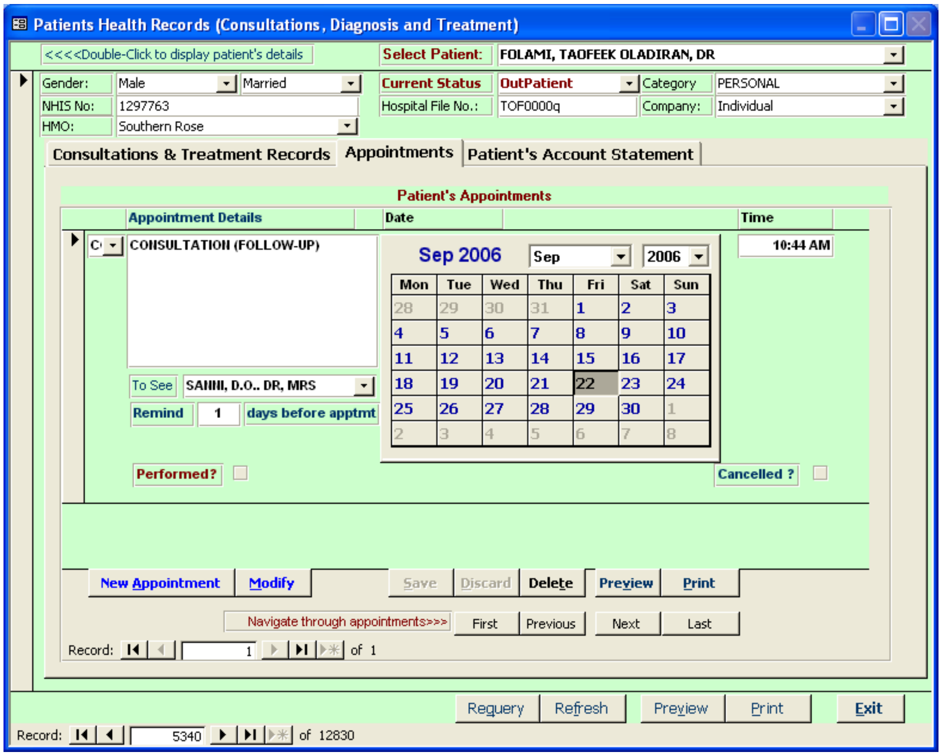


6.4.6 Appointments

To record future Appointments

1. Click **Health Records** on the main interface or select **Patients Health Records** from the Patients Records menu. This displays the interface below.
2. Select the patient of interest from the **Select Patient** combo box at the top of the interface.
3. Select the **Appointments** tab.
4. To add details of an appointment, click Add, and enter
    a. the **details of the appointment**,
    b. the **date** and the **time** and
    c. the no of days to the appointment to generate a **Remind**er.
5. Click **Save**.
6. To modify existing information, click **Modify**, change existing details.
7. Click **Save**.
8. You can preview\print the report of appointments of the patient in view by clicking Preview or Print.

9. When the appointment is honoured, click the check box labeled **Performed**. This will clear the appointment from the pending list to the **Honoured Appointments** list.
10. If the Appointment has been cancelled, click the check box labeled Cancelled to move the appointment to the **Cancelled Appointments** list.

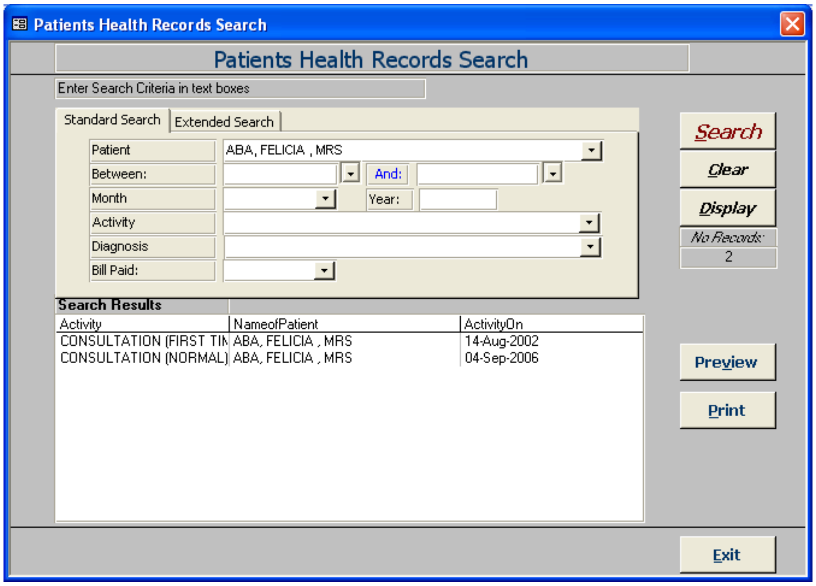


Pending Appointments, Honoured Appointments and Cancelled Appointments lists can be displayed by selecting appropriate items on the Patients Records menu

6.5 To search patients' health records

You can search health records by one or a combination of patient name, dates of consultations, treatment and activities and diagnosis.

1. Click **Health Records Search** from the main interface of select the **Health Records Search** from the Patients Records menu. This displays the interface below.
2. Enter the criteria for search in any of the text boxes and click **Search**. If results are found the list of patients will be displayed.
3. Click **Display** to display in full the health records results of the search.
4. Click Preview (or Print) to preview corresponding reports on the screen (or directly to the printer). When in Preview mode send the report to the printer via File->Print menu.


Patients Health Records Search
Patients Health Records Search
Enter Search Criteria in text boxes
Standard Search
Extended Search
Patient
ABA, FELICIA , MRS
Between:
And:
Month
Year:
Activity
Diagnosis
Bill Paid:
Search
Clear
Display
No Records:
2
Search Results
Activity
NameofPatient
ActivityOn
CONSULTATION (FIRST TIN
ABA, FELICIA , MRS
14-Aug-2002
CONSULTATION (NORMAL)
ABA, FELICIA , MRS
04-Sep-2006
Preview
Print
Exit

7 Patients Accounts Charging and Patients Invoicing

In this section we will learn how to

1. Charge patients for medical services and treatments provided.
2. Generate invoices for patients.
3. Generate invoices\requests for payments to HMOs.
4. Search for invoices.

The menu used for these operations is **Financials** with the following menu items.

- Patients Account Charging
- Group Account Charging
- Patients Invoices List
- Patients Invoices (Data Entry and Modifications)
- Patients Invoices Search

7.1 Charge patient for medical services and treatments provided

7.1.1 Patients Accounts Charging

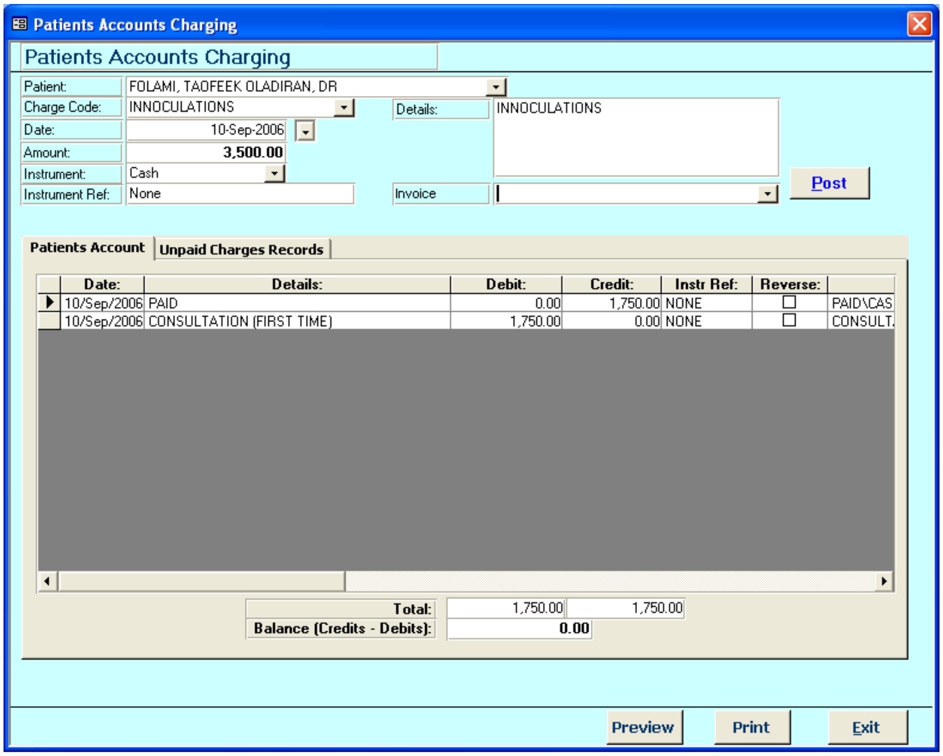
You can charge patients accounts directly with services and treatments provided.

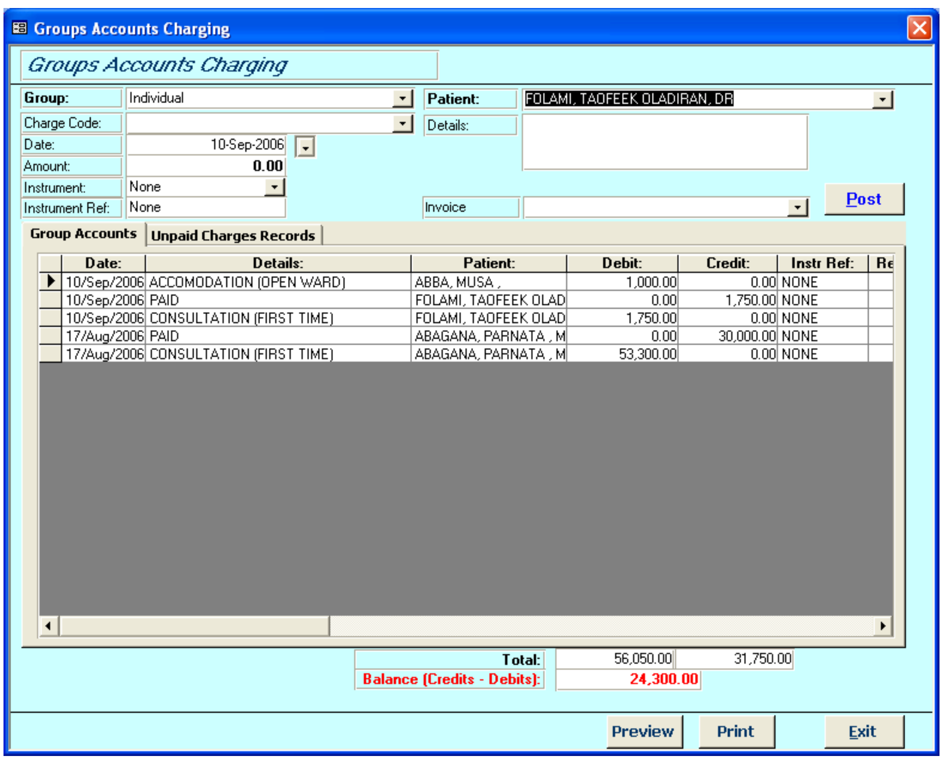
1. Select **Patients Accounts Charging** from the Financials menu
2. Select the **Patient**
3. Select the **Charge Code** (which includes treatment details)
4. Enter the **date**
5. Enter\Modify the **Amount**
6. Enter the **instrument** and **instrument ref** (e.g. invoice no, receipt no, debit note, cheque, etc)
7. Enter the **Details** of the service/charge
8. Enter the **Invoice** relating to the payment (if it is a payment)
9. Click **Post**. The account list will be updated with a new record and the balance updated to reflect current position.
10. You can print\preview the patient's accounts report by clicking Print or Preview.

7.1.2 Group Accounts Charging

You can also charge Patients Accounts based on the group\company of the patient. This facilitates generation of accounts and charges to the company\group that will be responsible for payment.

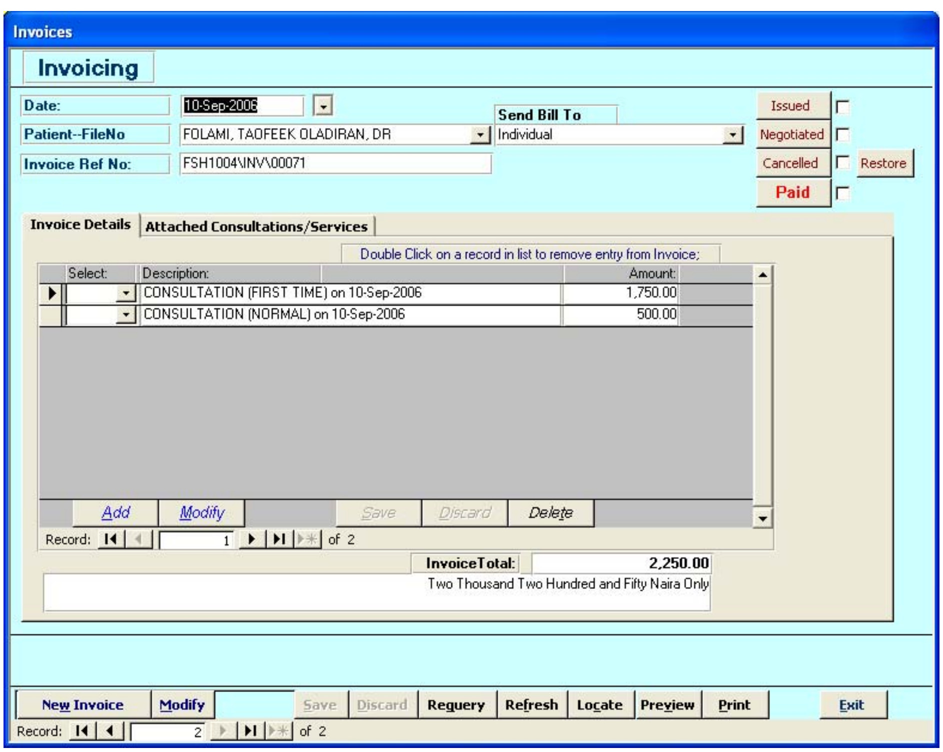
1. Select **Group Accounts Charging** from the Financials menu.
2. Select the **Group**.
3. Select the **Patient** (only patients in the group will be in the combo box list)
4. Select the **Charge Code** (which includes treatment details)
5. Enter the **date**
6. Enter\Modify the **Amount**
7. Enter the **instrument** and **instrument ref** (e.g. invoice no, receipt no, debit note, cheque, etc)
8. Enter the **Details** of the service/charge
9. Enter the **Invoice** relating to the payment (if it is a payment)
10. Click **Post**. The account list will be updated with a new record and the balance updated to reflect current position.
11. You can print\preview the patient's accounts report by clicking Print or Preview.


Patients Accounts Charging
Patients Accounts Charging
Patient: FOLAMI, TAOFEEK OLADIRAN, DR
Charge Code: INNOCULATIONS
Details: INNOCULATIONS
Date: 10-Sep-2006
Amount: 3,500.00
Instrument: Cash
Instrument Ref: None
Invoice
Post
Patients Account
Unpaid Charges Records
Date: Details: Debit: Credit: Instr Ref: Reverse:
10/Sep/2006 PAID 0.00 1,750.00 NONE PAID\CAS
10/Sep/2006 CONSULTATION (FIRST TIME) 1,750.00 0.00 NONE CONSULT.
Total: 1,750.00 1,750.00
Balance (Credits - Debits): 0.00
Preview
Print
Exit


Groups Accounts Charging
Groups Accounts Charging
Group: Individual
Patient: FOLAMI, TAOFEEK OLADIRAN, DR
Charge Code:
Details:
Date: 10-Sep-2006
Amount: 0.00
Instrument: None
Instrument Ref: None
Invoice
Post
Group Accounts
Unpaid Charges Records
Date: Details: Patient: Debit: Credit: Instr Ref: Re
10/Sep/2006 ACCOMODATION (OPEN WARD) ABBA, MUSA , 1,000.00 0.00 NONE
10/Sep/2006 PAID FOLAMI, TAOFEEK OLAD 0.00 1,750.00 NONE
10/Sep/2006 CONSULTATION (FIRST TIME) FOLAMI, TAOFEEK OLAD 1,750.00 0.00 NONE
17/Aug/2006 PAID ABAGANA, PARNATA , M 0.00 30,000.00 NONE
17/Aug/2006 CONSULTATION (FIRST TIME) ABAGANA, PARNATA , M 53,300.00 0.00 NONE
Total: 56,050.00 31,750.00
Balance (Credits - Debits): 24,300.00
Preview
Print
Exit

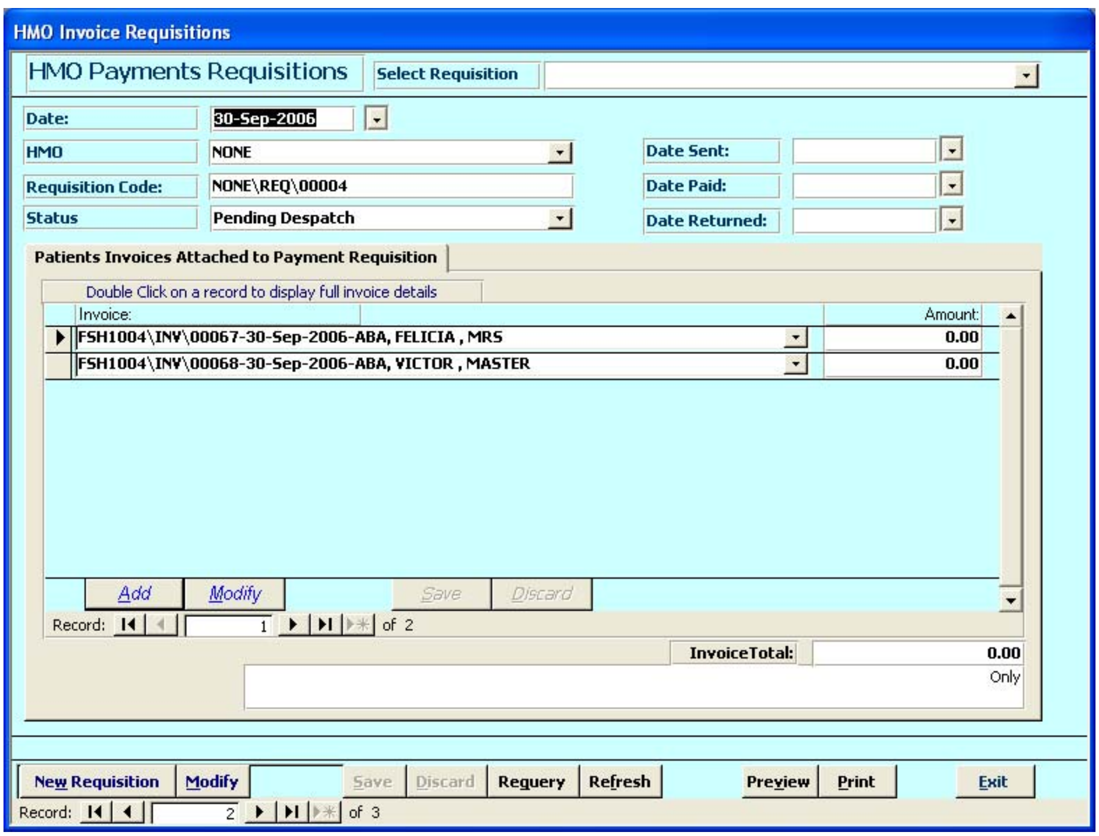
7.2 Generate Invoices for Patients

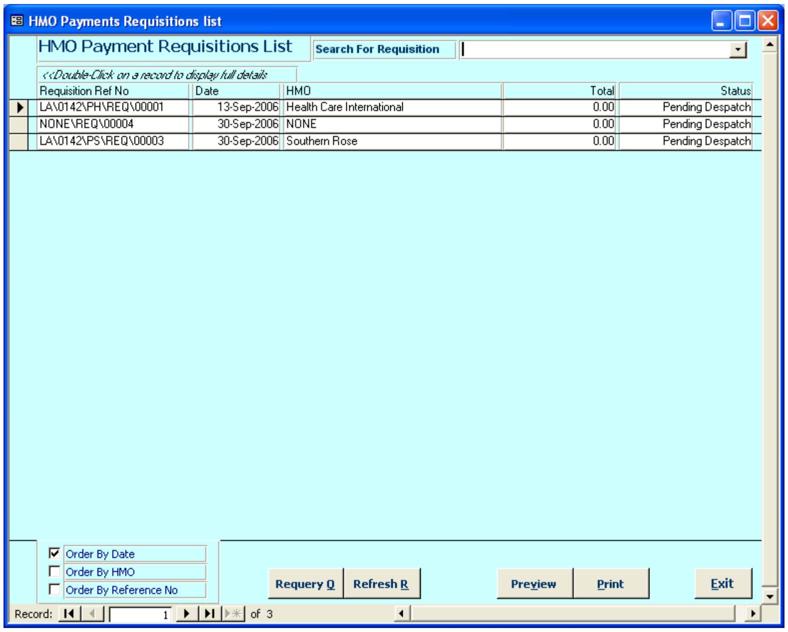
1. Select **Patients Invoices** from Financials menu
2. First create a template for the invoice
    a. Click **New Invoice**
    b. Select\Enter **date** of invoice.
    c. Select the **Patient**
    d. Click **Save**. You have now created a template for the invoice.
3. The next step is to create the invoice details, which can include Investigations and Diagnosis records of the patient.
    a. On the inset in the **Invoice Details** tab, Click **Add**
    b. Select an **Investigations and Diagnosis** record from the combo box under **Select** OR enter the details under **Description**.
    c. Enter\Adjust the **Amount**.
    d. Click Save.
    e. Repeat Steps a to d for other details.
4. The **Attached Consultations/Services** tab displays all the Investigations and Diagnosis records relating to this invoice in view.
5. You can modify details of each invoice's details by clicking **Modify**, change the details on the desired records, then click **Save**.
6. You can delete a detail by selecting the record, then click **Delete**. The record will be deleted if the invoice has not been issued.
7. Click
    a. **Issued** to indicate invoice has been issued;
    b. **Cancelled to** indicate invoice has been cancelled; **Restore** to reverse cancellation.
    c. **Negotiated** to indicate invoice has been negotiated.
8. You can print\preview the invoice report by clicking Print or Preview.
9. To locate an invoice, click **Locate** button and select the invoice from the combo box labeled **Select Invoice**.
10. To display invoices list select **Patients Invoices List** to display list of all invoices to date**.**



7.3 Generate Invoices\Requests for Payments to HMOs

1. Select **HMO Requisitions For Payment** from Financials menu
2. First create a template for the requisition
   a. Click **New requisition**
   b. Select the **Date**
   c. Select the **HMO**
   d. Click **Save**. You have now created a template for the requisition. Note that the Reference Number is automatically generated. You can replace it with your own code. The Status is set by default to Pending Dispatch.
3. The next step is to create the details which are patients invoices already generated an must be sent to the HMO
   a. On the inset in the **Patients Invoices Attached to Payment Requisition** tab, Click **Add**
   b. Select an invoice from the combo box under **Invoice**.
   c. Click **Save**.
   d. Repeat Steps a-c for other invoices.
4. Double-click on the left edge of an invoice record to display full details of the invoice.
5. You can print\preview the requisition report by clicking **Print** or **Preview**.
6. To locate a requisition, select from the combo box labeled **Select Requisition**.
7. To display invoices list, select **HMO Requisitions For Payment List** to display list of all requisitions to date**.**

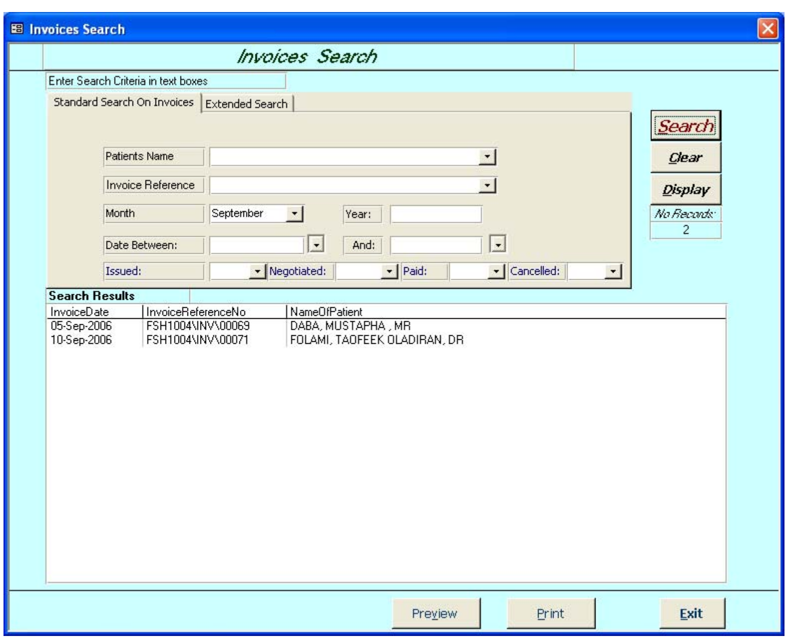




7.4 Search for Invoices

You can search for invoices using one or a combination of criteria such as Name of patient, Invoice References, Dates Issue and Invoices Status, and searches can be further extended by HMO, Company Name and NHIS status

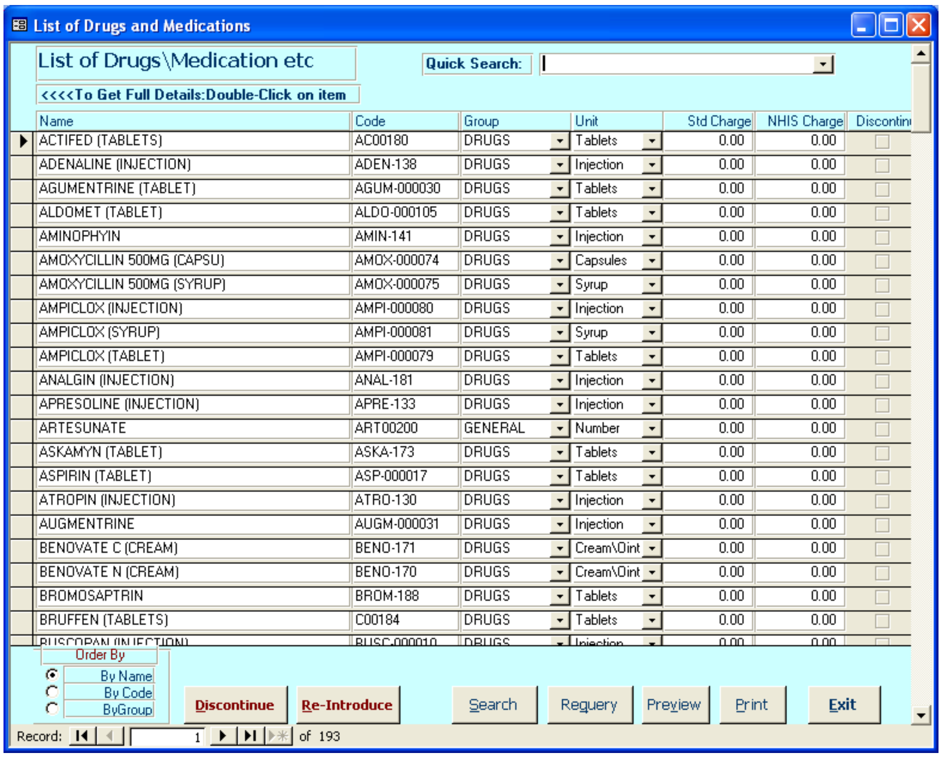
1. Click **Patients Invoices Search** from the Financials menu. This displays the search interface below.
2. Enter the criteria for search in any of the text boxes in the **Standard Search** tab (and in the Extended Search tab)
3. Click **Search**. The list of invoices matching the criteria specified will be displayed.
4. Double-Click on a record on the results list to display full details of the particular invoice.
5. Click **Preview** (or **Print**) to preview corresponding reports on the screen (or directly to the printer). When in Preview mode send the report to the printer via File->Print menu.

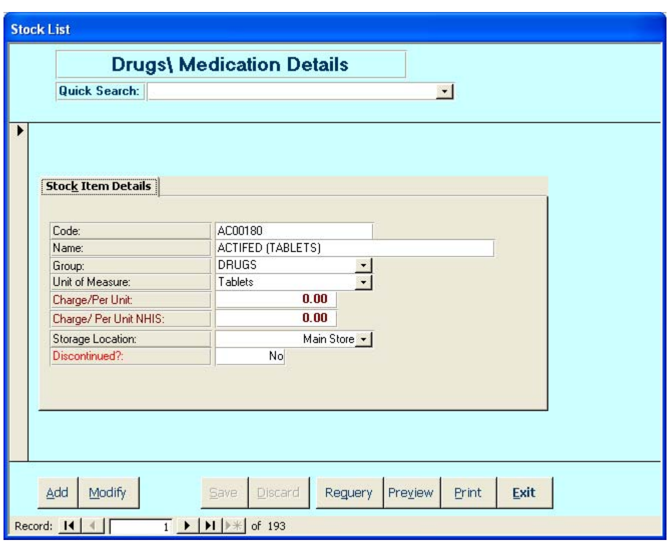


8 Pharmacy – Drugs and Medication Records

In this section we will learn how to record Drugs\Medications and the prices patients are charged.

1. To display the list of drugs and medications select **Drugs\Medication List** from Pharmacy menu. This displays the interface below.
2. To move to a particular record select the drug **Quick Search** combo box
3. Double-click on the record to display full details of the drug\medication.
4. To discontinue a drug, select or move to the appropriate record, click **Discontinue** button at bottom of the form. Click **Re-Introduce** to re-introduce a drug on the list of approved drugs.

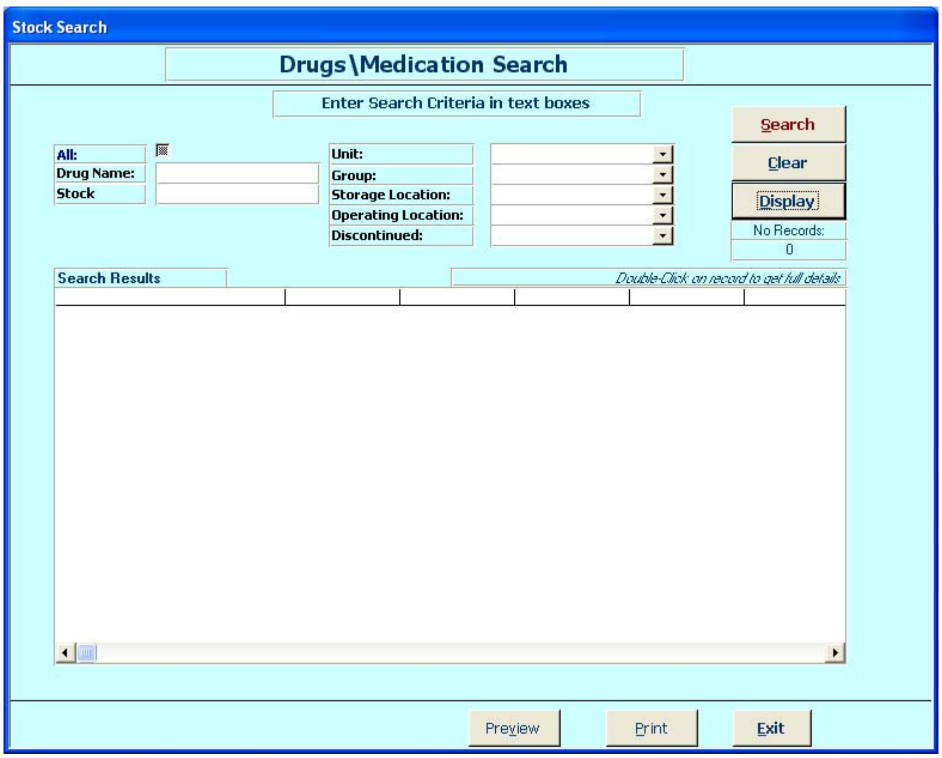




5. To add a new drug to the approved list, select **Drug\Medication Full Details** from the Pharmacy menu. This displays the form above.

   a. Click **Add**,
   b. Enter the details of the drug including
      i. the group,
      ii. unit of measure (to be used for dispensing),
      iii. Charge per unit for patients,
      iv. Charge per unit for NHIS Registered Patients and
      v. Storage location
   c. Click **Save**

6. You can print\preview relevant reports as required
7. To search for a drug or a group of drugs, select **Drugs\Medication Search** from Pharmacy menu. This displays the interface below.
8. Enter the criteria (e.g. Drug Name, Drug Code, etc.).
9. Click **Search**. Results of the search will be displayed. Double click on a record to display full details of the drug.
10. You can preview or print reports of the search via Preview\Print buttons.

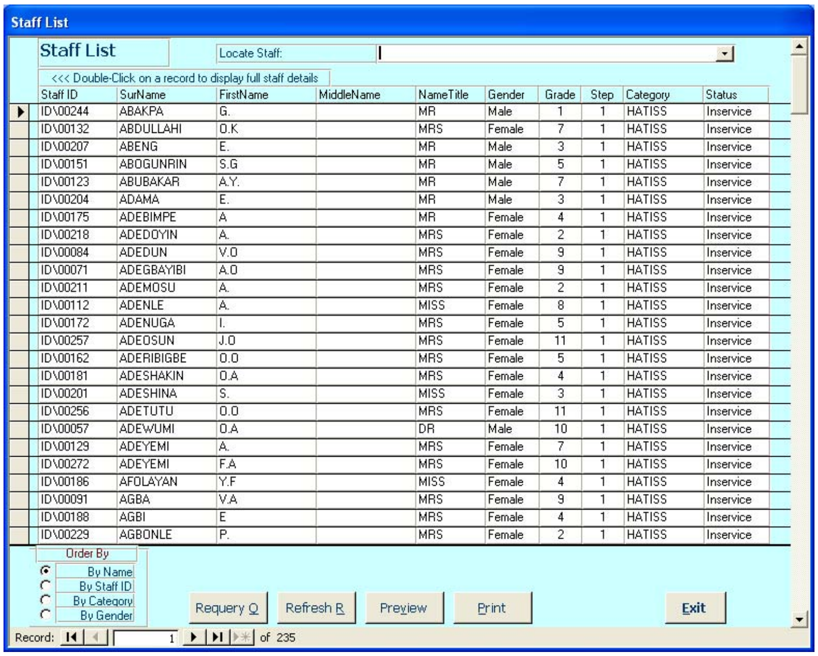


9 Staff Information

Clinic Manager provides a sub module to manage information on the staff of the hospital. This information is important particularly to the consultation information, which must be stamped with the name of the doctor that the patient consulted. Staff details are managed the same way as patients registration details are managed.

9.1.1 To display list of staff

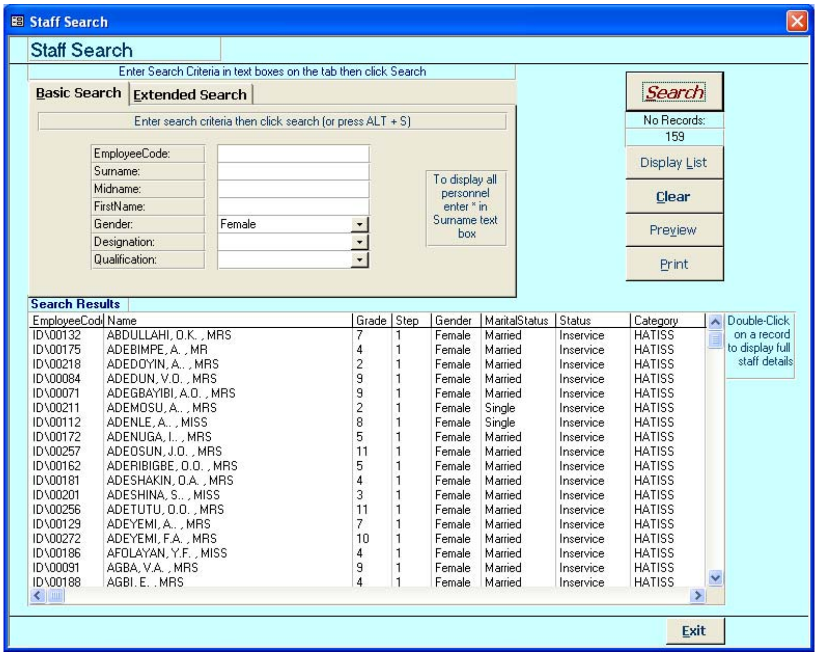
1. Select **Staff List** from Staff Details menu. This displays the list of staff shown below.
2. To move to a particular staff, select the staff from the combo box **Locate Staff**.
3. Double click on the left edge of the record to display full details of the staff.



Staff ID	SurName	FirstName	MiddleName	NameTitle	Gender	Grade	Step	Category	Status
ID\00244	ABAKPA	G.		MR	Male	1	1	HATISS	Inservice
ID\00132	ABDULLAHI	O.K		MRS	Female	7	1	HATISS	Inservice
ID\00207	ABENG	E.		MR	Male	3	1	HATISS	Inservice
ID\00151	ABOGUNRIN	S.G		MR	Male	5	1	HATISS	Inservice
ID\00123	ABUBAKAR	A.Y.		MR	Male	7	1	HATISS	Inservice
ID\00204	ADAMA	E.		MR	Male	3	1	HATISS	Inservice
ID\00175	ADEBIMPE	A		MR	Female	4	1	HATISS	Inservice
ID\00218	ADEDOYIN	A.		MRS	Female	2	1	HATISS	Inservice
ID\00084	ADEDUN	V.O		MRS	Female	9	1	HATISS	Inservice
ID\00071	ADEGBAYIBI	A.O		MRS	Female	9	1	HATISS	Inservice
ID\00211	ADEMOSU	A.		MRS	Female	2	1	HATISS	Inservice
ID\00112	ADENLE	A.		MISS	Female	8	1	HATISS	Inservice
ID\00172	ADENUGA	I.		MRS	Female	5	1	HATISS	Inservice
ID\00257	ADEOSUN	J.O		MRS	Female	11	1	HATISS	Inservice
ID\00162	ADERIBIGBE	O.O		MRS	Female	5	1	HATISS	Inservice
ID\00181	ADESHAKIN	O.A		MRS	Female	4	1	HATISS	Inservice
ID\00201	ADESHINA	S.		MISS	Female	3	1	HATISS	Inservice
ID\00256	ADETUTU	O.O		MRS	Female	11	1	HATISS	Inservice
ID\00057	ADEWUMI	O.A		DR	Male	10	1	HATISS	Inservice
ID\00129	ADEYEMI	A.		MRS	Female	7	1	HATISS	Inservice
ID\00272	ADEYEMI	F.A		MRS	Female	10	1	HATISS	Inservice
ID\00186	AFOLAYAN	Y.F		MISS	Female	4	1	HATISS	Inservice
ID\00091	AGBA	V.A		MRS	Female	9	1	HATISS	Inservice
ID\00188	AGBI	E		MRS	Female	4	1	HATISS	Inservice
ID\00229	AGBONLE	P.		MRS	Female	2	1	HATISS	Inservice

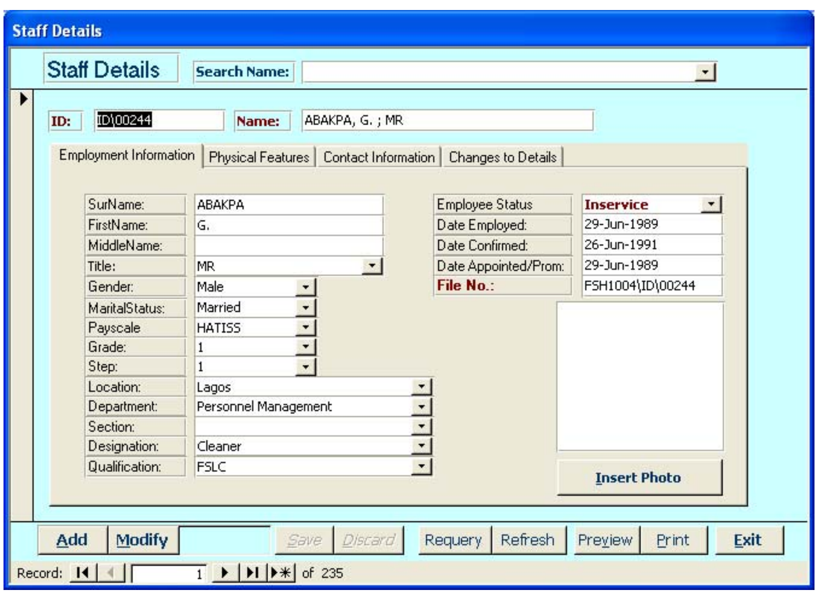
9.1.2 To search for staff details

1. Select **Staff Search** from the Staff Details menu. This displays the search interface shown below.
2. Specify search criteria in **Basic Search** tab (and Extended search tab).
3. You can search by one or a combination of
    a. Name,
    b. Surname,
    c. Middle name,
    d. First name,
    e. Gender,
    f. Designation
    g. Qualification
4. Click **Search**. Results matching the specified criteria will be displayed.



9.1.3 To create details of a new staff

1. Select **Staff Full Details** from Staff Details menu.
2. Click **Add**
3. Enter staff details in the
   a. **Employment Information** tab
   b. **Physical Features** tab and
   c. **Contact Information** tab
   d. Click **Insert Photo**, locate and select the staff photo file on your computer.
4. Click **Save**.
5. You can print\preview staff details via print\preview button.
6. To modify details, click **Modify**, change the detail(s) you want, and then click **Save**.

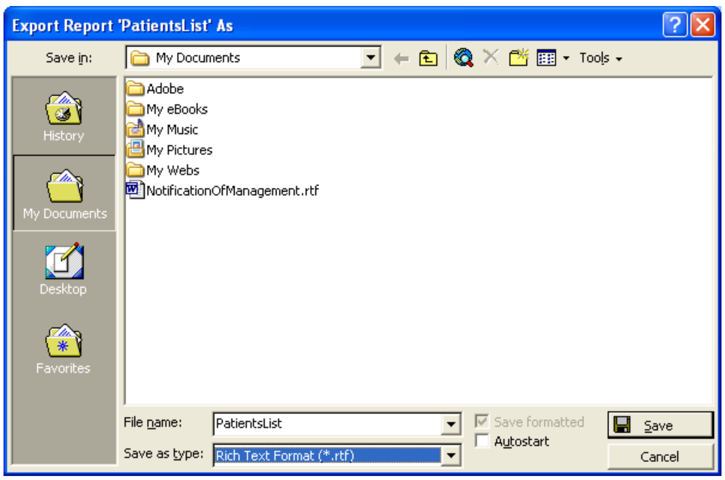


10 Exporting Reports to other file formats

You would have noticed by now that you can print set of reports from each of the interfaces. All reports can be printed directly to the printer or preview on the screen. However, Clinic Manager offers the flexibility to export report in several file formats such as Microsoft Excel, rich text, snapshot format and any other format supported on your system.

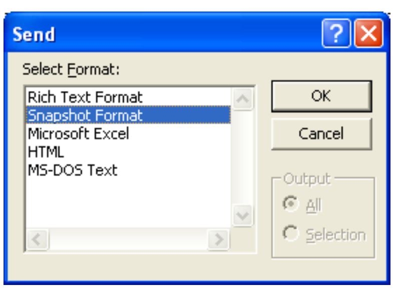
10.1.1 To export to other file format

1. From the preview of the report as shown below, select **Export** from **File->Export Information** menu.
2. The dialog box shown below will be displayed.
3. Enter the file name in **File name**.
4. Select the file type to export to in **Save as type**; e.g. Microsoft Excel
5. Navigate to the directory\folder to put the file.
6. Click **Save**.
7. The report will be saved as the specified file type.



10.1.2 To export the report as an attachment to e-mail

1. Select **Mail Recipient (As Attachment)** from **File->Export Information** menu.
2. Select the file format on the interface displayed, then Click **OK**.
3. Depending on your Internet settings, specify appropriate settings to send the file as an attachment



11 Appendix

11.1 Example Reports